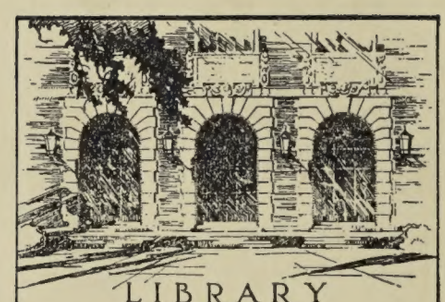


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THE

BRITISH MEDICAL JOURNAL,

BEING THE

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

MALIGNANT DISEASE OF THE TESTICLE, IN A CHILD ONE YEAR AND TEN MONTHS OLD.

Under the care of W. COULSON, Esq.

[*With remarks by* A. G. LAWRENCE, ESQ., *House-Surgeon.*]

ALFRED WINN, aged 1 year and 10 months, was admitted into the Blomfield Ward, under Mr. Coulson, October 27th, 1858, with a tumour projecting from the scrotum. The history of the disease was obtained from his mother, who stated that this was her third child, the other two being fine healthy children. She never remembered any of her relations suffering either from consumption or cancer; and the father and herself were quite healthy. When the child was a twelvemonth old, she weaned it; and four months afterwards she noticed the swelling in the scrotum. It was then of the size of a walnut, and she merely attributed it to a cold; but, on calling to mind the fact that the child had fallen down stairs two months previously, and had afterwards looked pale and ill, she became anxious, and consulted a surgeon, who at first thought it was a rupture. It was the only solid body in the scrotum (there being only one testicle, as she said). It was very hard, the scrotum and it being in one compact lump, and the tumour not moveable. It felt quite smooth on the surface. The child did not complain of any pain even when it was touched, and suffered very little inconvenience. The tumour continued gradually to enlarge; and, about two months afterwards, the patient was taken to another surgeon, who tapped it, but nothing came from it except blood and matter. Since this operation, the child had complained of pain; and, six weeks afterwards, the glands in the groin began to become enlarged. Since then they had increased considerably in size; and a small abscess had formed on the surface of the scrotum, in the situation of the wound of the tapping. Three weeks before admission, October 8th, the abscess was opened, and blood was discharged. A proposal was then made by the surgeon in attendance to remove the testicle. From this time a red excrescence protruded from the scrotum, and gradually enlarged. The child had not walked since the opening was made, but ran about before without complaining. The day after the opening was made, the bleeding from the wound was very profuse; and the discharge since then had been sanguineous. The bowels had been regular, and he had never suffered from impediment in making water. The general health had been good, and the disposition lively.

When admitted (October 27th), the child was pale, and of a decidedly cachectic appearance, which became more marked daily; otherwise, he seemed to have been a fat plump boy, with all his limbs well formed and rounded. The scrotum was much enlarged; and from almost the whole of the anterior surface a dark fungoid growth protruded, of about the size of a small chestnut. The margins of the scrotum around this seemed hard and much inflamed. The tumour in some parts appeared as if composed of dry hard blood, which had been exposed for some time; and, in other places, it was of a light yellowish appearance, as if pus had formed and dried on it. Here and there, a sanious and purulent discharge could be seen, which was rather scanty, although encouraged by poultices. The glands in both inguinal regions were very much enlarged, forming a semicircular line around the lower part of the abdomen. The under surface of the scrotum was tense, but somewhat soft, and, when pressed, did not give the child much pain. The patient was ordered to have a drachm of cod-liver oil and half a drachm of iron wine three times daily.

November 3rd. The upper part of the excrescence had given way, and was discharging a small quantity of pus, which, with a part of the surface of the tumour shaved off, was examined under the microscope, and found not to contain any cancer-cells.

November 9th. The tumour was certainly larger, and now of the size of a large chestnut. A small quantity of pus was discharged now and then. The secretions were healthy. The patient was confined to bed, but did not suffer much pain, unless the tumour were touched. The appetite was very good.

November 16th. He was much paler, and of a more decided yellowish cast. He was slightly convulsed in his sleep the previous night. He did not enjoy his food. The bowels had not been open for two days. The veins of the abdomen were somewhat more distended than usual. When the left lumbar region was pressed, the child cried out immediately; but no distinct increased dulness was found on percussion. The following medicine was ordered:—

℞ Liquoris morphiæ acetatis ♏viij; syrupi ʒss; aquæ ʒiss.
M. Fiat haustus ter die sumendus.

November 24th. The bowels were still sluggish, and daily required castor oil to open them. The child was much altered; his face was pale, anxious, and worn; and he seemed to suffer much. He had been convulsed several times since last report. The veins on the abdomen and chest were very prominent. A distinct fulness was felt in the left lumbar region, which seemed to be a mass of hard matter: the muscles on that side were tense, and the slightest pressure caused great pain to the patient. The right side was soft and natural. He passed his urine unconsciously in bed.

November 27th. The fulness on the left side had much increased, and extended from the false ribs to the upper margin of the ilium; and the veins were very large on the abdomen and chest. The child was very much convulsed the preceding day and this day. The bowels were well opened last night. The tumour protruding from the scrotum had not increased at all during the last fortnight; it now and then bled a little, and one or two small abscesses had formed and burst at different times; but it had much the same appearance as before described. The child died at 10.40 P.M., six months after the tumour was first noticed, and eight months after the injury.

On making the *post mortem* examination sixty hours after death, the body and extremities were found much emaciated. The scrotum was much enlarged and tense; and from it a large dark excrescence protruded, which was found to be connected with and growing from the secreting portion of the left testicle. Here and there, a small quantity of pus could be seen exuding from it when pressed. The glands in both groins were much enlarged and very prominent. The abdomen was much distended, but much more prominent on the left side than the right, and even a distinct bulging could be seen there. On opening the abdomen, the viscera were quite healthy, with the exception of the left kidney, the proper structure of which had entirely disappeared, and was replaced by a large, soft, and apparently cancerous, mass as large as the child's head. The mass was of a reddish hue, and resembled softened encephaloid cancer. On the left side, the spermatic cord was much thickened. On the same side, the glands above Poupart's ligament were as large as a chestnut, contained similar matter, and were much larger than on the right side. The left testicle was very much enlarged; the secreting portion was entirely destroyed, and replaced by the deposit of this cancerous material. All the other organs were found quite healthy and free from any similar deposit. Under the microscope, large multinucleated cells, with a large quantity of granular matter and oil-globules, were found in the matter taken from both the testicle, kidney, and glands in the groins; but there were fewer compound nucleated cells in the excrescence from the testicle and the glands

in the groin. In the kidney, uriniferous tubules with degenerated epithelium were easily traced out.

Remarks. There are a few points in this case worthy of a remark. Few cases are on record of such a disease attacking a child so young. The tumour seems to have been excited first of all by a blow, and to have slowly increased; but without pain or inconvenience to the child until, four months afterwards, tapping was performed. Here a fresh exciting cause was brought into action; and from this time we trace its more rapid progress; the glands in the groins now began to be affected; the pain and inconvenience was now first felt; the child's appearance before this was healthy; he now began to assume a more decidedly cachectic look which gradually became more marked, and an excrescence protruded from the scrotum which slowly increased, with occasional fits of bleeding or breaking of small abscesses until the 9th of November, from which time no enlargement is noticed up to the time of his death. But a few days after the above date the veins of the abdomen and chest were noticed to become more conspicuous. Convulsions came on; pain was felt in the left lumbar region; and a decided filling out of that side was noticed, which rapidly increased; the convulsions became more frequent; and the patient died eighteen days after this enlargement was noticed. On making the *post mortem* examination, the whole of the kidney was found involved in this disease, and a mass of the size of the child's head. Whether the convulsions were caused by the eccentric irritation here produced, or by the contamination of the blood with urea, is an open question. The growth of the disease from the kidney was rapid, and daily marked by the increased fulness in the veins on the abdomen and chest, and the more urgent constipation and increase in the tumour itself. The kidney being a parenchymatous vascular organ, with no real impediment around it to obstruct the growth of such a disease; it consequently more rapidly increased here than in the testicle, a much less vascular one. Moreover, we cannot overlook the fact of the left spermatic vein entering into the left renal, although this fact will not explain the origin of the disease in the kidney.

TISBURY UNION INFIRMARY.

FEMORAL ANEURISM IN A MAN, SEVENTY-FIVE YEARS OF AGE, CURED BY PRESSURE.

By J. Lardner Green, Esq., Tisbury.

William Ball, aged 75, a farm labourer, of intemperate habits, was admitted into the men's sick ward of the Tisbury Union Workhouse, in April 1858, and came under my care for chronic bronchitis. In the middle of June, he asked my opinion of a swelling he had just discovered in his right thigh. On examination, I found at about seven or eight inches below the centre of Poupart's ligament, and just above where the femoral artery passes through the tendinous canal of the adductor magnus, a soft pulsating tumour of the size of a small hen's egg. There was no pain nor discoloration of the skin. Firm pressure applied over the upper part of the femoral artery, and also to the tumour, reduced the latter to one-half its size, and stopped all pulsation in it; immediately, however, the pressure was withdrawn, the peculiar purring-like sensation returned, and the tumour recovered its former bulk. A very clear *bruit de souffle*, synchronous with the pulse at the wrist, was heard with the stethoscope placed over the tumour, which the patient thinks was caused by a strain when lifting a weight. The case was diagnosed to be one of recent femoral aneurism.

July 3rd, 1858. The tumour had increased to the size of a large orange; it felt thinner, and is distinctly *seen* to beat. Circumstances prevented me from undertaking the treatment of the case sooner. The patient was ordered to keep strictly the recumbent position. Two pear-shaped masses of lead, weighing respectively 3 lbs. 12 oz. and 2 lbs. 6 oz., covered with calico, were placed over the upper part of the course of the femoral artery. A feeble pulsation of the tumour could still be felt; but none when a slight additional pressure was made by the finger upon the larger mass of lead. I found the weights pressed most effectually when their long axes were placed in a diagonal position with the course of the artery. It was interesting to observe that, in proportion as the pulsatory movement became imperceptible in and exhausted by the weights, it became lost in the tumour. The weights were kept in position by a sling attached to a belt round the waist. Directions were given that one or both should be constantly used.

July 12th. The patient had been seen once or twice daily since the last report. The weights required readjustment each time. He had persisted in getting out of bed several times; it was difficult to make the patient, or his nurse (an old man, upwards of sixty), understand the fatal nature of the case, and the necessity of constantly applying the weights, which I found had not been done. The integuments were uninjured by the pressure; and the pain was not very great. The tumour, though somewhat less, pulsated when the weights were removed.

July 15th. I had a ring tourniquet made and applied in place of the weights; the screw being turned, so as to command the circulation. The patient was kept strictly in the lying position, and the limb bandaged. A pill, containing opium, acetate of lead, and digitalis, was given every fourth hour.

July 17th. The man complained that the tourniquet, which he had shifted out of position several times, was more painful to bear than the weights. He had felt a hot pain round the knee and calf of the leg. The tumour was harder; its pulsations felt less immediately under the skin; and it evidently contained a fibrous lining. The medicine was continued; it allayed the troublesome cough, and kept the bowels quiet. The pulse was 70, slower, harder and smaller.

July 20th. It was difficult to keep the pad of the tourniquet in its place—partly owing to its plane, parallel with Poupart's ligament, being so oblique to the axis of the thigh: moreover, the slightest movement of either the instrument or the limb removed all pressure by the pad upon the artery. The skin began to suffer from the pressure; it was red and very tender. I now decided upon trusting to the pressure of the weights only. The man was firmly placed in bed, resting on a slightly inclined plane. The weights were kept better in their places by a sling fastened to a strap going over the left shoulder.

July 22nd. Pressure had been uninterruptedly applied; the weights were easily kept in position. The patient was delighted to feel less "thumping" in the tumour when the weights were raised. It was harder; the skin under the weights was looking better. The medicine was ordered to be given thrice a day only. The right thigh and leg had lately felt benumbed, but were less so now.

From this date the tumour became harder; the pulsatory thrill becoming less perceptible; until about August 4th, when it could no longer be detected. It was moderately firm. The medicine was discontinued. A slight degree of compression was continued.

August 15th. The aneurism was cured.

December 10th. The tumour was examined. Though nearly of the size it was when its treatment was commenced, it is entirely free from all pulsations. By the stethoscope no sound can be detected in its substance; and no effect is produced upon it by pressure on the artery above. There is no visible difference in the blood-vessels of the two limbs; the right one feels natural, and can be moved easily.

Remarks. I believe this to be the first recorded case of femoral aneurism, occurring in a person of the advanced age of 75, cured by pressure. There are few objects of study in the history of modern surgery more interesting than the nature and treatment of external aneurism; and the views held respectively by the Dublin and Edinburgh surgeons as to the value of the treatment by pressure. Not many years back, we were told that the only efficient means to cure the disease was the dangerous operation of cutting down upon the artery, and applying the ligature above the aneurism. Samuel Cooper, in the last edition of his text book, *The First Lines of Surgery*, after saying, "An aneurism left to take its own course, would generally destroy the patient by hæmorrhage or gangrene," remarks further on, with regard to treatment, that "Pressure made on an artery, with the view of obstructing the passage of blood into the sac, rarely answers. Few patients can bear the pain which arises from it, and it is exceedingly difficult to make it operate effectually." . . . "There being, indeed, but one method—cutting down to the principal artery, and applying a tight ligature round it." The advantages of the treatment by pressure are, that even should it prove ineffectual, yet in most of such instances where it has been carefully and judiciously applied, the patient will still be fit to undergo the operation by the knife; and, in the majority of cases so treated, such risk will not be incurred by the successful result of pressure. In most cases, it will be desirable to employ internal remedies to facilitate the coagulation of the blood, whilst, by the local treatment, the motion within the sac is lessened or destroyed. Treatment by pressure requires perseverance on the part of the patient, and constant watching by the surgeon to adjust

the instruments and regulate the pressure. This may be exerted by some firm body, by compression, by a spring or elastic substance; but the only way to produce a perfectly uniform amount of pressure at all times is to employ *gravity*—the plan mainly relied upon in this case. This is the chief advantage in Dr. Carte's apparatus.

Cases of popliteal and femoral aneurism occur in the proportion of about seven to one; and forty times in males to one in females. They are generally found in persons between 20 and 40 years of age. Sir A. Cooper records an unique case of *popliteal* aneurism, in a man of 80. The length of time during which pressure has been successfully applied varies much: thus, in thirteen cases, it was from seven hours to as many days; and in four cases, from seventy to ninety-three days.

Original Communications.

FUNCTIONAL AFFECTIONS OF THE HEART.

By C. M. Durrant, M.D., one of the Physicians to the East Suffolk and Ipswich Hospital.

Cases of this class are constantly presenting themselves to the notice of the physician, whether engaged in hospital or in private practice. In the agricultural districts, the labourer, as well as the anæmic girl, become equally prone to the attack; and in no class of individuals does it assume more severity, or give rise to greater apprehension as to the result, than in the case of the medical practitioner, who is naturally disposed to draw unfavourable surmises from symptoms obtaining in his own person. Among the labouring portion of the agricultural class, the chief cause giving rise to functional irritability of the heart's action is disturbance of the digestive organs; and this occurring especially in those whose labours are of a solitary kind, *i. e.*, where the individual chiefly works without companions. Among these are the shepherd, the gardener, the hedger, the wood-cutter, etc.; in whom, if the mind becomes fairly concentrated upon the abnormal sensation, the most nervous apprehensions as to the results quickly follow.

There is another class of persons who are particularly subject to functional irritability of the heart's action. These are persons of both sexes, whose complexion is atrabilious, with a naturally feeble organisation, and in whom the hepatic functions are very prone to torpidity of action. Very many cases of this latter description have come under my notice, and some, indeed, in which the symptoms, always severe, have been aggravated by a doubtfully or erroneously expressed professional opinion. The irritability of the heart's action in these cases is excessive, and the greatest care and circumspection are necessary in the formation of a correct diagnosis.

The impulse of the heart is increased; but this is more apparent than real, inasmuch as, on continuing the examination, especially if the attention be diverted, the force of the action will be found to diminish, and to differ in a marked degree from the steady heaving impulse of hypertrophy. The sounds of the heart are loud, clear, and ringing, often with a metallic tone: this is caused by the impulse of the organ against the parietes of the chest. The extent of surface over which the sounds are audible varies exceedingly: in some, it is almost limited to the præcordial region; while, in others, it is audible over the entire chest.

In the class of cases which we are now considering, we may have, in addition, slight embarrassment of the respiration, tendency to syncope, and a general feeling of incertitude of action, both in reference to mental as well as physical exertion.

In addition to this, I have very generally found severe pain referred to the region of the spleen. This assumes more the character of splenalgia than intercostal neuralgia, and, by its persistence, becomes often an obstinate symptom.

Another and a severe form of functional irritability of the heart is presented in the anæmic, over-worked, and ill fed, of both sexes. The books of the hospital are seldom without instances of this variety. In these cases, the heart is weak and insufficiently nourished, and, like the palpitation arising from scurvy, it is less apparent to the observer than distressing to the patient.

In addition to the foregoing symptoms, we sometimes find in these cases which are of a more passive character, considerable dyspnœa on exertion, some œdema of the face and ankles, without albumen in the urine, and often a vague apprehension of sudden death. Another cause of functional, or rather sympathetic palpitation, is gout. The due discrimination of this affection is highly necessary, and much care is required in framing the diagnosis, inasmuch as, the patient being generally more advanced in life, and organic disease of the heart not unfrequently coexisting with gout, a correct analysis of what is real from what is merely functional will be most important. A warm alkaline aperient will sometimes materially aid in clearing the diagnosis.

Toxæmia in all its forms, but more particularly those arising from granular kidney, will give rise to functional disturbance of the heart's action. In doubtful cases, even without œdema, it will be always well to examine the condition of the urine.

In rheumatic subjects, the heart is very prone to attacks of palpitation, accompanied by considerable pain in the præcordial region, and sometimes extending down the arm. This may, and does obtain, without any disease of the organ itself, and arises from irritation of the cardiac nerves, probably excited by rheumatic action, and, as such, may be included in the toxæmic palpitation. Dr. Watson, in his interesting *Lectures*, mentions the case of a barrister, in whom tea was found to produce the most painfully exaggerated and fluttering sensation about the heart. On abstaining from this beverage, the heart resumed its healthy tone and action; but, on tea being again taken (which experiment was often tried), the same severe functional disturbance was invariably the result. On renouncing tea altogether, both the palpitation and the apprehension to which it gave rise were got rid of. A precisely similar instance obtains in the case of a friend of my own, who is equally compelled to renounce his favourite beverage.

I allude to these instances as possible to occur, and, as such, should not be overlooked when seeking the cause of functional disturbance of the heart's action. I by no means, however, bring them forward in support of a prevailing dogma of the present day—a favourite one, I am told, with the homœopathists—viz., that all tea-drinkers are undergoing a process of slow but no less sure poisoning.

Uterine or ovarian irritation, acting through the spinal and sympathetic nervous system, is one very common cause of nervous disturbance of the heart's action in young females; to which may be added hysteria, whether originating in moral emotions, or dependent upon excessive and debilitating discharges. In the opposite sex, we as constantly find that the most distressing cardiac disturbance is attributable either to excessive sexual intercourse, or more frequently to masturbation. The distress of mind to which these causes give rise is very great; and it is among these victims that the unprincipled so uncompromisingly work upon the moral feelings and the purses of their unfortunate dupes.

Tobacco in excess may, by weakening nervous energy, be productive of disturbance of the heart's action; and those who are prone to an easily excited nervous palpitation, or more especially to a functional irregularity of this organ, will unquestionably do well to abstain *in toto* from its use.

One of the most frequent causes giving rise either to palpitation, or to an enfeebled and irregular action of the heart, is an impaired and atonic condition of the digestive function, accompanied by flatulence and torpidity of the bowels. This is a very common occurrence, but one that is in general speedily relieved by appropriate treatment, directed to the exciting cause.

There is perhaps no condition of the organ which gives rise to so much anxiety and alarm in the mind of the patient as this disturbed nervous derangement, characterised by irregularity and occasional apparent cessation of the heart's action. Other causes, such as excessive muscular exertion, pregnancy, or diseases of the viscera of the abdomen, may also be cited as occasionally giving rise to functional disturbance of the cardiac movements. I have recently witnessed the most distressing palpitation of the heart, itself otherwise healthy, dependent upon an aneurismal enlargement of the arch of the aorta.

Moral emotions are by no means to be overlooked as an exciting cause of cardiac irregularity. This is particularly observable in the time of commercial difficulty. Loss of property, disappointed schemes, and a variety of moral agencies, by depressing nervous power and inciting venous congestion, and thus altering the general balance of the organic system, often prove serious and sometimes irremediable causes of this affection.

A correct diagnosis between organic and functional disturbance of the heart's action, whether in the form of simple palpitation or rhythmical irregularity, is by no means always easy.

All the circumstances of the case, both collateral and direct, must be attentively considered; and even then it is arrived at rather as the result of constant clinical observation and tact, than by the most careful study of the differential characters laid down by authors on these diseases. The patient and his friends will press strongly for a positive opinion upon the first visit; but if doubt exist, it will be prudent to withhold it until a repeated physical examination, under different circumstances and at varying periods of the day, justify our doing so with tolerable certainty. Although nervous palpitation is very generally relieved by taking exercise, still, if anæmia exist, the contrary result will obtain; and thus the diagnosis may be rendered doubtful, particularly if œdema of the ankles, from debility, exist at the same time.

The force of the action in nervous palpitation varies greatly. It may be scarcely perceptible to the examiner, while to the patient it very frequently gives rise to the most distressing anxiety. At other times, the pulsations are sufficiently violent to shake the bed.

Palpitations, to which the patient is sensible, are often functional in character; while those that occur with force, without the patient's attention being attracted by the circumstance, are more frequently of organic origin. The sounds of the heart in palpitation arising from functional disturbance of its action are sharp, loud, and ringing. The first sound is loud and abrupt, and is sometimes even audible both to the patient and the physician, without contact of the ear or stethoscope. The second sound is occasionally doubled; but this occurs generally as a temporary phenomenon only, and is not of material assistance as a diagnostic guide.

The impulse of the heart excited by inorganic causes is sharp and "slapping"; and sometimes a metallic ringing sound, produced by the energy of the contraction and smartness of the shock, is audible at the apex.

The existence of murmur will obviously require great care in forming a diagnosis, especially if the patient have formerly been the subject of rheumatism, and is now suffering from an impoverished condition of blood. Inorganic murmur is for the most part soft and blowing: it may, however, under great vibratory disturbance, become musical and somewhat harsh in its tone. It seat is usually at the base of the heart, over the aortic or pulmonic valves, from the former of which it is communicated to the aorta and carotid arteries.

The coexistence of a basic systolic murmur, with a continuous humming sound in the veins of the neck, affords strong presumptive evidence that the case is one of inorganic disease. Although it was formerly considered an established fact that inorganic murmurs were limited in site to the base of the heart, it is now admitted, and I can also verify the statement, that a murmur, varying in intensity and constancy, may exist over the apex, quite independently of organic disease. With all this, however, it must be admitted that there is no certain character by which an inorganic can be distinguished from an organic murmur; and it consequently behoves the examiner to weigh accurately all the existing and collateral phenomena of the case, lest, on the one hand, he inadvertently alarm his patient, rendering him more or less miserable for life; or, on the other, he find his diagnosis falsified, and his reputation injured, by the sudden and unexpected death of the individual in whom a functional disorder was alone suspected. I have already alluded to the irregular rhythm of the heart's action, as dependent upon derangement of the digestive organs, moral causes, etc.; but, in all cases of *permanent* irregularity of the heart's action occurring late in life, even though no physical sign of organic mischief be present, a guarded prognosis is called for, as not unfrequently the irregularity will be found to depend, not upon perverted function, but upon a softened or fatty degeneration of the muscular texture.

In the treatment of functional disorders of the heart, more may often be effected by judiciously observed moral advice and hygienic regulation, than by medicine. At all events, premising that the cause is fully ascertained and the diagnosis accurately determined, the particular selection of remedies may be left to the judgment of the medical attendant. As a rule, unless the heart be congested, venesection, in any form, is to be strictly avoided.

In that class of persons to whom I have referred—viz., the atrabilious—and in whom palpitation is very common, steel and tonics are in general not well borne, and the cardiac disturbance is rather increased than lessened by their use. Small continued doses of blue pill, with the compound galbanum pill, together with alkalies in combination with the compound tincture of valerian and henbane, I have found to be of the greatest service. Wine also, mixed with water, will agree better with patients presenting these features of the disease, than malt liquors in any form. In the toxæmic variety, if much headache prevail, a blister to the nape of the neck will be found useful, and it indirectly quiets the disturbed action of the heart. In the young female, whether the cause be a spanæmic condition from deteriorated blood, or whether it be attributable to uterine irritation, the necessity for wearing warm flannel clothing, and taking regular exercise, short of producing excessive fatigue, must be strictly inculcated.

TUMOUR OF UPPER THIRD OF THE THIGH: SUCCESSFUL AMPUTATION AT THE HIP-JOINT.

By William James Clement, Esq.. F.R.C.S.E., Shrewsbury.

Mrs. Davies, aged 32, of slight figure and fair complexion, is the mother of four children; the eldest nine, the youngest two years old. Her family on the maternal and paternal side were healthy. Her mother died in childbed; but her father and grandmother, aged 84, are both living.

About three years ago, according to the patient's statement, she first observed a small tumour situated in the upper and inner portion of the left thigh. It was soft, moveable, and free from pain or tenderness. Its growth was at first slow and almost imperceptible; but after the birth of her last child, it increased with great rapidity.

I was desired to see her on April 2nd, shortly after her discharge as incurable from a public institution. I found a very large tumour occupying the entire upper third of the thigh, and extending within two inches of Poupart's ligament. The tumour was elastic to the touch, not nodulated, but having an even surface. Pressure caused no uneasiness, but the patient complained of acute darting pains through the substance of the tumour and numbness down the limb. There was no discoloration of the surface; but on one spot where an exploring needle had been introduced, the skin was red and inflamed. I made a careful examination of the parts above Poupart's ligament, but could discover no enlargement or affection whatever of the deep-seated glands. The stethoscope also failed to detect anything wrong in the lungs and heart. There was no great amount of constitutional disturbance. and the countenance had not that peculiar anxiety so common to patients labouring under malignant disease.

Taking into consideration the age of the patient, and the absence of all internal organic affections, I came to the conclusion that removal of the limb at the hip-joint was a justifiable proceeding. The only serious obstacle to the operation was the extension of the disease so close to Poupart's ligament, preventing the formation of an anterior flap. The tumour, however, did not encroach upon the posterior part of the thigh, and the muscles and integument there were apparently sound.

On June 9th, I was requested to perform the operation. A great change had taken place in the condition of the limb since I saw it on April 2nd. It appeared that soon after my first examination of the patient, ulceration of the surface commenced at the point where the exploring needle had been used, and rapidly extended. The skin had entirely disappeared from the surface of the tumour, and a large livid mass occupied the whole upper portion of the thigh, resembling in appearance putrid liver, and exhaling a most intolerable stench. There was not quite an inch of sound skin between the lower edge of Poupart's ligament and the upper part of the diseased mass. The patient was greatly emaciated since my former visit, the tumour having discharged daily more than a pint of bloody serous fluid. The pulse was very feeble, beating 140 in the minute. The pain was excessive, and large doses of opium failed to give any relief. The tumour, one inch below Poupart's ligament, measured thirty-four inches and a half, being two inches more than double the circumference of the opposite limb at the same place.

The rapid and successful removal of the thigh at the hip-joint depending so much upon the assistants and their simultaneous action, I was most fortunate in having the services of my friends, Mr. Heathcote, Mr. Keate, and Mr. Pidduck.

Chloroform was administered, and the patient was kept under its influence until after the last ligature was applied. The knee being slightly bent upwards on the pelvis, I thrust in a long knife at about an equal distance between the anterior superior spinous process of the ilium and the trochanter major, deep

below the vessels, and brought out the point just before the anus. As I cut rapidly upwards, Mr. Heathcote followed the knife with his fingers. Pressure with them and his thumb above the groin, secured the vessels as soon as they were divided; and not one ounce of blood was lost at this stage of the operation. Mr. Keate, who had charge of the limb, then suddenly depressed the thigh. Two strokes of the knife over the capsular ligament were made, and the head of the femur started out of the acetabulum, at the same time tearing through the round ligament. Disarticulation was rapidly effected, and the separation of the limb completed by making a long posterior flap. All hæmorrhage from the posterior flap was controlled by Mr. Pidduck. Five vessels only required the application of ligatures, and there was but very slight oozing from the surface. As soon as that had ceased, the posterior flap was folded upwards on the groin. Three sutures were inserted, some strips of adhesive plaister applied, and over all a wet compress.

The patient did not experience one bad symptom after the performance of the operation. A full dose of morphia was given at bedtime every night for a week.

The dressings were removed on the third day, and with the exception of a small part at the outer angle, and also where the ligatures hung out, the whole line of the incisions was found to have united by the first intention.

The patient was out of bed and on crutches at the end of the month from the time of the operation. She gradually regained flesh and strength, and is now perfectly well and able to attend to her domestic duties as far as a person so mutilated can do.

On examining the tumour, no trace of muscular fibres could be discovered in the upper anterior portion of the limb. A large mass of soft liver-like substance, intersected by thin fibrinous bands, extended from the lower third of the thigh within one inch of Poupart's ligament. The diseased substance extended down to the periosteum, covering the anterior portion of the femur, but the bone itself was quite healthy. In no part of the diseased structure could any medullary or cerebral-like substance be detected.

CASE OF STRANGULATED RIGHT FEMORAL HERNIA: OPERATION ON FOURTH DAY OF STRANGULATION: RECOVERY.

By Alfred Fleischmann, Esq., Gresford Cottage, Wrexham.

I am induced to offer a few remarks upon the above case, because I believe the operation for hernia has been unduly surrounded with supposed difficulty and danger. In recent cases of strangulation, practitioners are, I fear, prone to wait, and indulge the too often delusive hope that long continued taxis may supersede the knife; whilst, where strangulation has existed for some days, the case is often looked upon as hopeless, and may be the patient dies unaided and unrelieved.

On Saturday afternoon, November 6th, I was summoned to a remote country district, to see a woman suffering under all the symptoms of strangulated hernia. I found they had existed for four days. Fæcal vomiting and hiccough had set in; her pulse was 120, but her expression did not betoken excessive anxiety. The hernia was on the right side, and clearly femoral. Sixteen years ago, she had ruptured herself lifting a heavy weight: it then appeared as a marble, was down during the day, and up at night. She never wore a truss. She was of spare weakly habit, in age 44, the mother of two children. For the last few days she had been dyspeptic, vomiting her food. On Wednesday, November 3rd, whilst vomiting and straining violently, the rupture descended more than usual; she tried to replace it, but failed. Application was made to an unqualified practitioner, who sent her some hydrargyrum cum cretâ and rhubarb, which, however, produced no marked amelioration!

The symptoms grew more and more urgent, till, on Saturday, November 6th (the fourth day of strangulation), she sent to seek for further help.

The tumour was of stony hardness; reduction was out of the question; and I decided upon operating with as little delay as possible. I called into consultation Mr. Griffiths, who kindly attended, and rendered me most valuable assistance. He also tried taxis, but, like me, soon abandoned the attempt. The operation was a straightforward one, and presented no features worthy of particular note. The sac was opened. The intestine was livid in hue, and *incipiently* gangrenous. Several ounces of straw-coloured serum escaped from the peritoneal cavity. The stricture was firm, and required free division. After the operation, she had a full dose of opium and ammonia. I sat with her all night: she was free from pain, and slept well. In the morning, her pulse was 106. The remission of all her urgent symptoms was total.

November 8th. Pulse 100. She had no pain in the wound. The tongue was clean. She lived upon strong beef-tea, and took small doses of ammonia and henbane.

November 9th. Pulse 104. She had not the slightest pain or uneasiness in the wound. I left well alone.

November 10th. Pulse 112. She felt no pain, but some stiffness in the wound. I dressed it, and was gratified to find the upper third united by primary intention, and the remainder looking very healthy. The discharge was sufficient, though not abundant. The bowels had not acted, and a simple enema did not bring much away.

November 12th. Yesterday an enema acted copiously; to-day the bowels were naturally moved. Pulse 100. The wound was very healthy.

I need not continue the record further. She rapidly improved; and, on the fourteenth day after the operation, the wound was healed, and she was ready to leave her bed.

Remarks. This was, I think, a case upon which the most sanguine surgeon would have passed an unfavourable prognosis; and, taking into consideration that the strangulation had existed four days; that she was a weakly woman, debilitated by previous illness; that the extrapped intestine was congested to extreme lividity, and almost to gangrene; and that the peritoneal membrane had begun to sympathise with the gut,—I think most justly so. But, the operation over, all morbid processes ceased; and the *vis medicatrix naturæ* proved the wisdom of our attempt. That the pulse never rose above 112; that no sloughing worthy of mention followed; that the imprisoned bowel so soon recovered its natural function; and that the constitutional symptoms after the operation were so insignificant,—are all, I think, facts worthy of note, and full of encouragement for the future. I am convinced that *long attempted* taxis, where strangulation is not recent, is as useless as it is perilous; and that, if it succeeds once, it fails twenty times.

There is a point which, in hospital practice, has often struck me, and which this case, which after the operation was left for four days undisturbed, I think, well illustrates; viz, that where a wound is painless, where suppuration is not excessive, and where the constitutional symptoms do not indicate progressing mischief, the less it is interfered with, and the less it is exposed to atmospheric influence, the better. I feel sure, too, that in these days of pyæmia and proneness to typhoid symptoms, a generous diet and due administration of stimulants after an operation often ward off extensive suppuration and vital depression, or, failing that, enable the patient to survive them.

Transactions of Branches.

EAST YORK AND NORTH LINCOLN BRANCH.

A FALLACY IN THE PHYSICAL DIAGNOSIS OF ABDOMINAL TUMOUR.

By John Dix, Esq., Hull.

[*Read Sept. 23rd*, 1858.]

The records of medical literature and the observations of practical experience combine to teach us—that a question of diagnosis sometimes arises between renal enlargement and hepatic tumours—when one or other of these morbid conditions presents itself, on what may be termed debatable ground. In such a case, the presence or absence of resonance on percussion in front of the tumour is usually one of the most certain and reliable of the discriminative *physical* signs.

This is such a self-evident fact, and so obviously and so necessarily dependent on the anatomical position of the colon in relation to these two organs, that it is almost superfluous to quote authority on the point. I content myself with a single citation, which appears to state the whole matter clearly and succinctly.

Dr. Ballard, in his monograph, *On the Physical Diagnosis of Diseases of the Abdomen*, thus expresses himself:—"On the right side, the difficulty lies in distinguishing renal tumours from enlargements of the liver and gall-bladder. The distinction upon which the greatest reliance is to be placed, and which, in the majority of instances, will be found applicable, is the existence of the signs which palpation, percussion, and auscultation, severally afford of the presence of a portion of the colon in front of the tumour. It is rarely that this sign is present in hepatic, or absent at one time or another in renal tumours."

This, then, is the rule; exceptions to it are recognised in either case. Thus Ballard mentions a case where there was resonance on percussion over a tumour of the liver, which was "due to the colon crossing the surface of a lobulated encephaloid mass, and lying in a groove." And, on the other hand, whilst stating that the colon is pushed forward by an enlarging kidney, and so produces a resonant sound in front of the tumour, he adds this foot-note: "Although this holds good in a large majority of cases, yet I believe it is open to exceptions"; but of this, he gives no special illustration.

A case has lately come under my observation in which this rule was violated from a very singular cause. A detailed account is needless. I will relate only the salient points.

Mrs. M., aged 55, came under my care on April 7th, 1857. She was then very ill; pallid, feeble, emaciated; she complained chiefly of pain in the right side of the abdomen, with frequent vomiting and other symptoms referrible to derangement of the hepatic and digestive functions. She had suffered before-time from jaundice and gall-stones. In the right hypochondrium was a very palpable tumour, which was the chief seat of pain. The patient was unaware of the existence of this, although it was well defined and easily recognisable. To the examining fingers it seemed about the size of the folded fist, and it conveyed the impression of a solid body—an outgrowth from the liver—extending in a direction downwards towards the pelvic region rather than inwards towards the umbilicus. Its surface felt level and even. No other tumours or nodosities could be felt; nor was there evidence of general hepatic enlargement.

This is a summary of the results of many careful observations. As I have said, the general symptoms all pointed to the liver as the seat of the mischief; and, after a time, slight jaundice supervened. The urine was often examined, and gave no indications of kidney disease. What, then, was there difficult in the diagnosis? Simply this:—In front of this tumour was resonance on percussion, clear, sonorous, unmistakeable, constant, continuous from the cæcum upwards, and so across towards the median line of the abdomen, where it was lost in the general resonance of the intestines. In this last particular there was a slight variation. Thus at one time, when the growth was somewhat small and not so decidedly traceable to its connection with the edge of the liver as it subsequently became, it seemed as if the resonant note ceased at the lower edge of the tumour to be again brought out as the pleximeter passed upwards over its surface towards the costal cartilages—the tympanitic sound being clearest above and below the most prominent portion of the growth.

This state of things suggested to my mind that our enemy was after all merely a mass of hardened fæces impacted in the colon. This idea was cherished by the appearance of lumpy evacuations on purgation, followed by a certain diminution in the abdominal enlargement, shewing that there really was lodgment in the large intestine, in close proximity with the tumour, if not forming part and parcel thereof.

Further observation and the subsequent course of events proved that this was a fallacious hope, and I was driven back upon the horns of this dilemma—Was this a growth from the liver, insinuating itself in some way or other beneath the colon? or was it a tumour of some organ, naturally placed behind that viscus? There were difficulties in the way of either conclusion; nor in truth would either have been correct.

The patient died in about three months by a lingering and painful process of exhaustion from suffering and inanition; and, to the day of her death, this resonance in front of the tumour was to me a stumbling block and cause of doubt in the matter of diagnosis.

After death, the mystery was explained—the scalpel cut this Gordian knot. The tumour was hepatic and malignant. It was softening down—sloughing, in fact; and in this process it had involved and laid open *the duodenum*, to which it was attached, and whence air had escaped into a circumscribed cavity formed by the tumour behind and the abdominal wall in front, to both of which the transverse colon was adherent below, forming the lower boundary of the aforesaid space. Hence the tympanitic note in front of the tumour; and hence also this resonance was continuous with the natural flatulence of the colon. The liver was stuffed with smaller growths of the same kind, but none of them were cognisable by external palpation; and there was a single nodule of a like deposit in the spleen. The gall-bladder contained several calculi.

I have only to add, that Sir Henry Cooper, who saw this patient with me, did not allow himself to be led away by my pet difficulty; but looking to the broad features of the case, and relying chiefly on the general symptoms, gave a confident and most accurate opinion that this was a malignant tumour of the liver.

Some may be inclined to consider that it was an attempt at over refinement in diagnosis, which led to needless perplexity, and caused unnecessary doubt.

Others, perhaps, may agree with me, that this was a real anomaly, which could neither be ignored nor easily explained; that the physical condition was peculiar, arising out of a still more curious and remarkable lesion, not likely to be guessed at, or correctly surmised, or soon met with again; and that although the point we have been considering was of no great practical importance as to either treatment or prognosis, yet the case is interesting from its singularity, and from the clear and satisfactory solution brought out by the dissection, of a kind of enigma, which, in a similar or somewhat varied form, may have occurred to and puzzled others; and that it is therefore worthy of relation here, and of public record hereafter.

When the foregoing paper was read at Beverley, I took occasion to mention that I had then under observation another case of malignant disease of the liver, in which the colon passed in front of the lower part of the tumour, rendering it doubtful (as in the preceding case,) whether this portion of the growth belonged to the liver or to the kidney.

This patient has since died, and I therefore subjoin a brief account of the case as a further illustration of the subject under consideration. It furnishes an apt exemplification of the general rule, that the colon will usually be found a reliable landmark and aid to diagnosis in these doubtful tumours.

Elizabeth Parkin, aged 65, came under my care in July last. She had been ill some months, was much enfeebled and greatly emaciated, so that the manipulative examination of the abdomen was particularly easy and conclusive. The liver was much enlarged, reaching nearly to the umbilicus. Nodules and protuberances were conspicuous and numerous, leaving no doubt as to the nature of the disease. At its lower border the arch of the transverse colon could be most distinctly traced across the abdomen; the undulations of flatus passing therein could be felt and even seen. Behind this, and projecting somewhat below it, was another tumour clearly defined, hard, rounded at the lower extremity, not unlike a kidney in shape and position, but somewhat larger. Above, it was decidedly connected with the liver, the intimate union of the two being easily made out through the empty intestine and attenuated parietes.

Whether this was liver or kidney, who could say with certainty? The history and symptoms lent no aid in determining the question. The examination of the urine showed nothing abnormal, but there was an obscure and confused account, of a considerable quantity of blood having been passed on some occasion a few months previously; but whether from the bladder, or from the vagina, or from the rectum, was not satisfactorily shown, although it was believed to have come with the urine.

There had at no time been either jaundice or ascites. An attack of pneumonia dealt the final blow, and she died October 27th.

At the necropsy we found, as had been foretold, that the enlargement of the liver was caused by scattered tubers of soft cancer, varying in size from that of a pea to that of a peach. The colon was attached to the lower edge of the liver, whilst the tumour, which had been felt below and behind the intestine, proved to be the lower end of the *right kidney*, affected with the same disease. It was about twice its natural size, and intimately adherent to the liver above. Its pelvis and ureter were open, and its secreting structure was not entirely destroyed.

In the right suprarenal capsule were also nodules of a similar growth. Both lungs were studded with similar depositions; the right being also in a state of red hepatization.

Clinical Lectures
ON
LITHOTOMY.
DELIVERED IN
THE LEEDS GENERAL INFIRMARY.

By Samuel Smith, Esq., Senior Surgeon to the Infirmary.

Lecture I.

Gentlemen,—There is no operation in surgery of greater importance than that of lithotomy; in fact, it is considered the great operation of surgery. When you see a strong robust man having walked vigorously into the operation-room; bound hand and foot, and submitted to the knife; thence taken to his bed, where he dies within a week, you cannot conceal from yourselves the fact, that he did not die of the disease, but of the operation. How important then, gentlemen, in a case of this kind is it that before any one should dare to undertake it, he should in the first instance thoroughly acquaint himself with the anatomy of the parts and the practice proper to be pursued on such occasions.

Nothing in a surgeon's practice, generally speaking, calls forth so strongly as this operation the feeling usually termed nervousness. I know many, myself amongst the number, who never experience this feeling at the prospect of performing any other. Gentlemen, I was upwards of a quarter of a century in overcoming it. I used to call it my lithotomy feeling; and I will describe it to you. From the moment of giving notice to the house-surgeon the day previous, a certain degree of restlessness and anxiety came upon me; I thought about nothing but lithotomy. I went to bed, and slept during the early part of the night; but invariably awoke at four or five in the morning of the day on which the operation was to take place. I used to feel so nervous and indisposed, that, in walking up stairs, I was very glad of the assistance of the banisters to reach the top. I felt ill; but, from the moment I took the scalpel, I recovered; and no sooner was the stone in my hand than I became as strong as a lion, and felt as well as ever I was in my life: it effected a sudden and complete cure of the feeling I have described. I used to feel very much humbled on account of this nervousness, for I fancied myself a man of high courage in every other respect; but I yielded completely on this point, and felt ashamed of it till I happened to see that the greatest of English lithotomists suffered under these circumstances even more than I did myself. Cheselden's feelings of anxiety amounted to illness; and he had the manliness to confess it, and put it in print. Hear what he says. After recounting his various operations, and the very great success that attended them, these are his words:

"If I have any reputation in this way, I have earned it dearly, for no one ever endured more anxiety and sickness before an operation; yet, from the moment I began to operate, all uneasiness ceased; and if I have had better success than others, I do not impute it to more knowledge, but to the happiness of a mind that was never ruffled and disconcerted, and a hand that never trembled, during an operation."

Gentlemen, if a man like Cheselden can confess to having had such feelings, I am not ashamed to state that I shared in them; and it is only very, very recently that I have been entirely free from them. You will some of you, no doubt, in your day, become lithotomists; and you may suffer from the same cause. If so, do not be ashamed to ask assistance from above. Do not feel ashamed to confess, as I do now, that, previous to performing this great operation of lithotomy, I never omitted praying to God to give me that confidence and fortitude, skill and dexterity, which are required for obtaining a successful result. That, I assure you, will give you those high mental qualities and presence of mind often required to meet the very untoward events which will sometimes occur.

I propose, gentlemen, on the present occasion, to give you what may be called my experience of Leeds Infirmary lithotomy; and this will give me an opportunity of explaining how that operation has been performed here for upwards of half a century; for it is now a year beyond that time since I first entered the Infirmary as a pupil under the celebrated Mr. Hey. The surgeons then were Hey, Logan, and Chorley. These gentlemen, at that time, in the performance of this operation, all used the cutting gorget; Mr. Chorley preferring a large broad one, that cut on both sides. It had its name from a surgeon of Birmingham of that day: it divided the prostate freely, both right and left, on entering the bladder. At this period they had a very wrong impression that it was necessary to divide the prostate very freely. The external incision was made quite in a different manner from that in which you now see it performed. Instead of plunging the scalpel point daggerwise first into the perinæum, and thus cutting in the same line a deep and long external incision, the cutting edge of the scalpel was placed on the skin (rather higher than we now begin), and a long incision was made through it; and then followed a tedious dissection. The cut was not made at one stroke, as you now see it done; but frequently a greater amount of time was occupied in the performance of the external incision than is now required for the entire operation. The middle of the incision was dissected, and the membranous part of the urethra sought for. When this was found, the scalpel was changed for one with a double edge, with which the opening was enlarged up and down. The nail of the left forefinger being placed in this opening, the beak of the large cutting gorget was fixed there. The operator then, rising from his chair, took the handle of the staff from the assistant, grasped it firmly, depressed the handle, and pushed the beak of the gorget along the groove into the bladder.

Great force was often required to accomplish this. You will remember that this double-edged gorget was very large and very broad, and was chosen with the especial intention of making a very free division of the prostate; and thus, as was supposed, of making an incision that would enable them easily to extract the stone. I have said the push required to get it through these parts was often considerable; and, bearing in mind the narrowness of the upper part of the arch of the pubes in the male, and that the external incision was shallow above and below, and deep only in its centre, you will not be surprised when I tell you that I have several times seen the entrance of the gorget arrested by the presence of the bone. On one occasion, after I became surgeon to the Infirmary, I have a clear recollection of the surgeon making use of this double edged gorget, and being thus brought to a full stop in his operation; but by force succeeding in getting it into the bladder. The gorget was withdrawn, with both its cutting edges roughened and destroyed, which was believed by the surgeon to be done by its coming into contact with the stone; but, after the death of the patient, I proved that my suspicion was correct, by putting my finger-nails into the notches made on both sides of the ramus of the os pubis by the cutting gorget. When the cutting gorget was withdrawn, the blunt one was then passed along the groove of the staff into the bladder, as a director for the introduction of the forceps. The stone was then grasped by the forceps, and the attempt to extract it commenced. Sometimes, when not too large, it was withdrawn readily.

But when the stone was large, there was always very great difficulty in extracting it. How came this? There was a very large division of the prostate, to thrice the extent you see it done now; but at the time I am alluding to, the stone never came through the parts with the slight power you now often see required to accomplish this. There was always difficulty, more or less. I have a vivid recollection at this moment of seeing a poor man from Market Weighton upon the table operated upon by the senior surgeon in 1809, the stone grasped in the forceps, and the surgeon extracting with all his might until quite exhausted with the effort, when he gave the instrument into the hands of his junior colleague, who not immediately, but in process of time, succeeded in extracting it. The result of such an operation may be easily imagined—the man died. When the stone could not be extracted with facility, there never was any suspicion that the fault was in the external incision; the supposition was that the prostate had not been sufficiently divided, and accordingly this was an instrument (showing a straight probe-pointed bistoury) which was invariably placed on the tray for the operation of lithotomy. When the stone was grasped by the forceps and it was found that it would not come, the handles were held by the assistant, the operator inserting the forefinger of the left hand into the wound, passed the bistoury along it, and made a more extensive division of the prostate laterally; but so ineffectual was this transverse incision of the prostate usually found, that I have seen it done repeatedly in one operation with very little advantage.

This instrument—the probe-pointed bistoury—is rarely required by us in the present day. I have not seen it used except on one occasion for twenty years, and that was my last operation. Why did I use this instrument then? Because I did what it is always necessary to do previous to operation;

viz., I examined and measured and ascertained the exact condition of the prostate gland of the man Wm. Hudson, upon whom I operated in September last. I found that it was enormously enlarged, very hard, and I knew that there would be difficulty in consequence. Previously, therefore, to the operation, I requested Mr. Hardwick to put that probe-pointed bistoury on the tray, and, as I had suspected, its use was required; for although my largest scalpel had penetrated the bladder, the prostate was so hard and enlarged that it was evident there was not a sufficient opening, and I enlarged it with this bistoury; and then you will remember when the stone was grasped with the forceps, the prostate was so enlarged, (and the middle lobe more particularly) that it came in front of the stone in the grasp of the forceps, where it was again divided by me with the sharp-pointed bistoury. If that had not been done, the operation would have been a fatal one, but, as you all know, the man, although 68 years of age, made an excellent recovery.

Well then, Gentlemen, I wish to explain to you that at this period the reason of all this difficulty in extracting the stone was not in consequence of an insufficient division of the prostate, as was supposed, but on account of the insufficient depth of the external incision at the upper and lower part. If the scalpel had been passed as we now pass it, dagger-wise, deep into the perinæum, in the first instance, this difficulty would not have occurred, nor would it have been necessary to make so extensive a division of the prostate. At this period, hæmorrhage after lithotomy took place to a greater extent and more frequently than we see it now, and that was in consequence of the great division made *transversely* through the deep parts. In penetrating the bladder, important vessels were often divided by the gorget which now escape. At this period, the grooved staffs which were used were very small compared with those we use now. This was the kind of staff (showing one of very small diameter) used on these occasions; compare it with this (showing one of very large diameter). There is a very great advantage in the use of a large staff; it puts the parts gently on the stretch. When the point of the scalpel pierces the membranous part of the urethra, the wound gapes and is not easily lost, but when these thin narrow staffs were used, when the scalpel penetrated its groove, unless the finger nail was immediately put into the opening, it would be lost, and perhaps another made in its place.

Now, Gentlemen, you will see from what I have said of the manner in which this operation was performed at the Leeds Infirmary fifty years ago, that it must have occupied a considerably greater amount of time in its performance than we require at present. I may state to you truly that the time then required for this operation was generally three or four, and occasionally even eight times more than we require now. Do not imagine from the observations I have made that I wish to undervalue the reputations of those men who have now gone from among us. No, they were all of them first rate men in their day; but since that time Leeds Infirmary surgery, like surgical science everywhere, has made great advances and been much improved. Believe me when I tell you that I feel a greater degree of respect and reverence for the memory of the senior of those three, than for that of any man I ever knew, with the exception only of my own father.

In the winter of 1812, when I was a student in Edinburgh, the first William Hey and Mr. Logan retired from the practice of the Infirmary, and were succeeded by the second William Hey and Mr. Stansfeld. Mr. Hey continued the use of the cutting gorget till several years after I became a surgeon of the Infirmary, when he gave it up for Mr. Key's scalpel and straight staff. Some years after that time, Mr. Hey and I having one morning both finished going round the wards, met in the House-Surgeon's room. Knowing that he was going to perform lithotomy at one o'clock that day, and remembering that his last two cases in succession had died of hæmorrhage, and in the last case, that the pudic artery had been divided; having, I say, been so much impressed with what I saw on that occasion, I determined to make a clean conscience and speak to him on the subject. Accordingly I told him that I had noticed, particularly when he performed his last operation, that as he passed in Key's knife I distinctly saw the pudic artery divided by the cutting edge of the knife near the hilt as it passed through the prostate held at a considerable angle from the staff. I explained this to him and advised him, by all means, to get the cutting edge towards the hilt ground away, so that it would not cut beyond a certain point. He was convinced that I was right, and asked me, as a favour, to see to its being done for him. I took the knife to Gay, the cutler, and explained the matter to him. He recommended a new knife in preference; and this is the knife he made that morning according to my directions, and with which Mr. Hey operated successfully. The edge of this instrument towards the hilt is one-eighth of an inch broad, while the other was quite sharp; the cutting part of the knife is therefore only one half of the length of the other. Before I have finished these lectures, I purpose fully to explain this subject. I will give you a comparison of the advantages and disadvantages of the curved staff, and the beaked scalpel, as compared with the disadvantages of the straight staff and pointed scalpel.

I have not a recollection of ever having seen Mr. Stansfeld, the junior surgeon of that day, perform lithotomy; but I have had some conversation with Mr. Garlick lately, and I believe he operated with great success with the curved staff and scalpel. Mr. Stansfeld died of fever in January 1819, and I was elected in his place on the 15th of February of that year. The surgeons of the Infirmary then became Chorley, Hey, and Smith.

I purpose now to give you my own personal experience on this subject, and the various steps by which I have arrived at my present method. The first time I performed this operation was October 19th, 1821, on Benjamin Kingston, of Leeds, aged 21 years. At this period I had a feeling in favour of the curved staff and scalpel; but in accordance with the practice of my seniors, on the first occasion I used the cutting gorget, but it was not so large and broad and only cut on one side. A physician of the Infirmary, who had previously been a surgeon in the army, was present, and complimented me on the operation. It was fairly done; the only untoward circumstance being, that the stone was very friable and gave way under the pressure of the forceps. It was so soft that it could be broken by pressure between the finger and thumb. Here is the nucleus of oxalate of lime enclosed in soft layers. The great bulk of the stone came away in the forceps, the rest was readily removed by the scoop, and the bladder afterwards washed out. The man had hæmorrhage to some extent, but not at all such as to place his life in danger. On this account, although the hæmorrhage had ceased, the House-Surgeon very kindly undertook to watch him narrowly, and slept that night in the same ward with the patient. In the middle of the night the man was attacked with considerable pain and a forcing sensation; no doubt it was produced by coagula in the bladder; but at that time the bugbear in these cases was peritonitis, and these pains were supposed to indicate the commencement of that disease, and under that impression the House-Surgeon took out his lancet and abstracted from this poor man (who had only a few hours previously submitted to an operation followed by considerable hæmorrhage), thirty ounces of blood. This man's fate was sealed from that moment. He received his death wound, not from the scalpel, not from the gorget, but from the lancet; and he died in the course of a few days. I will not occupy your time by relating the disgraceful extent to which blood-letting was carried in many hospitals at that time; but I am proud to say, that I was among the first here to see the error, and one of the earliest to abandon it.

Soon after that operation, I read a most excellent paper in the *Medico-Chirurgical Transactions*, by Mr. Martineau, of Norwich, in which he gives the result of eighty-four operations, in which only two fatal cases are recorded. I was quite struck with one part of these observations, which were to this effect, that he believed peritonitis rarely, if ever, took place after lithotomy; that in all these cases he had never once used the lancet, and very rarely even applied a leech; that on the fourth day after the operation he gave his patients generous diet and beer: and I came to the conclusion that these circumstances, in a great measure, accounted for his great success. Sir Astley Cooper was very much struck by the success obtained by Martineau in the operations at Norwich; and thinking there might be something due to the sort of instruments used, he wrote, desiring they might be sent for his inspection. Martineau sent him a bag of old sounds, grooved staffs, and forceps of the most ordinary construction. He used to cut into the membranous part of the urethra, making a very slight division of the prostate with the scalpel, following that up by the blunt gorget into the bladder. Sir Astley Cooper was quite disappointed when he saw these instruments, because he expected to see something new. I have been told that he returned them to Martineau with a very handsome letter, part of which ran thus: "I see that your success it not at all owing to the instruments you use, but to the head which dictates, and to the hand which performs your operations."

About this period I paid a visit to London, and went round

the Middlesex Hospital with my old teacher, Sir Charles Bell, with whom I had some conversation on the subject of lithotomy. I told him about my first operation, and how miserable it had made me. I explained to him how I had done it; and I will tell you what his expression was: "Why, what the devil did you use the gorget for, Smith? Never use the gorget. Operate with the scalpel, and get one of my staffs: I will give you one." He gave me this staff; and, gentlemen, if you will look at this plate in his illustrations of the great operations of surgery, and compare the two, you will find the instrument and the plate exactly correspond. You will also see that the groove in the staff is made obliquely, so that the scalpel, when placed in it, will cut in that direction. When I first got this staff, I was very proud of it, till I took it to the Infirmary, and it was compared by the house-surgeon and others with the Leeds Infirmary staffs. It was laughed to scorn, and thought an especial good joke when, on the first occasion that I tried it on the dead body (for I determined to use it), I was obliged to ask for a scalpel to slit open the glans. However, I persisted with it on the dead body, having a patient upon whom I was going to operate in a few days. There is an old French proverb, gentlemen, and a very good one indeed, "Il rit bien qui rit le dernier"; and I laughed well, for I laughed the last. In my next operation, this staff went into the bladder as smooth as oil; and, since that day, these small staffs have been discarded, and the largest staff that will pass the glans is always chosen. In the natural construction of these parts, the urethra within the glans is the narrowest part of the passage; and if an instrument will pass there, it will usually pass to the bladder. In eighteen out of twenty adults, when there is no stricture, this large staff will readily pass. Well, then, I got my large staff; and I determined to cast away for ever that murderous instrument, the cutting gorget, and to operate with the scalpel.

Accordingly, on December 2nd, 1822, I performed two operations, one on Thos. Holden, aged 60, in which case that large staff and the scalpel were used: it was very successful, and the patient made a good recovery. The other case was John Horsfall, of Leeds, aged 13. He was also operated on with the curved staff and pointed scalpel. There, again, all went on well, and he had a favourable recovery. This is the stone which was extracted: it is an excellent specimen of the mulberry calculus. During the performance of these two operations, although they were both successful, the feeling that there was a risk of the point of the scalpel escaping from the groove of the staff, occasioned me considerable anxiety. I thought that I should feel much safer if the scalpel were furnished with a beak.

British Medical Journal.

SATURDAY, JANUARY 1st, 1859.

THE OBSTETRICAL SOCIETY OF LONDON.

The Obstetrical Society of London having now taken its position amongst the leading scientific institutions of the day, it only remains for the Fellows to work zealously together in the good cause, to insure a long continued prosperity. The founders have every reason to feel highly gratified at the success which has so far attended their efforts; and as, at the inaugural meeting, they handed the Society over to their professional brethren generally, their responsibility in a great measure ceases.

There is one very excellent feature in the Obstetrical Society which deserves the attention of our readers; viz., that it appeals for support and encouragement, not chiefly to the medical practitioners residing in the metropolis, but most especially to those busy members of our body who are engaged in provincial practice. All who are acquainted with these latter physicians and surgeons know how earnestly they work by day and night to relieve pain and suffering; and it is felt that each one of them must have amassed some important practical facts which deserve attentive consideration, and considerable circulation. It is not expected that such gentlemen, fully engaged in the arduous duties of practice, and with very limited—if any—literary leisure, will consume the midnight oil in the composition of elaborate or theoretical papers; but it is thought that it will be in the power of almost each one to communicate the history of one or more important cases, as well as a number of practical observations which may—when collected together—have a very important bearing upon the prevention and treatment of disease. For our own parts, we entertain a very positive opinion that great advantage will accrue to the obstetric art from the publication of volumes of transactions stored with such facts, gathered from actual clinical experience.

Whether the Society will exert its energies in promoting the solution of any of the social questions, which are exciting so much attention in the present day, we have no means of knowing, but we think it may at least well consider the propriety of doing so; for we are sure that every Fellow of it wishes to work amicably with those who enjoy wealth, education, and position, for the general amelioration of the condition of the poor. Without, then, assuming any rash or dictatorial interference, how important is it that strenuous exertions should be made by such an influential body as the one under consideration, to substitute skilled attendance upon the labourer's wife, in the place of that which she receives from the midwife. Who is there amongst us that is not personally acquainted with some harrowing tale of children left motherless through the gross ignorance of uneducated women; of thoughtless women, who—unfit for any occupation demanding even the possession of the most elementary kind of knowledge, or of a particle of common sense—yet dare to play with human life. We have known a midwife sit quietly by the bed-side in a case of shoulder presentation for very many hours, and in spite of the prolonged agony and urgent prayers of the patient, refuse to send for proper aid, asserting that all was as it should be! When friendly assistance came, it unhappily arrived too late; but the midwife merely shrugged her shoulders, filled her nostrils with snuff, and retired to *assist* another sufferer; possibly resolving that on any future emergency she would not have a stuck-up doctor sent for, to find fault with her practice. This is only one instance, it is true; but we could collect a hundred similar ones in a week. The subject is not merely a simple question of humanity, but one also of pounds, shillings, and pence; as the rate-payers would acknowledge if they only visited the unions and ascertained the expense of supporting destitute orphans. Indeed, look at the matter from any point of view we please, it cannot but excite great surprise and regret that its consideration should be necessary in the present day, with all our boasted enlightenment and civilisation.

Again, there is the subject of infanticide—a crime which, we fear, is greatly more prevalent in this Christian country than those who have not well considered the topic would at first believe. The murder of a helpless infant seems to us one of the most revolting crimes which can be committed; but it really may be doubted whether this is the general opinion of the uneducated classes, to judge from the sympathy which persons accused of it generally have shown to them. Though Mahomet was an impostor, yet he certainly achieved some good; and not the least was in prohibiting this sin. "Kill not

your children," says the Koran, "for fear of coming to want; we will provide for them and for you: verily the killing of them is a great sin." One principal reason why cases of infanticide are so numerous seems to be the difficulty with which those who perpetrate it can be punished. The law really appears purposely to provide for the escape of the guilty mother, by making it incumbent upon the medical witness to prove that the child was *wholly born* when the violence was committed. As Dr. W. B. Ryan has shown, it is not sufficient that the medical witness prove the child to have breathed at or about the time of birth; but it is absolutely necessary, under the present state of the statutes, to prove that the child was alive when completely born; that life existed after the body came into the world, as shown by the state of the lungs, etc. Hence the killing of the infant *during birth*, although it breathes and lives, is not a legal murder: although injuries of a deadly character may appear, yet, unless it can be proved that the child was wholly born when it was killed, the accused must be acquitted. In the pages of the Provincial Medical and Surgical Journal for April 23rd, 1845, a case is reported, in which it was proved that the infant had breathed, though, when found, its head was nearly severed from the body. Mr. Justice Erle directed the jury that, before they returned a verdict of guilty, they must be satisfied that the child had an existence distinct from and independent of the mother when she murdered it. Of course, the prisoner was acquitted. Should a similar trial take place to-morrow, the result would be the same, inasmuch as the law remains unaltered.

There is only one other matter which we shall now speak of, and it is with respect to abortion-procurers. We believe that there are a set of scoundrels, in this and other large cities, who pretend to be legally qualified medical men, and who gain their living by destroying the products of conception in unchaste women. That the new Medical Act may effect some good, in depriving these knaves of their borrowed titles, is sincerely to be hoped; but we think much more may possibly be effected by vigilance on the part of the Fellows of the Obstetrical Society, in exposing any cases of the kind which may accidentally fall under their notice. The crime of inducing abortion is a most detestable one, and every effort should be made to give those who practise it full opportunity for repentance in penal servitude.

As we observed at the commencement of these remarks, we do not know if the consideration of these and similar weighty matters will be considered within the province of the Obstetrical Society of London, or whether it will simply confine its attention to the advancement of science; but, whatever may be the views entertained on this point, we have no hesitation in wishing the Society a long and prosperous career; for we are sure it will afford material aid in the cultivation of practical medicine and the general advancement of truth.

THE WEEK.

The trial of Hodgson, the druggist, one of the persons implicated in the recent poisonings by arsenicated lozenges at Bradford, took place on December 21st, and terminated in a verdict of acquittal. The prisoner's assistant, Goddard, swore that his master had instructed him to procure the "daft" from a cask in a corner of the room where the wares were kept; but that, instead of doing so, he went to a cask on the top of the staircase, at least four yards from any corner. His master, he said, had told him to be very careful about poisons, and never to sell them unless in his presence. Mr. Baron Watson could not see any evidence of negligence, and directed the jury to acquit the prisoner; which they accordingly did. Mr. Hodgson has had a fortunate escape for himself; but the result of this trial only goes to prove the necessity of some stringent laws which shall enforce the keeping of poisons in a place where they cannot possibly be mistaken for anything else.

There is an old saying, that services which are obtained for nothing are considered worth nothing; and the saw has just been practically exemplified at Taunton, where the Governors of the Taunton and Somerset Hospital have recently made a rule, which is justly considered highly offensive by the medical officers of that charity. Not content with receiving the gratuitous services of their professional staff, incredible as it may appear, they seek to time them, to force them to sign their names in a book on each visit to the hospital, with the date and hour of the visit. No reason whatever has been assigned for the establishment of this rule, which will, without doubt, if carried out, be considered to be a reproof to the medical officers—a curb judiciously introduced to keep them in order. We are not aware that the Governors of any hospital have heretofore attempted so flagrant an interference with their staff. Some time since, the Governors of the Devon and Exeter Hospital attempted to exclude the visiting physicians and surgeons from the committee of the hospital, but, mainly through the efforts of our associate Dr. Shapter, this attempt upon their rights and privileges was defeated; and we have no doubt whatever that the Taunton Governors will ultimately be obliged to withdraw their obnoxious rule. On the 6th of January, 1859, a special meeting of this tyrannical body is to be called, for the purpose of proposing the expulsion of the gentlemen who decline to be thus treated like day-labourers; and we shall shortly, therefore, see whether a body of English gentlemen can be found mean enough to fulfil the threat they have been unjust enough to put forth.

We beg to remind our Associates that the first day of January in each year is the period from which the membership of the British Medical Association is dated. If, therefore, any Associates have new members to propose, it is suggested that they should do so with as little delay as possible. This will not only secure to the new members the perusal at an early period of the numbers of the Journal to which they are entitled, but will also be a convenience to the publisher, in enabling him to form a correct estimate of the number of copies required to be printed each week. Among the advertisement pages is a form of nomination, which can be readily filled up. We trust that many Associates will make use of it.

We beg to call the attention of our readers to two letters which have appeared in the *Times*, by Dr. Mayo, the President of the College of Physicians, and Dr. Forbes Winslow, relative to the legal responsibility of the insane, with especial reference to the trial of James Atkinson at York. It is clear that so important a question must call forth further correspondence: we shall, therefore, defer any remarks we may have to make upon it.

MEDICAL REGISTRATION.

NOTE FROM THE REGISTRAR.

Dr. Francis Hawkins would be greatly obliged if the Editor of the British Medical Journal would have the kindness to make known, that the number of applications for Registration is now so exceedingly large, that some time must necessarily elapse before they can be acknowledged; and a much longer time before they can be examined and entered, and receipts returned.

18, Bolton Street, December 29th, 1858.

LIVERPOOL MEDICAL REGISTRATION ASSOCIATION.

The Registrar under the new Medical Act having requested the Registration Societies to receive the applications and fees of all qualified members of the profession desirous of being registered,—Notice is hereby given that the Sub-Committee of the above Association will attend daily at the Medical Institution, Mount Pleasant, between the hours of 12 and 1, from this day to the 8th of January next inclusive, for the purpose of receiving such applications, etc., and transmitting them to the Registrar. Forms of application for registration will be supplied. A. T. H. Waters, *Honorary Secretary.*

December 30th, 1858.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR SCOTLAND.

Royal College of Physicians, London, November 27th, 1858.

Sederunt—Sir B. C. Brodie, *President;* Dr. Alexander Wood, Dr. Andrew Wood, Dr. Lawrie, Dr. Watson, Mr. Syme, and Dr. Christison.

Moved by Dr. Christison, and seconded by Dr. Lawrie—

"That Dr. William Robertson be elected Registrar for Scotland."

Moved by Dr. Andrew Wood, and seconded by Dr. Watson—

"That Dr. John Gairdner be elected Registrar for Scotland."

Votes taken, and Dr. William Robertson declared elected.

(*Confirmed*), James Syme.

2, Rutland Street, Edinburgh, December 7th, 1858.

Sederunt—Mr. Syme, *Chairman;* Dr. Christison, Dr. Watson, Dr. Lawrie, Dr. Alexander Wood, Dr. Andrew Wood, and Dr. William Robertson, *Registrar.*

The minutes of the last meeting were read and confirmed.

Moved by Dr. Andrew Wood, seconded by Dr. Lawrie, and agreed to—

"That Dr. William Robertson leave the room."

Moved by Dr. Alexander Wood, seconded by Dr. Watson, and agreed—

"That Dr. William Robertson be also Secretary to the Scottish Branch Council."

Moved by Dr. Andrew Wood, seconded by Dr. Lawrie, and agreed to—

"That the salary of the Registrar and Secretary be £150 per annum; and that he be allowed to employ such assistance from a clerk as may be necessary during the first year."

Moved by Dr. Alexander Wood, seconded by Dr. Watson, and agreed—

"That the Registrar be authorised to procure the books and stationery and other appliances necessary for conducting his business."

Moved by Mr. Syme, seconded by Dr. Christison, and agreed—

"That the Registrar be instructed to write in the name of the Scottish Branch Council to the Lords of the Treasury, requesting that apartments may be furnished by Government for the carrying out the provisions of the Medical Act; and further, that it be remitted to Dr. Alexander Wood and the Registrar to make arrangements for accommodation in the meantime."

Moved by Dr. Alexander Wood, seconded by Dr. Lawrie, and agreed to—

"That Mr. Syme and Dr. Christison be appointed Treasurers, and that an account be opened with the Bank of Scotland. That all cheques on the bank shall be signed by one of the Treasurers, in addition to the Registrar. That the Registrar shall not retain in his hands more than £100; but shall lodge all moneys as they accumulate in the bank, to the credit of the Scottish Branch of the General Council of Medical Education and Registration."

Resolved, on the motion of Dr. Andrew Wood, and seconded by Dr. Watson—

"That *three* be a quorum at meetings of the Scottish Branch Council; and that the Registrar be authorised to issue summonses for meetings, on the requisition of the President, or of two of the members of the Branch Council."

Resolved, on the motion of Dr. Lawrie, and seconded by Dr. Watson—

"That Dr. Christison and Dr. Andrew Wood be appointed to cooperate with the Registrar in the business of the Registration."

Resolved on the motion of Dr. Andrew Wood, and seconded by Dr. Watson—

"That the Registrar grant a stamped receipt for all fees received from applicants for registration; and that he shall note on such receipts the qualifications of the applicants."

Dr. Christison produced a draught of an advertisement in regard to the provisions of the Act. The Council returned thanks to Dr. Christison, and approved generally of the draught. It was remitted to Dr. Christison and Dr. Andrew Wood to revise and prepare the advertisement for publication.

It was remitted to Dr. Alexander Wood and the Registrar to arrange regarding the papers in which the advertisement should appear. (*Confirmed*), James Syme.

BRANCH COUNCIL FOR IRELAND.

December 2nd, 1858.

In the Hall of the King and Queen's College of Physicians.

Present:—Drs. A. Smith, J. Apjohn, R. C. Williams, D. J. Corrigan, C. H. Leet, and W. Stokes.

On the motion of Dr. Stokes, and seconded by Dr. Leet, it was resolved—

"That Dr. Corrigan do take the chair."

It was then moved by Dr. Stokes, seconded by Dr. Apjohn, and resolved—

"That the salary of the Registrar and Secretary to the Branch Council for Ireland, shall be £300 per annum."

On the motion of Dr. Smith, seconded by Dr. Leet, it was further resolved—

"That the offices of Secretary and Treasurer shall not be combined in the same person."

On the motion of Dr. Apjohn, seconded by Dr. Leet, it was further resolved—

"That the Registrar shall pay all moneys received by him into the Bank of Ireland, to the credit of the Branch Medical Council of Ireland, not retaining in his hands at any time more than £50; and that all cheques for drawing money be signed by the Chairman of the day and two other members."

Henry Maunsell, M.D., was then appointed Registrar to the Branch Medical Council for Ireland; and, on the motion of Dr. Stokes, seconded by Dr. Leet—Dr. Williams was requested to inform Dr. Maunsell that he had been appointed Registrar, at a salary of £300 a-year.

The Council then adjourned to Monday, the 6th instant, at Four o'clock.

December 6th, 1858.

Present:—Dr. Smith in the chair; Drs. Williams, Corrigan, Leet, Apjohn, and Stokes; Dr. Maunsell, *Registrar.*

The minutes of last meeting were approved and signed.

On the motion of Dr. Williams, seconded by Dr. Apjohn, it was resolved—

"That application be made to the Governors of the Bank of Ireland for permission to open an account for the 'Branch Medical Council for Ireland', in the names of the six Council-

lors of the Branch; and that the resolution adopted on the 2nd inst. be modified, so as to provide that all cheques for drawing money shall be signed by the Chairman of the day and one other Councillor, and countersigned by the Secretary. Also, that Dr. Smith and Dr. Stokes be joint Treasurers."

On the motion of Dr. Corrigan, and seconded by Dr. Leet, it was resolved—

"That the Secretary be directed to ascertain if temporary accommodation can be afforded in the College of Surgeons, pending the procuring of a permanent office."

On the motion of Dr. Stokes, and by Dr. Williams, a form of notice of the commencement of registration was adopted; and it was resolved—

"That it be inserted once in each of the following journals, viz.: *Saunders' News Letter*, *Freeman's Journal*, *Dublin Evening Mail*, *Dublin Evening Post*, *Dublin Medical Press*, *Dublin Hospital Gazette*, *Limerick Chronicle*, *Cork Southern Reporter*, *Waterford Mail*, *Leinster Express*, *Belfast Northern Whig*, and *Galway Vindicator*."

On the motion of Dr. Corrigan, and seconded by Dr. Stokes, it was resolved—

"That the Registrar do apply to the several bodies enumerated in Schedule (A) of the Medical Act, asking for certified lists of persons who are entitled to be registered in respect to qualifications granted by such bodies respectively."

Adjourned to Monday, the 13th December.

December 13th, 1858.

The Branch Council met at the temporary office in the College of Surgeons.

Present:—Dr. Smith in the chair; Drs. Corrigan, Williams, Leet, Apjohn, Stokes; Dr. Maunsell, *Registrar*.

The minutes of last meeting were approved and signed.

On the motion of Dr. Corrigan, and seconded by Dr. Apjohn, it was resolved—

"That the salary of the Clerk be £80 a year, that he be required to give security for £50; and that an advertisement be inserted in *Saunders' News-Letter* and the *Freeman's Journal*, appointing the 20th instant for the election."

Ordered—That one hundred copies of the minutes of the Branch Council be printed and transmitted to councillors and registrars, in accordance with order of General Council.

On the motion of Dr. Williams, and seconded by Dr. Apjohn, it was resolved—

"That the Licence in Midwifery of the King and Queen's College of Physicians, and of the Royal College of Surgeons in Ireland, be registered, if the holders of such licences shall so require."

Ordered—That minor qualifications, as that of Licentiate, when the person is a Fellow of the same College, be registered if required.

Letter read from John Moore Neligan, M.D., Fellow of the King and Queen's College of Physicians, requiring to be registered, and to have the words "Physician and Doctor of Medicine" inserted in the title column of the register, opposite his name.

Ordered—That a copy of the order of the General Council, directing that the title column shall not be filled up, be sent to Dr. Neligan, and that he be informed that the registration will be conducted in accordance therewith.

Ordered—That a short notice, calling attention to the necessity of persons who desire their names to appear in the register for the ensuing year, registering before the 1st of January, be published in twenty Irish journals.

On the motion of Dr. Corrigan, seconded by Dr. Leet, it was resolved—

"That a meeting of the Branch Council may be summoned at any time by the Registrar, upon requisition to him signed by two Councillors; notice of two days being given of such meeting."

On the motion of Dr. Stokes, seconded by Dr. Williams, it was resolved—

"That three Councillors shall form a quorum."

On the motion of Dr. Corrigan, seconded by Dr. Apjohn, it was resolved—

"That the Chair shall be taken by the third Councillor entering the room at the time of meeting."

On the motion of Dr. Williams, seconded by Dr. Leet, it was resolved—

"That the Chairman shall have a vote; and in cases of equality, also a casting vote."

The Council then adjourned to Monday, the 20th December.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

READING BRANCH: SPECIAL GENERAL MEETING.

A special general meeting of the Reading Branch of the British Medical Association was held at the Royal Berks Hospital, on December 15th; George May, Esq., President, in the chair. There were also present: T. A. Blomfield, Esq. (Reading); G. D. Brown, Esq. (Henley); C. M. Burnett, M.D. (Alton); J. Breach, Esq. (Aston); F. A. Bulley, Esq. (Reading); J. H. Brooks, Esq. (Henley); R. Colbourne, Esq. (Marlow); N. Crisp, Esq. (Swallowfield); C. Cowan, M.D. (Reading); J. W. Dryland, Esq. (Reading); A. Fernie, Esq. (Reading); F. G. Harcourt, Esq. (Binfield); — Haynes, Esq. (Reading); I. Harrinson, Esq. (Reading); T. Jeston, Esq. (Henley); S. Kidgell, Esq. (Pangbourne); A. Lamb, Esq. (Hampstead Norreys); J. J. Luce, Esq. (Swallowfield); G. May, jun., Esq. (Reading); J. M'Intyre, M.D. (Odiham); W. W. Moxhay, Esq. (Reading); H. H. Muggeridge, Esq. (Reading); A. J. Moore, Esq. (Reading); S. Plumbe, M.D. (Maidenhead); G. Pound, Esq. (Odiham); — Phelps, Esq. (Reading); W. Scott, M.D. (Odiham); J. Taylor, Esq. (Burghfield); J. Taylor, Esq. (Wargrave); C. Vines, Esq. (Reading); E. Wells, M.D. (Reading); H. Waldron, Esq. (Theale); J. W. Workman, Esq. (Reading); T. L. Walford, Esq. (Reading); W. B. Young, Esq. (Reading).

NEW MEMBERS.

The following gentlemen were unanimously elected members: A. J. Moore, Esq. (Reading); A. Lamb, Esq. (Hampstead Norreys); S. Plumbe, M.D. (Maidenhead).

MEDICAL REGISTRATION.

Dr. Burnett moved—

"That the Council of the Reading Branch of the British Medical Association be requested to take measures to assist the Registrar to carry out efficiently the new Medical Act."

Dr. Cowan seconded this resolution; and it was carried unanimously.

ASSURANCE OFFICE FEES.

Mr. Walford proposed—

"That the members of the Reading Branch be recommended not to give information respecting the health of any private patient except on the receipt of a fee from the office."

This was seconded by Dr. Cowan, and carried unanimously.

Mr. Brooks proposed that the fee should never be less than one guinea; for policies above £500, two guineas; and for those above £1,000, three guineas.

This resolution gave rise to an animated discussion, and several amendments were proposed. Ultimately it was decided that the amount of the fee should be left to the discretion of each medical man.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

Social and scientific meetings of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on the undermentioned days:—

Friday, March 25th, 1859, at 3.30, at the Town Hall, Gravesend.

Friday, April 29th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary*.

Brompton, Chatham.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, December 1858.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, Dec. 6th, 1858.

W. H. Willshire, M.D., President, in the Chair.

MOLLITIES OSSIUM; CÆSAREAN SECTION.

BY E. W. MURPHY, M.D.

Mrs. N—, aged 30, had been married about sixteen years, and had given birth to seven children, all born at the full time, without any difficulty in the labour. Three or four months previous to the birth of her last child (May 29th, 1856), she complained of constant weariness and dull aching pain in the lower part of the back and down the thighs, slightly increased on walking. She continued to go about, however, up to within an hour or two of that confinement. Dr. Fraser, of Torrington Square, her medical attendant, had not seen her for several days before, but, calling in accidentally, found her in labour, and just about to send for him. The labour was quite natural, and terminated in less than two hours. Her subsequent recovery was slow, but at the end of three weeks Dr. Fraser ceased to attend her. She was then able to go about, but complained of weakness and *slight* pain, or rather uneasiness, in the loins and thighs. Dr. Fraser did not see her again professionally until July 1858, two months previous to her last confinement. She had never lost the sense of weariness in the loins and thighs since the birth of her last child; but in October, 1857, when she again became pregnant, the pain and difficulty in walking gradually increased. She was able to go to chapel January 1st, 1858, but afterwards was unable to leave the house. Dr. Fraser was engaged to attend her in April of the present year, and found her sitting at her work-table in the parlour. She had then only complained of sickness of the stomach, which was relieved by appropriate remedies. Each time Dr. Fraser saw her, she was dressed and sitting in her chair, and after his fourth visit he ceased to attend her until sent for on July 10th, when the pains of labour, which began on the 8th, assumed a decided character. Being engaged at the time, his partner, Dr. Andrews, saw her, who, on making an examination, was surprised at the extreme narrowness of the outlet of the pelvis. Dr. Fraser saw her in the afternoon, and observed the same peculiarity. The pains were feeble, and the patient somewhat exhausted. An anodyne was ordered, in the hope that, if sleep were procured, more vigorous pains would advance the presentation. On July 11th, Dr. Fraser, finding no alteration, requested the assistance of Dr. Murphy, who saw the patient about two P.M., and, having made an examination, found it impossible to introduce two fingers between the pubic rami; by pressing back, however, against the coccyx, and using the left hand, he was able to get two fingers within the brim of the pelvis, bending them upwards and forwards, to avoid the strongly-projecting promontory of the sacrum. The pubic bones were doubled back so much that the space in the brim seemed hardly two inches in the antero-posterior measurement. On the left side it was diminished to half an inch, on the right it was open to about two inches and a half. Passing the finger round the brim, the space seemed to be hardly larger than a florin, through which protruded the os uteri and membranes: the head could just be touched. The nature of the difficulty being thus revealed, Dr. Murphy felt satisfied that it was totally impossible to attempt perforation; in fact, no instrument could be used for that purpose. The patient, however, had no pains for some hours previously, and he was anxious to ascertain what the uterus might do if it were possible to get the head within reach of instrument. It was agreed, therefore, to see her at five P.M. There was no change in the action of the uterus.

Nine P.M.: The pains had returned for a short time, but made no difference in the position. An anodyne was ordered, and she was left in the charge of Dr. Andrews for the night.

July 12th. She slept a good deal during the night; the pains returned in the morning, and continued stronger than before. Dr. Murphy saw her at twelve o'clock. The membranes were ruptured, the funis had descended and ceased to pulsate; there was no alteration in the pelvis. The necessity for the Cæsarean section was decided. Dr. Murphy wished to have Dr. West's opinion, who made a most careful examination, and arrived at the same conclusion. She was at once taken into University College Hospital, and placed in a ward prepared for the purpose. She was placed under the influence of chloroform; and Mr. Quain, who kindly rendered his assistance, performed the operation. An incision was made in the line of the linea alba, the uterus exposed, and its parietes divided. The placenta protruded and was immediately extracted; and the child removed. The hæmorrhage, which was considerable, was controlled by the contraction of the uterus. The intestines, which had slightly protruded, were replaced, the edges of the wound united by the hair-lip suture, and a space left below for the escape of the discharges. She was bandaged and placed in bed, and twenty-five minims of Battley's sedative were given in beef-tea.

July 13th. The patient slept at intervals during the night; pulse 120; tongue dry; skin hot, but moist. Towards evening she complained of sickness and pain in her bowels, and suffered great thirst; she had taken five minims of black drops every second hour during the day. At night the pain and sickness were relieved, but symptoms of exhaustion were setting in; pulse 160, rapid and feeble. She was restless, and not inclined to sleep; this increased during the night so as to amount to jactitation, with hiccup and blowing respiration.

July 14th. Exhaustion extreme; pulse scarcely felt. She died at twelve o'clock.

July 15th. Twenty-four hours after death the *post mortem* examination was made. The abdomen was much distended and resonant; no attempt at union in the line of the incision. On opening the abdomen, a quantity of bloody serum escaped; the intestines were distended with flatus, especially the stomach, which occupied the whole upper part of the abdomen; some lymph was found on the peritoneum. The uterus presented a dark-red surface, its divided edges being widely separated. When the stomach was laid open, and the flatus escaped, some undigested currants and a small quantity of feculent matter were found in it. The head and lungs were healthy. The pelvis was found to be brittle throughout; all the articulations loose, and even the pubic and ischiatic portions of the coxal bones moved on each other, much more, however, on the left than on the right side; both iliac bones were much distorted and very carious, being perforated in several places, and as thin as tissue paper. The horizontal rami of the os pubis were parallel, the pectineal eminence on the left almost touching the promontory of the sacrum; the space, by measurement, was half an inch, but the bones were very easily pressed together; the descending rami were also closed in, the left being carious and eaten through at the pubic and ischiatic junction; the acetabula were also eaten through, and the head of the femur was in a similar condition. The brittleness of the bones was such that a plaster of Paris cast could not be made of them. There was no observable difference in the stature of the patient. The child's head was well ossified.

Dr. Murphy regretted the delay in the performance of this operation, and quoted from Mauriceau, Hamilton, and others, several cases to prove the evil consequences of delay and hesi-

tation in such instances; in some, the patients died undelivered; in others, the operation failed because performed too late. In mollities ossium, he was aware that the chances were greatly against the patient's recovery, not only because of the difficulty of reunion in the uterine wound—because of the process of disintegration in its tissues then going forwards, as Dr. West has well pointed out; but also because the existing disease is one of disintegration. Nevertheless, he argued that the safety of the patient is not more secured by any other operation; that in some cases, as the present one, craniotomy is impossible; in others, when performed, death has been the result. As an illustration of his argument, he quoted from Dr. R. Lee's *Clinical Midwifery* the only case of mollities ossium that came under Dr. Lee's notice, in which craniotomy was with great difficulty performed, and the uterus was ruptured. In such cases, therefore, where the risk to the mother is equally great whatever operation be performed, Dr. Murphy laid it down as a principle, that no practitioner is justified in taking away human life, even from an unborn child, unless he is nearly certain that it will be the means of saving the parent, and in cases where the mortality from craniotomy is as great as from the Cæsarean section, he is bound to adopt the operation that may save the child.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM ASSOCIATION.

Letter from R. Griffin, Esq.

Sir,—I shall feel obliged by your allowing me, through the medium of your Journal, to beg the Poor-law Medical Officers to refrain from replying to the "Heads of a scheme for a suggested new arrangement of medical relief", issued by the President of the Poor-law Board, until I have time to address them more fully on the subject. I have only this day received a copy of the draft. There are some points in it exceedingly good; and others that will require amendment. The salary is made up of three different items, and not of a single 1*s.* 6*d.*, as some gentlemen have, on a cursory glance, imagined.

I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, 29th December, 1858.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Christian. On December 20th, 1858, at Ovington Terrace, Brompton, the wife of J. S. Christian, M.D., of a daughter.

Godrich. On December 23rd, 1858, at 12, Sydney Place, Brompton, the wife of Francis Godrich, Esq., Surgeon, of a son.

Richardson. On December 23rd, 1858, at 12, Hinde Street, Manchester Square, the wife of *Benjamin W. Richardson, M.D., of a son.

MARRIAGES.

Andrews—Ford. Andrews, Charles G., Esq., Surgeon Bengal Army, to Georgiana Louisa, youngest daughter of the late John Ford, Esq., H.E.I.C.S., at St. Paul's Cathedral, Calcutta, on November 6th, 1858.

Cooper—World. Cooper, John, Esq., of Burghfield Mills, Reading, to Susannah, eldest daughter of R. R. World, Esq., Surgeon, City Road, London.

DEATHS.

Birkbeck. On December 25th, 1858, Frances Georgina, youngest daughter of the late George Birkbeck, M.D.

Brownfield, John Hayden, Esq., Surgeon, Superintendent of the Government Emigration ship *Alfred*, aged 33, at sea, on September 7th, 1858, aged 33.

Cowan, Thomas, M.D., Surgeon of H.M.'s 94th Regiment, at Peshawur, on November 7th, 1858.

Cruikshank, William, M.D., Deputy Inspector-General of Hospitals, at Simla, on November 5th, 1858.

*Daniell, J. G., Esq., Surgeon, of Nayland, Suffolk, lately.

*Drury, Thomas J., M.D., Physician to the Salop Infirmary, at Shrewsbury, of sloughing-sore-throat, after a few days illness, on December 19th, 1858. Dr. T. J. Drury was a member of the Shropshire Branch of the British Medical Association from its formation, and for many years zealously discharged the duties of Honorary Secretary to the Branch. At the time of his death, he was a member of the Committee of Council of the Association. His loss is deeply regretted by his colleagues and brother associates.

Earle, John Henry, Esq., Surgeon, at Cromer, Norfolk, on December 11th, 1858.

France. On December 21st, 1858, in Bloomsbury Square, Bernard Owen Beckwith, son of John F. France, Esq., Surgeon.

*Green, John, M.D., J.P., at Newton-in-Makerfield, Lancashire, aged 56, on December 22nd, 1858.

Hawkins. On December 22nd, 1858, in Grosvenor Street, Caroline, wife of Cæsar H. Hawkins, Esq., Surgeon.

Lever, John C. W., M.D., Physician-Accoucheur to Guy's Hospital, at 12, Wellington Street, London Bridge, aged 47, on December 29th, 1858.

Morris. On December 20th, 1858, at Brixworth, Northamptonshire, Emma Harriet, wife of *Robert R. Morris, Esq., Surgeon, aged 55.

Shorland. On December 16th, 1858, at Winchester, aged 65, Charlotte, wife of James Shorland, Esq., formerly Surgeon 96th Regiment.

White, Andrew, M.D., Deputy Inspector-General of Army Hospitals, at Teddington Weir, suddenly, on December 18th, 1858.

APPOINTMENTS.

Cloquet, M. Jules, has been elected Vice-President of the Academy of Medicine in Paris for 1859.

Cruveilhier, M., has been elected President of the Academy of Medicine in Paris for the ensuing year.

Ford, James, Esq., appointed Resident Medical Officer to the North Devon Infirmary, Barnstaple.

Rendle, Charles B., Esq., late Assistant Demonstrator of Anatomy at King's College, London, has been appointed House-Surgeon of the Devon and Exeter Hospital, in the room of Dr. J. S. Biggs, resigned.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Thursday, December 23rd, 1858:—

Abbey, Walter, Wellingborough, Northamptonshire
Aikins, Moses Henry, Toronto
Bankart, James, Humberstone Road, Leicester
Bird, Curtis James, Red River Settlement, Hudson's Bay
Fitzpatrick, Bernard, Clones, co. Monaghan, Ireland
Gasquet, Joseph Raymond, Westbourne Grove North, Bayswater
Heath, William Ravenscraft, Manchester
Hellicar, Charles Joseph, Clifton, Bristol
Hewitt, Thomas, Tipperary
Hore, William, Shoreham, Sussex
Ingle, Robert Nicholas, Melbourne, Derby
Lackersteen, Mark Henry, Calcutta
Marr, James, Tynemouth, Northumberland
Metcalfe, Robert, Epsom
Rogers, Joseph, Hanover Square

Apothecaries' Hall. Members admitted on Thursday, December 23rd, 1858:—

Bennett, Charles Vaughan Simmons, Haverfordwest
Brabant, Herbert, Bath
Braithwaite, James, Leeds
Carruthers, Joseph, Melbourne
Culverwell, Charles, Calcutta
Dean, Thomas Nainby, Manchester
Harle, Thomas William, Bishop's Stortford
Harper, Frederick Luther, Aldenham Street
Harrison, George Morley, Manchester
Hindle, George, Over Darwen, Lancashire
Hooper, John Turton, Gateshead
Housley, John, Mansfield Woodhouse, Notts.
Johnston, Robert, Newry, Ireland

Jones, Evan, Aberdare, Glamorganshire
Jones, William Allen, Foxley, Bewdley
Lamb, Robert, 205, Fleet Street
Mason, Frederick John, Wisbeach, Cambridgeshire
Merryweather, James, Lofthouse, Yorkshire
Morgan, Walter, Bridgend, Glamorganshire
Oldham, Riton, West Hartlepool
Parker, Thomas Didymus, Sevenoaks, Kent
Read, Reginald Bligh, 41, Jewin Street, City
Thelwall, William, Farndon
Turner, Thomas, Lake Lock, Wakefield
Walsh, John, Manchester
Ward, Henry Debord, Blyth, Northumberland
Wheeler, Charles, Wantage
Wildbore, Samuel, 74, Wimpole Street
Woolley, George, Kentish Town

HEALTH OF LONDON:—WEEK ENDING DECEMBER 25th, 1858.

[From the Registrar-General's Report.]

The London returns give satisfactory indications of an improved state of the public health. The deaths which in the week ending December 4th were 1738, and in the two following weeks were 1531 and 1442, have still further declined, and in the week ending last Saturday they were 1240. The mean temperature of the air last week was 44·5°, which is 9° higher than it was in the third week of November.

In the ten years 1848-57 the average number of deaths in the weeks corresponding with last week was 1142; but as the deaths in the present return occurred in an increased population, they should be compared with the average after the latter is raised proportionally to the increase, a correction which will make it 1256. It appears, therefore, that though the difference is small, the actual return for last week is less than the result obtained by calculation.

If the deaths in London last week had been according to "the healthy rate" of mortality derived from certain selected English districts in the last quarter of the year, they would have been 765; and the excess above this point which the true number exhibits is 475, and represents what may be termed the *unnatural* part of the mortality.

The deaths referred in the present return to zymotic diseases amount to 320, the corrected average being 280; those ascribed to pulmonary complaints (not including phthisis or whooping-cough) are 307, the corrected average being 264. The deaths that arose from phthisis (or consumption) are 126, whilst the average is 135. The mortality from scarlatina continues to decrease slowly; it numbered 106, which, however, is still double the average. Measles was fatal in 40 cases; it carried off five children in the sub-district of Whitecross Street. Sixteen fatal cases of scarlatina occurred in Pancras, many of these in Somers Town, where it appears to be very prevalent. Twelve deaths from the same complaint occurred in the Poplar district; and 6 in the sub-district of St. Peter, Walworth.

Last week the births of 703 boys and 709 girls, in all 1412 children, were registered in London. In the ten corresponding weeks of the years 1848-57 the average number was 1489.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·438 in. The barometrical readings varied from 29·09 in. to 29·68 in. The mean temperature of the week was 44·5°, which is 6·5° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week, and on three days, Tuesday, Wednesday, and Thursday, this excess was from 7° to 10°. The thermometer in the shade fell to its *lowest* point, 34·9°, on Monday, and rose to its *highest*, 53·5°, on the following day. The extreme range was therefore 18·6°. The mean range of the week was 10·2°. The difference between the mean dew-point temperature and air temperature was 3·6°. The mean degree of humidity was 87. On two days the humidity of the air was 95, approximating to complete saturation. The mean temperature of the water of the Thames was 42·2°. The wind blew from the south-west. Thursday night was very wild and stormy. Rain fell to the amount of 0·79 in. in the week.

Epidemiological Society. On Monday, January 3, 1859, a paper will be read, entitled, "Practical Remarks on Cholera Morbus, its origin, nature, and treatment." By H. Cameron, Esq., Surgeon 1st Battalion Artillery H.M. Indian Forces.

OBSTETRICAL SOCIETY OF LONDON.

The inaugural meeting of this Society took place on December 16th at the Freemasons' Tavern. A large number of metropolitan obstetric teachers and practitioners were present. The chair was taken by Edward Rigby, M.D.

Dr. Rigby briefly explained the objects for which the meeting had been called together. They were there assembled for the purpose of inaugurating a society to be devoted to the advancement of the knowledge of obstetrics and the diseases of women and children. It had long been a matter of exceeding surprise to him that no society had been instituted in the metropolis for this purpose. There could be no question as to the fact, that a very large amount of experience was wasted and lost, owing to the circumstance that no machinery for the systematic collection of facts relating to midwifery could be said to be in operation. The new society would be eminently useful to general practitioners, most of whom have daily brought before their notice facts which the Society might be the means of registering. The Society could be made a depositary for general heads of important cases in midwifery throughout the country, and it would, he trusted, be largely supported by country as well as town practitioners. The foundation of the Society would, he was convinced, be attended with advantages of extreme importance to science and to the community at large. Before calling on Dr. Tyler Smith to propose the first resolution, he could not abstain from remarking, that the energy and perseverance which that gentleman had exhibited in promoting so successfully the foundation of the Society, entitled him to the deepest thanks of all interested in the undertaking.

Dr. Tyler Smith moved the first resolution:—

"That it is expedient to institute a society for the promotion of knowledge in all that relates to obstetrics and the diseases of women and children, in which practitioners resident in the metropolis and the provinces shall be invited to take an active part; and that such a society be now founded, under the name of the Obstetrical Society of London."

He detailed the steps taken for the formation of the Society, and which had resulted in the present meeting. There was no other city in the world in which equal scope for such an association existed. London contained thirteen obstetric schools, all well appointed and in full activity. There were between thirty and forty practitioners who either were or had been obstetric teachers, besides others engaged in special obstetric practice. Nearly 2,000 gentlemen were engaged in general practice in the metropolitan districts, upon whom the responsibilities of midwifery fell even more heavily than the responsibilities of medicine or surgery. No cases equally urgent with *placenta prævia* and *post partum* floodings, or those in which craniotomy or turning might be thought necessary, occurred in medicine or surgery under conditions of equal urgency to the general practitioner. In medical or surgical cases assistance could generally be obtained; but in obstetric cases dangerous emergencies were often so sudden as to throw the whole responsibility on the individual practitioner. The number of labours occurring in the metropolis annually amounted to about eighty thousand. In this great field, and with so many workers, a rich harvest of knowledge might be brought in through the agency of an Obstetrical Society. But they were not limited to London alone. Already the principal teachers in the provinces had joined themselves to the undertaking. We might get something like a fair idea of the importance of obstetric practice in this country from the fact, that of all the women delivered in England and Wales, no fewer than one in each one hundred and eighty-nine died in childbirth. The number of still-born children was over twenty-two thousand a year. The chief business of an obstetrical society would be to diminish this mortality, and the task was one of the highest importance. It seemed to him a positive duty, from which obstetricians could not escape, that they should unite together, and promote the scientific and social interests of the branch of practice in which they were engaged. In the course of the proceedings which it had been necessary to take, he had met with various objections to the institution of an obstetrical society, which he would notice and endeavour to refute. It was said—why have a special society for obstetrics when no special surgical or medical societies were considered necessary? The answer to this was, that the Colleges of Physicians and Surgeons were in reality great institutions for the special advancement of medicine and surgery. Those engaged in obstetric practice had no public body to which their allegiance was due, and upon which they could depend for the

promotion of their department of the art of healing. This had always acted as a discouragement; but it would, to a great extent be removed by the operation of a successful obstetrical society. Other objectors were loud in their warnings against the evils of everything like a separation from the colleges of physic and surgery. No wish existed for any such separation; but it was felt by many, that we had too long leant upon others; that we were now able to walk alone; and that we should be all the more respected in the colleges to which we belonged, if we could show ourselves possessed of something like an independent power of action. Some, who opposed our proceedings, argued that the Society would only increase talk and talkers, and that reticence was more to be desired than publicity. He wished to speak with every respect of those who differed from him; but he thought this dictum was somewhat out of joint with the age in which we lived; silence was not progress. As iron sharpeneth iron, so in the collision of mind with mind, true doctrines were brought out and sustained. Discussion had well been said to be the very life and soul of science. There were others who acknowledged that science and practice would be advanced by the proposed Society; but were fearful that obstetrists would suffer, in a social point of view, from placing themselves in any degree apart from the physicians and surgeons engaged in what was called "pure practice." This he did not believe. At all events, it was their plain duty, first and foremost, without thinking of consequences, to advance the science and art in which they were engaged. They certainly need not dread the results of such a course of proceeding. It was an idle fear to imagine that they could lower themselves in the social scale by raising themselves in knowledge. Union ought not to excite jealousy. These were not the times in which improvements were made by individual efforts alone, but in which numbers of men engaged in the same pursuit, by uniting together, have produced some of the greatest results of modern civilisation. On every ground, therefore, having reference to their scientific and social position, he had the greatest satisfaction in moving the resolution to found the Obstetrical Society of London.

Dr. Granville, F.R.S., seconded the resolution. He stated that he attended with pleasure this second attempt to establish an Obstetrical Society in London. He was grieved to notice that he could claim the privilege of being the oldest veteran in the room; a whole generation of obstetrical practitioners had passed away, who knew of his earnestness in promoting their art and science. He hoped that this endeavour to establish such a Society would prove more permanently successful than the first. The book which he held in his hand would shew that, in November 1825, a meeting was held at his house, attended by the *élite* of the obstetrical practitioners of that time. A Society was then formed, over which Sir Charles M. Clarke presided. The plan originally laid down by himself was considered too vast; and, as it embraced two distinct parts, the majority of the members enrolled resolved to adopt one only; viz., the political or *state* part of the question. Dr. Granville next alluded to the condition of the practice of midwifery in this country at a former period. At his return from Paris in 1817, this condition was a most anomalous one. Not only any one might practise midwifery without let or hindrance, and indeed without any medical qualification whatever (there being no repressive laws in existence to prevent it), but this very license was made the means of enabling quacks to do their work with impunity, defying judge and jury, when summoned before a Court of law, by setting up as a defence, that they did not pretend to be doctors, surgeons, or apothecaries, but only man-midwives. The degraded state of the profession of the art was such that the College of Physicians considered a Licentiate practising midwifery as unworthy of a Fellowship; while a Member of the College of Surgeons was deemed ineligible to be on the list of Council or Court of Examiners, if he practised as an accoucheur; and the Apothecaries' Company, which had been pressed to institute an examination in midwifery, long resisted the "soft persuasion". This being the case, the Society brought together in 1825 applied themselves to the removal of all such indignities, and to raise to a proper and dignified station the practitioners in midwifery. By memorials and letters to the corporate bodies, and through the then Secretary of State for the Home Department, this was accomplished. He had the task of replying to the many cavils and the bold sophistry of the late Sir H. Halford, who fought hard to perpetuate their exclusion from the College. Sir H. Halford's contemptuous (to his mind infamatory) expression, made use of in a letter to Sir R. Peel, that "midwifery was an unfit occupation for gentlemen of academical education", was well known. After exertions continued during three years, that Society succeeded in obtaining the following points:— 1. A recognition of the honourable position of obstetricians among the medical practitioners of the three corporate bodies. 2. An examination in midwifery by the Apothecaries' Company. 3. The admission of persons practising midwifery (being members of the College of Surgeons) to be eligible for a post in the Council. 4. The concession by the College of Physicians, that Licentiates practising midwifery shall not be ineligible for the Fellowship of the College. At present these reforms had gone farther; the corporate bodies examined in midwifery; one of them delivered diplomas in obstetrics. Accoucheurs were made Fellows of the College of Physicians, and accoucheurs were on the Court of Examiners of the College of Surgeons. Thus the first attempt of an English Obstetrical Society had not been altogether barren of results. All state or political difficulties have been removed: and there is left for the Society it is now proposed to establish, the much more congenial task of promoting the purely scientific part of the great questions which such an extensive field as the practice of midwifery, the treatment of children, and the study and management of female diseases, offers to the attention of the highly educated physician, surgeon, or general practitioner of our days. Though having long ceased, after nearly thirty years of actual midwifery, to attend labours, he was happy to have an opportunity of joining his feeble efforts in promoting the welfare of the proposed Society.

Dr. Barnes moved the second resolution—

"That all legally qualified medical practitioners be eligible for election as ordinary Fellows of the Society."

He hailed with satisfaction the establishment of a Society in the metropolis for the cultivation of obstetrics. He considered it a reproach to us that, in consequence of the absence of a Society devoted to the promotion of this department of medicine, we were not in the same position as the obstetricians of towns on the continent of considerably less magnitude than London, from which authorities on particular questions emanated, and derived that weight which a Society is always capable of imparting. If, as he believed to be the case, the practice of midwifery was, notwithstanding, more successful in London than on the continent, there was the more reason that our practice and opinions should be disseminated. It belonged to obstetrics to teach as well as to learn. He felt confident as to the future of the Society.

Dr. Metcalfe Babington, who seconded the resolution, dwelt on the many and great opportunities in the metropolis for obtaining and collecting statistics and other valuable information on that very important branch of our profession, the obstetrical art. He was much surprised that the former Society, the history of which had been detailed to them by Dr. Granville, had not thought fit to continue its efforts. He agreed most entirely with Dr. Tyler Smith, and thought that any objections likely to arise to the formation of such a Society had been most completely answered by him. Not many years ago, certainly, the obstetric practitioners occupied a position by no means flattering. We were considered unworthy to take a place in a scientific brotherhood. Not long since, an eminent physician said derisively of the obstetrician, that his *métier* was to undertake everything; and that the witty saying of a late divine in regard to Lord John Russell applied equally to him, "that he would deliver a woman with child, cut a man for the stone, or take the command of the Channel fleet". Now he believed that the obstetrician would, in the practice of his art, undertake and accomplish anything that required boldness, energy, talent, and presence of mind. He had great pleasure in seconding the resolution.

Mr. Fergusson, in proposing the third resolution, said it might seem curious that one in that department of the profession to which he had chiefly devoted his attention should come to such a meeting. At one time in his own history he should have had such a feeling; but years, which bring experience, had led him to think differently on such matters than he did formerly, and he was now convinced there was no man more useful in his walk in life than such as practised that department in which the generality of those present were so much interested. He could not let the opportunity pass without congratulating the gentlemen present on the objects of the meeting. He thought the proposed Society highly desirable, particularly in London. If it were desirable to have specialities, there was no place like London for such professional divisions; and if such societies as that contemplated flourished in smaller communities, it was certainly needful that this metropolis should be thus represented. There were already so-

cieties for physicians and surgeons, but he thought the department of medicine to which most of the gentlemen present were devoted, deserved a higher representation than that hitherto accorded to it. In the progress of time, obstetric medicine had acquired a high position, and in his opinion this was a strong mark of the progress of civilisation. Should the talented author of the work devoted to that subject require a new theme for his pen, he would humbly suggest this one as worthy of his attention. As civilisation advanced, the attentions of the masculine sex to the female became more marked. In savage life, the female was left almost to her own resources. He would not enter upon the question of mortality in civilised or savage life on such occasions, but he would not hesitate to affirm that attention to the female in her hour of trouble and peril was a strong characteristic of civilisation. No department in medicine had made such rapid strides in modern times as that in which they were interested; and it was gratifying to perceive how, in the progress of time, the position of the obstetrical practitioner had at last been recognised by the Colleges of Physicians and of Surgeons in London. The youngest man in that room might perhaps know of the frightful results attendant upon the practice of the midwives of former times; and all the gentlemen present, with the numercus body of their contemporaries in the same department, might congratulate themselves that the step now about to be taken would go far to shake off all such dangers in time to come. He moved—

"That the following gentlemen be elected officers of the Society for the year 1859.—*Honorary President:* Sir Charles Locock, Bart., M.D. *President:* Edward Rigby, M.D. *Vice-Presidents:* Robert Barnes, M.D.; Samuel Berry, F.R.C.S.E. (Birmingham); Lawson Cape, M.D.; A. B. Granville, M.D.; J. C. W. Lever, M.D.; Edward W. Murphy, M.D.; Henry Oldham, M.D.; Thomas Radford, M.D. (Manchester); W. Tyler Smith, M.D.; C. Waller, M.D. *Council:* James Allen, Esq. (York); E. Batty, Esq. (Liverpool); Edgar Barker, F.R.C.S.E.; C. Metcalfe Babington, M.D.; I. B. Brown, F.R.C.S.E.; W. J. Bryant, F.R.C.S.E.; John Butler, Esq. (Woolwich); Jos. Cholmondeley, Esq.; J. Hall Davis, M.D.; G. D. Gibb, M.D.; S. W. J. Merriman, M.D.; F. W. Mackenzie, M.D.; J. T. Musgrave, Esq.; W. O. Priestley, M.D.; C. H. F. Routh, M.D.; Spencer Wells, F.R.C.S.E.; R. U. West, M.D. (Alford, Lincolnshire); James Whitehead, M.D. (Manchester); with power to add to their number. *Treasurer:* W. Tyler Smith, M.D. *Honorary Secretaries:* Graily Hewitt, M.D.; T. H. Tanner, M.D."

Dr. Routh, in seconding the resolution, gave his cordial support to the Society. To none did woman in the time of trial allotted by the Creator owe more than to the accoucheur. Every man might not have a wife, but most had sisters; surely, then, that midwifery should be well understood and practised was greatly to be desired. Many in the room he felt had obligations to other accoucheurs which nothing would repay. He hoped that in the new society the political element would not be entirely lost sight of. How many lives of young and interesting children were daily sacrificed by prescribing chemists and druggists! By pointing out the difficulties in the treatment of children's diseases, this source of evil might be removed. With regard to midwives, again, he considered that, as on the continent, it should be obligatory on them to go through a regular course of study, and that the state was guilty in allowing them to practise midwifery without such education. There was therefore still much room for political intervention. If the society not only sought to advance the science of the art, but also endeavoured to extend the knowledge thereof amongst those who practised it, a great service would indeed be performed and immense good would be derived by all classes.

The next resolution, empowering the Council to frame laws and to draw up and circulate a prospectus setting forth the objects of the Society, was proposed by Mr. Spencer Wells and seconded by Dr. Mackenzie.

On the proposition of Dr. Tanner, seconded by Dr. Graily Hewitt, a vote of thanks to Dr. Rigby for his kindness in presiding and for his able conduct in the chair was carried by acclamation, and the proceedings terminated.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND AND THE MEDICAL COUNCIL.

On Monday, December 20th, 1858, a conference of Members and Fellows of the Royal College of Surgeons was held at the Freemasons' Tavern, for the purpose of considering the recent act of the Council of the said College in electing (to the exclusion of the members and fellows) a member to the General Council of Medical Education and Registration, and to take such steps as may be necessary to secure the corporate rights of the members and fellows. Among the gentlemen present were Mr. Brady, M.P., Mr. Wakley, Mr. G. Bottomley, F.R.C.S., Mr. Spencer Wells, F.R.C.S., Mr. Luke, Dr. Tunnalley, Dr. Macgregor, Mr. J. F. Clarke, Mr. Chatto, Mr. George Ross, Mr. Lobb, Mr. Day, Mr. Gant, Dr. Burford Carlisle, Dr. Fowler, Dr. Kidd, Dr. O'Connor, Mr. McAndrew, Mr. Beattie, Dr. Dillon, Mr. Hutchinson, etc.

The chair was taken by J. Lavies, Esq. The following resolutions were passed.

1. Proposed by Mr. Bottomley, of Croydon, and seconded by Dr. J. H. Williams:—

"That, in the opinion of this conference, the Council of the Royal College of Surgeons of England, having excluded the members and fellows of the College from a voice in the election of their representive to the General Council of Medical Education and Registration, under the Medical Act, have thereby invaded the corporate rights of the members and fellows, and infringed the provisions of the said Act; and, further, that in the opinion of the conference a principle is involved in the said election which would subvert the representative rights granted to the members and fellows by the legislature in that Act."

2. Proposed by Dr. Ladd, and seconded by Mr. Pocock:—

"That this conference cordially approves the proceedings, up to this time, taken by the committee which has acted on behalf of the members and fellows of the College; and, further, this conference empowers the committee to name another day to hold a public meeting, or to take such other steps as may be necessary to ascertain the views of the members and fellows in respect to the exercise of their corporate rights and the provisions of the new Medical Act."

CRIMINAL RESPONSIBILITY OF THE INSANE.

The following letter has been addressed to the *Times* by Dr. Mayo, the President of the Royal College of Physicians of London.

"Sir,—The report of the trial of James Atkinson at York, for the murder of Mary Scaife, in the *Times* of the 18th ult., deserves consideration on grounds which apply to a large number of similar cases, not without important bearings on the interests of society. The plea of mental unsoundness was successfully urged in favour of the criminal. Without any disposition to question its appropriateness,—indeed, with a strong conviction of difficulty attending such criticism on the part of any one not present at the trial,—I would still call your attention to consequences indirectly, but certainly, appertaining to this class of cases upon our present system—a class of cases in which the immediate act is resolvable into normal principles of action, while the context of character affords some grounds for a suspicion of mental unsoundness. Whether James Atkinson was, or was not, insane in that sense of the word in which the plea is exculpatory in the eye of the law, there is, I imagine, no doubt that he was not insane in that sense of the word in which he would have been consigned to a lunatic asylum previously to having qualified himself for such detention by a criminal act. The argument of Dr. Forbes Winslow would not, I imagine, have satisfied the Commissioners in Lunacy that vice, cruelty, intemperate passionateness, defective memory, feeble moral qualities, and limited intellect, inadequate notions of the nature of the Deity, even accompanied by a goitre, would warrant their depriving Atkinson of his liberty. Now, this consideration, which applies, I say, to a large group of cases, is fraught with very perilous interest as far as the public is concerned. The interests of the public and the prisoner are mischievously at variance in our present mode of applying the plea of intellectual deficiency or perversion. So far as it protects the one, it places the other in jeopardy. Until he has committed a frightful crime the delinquent is a vicious brute, subject to all the minor penalties of the law. Let him only murder the woman whom he has ruined, and he becomes the subject of a metaphysical exculpation, and is maintained for the rest of his life at the public expense. Such is English law—at one period of our history a sanguinary code, protective of the public at the expense of the delinquent; at another period protective of the delinquent at the expense of the public safety.

"But how is this state of things to be remedied? Not, as I have already observed, by making all such persous as James Atkinson subject to detention lest they should commit murders

—a principle of most dangerous application to the public liberty, if thus extended; but by a more careful and philosophical application of the laws of moral responsibility to such cases,—by its being borne in mind that this class of brutes—for such in truth they are, rather than madmen—can be influenced by motives, can be restrained by their fears, and are susceptible of the effect of examples. The most unquestionable lunatics can be influenced by motives—a fact well recognised and applied by all judicious managers of asylums. Let those who must not be incarcerated in such places benefit by prevention thus carried out. I do not believe that we shall be emancipated from the social dangers which this letter is intended to avert until we have emancipated ourselves from our present theory of moral responsibility, and learnt that unsoundness of the moral principle gives many elements of character closely resembling those of the insane, but differing in one all-important element—namely, the capacity of appreciating the risks attendant on crime, and thus of being influenced by fear of punishment.

"I remain, sir, yours faithfully,

"Thomas Mayo.

"Dec. 24th, 1858."

In reply, Dr. Forbes Winslow has also addressed a letter to the *Times*. It is too long for us to insert entire; but we extract the principal points. He says:

"During the several anxious and prolonged consultations I had with the three medical gentlemen at York (previously to the trial) respecting the alleged insanity of James Atkinson, the question suggested by Dr. Mayo was, in fact, put by myself on more than one occasion to Dr. C. Williams and Messrs. Kitching and North. 'Is this a case,' I asked, 'supposing we had known James Atkinson's antecedents, but were ignorant of the fact that he had committed murder, in which we could conscientiously have certified to his mental unsoundness?' The answer to that question was an emphatic 'Yes.' We arrived at this conclusion . . . principally on account of the prisoner's obvious and palpable condition of imbecile mind at the time of our interview.

"During the lengthened examination that I instituted of the prisoner's state, in the presence of the medical gentlemen previously mentioned, I discovered that he had not the intelligence and knowledge of a child of eight years of age. He was utterly incapable of understanding the most simple question; his powers of apprehension were of the lowest order; the memory, faculty of judgment, and comparison were little, if at all developed. Apart from these symptoms of stunted mind and mental imbecility, I found the prisoner entirely unconscious of the awful position in which he stood. . . . .

"It is true, as Dr. Mayo suggests, that mere 'vice,' 'defective memory,' 'limited intellect,' etc., when viewed by themselves, are not safe *data* upon which to found (exclusively) a theory of insanity and moral irresponsibility; but are not these states of mind the elements that enter into the constitution of that condition of mental disorder known by the term 'imbecility'?

"This type of insanity is not a metaphysical abstraction. It is a condition of mind recognised by certain negations; in other words, by the absence of those manifestations of intellect generally considered to represent what we term the average standard of mental health.

"'Defective memory,' 'limited intellect,' may exist irrespectively of insanity and imbecility, but I would ask Dr. Mayo whether the latter state can be present without such symptoms; in other words, whether they are not essential ingredients in all such cases.

"An imbecile has little or no memory, is dull of apprehension, is incapable of grasping the most simple questions, has no power of comparison, exhibits no interest, or interest of a most feeble character, in surrounding circumstances, and has no rational and sane appreciation of his social duties of position.

"If these symptoms were considered individually, they would be unsafe and dangerous evidences upon which to form a conclusion as to the state of any mind; but when viewed in the aggregate, they constitute valid and satisfactory *data* to guide the medical jurist to a right result.

"Dr. Mayo has taken this opportunity of reviving an opinion which he has previously advanced, respecting the responsibility of persons in a partial state of insanity. He says, 'Madmen can be influenced by motives, can be restrained by their fears, and are susceptible of the effect of examples. The most unquestionable lunatics can be influenced by motives,— a fact well recognised and applied by all judicious managers of asylums.' There can be no doubt as to the truth of Dr. Mayo's general proposition. 'Unquestionable lunatics and madmen' can be 'influenced by motives' and 'restrained by fears.' What class of the insane are not so influenced, except those reduced to positive idiocy? Let me ask Dr. Mayo whether the insane can be influenced (under circumstances similar to those in which Atkinson was placed) by rational motives,—I mean motives addressed to their reason, and not to their instinct. . . .

"Dr. Mayo asserts that 'unquestionable lunatics and madmen' can be 'restrained by their fears.' This is an admitted axiom. But the fear of the lunatic and madman is not a reasonable and rational, but an instinctive fear, such as animals exhibit when influenced by the dread of punishment.

"Would it not be perfectly monstrous to consider the 'unquestionable lunatic' as responsible as a man in full possession of his reason, merely because he is when under conditions of moral restraint and control 'influenced by motives,' and 'restrained by fear'?

"If this doctrine were to be acquiesced in by our judges and juries, we should soon have a general lunatic asylum delivery, and Dr. Mayo and those who agree with him in opinion, would be able with impunity to indulge their fancy and gratify their taste, by witnessing many a poor irresponsible lunatic strangled publicly to death upon the gallows! God forbid that such a demoralising, degrading, and brutalising spectacle should ever be witnessed in a civilised and Christian country!"

Health of Policemen in Hull. Mr. Munroe, Surgeon to the Hull Police, has lately published a report on the medical statistics of the force from November 19, 1857, to November 19, 1858. He observes that the sickness experienced by the police force is more than double the amount of sickness experienced by operatives living in large towns. The number of days' sickness in one year experienced by persons of various trades in large towns, calculated for the ages of our policemen, amount to 806. The number of days sickness during last year of the Hull police force was 1,761, being 955 days more than the average sickness of our working classes in towns. The average age of the policemen in the Hull force is 33; and, according to the tables of Neison and Ratcliffe, they should experience six days six hours of sickness in the year; but the policemen have actually experienced each fourteen days thirteen hours sickness. The inspectors have been peculiarly healthy. The sergeants, with one exception, have also had much below the average amount of sickness occurring to other persons in towns; so that the great amount of sickness has been experienced by the constables. It should be mentioned also that out of the 121 policemen composing the force 17 have had no day's sickness. The average amount of sickness has been four and three quarters men *per diem*. Those policemen who have been labourers, especially those from country districts, are the healthiest subjects, and do their duty with the least amount of inconvenience; whilst, on the other hand, those who have been engaged in indoor employment suffer more in health, and do their duty with more inconvenience.

TO CORRESPONDENTS.

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Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Dr. Woodforde; Mr. W. Allison; Mr. T. T. Blease; Mr. J. R. Humphreys; Mr. G. M. Humphry; Mr. Alfred Fleischmann; Mr. Samuel Smith; Dr. Herbert Barker; Mr. J. M. Hunter; Mr. H. Munroe; Dr. McWilliam; Mr. H. J. Reading; Dr. A. Harvey; Mr. H. Barrett; Dr. J. W. Watkins; Mr. G. Chavasse; Mr. H. Terry, jun.; Mr. T. Holmes; Mr. W. J. Clement; Mr. J. Dix: Dr. F. Hawkins; Mr. J. S. Bartrum; Mr. W. C. Lake; Mr. G. Ager; Mr. J. G. Darlington; Mr. Griffin; Mr. G. Hornby; Mr H. Thompson; and Dr. S. Griffith.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

CASES OF GRANULAR OPHTHALMIA TREATED BY THE APPLICATION OF GONORRHŒAL MATTER TO THE EYE.

Under the care of GEORGE MURRAY HUMPHRY, Esq.

CASE I. Wm. Ford, aged 49, a thin pale man, had been the subject of ophthalmia for more than three years. The disease was, he believes, caused by particles of sand getting into his eyes when following the occupation of digging for coprolites; it was at first neglected, then treated with stimulating applications, and gradually assumed a very aggravated form. The conjunctiva of the lids and of the hinder part of the globe in each eye was in a highly granulated and vascular state; the surface of the right cornea was so opaque that he could scarcely distinguish light from darkness; and in the left cornea there was not sufficient transparency to enable him to guide himself; the lids extremely relaxed. He had undergone a great variety of treatment, in and out of Hospital, both in Cambridge and in London, without deriving the least benefit; and there was much reason to fear that he would be blind for the remainder of his life.

July 17th, 1858. Some fresh gonorrhœal matter was taken from the penis of a man, and applied to the conjunctiva of the *right* eye. This was followed by very severe purulent ophthalmia of *both* eyes, the conjunctivæ swelling, and the surfaces of both corneæ becoming quite vascular. Fomentations and frequent washings with warm water were used. Gradually the inflammation diminished; the conjunctival swelling subsided; the purulent discharge ceased; and the corneal structure again came into view, and became more and more clear. The left cornea is now nearly transparent, and the right is more so than it has been since the first commencement of his malady. He can read large print, and is able to commence working upon the roads. The granulations upon the conjunctivæ are very much less large and numerous; and it is hoped the improvement will continue.

CASE II. Catherine Coyfield, aged 14, a healthy girl, had suffered under ophthalmia for four years. The disease, at first neglected, and then treated with nitrate of silver, had become intractable, and resisted the ordinary remedies, employed with great care by the different surgeons of the Hospital under whom she had been, at intervals, as in and out patient, for more than two years. The conjunctiva of the lids and back of the globe was very granular, and the corneæ were so opaque and vascular that she could scarcely see to guide herself; so that she was quite unfit for any work. Her condition was a source of great anxiety, the result of past treatment leading to the apprehension that no remedy would be found.

July 17th, 1858. Some pus was taken from the eye of the gonorrhœal patient above mentioned, which had recently been destroyed by ophthalmia, and applied to the conjunctiva of the girl's *right* eye. Purulent ophthalmia ensued in *both* eyes, very severe, but not quite so severe as in the case of Ford. It gradually subsided; and the corneæ became clearer, so that, by the end of August, she could guide herself about very well. The improvement has continued; and she has for some time been able to read small print, thread her needle, do needle and other household work, and, indeed, see very well. The corneæ have nearly their natural transparency; and the conjunctiva has an almost healthy condition.

In clinical remarks upon these cases, Mr. Humphry observed that granular ophthalmia has hitherto been one of the *opprobria* of surgery—a truly sad and almost intractable disease. Many cases had come under his care, and he had paid great attention to them, without good result; and he had witnessed similar want of success at the hands of other surgeons. In communications with experienced medical men, and in visits to hospitals in Great Britain and on the Continent, he had made a point of inquiring respecting the treatment of this disease, without gaining any satisfactory information. In two obstinate cases, he had carefully dissected away the morbid conjunctiva from the under surfaces of the lids: in one of these, an old soldier, decided improvement followed the operation, the man regaining and retaining very fair sight; in the other, little or no good was done. He was prepared, therefore, to give a favourable consideration even to the suggestion of the somewhat revolting and hazardous experiment of applying gonorrhœal matter to the eye, which had been already carried out by Mr. Bowman at the Moorfields Eye Infirmary. The principle obviously is that of curing a chronic inflammation and its results by exciting a more severe inflammation in the structure; and, as no other agent that he could think of was likely to produce an impression sufficiently severe and prolonged to work the desired effect, Mr. Humphry determined to introduce the gonorrhœal matter into one eye of each patient. It is worthy of remark, that acute inflammation of both eyes quickly followed. The result has been most satisfactory, inasmuch as good sight has been restored in one, and very fair sight in the other of two persons, who were nearly blind, and apparently condemned to remain so. It need scarcely be observed, that such a mode of treatment should be reserved for the very worst cases, those in which the cornea has become so opaque that useful vision is lost, and in which a fair trial has been given to milder means. The cases above related, and others in which the same plan has been followed, seem to corroborate the statement that, in protracted cases of granular ophthalmia, where the cornea has become opaque, there is less liability to sloughing of that tissue under the severe inflammation excited by the application of gonorrhœal matter, than where the organ is in a more healthy condition.

ST. GEORGE'S HOSPITAL.

A SERIES OF CASES OF NARCOTIC INJECTION INTO THE CELLULAR TISSUE IN NEURALGIA AND OTHER DISEASES.

[*From Notes by* C. HUNTER, Esq., *House-Surgeon.*]

IN the number of this JOURNAL for August 28th, 1858, will be found a paper by Dr. Alex. Wood, showing the advantages derived, in cases of neuralgia, from the injection into the cellular tissue, in the immediate neighbourhood of the affected nerve, of a few drops of a strong solution of morphia. This suggestion was at once adopted at St. George's Hospital; and Mr. Hunter published in the *Medical Times and Gazette* for October 6th and October 30th, the account of two cases in which he had followed Dr. Wood's plan, under the direction of the medical officers of the Hospital, with considerable benefit. He found, however (as will be seen by the account referred to), one considerable drawback to the adoption of Dr. Wood's treatment, in its original form, in the liability to the formation of abscess from the frequent repetition of the injection in the same place, viz., over the affected nerve. Hence he was led to make experiments with a view of discovering whether the action of the remedy depended on its localisation at the painful spot, or whether it would also give relief if injected into other parts of the cellular tissue. The latter turned out to be the case, so that Dr. Wood's remedy proved even more widely applicable than its author had at first supposed. We shall proceed to

quote from Mr. Hunter's notes the account of a few of the cases in which he has used this agent, merely premising that the method in use at this Hospital is to pass into the cellular tissue, through a small puncture, a few drops of a very strong solution of the acetate of morphia, with a syringe such as is used for the injection of the perchloride of iron into nævi, by which means a certain small number of drops can be passed in with certainty. The solution of the acetate of morphia is assisted by the addition of acetic acid; and the superfluous acid is then neutralised, as this is found to have some effect in obviating abscess.

Case i. Henry Smith was admitted under the care of Dr. Page on September 29th, 1858, on account of sciatica. He was put upon a course of morphia (one-sixth of a grain of the acetate with two grains of acetous extract of colchicum three times a day), but without benefit; and galvanism was applied over the region of the hip, equally ineffectually. On November 2nd, these measures were suspended, no improvement having been obtained. On November 3rd, Dr. Page directed that three-fourths of a grain of acetate of morphia should be injected into the cellular tissue. This was done at the lower border of the buttock. Three-quarters of an hour afterwards, the man was not asleep, but felt drowsy, was warm and very comfortable, and his skin was perspiring. Next day, he had slept better than usual, and the pain in the hip felt easier. His mouth became dry in the morning, and he was sick once. In the evening, the injection was repeated, but into the cellular tissue of the arm. He then went off to sleep at once, and slept for five hours, waking afterwards occasionally. This was, for him, a very good night. He felt the leg certainly stronger afterwards; but the pain continued as before, if anything, a little worse. In the afternoon of November 5th, he was walking about, boasting how much stronger his leg was, and how much better he could walk. At 10 p.m., the same dose as before was injected, this time into the cellular tissue over the sciatic nerve. He passed a good night, had no sickness from the morphia, walked about a good part of the afternoon, and seemed delighted with his progress. In the evening, the injection was repeated, into the cellular tissue of the other arm. He went out quite cured on November 10th, the injections having been practised five times altogether.

Case ii. Edmund H., aged about 30, was admitted on November 2nd, under the care of Dr. Page, with delirium tremens. An emetic was given, and he was treated with forty drops of laudanum every other hour during the day. He slept a little during that night, but was as bad as ever next day. After the night of the 2nd, he did not sleep for two days and nights, and was so excited that the strait waistcoat was found necessary. Morphia had been repeatedly given in half-grain doses by the mouth, but without producing sleep. At 3 p.m. on November 5th, half a grain of morphia was injected into the cellular tissue of the neck. At the time of the injection, he was quiet, but sleepless; the tongue was tremulous; he could talk rationally. Ten minutes after the dose, he was in the same state; the eyes were open; he was sleepless. Fifteen minutes after the injection, the eyes were occasionally shut, and, when open, looked sleepy. One hour afterwards, the eyes were frequently closed; he seemed quiet, and inclined to sleep; and in two hours he was comfortably asleep, and continued so for five hours and a half. He then had some wakeful intervals, but again went to sleep for five hours, and afterwards continued dozing throughout the night. On November 6th, he was much quieter than he had been the previous day. The pulse was 80; the skin perspiring. At a quarter to 9 p.m., the same dose was again injected. He was found, three-quarters of an hour afterwards, fast asleep, and continued so for nine hours. On November 7th, he was far more quiet and rational. The injection was repeated in the evening; but on the following evening he was found asleep. No further symptoms occurred, and he was discharged cured a few days afterwards.

Case iii. An elderly man, aged about 60, was admitted on November 5th, 1858, with a gunshot wound of the thigh. On November 13th, he had a little wandering delirium. On the 14th, trismus and other symptoms of tetanus supervened; and these increased during the two following days. On the 16th, it is noted that he had hardly slept since the spasms first came on. At thirty-five minutes to one o'clock, three-quarters of a grain of morphia was injected into his arm. In twenty-five minutes he fell asleep, and remained asleep for the greater part of the night, totally undisturbed by the tetanic spasms, although they recurred nearly every minute. The progress of the case did not appear to be affected by this treatment; but it was interesting to observe that, though the brain was brought fully under the influence of the narcotic, the spinal system remained in the same state of excited action as before.

Case iv was that of a man (Richard W.) who was admitted on December 1st, 1858, on account of a self-inflicted wound of the throat. He appeared to be maniacal, and on the following night again attempted suicide. About midnight on December 3rd, he again became extremely excited, noisy, and restless. He was restrained by two men; and two doses of half a drachm of laudanum were given, but without effect. Five drops of the solution of morphia were then injected into the cellular tissue of the arm. For the first quarter of an hour afterwards, he was very quiet, and often shut his eyes for a minute, as if asleep. He went to sleep in twenty minutes, and remained so for six hours and a half. The morphia injection was repeated occasionally afterwards, with equally beneficial results, as far as obtaining sleep went; but the patient appeared to be in a state of confirmed mania.

Case v. James D., aged 70, was admitted on November 24th, 1858, under Dr. Page's care. He had been subject to gout, and for a fortnight had been suffering day and night from pain resembling sciatica. He was treated with morphia and colchicum, and then with saline mixtures and hyoscyamus, without the least good effect. The narcotic injection was then practised in the arm. In a quarter of an hour afterwards, he was sound asleep, and slept all night. The next day, he had no pain in the limb at all. Three days after the injection, it was reported that he had been better ever since, had slept pretty well, and had little or no pain during the day.

Case vi. Mary D., aged 16, was admitted on Nov. 16th, under the care of Dr. Page, in a fearful state of chorea, which the treatment adopted quite failed to relieve. On December 7th, it is reported that she was then much weaker than at the time of her admission. She had had no sleep for three days and nights, and was perpetually moving about, sometimes violently. It seemed probable that, unless sleep was procured, she would die of exhaustion. At 11 p.m., one-third of a grain of morphia was injected into the cellular tissue of the neck. In fifteen minutes she was asleep, and slept soundly for three-quarters of an hour; but then awoke, and was as bad as before. At 2.30 a.m., half a grain was injected. She was asleep in four minutes, and slept for three hours. On December 8th, she was again as bad as ever; sordes were collecting about the lips, and the pulse was extremely weak. In the evening, one-third of a grain of acetate of morphia was injected. In seven minutes she dozed, and had a little sleep. At 1 a.m., half a grain was again injected. She again went to sleep in four minutes, and slept for six hours and a half. The relief, however, proved only temporary; and she ultimately died exhausted. No *post mortem* examination could be obtained.

GUY'S HOSPITAL.

WOUND OF THE FEMORAL ARTERY.

Under the care of J. Birkett, Esq.

[*Reported by* J. G. Terry, Esq.]

In July 1858, a healthy youth, aged 16, was cutting paper with an old amputating knife, it slipped quickly through the paper, and the point inflicted a wound in the right femoral artery, where it lies superficially about an inch below Poupart's ligament.

Profuse hæmorrhage was the result, which was controlled by direct local pressure, and he was brought to the hospital very quickly after the receipt of the injury, in an exhausted state from loss of blood. Mr. Birkett immediately proceeded to tie a ligature around the artery, and to accomplish this he enlarged the original incision in the integuments, and freely exposed the anterior surface of the wounded vessel. The opening was of a triangular figure, or V-shaped, situated a little to the outer side of the artery, and a small flap had been formed of its coats. The point of the knife had probably just struck the artery, which being convex when distended with blood, offered every facility for the formation of such a wound. There was no difficulty in placing a strong silk ligature beneath the vessel, and in tying one first above the wound and another below. After tying the upper ligature, considerable bleeding took place from the distal portion of the vessel, but there was an absence of the *per saltum* escape of the blood; the wound rapidly filled with blood, but pressure below controlled it. The edges of the incision of the integuments were adapted with sutures and dry lint placed over it. The hip-joint was slightly flexed. Stimuli were given, and in the evening, although the boy was low, he was comfortable and reaction

fully established. Nourishing food was allowed from the first, and, three days after the injury, ten minims of tincture of sesquichloride of iron and four grains of sesquicarbonate of ammonia were given in camphor mixture three times a-day. The ligatures separated, one on the thirteenth, the other on the fourteenth day after their application, and the boy recovered without an untoward symptom.

Original Communications.

ON DISEASES OF JOINTS.

By Holmes Coote, Esq., F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital, and to the Royal Orthopædic Hospital, etc.

VIII.—FORCIBLE EXTENSION OF JOINTS.

1. *The Elbow-joint.* No joint has been more frequently subjected to treatment by forcible extension than that of the elbow. The smaller size of the articulation as contrasted with the knee; the readiness with which force could be applied, were circumstances too favourable for such a proceeding to be overlooked. The ultimate result has appeared to me to be nearly the same in all cases. The forearm may be flexed or extended to any angle, but the limb remains stiff: no free motion is restored. Hence the idea which was once entertained, that forcible extension might become, in some cases, the means of restoring the proper movements of the forearm after disease, proves to be fallacious.

Let me relate the *post mortem* appearances of some joints which have been the seat of acute and of chronic disease; and thus perhaps the explanation will be apparent why stiffness of the limb should remain. It is unnecessary to remark, that the treatment now under review is chiefly applied to cases of the latter kind; but the evidence afforded by both sets of morbid appearances will be interesting.

Lobstein relates the particulars of a case of ulceration of the articulating surfaces—protrusion of the head of the radius through an ulcerated opening of the skin. On the elbow of a man, aged 25, there were two large sores, one on the internal condyle, the other on the external condyle of the humerus. The ligaments were entirely destroyed, and the head of the radius protruded through the corresponding opening of the skin. The articulating surfaces were rough, the muscles partially destroyed and degenerated. The nerves had retained their normal structure, though thickened externally. (*Traité d'Anat. pathol.*, tom. ii, p. 309.)

The severity of the inflammation, often aggravated by want of proper treatment, may tend to abscess or mortification of the bone. Such a case is related by Meinel (*Ueben Knochentuberkeln*), who saw in a youth, aged 18, who had suffered from numerous ulcerations of the skull, ulcerations of the cartilages in the right elbow-joint, with a carious condition of the surfaces of the bones, and exposure of the cancellous structure. Between the condyles of the humerus, and imbedded in the substance of the bone, was a round cavity, containing a thick substance, like tubercle (inspissated pus?) A similar cavity was found in the sigmoid extremity of the ulna. The cavity for the head of the radius was completely destroyed. With this ulcerated condition of the extremities of the bones is sometimes combined a porous and spongy state of the osseous tissue (Museum of St. Bartholomew's Hospital, Ser. II, No. 30), or the development of osteophytes (Syme, *Treatise on the Excision of Diseased Joints*: 1831). Necrosis has been noticed and recorded in very many instances—1. At the lower end of the humerus, combined with anchylosis of the joint, by Michet (*Gaz. Méd. de Paris*, 1840, tom. viii). 2. In the upper extremity of the ulna, combined with partial anchylosis of the joint (Museum of Royal College of Surgeons, No. 3164). In the Museum of St. Bartholomew's Hospital (Ser. I, No. 209), there is a specimen shewing part of the spongy substance of the humerus in a state of necrosis, and lying loose in the medullary cavity: a long fistulous passage passes into the articular cavity, which is in great part deprived of its cartilage.

The history of diseases of the elbow-joint illustrates the fact that, in persons of strumous habit, bony anchylosis does not take place. The only apparent exception to this rule is when, after long continued local disease, the strumous taint seems to have worn itself out, in which case the processes of repair become the same as in individuals perfectly healthy.

In the Museum of the Royal College of Surgeons of England there are two specimens of considerable interest; one (No. 3344) shewing osseous union (the forearm at a right angle), without any considerable alteration of form; the other (No. 3346) with considerable change and atrophy. The Museum of Anatomy in the University of Berlin (No. 2252) contains a specimen of anchylosis of both elbow-joints, from a man aged 50. In the right arm, the humerus and ulna are united at a very obtuse angle, both bones passing by fusion one into another, so that the trochlea is no longer visible. The upper part of the head of the radius is wanting. The bones are somewhat atrophied. In the left arm the same changes exist; the bones, however, being at a right angle. In all probability, the cause of the disease was rheumatism. In the Museum of St. Bartholomew's Hospital (Sec. I, Subs. B, No. 29) there is a specimen of similar origin, in which all the three bones are blended together at their articular extremities.

In chronic inflammation, the morbid changes and processes of repair are more generally important as regards the mode of treatment now in question.

Chronic rheumatic inflammation terminates often in changes such as the following specimen in the Museum of the Royal College of Surgeons, taken from a man aged 50. The articular surfaces of both joints, instead of being covered with cartilage, are smooth, hard, and in parts polished. On the margin are numerous knotty osteophytes of hard and compact tissue, but covered with glistening fibrous structures. The head of the radius is larger than natural, by the formation of new bone, and directed backwards; a great part of its anterior surface being flattened, corresponding to a similar flattened surface in the front of the outer condyle of the humerus.

Preparation No. 53 (Museum of St. Bartholomew's Hospital), Sec. III, Sub-sec. B, exhibits the limb in extreme flexion, the hand in extreme pronation. At the articular extremity of the humerus, the internal condyle is diminished in circumference, and pointed; the trochlea is nearly obliterated; part of the external condyle is hard and polished; knotty osseous growths surround the borders of the joint. The outer half of the greater sigmoid cavity is hard, polished, and superficially furrowed; the inner half is rough, as if ulcerated. The lesser sigmoid cavity is obliterated. Below it is a deep hollow for the head of the radius. The head of the radius, deprived of cartilage, is directed backwards from the shaft, and surrounded in greater part by osseous growths; its anterior surface, corresponding with the external condyle of the humerus, is hard and polished.

In the treatment of all cases of progressive disease affecting joints, rest is imperatively necessary. When the disease has subsided, voluntary movement will return, aided by passive exercise, provided no serious injury has occurred to the structure proper to the articulation. In cases of chronic rheumatic disease, when the articular cartilage has been removed, and the surfaces of the bone have acquired a polished ivory character, passive motion, assisted by counterirritants, may be the means of greatly improving the patient's condition. But forcible extension, however skilfully effected, seems but to give us the power of placing the limb into whatever position we require; the freedom of movement following the operation is lost as soon as the ruptured and torn tissues have had time for repair. The following case, related by Cruveilhier (*Traité d'Anat. pathol. générale*, tom. i, p. 465), is supposed to have been one of incomplete dislocation, brought on by ulceration of the articular surfaces. The articular extremities of the humerus, radius, and ulna, were without any covering of cartilage, hypertrophied, and misshapen. The humerus projected over the bones of the forearm, and accordingly the extremity of the olecranon was taken from its fossa in extension. In no position did the articular extremities of the bones exactly correspond, but in none did they completely separate. The greatly stretched musculus brachialis internus (anticus) was divided into three portions, of which the middle only was inserted into the lower part of the coronoid process. The two lateral portions, which slipped over the borders of the trochlea of the humerus, had each a sesamoid bone, which corresponded with a concave surface in the humerus. There was adhesion between the tendon of the biceps and the denuded surface of the humerus. There were two other sesamoid bones posteriorly, one in the anconeus, the other within the external lateral ligament.

A girl is at the present time in St. Bartholomew's Hospital, who has now recovered from an attack of strumous inflammation of the elbow-joint, of very severe character. I am convinced that the operation of excision of the articular ends of the bones would have been performed by many surgeons; the

idea would have suggested itself to more. The joint has been kept *at rest*, *i. e.*, by means of small well applied splints and careful bandaging. The practice of keeping the arm in a sling was insufficient; the usual bent splints of heavy wood were troublesome and inapplicable. The patient will leave the hospital well in a few days. The injury done to the structures proper to the joint is inconsiderable, and there is very free movement. The case has been under treatment about eight months, in one of Mr. Lawrence's wards. Now, when the result here obtained is contrasted with the results obtained by excision, the advantages which ensue from abstaining from the use of the knife are obvious. The forearm of a person with an excised elbow is for a long time moveable and weak, and often requires artificial support for many years. Many months must pass before the limb is useful, in the most favourable cases. It is true that there are cases requiring operation, where the cancellous texture of the bones is diseased or necrosed; but pathological anatomy teaches us that such accidents are mostly the result of violence done to inflamed structures, and may be avoided by skill on the part of the surgeon, and by care on that of the patient.

CHLORINE INHALATION IN DIPHTHERIA.

By C. F. Hodson, Esq., Bishop Stortford.

I am induced by the continued prevalence of diphtheria and its extreme fatality in those cases where the larynx is involved, to communicate to my fellow associates a method of applying chlorine, which I have recently found so successful in an apparently hopeless case, that I cannot but think it will prove generally useful in the treatment of the more severe forms of diphtheria.

On Tuesday, November 30th, I received a summons to see a little girl, aged 3½ years, who had been poorly for several days, and was then supposed to be suffering with croup. An emetic was sent; and the child was visited shortly afterwards, when the nature of the disease was at once seen. The emetic had led to the removal of the exudation from the rima glottidis with considerable temporary relief, although the state of the fauces and nostrils, and the drowsy feeble condition of the child were such as to excite grave alarm. In the afternoon the gurgling returned; a second visit was demanded, when the treatment was adopted which is laid down in the excellent paper read by Mr. T. Stiles, at the Cambridge and Huntingdon Meeting of this Branch, (see Journal for 1858, p. 628); this treatment I have hitherto found most satisfactory. Wine, beef-tea, eggs, etc., were given as far as possible; and the entrance to the larynx was freed from the exudation by the repeated use of the curved probang, the sponge being well wetted with Burnett's solution.

On the following Friday, the child became much worse, sleeping heavily, and the breathing becoming more and more obstructed; the probang afforded only trivial relief, and on the morning of Saturday the end seemed close at hand. I then proposed trying the effects of inhalation of the vapour of boiling water, mixed with a portion of solution of chlorinated lime. A very serviceable vapour-bath was thus extemporised. An earthen milk-pan was placed on the bed close to the child; above this a large open umbrella; shawls and a piece of drugget were thrown over, hanging down to the bed so as to enclose the child and milk-pan completely; the latter was then half filled with boiling water; and, lastly, a few spoonsful of the chlorinated solution were added. After a few minutes the exudation became looser, and at the end of ten minutes, when the coverings were removed, the breathing was much freer. I directed this vapour-bath to be repeated every three hours, and occasionally a large sponge, dipped in boiling water, with a little of the solution sprinkled on it, held beneath the mouth and nose. For two days this plan was steadily pursued, and excepting for a few hours, the improvement was uniformly progressive.

From Sunday, December 6th, the interval was gradually increased, and after a few days the bath was used only twice or thrice in the twenty-four hours, until the child became convalescent. I should add, the bath was never unpleasant to the little patient, it was often commenced when she was asleep, and invariably gave immediate relief. It has rarely occurred to me, in the course of more than twenty-two years active practice, to witness a more gratifying result from such simple means.

CHLORINE IN THE TREATMENT OF DIPHTHERIA.

By Stephen S. Alford, Esq., F.R.C.S.Eng. and L.A.C.

In describing the treatment I have adopted in cases of diphtheria, I do not pretend to suggest anything original; but I feel that every medical man should record, for the benefit of the profession, the treatment he has found most successful in this complaint.

Diphtheria consists of the formation of a dirty white fungus-like covering over the throat and palate, surrounded by and apparently growing in a jelly spawnlike exudation, which protrudes through, and extends beyond the white fungus. The disease is accompanied with rapid prostration of strength, and often proves fatal in less than forty-eight hours. The formidable constitutional effects arise, I presume, from the absorption of a poison generated by the disease. The real remedy, therefore, should be purely local; viz., to remove the poisonous growth, and to prevent its reforming, and to counteract or destroy its poisonous character.

If nitrate of silver, when applied, does not at once effectually destroy the morbid growth, so as to prevent its recurrence, it forms a covering, behind which the poisonous fungi can go on increasing, and rapidly poisoning the whole system. Indeed, no local application, if not *constantly applied*, is likely to be successful. I have, therefore, abandoned the caustic treatment.

Last March, having had several cases of diphtheria, I tried a gargle of chlorinated soda, of the strength of from half a drachm to a drachm in an ounce of water, to be used every ten or fifteen minutes, so as to wash away, and *keep washed* away, the morbid growth, and, by the constant application of the chlorine contained in the gargle, destroy the poisonous character of the disease. When this plan is persevered in, the white fungi and jelly-like mass are washed away; and the throat is kept free by constant gargling.

I believe the chlorine itself not only counteracts the poisonous nature of the morbid secretion, and destroys its deleterious character, but also has a beneficial effect on the system at large; and again, by destroying the virus, prevents its spreading to other members of the family. The disease has never spread where this plan has been adopted. All these points have satisfied me in the use of this remedy, and I am pleased to find others have found it equally successful, as noticed in the Journal by Dr. Bryden. The character of the gargle is important, but I feel the frequently washing of the throat to be equally essential; and for this reason, I prefer the gargle being used every ten or fifteen minutes to the dilute hydrochloric acid only applied occasionally, as used in some of the metropolitan hospitals. In addition to the frequent washings of the throat, which I consider *the* treatment, I apply *spongio-piline*, frequently steeped in hot water, tied round the neck; and at once keep up the strength by stimulants; viz., wine and brandy, with eggs, arrowroot, or water. I give bark and chlorate of potass with henbane, and an anodyne at night (twenty minims of liquor opii sedativus); for sleeplessness has been a marked feature in all my cases; aperients of a warm but decided nature, and little or no mercury, make up the treatment I adopt. When the above plans have been carried out, I have found them invariably successful.

In several severe cases of ulcerated sore throat, the same gargle, constantly applied, has succeeded.

Melancholy Death of a Young Surgeon. A melancholy accident occurred at the Norwich Dispensary on Saturday evening, Jan. 1st, resulting in the death of Mr. Alfred Dowson, a gentleman twenty-two years of age, who had been officiating during the last few days for his brother, Mr. Arthur Dowson, surgeon at that institution. It seems that the deceased took what he fancied was some tincture of orange-peel, but which really proved to be tincture of aconite. The unfortunate young man misread the labels on the bottles, one being marked "Tinct. Aurant.", and the other "Tinct. Aconiti." After making the fatal mistake he ate some supper, conversed cheerfully, and retired to rest; but he had not been long in bed when he found himself in such pain that he disturbed the establishment. Professional assistance was promptly at hand, but was rendered in vain, death soon terminating the sufferings of the deceased. At an inquest held by Mr. W. Wilde, city coroner, the jury, after hearing several witnesses, returned the following verdict:—"That the deceased took some tincture of aconite accidentally and by mistake, intending to take some tincture of orange-peel."

Clinical Lectures
ON
LITHOTOMY.
DELIVERED IN
THE LEEDS GENERAL INFIRMARY.

By Samuel Smith, Esq., Senior Surgeon to the Infirmary.

Lecture II.

Gentlemen,—I had stated, when we parted, that my second and third operations were performed with the curved staff and the common scalpel; and that both these cases were successful. Still I felt that it was not perfectly safe to pass a pointed scalpel along the groove of the staff through the prostate to the bladder. I felt that I wanted a beak, with which I could push firmly against the groove, with the knife held at a certain angle to the staff, and thus reach the bladder in safety.

At that time I read a very excellent work recently published, entitled Barlow's *Essays on Surgery*. The author was an eminent Lancashire surgeon, and part of his book was on lithotomy. From this book I learned the value of the bulbous-ended sound, of the beaked knife, and the more frequent use of the scoop instead of the forceps in the extraction of the stone. The beaked knife, with which he operated with very great success, is represented in this plate; but I shew you also one which was made for me afterwards, with rather greater breadth in the blade. I resolved, then, to use it, because I saw that it was exactly like a common scalpel with a beak, and that it would run in a satisfactory way along the groove of the staff; possessing this advantage over the gorget, that you could make your incision through the prostate at any angle you chose. I resolved to use this knife in future; but, after performing a few operations with it, I thought it would be better still to have common scalpels with beaks and diameters corresponding to the size of the patient and his prostate gland. I therefore got these knives made, which, you will see, are of the common form of the scalpel, but with a beak (or probe-pointed); and I had them of six different sizes. The cutting surface of the smallest which I show you is an inch and a half long, and the blade is five-sixteenths of an inch in diameter; and I had them graduated, each being one-sixteenth of an inch broader than the other, till my largest knife had a cutting surface of two inches and a half in length, and a breadth of ten-sixteenths of an inch. If I had to construct these knives again, I would only have four; and the first should be of exactly the same size as the first I shewed you. I would then increase each size one-eighth of an inch, and a corresponding increase of length; so that the largest, or No. 4, should be eleven-sixteenths of an inch broad, and two inches and a half long in the blade. With four knives of this kind, you might safely perform the operation upon any individual; upon a child two years old with the smallest, and upon an adult with a greatly enlarged prostate with the largest knife; taking care, when the prostate gland has been greatly enlarged and its structure changed (and you ought to take the measure of every prostate gland before you take the knife in hand for operation), that a more free division of it may be necessary. And with this knife that incision may be made as free as possible; for, after the gland is cut to the extent of the diameter of the blade, by the introduction of the forefinger of the left hand, it can be enlarged, on withdrawing the knife, to any extent you like.

After performing several operations with Barlow's knife, I then commenced with my own beaked scalpels. With the common scalpel, with Barlow's knife, and with my own knives, I performed in succession twenty-two operations of lithotomy, not only without a death, but without a single untoward circumstance. That was a success which had never been approached at all in the Leeds Infirmary before, and has never been equalled since. The link in my long chain of successful cases was broken thus.

My twenty-fourth case was William Clapham, 5 years of age, from Knaresborough. He came with distressing symptoms of stone; was sounded by myself and both my colleagues in consultation, all three being under the impression that a stone was felt in the bladder. An operation was decided on, which was performed by me on the 30th of April, 1832. When the knife had passed through the prostate, along with the rush of urine through the external wound, I noticed floating with it a singular white fleshy substance, about three-fourths of an inch long, and rather thicker than a crow's quill. This escaped with the urine, and fell into the sawdust on the floor. The finger of the left hand being passed through the wound, I could feel no stone. I felt the entire cavity of the bladder, and searched in every direction; still no stone could be found. After a certain time of embarrassment, as you may readily conceive, and the bladder being explored with the female sound by my colleagues as well as by myself, with the same result, the patient was unbound, taken into the Garden Ward, and put to bed. From the moment of the operation he lost his distressing symptoms. The urine flowed freely through the wound; he suffered no more pain, and very little exhaustion. He went on favourably for a few days, when he began gradually to sink, and died on the tenth day. On *post mortem* examination, it was found that there were two small calculi, not larger than a grain of wheat, in the ureter; one of them being within an inch of its entrance into the bladder, and the other midway between it and the kidney. There was also a calculus of the size of a very small flattened olive in the kidney. Here is the kidney, and you can see the cavity in which it was impacted. But what was the substance which floated away with the urine? Here are the bladder and prostate gland, and you will see that the prostate is fringed with several of these substances; and it was the knife which, in passing into the bladder, divided one at its neck, and separated it. This is the only instance in which I have observed such substances; but, in a prize essay on *Lithotomy* by my late friend Mr. John Green Crosse, of the Norwich Hospital, he describes a prostate as being surrounded by such substances, and gives a drawing of the same in his twenty-third plate. The stone which was taken from the kidney was lent by me to the parents, to show at Knaresborough, they promising to return it. I never got it back to this day. Mr. Sagar, surgeon, of this town, whose friends resided in that neighbourhood, applied again and again for it; but they refused to give it up, on the ground that the examination of the body had taken place without their permission. Since that time I have never given up the original stone, but a cast taken in sulphur: you can by this means imitate both the weight, colour, and form, very exactly.

Gentlemen, there was a good deal to be learnt from that operation. I have since always observed this rule, not only to feel but to hear the stone; for, in some examinations, there are symptoms closely imitating the sensations produced by the presence of a stone. The bladder gets into a rugose roughened state; and, when the sound passes over its surface, it gives you something very like the sensation of touching a stone.

In the case I have alluded to, I have a very strong impression that there really was a very small calculus in the bladder, and that it escaped along with the other substance mentioned to you. I think, gentlemen, you ought to allow that to be possible. I will not say that it was so, but I suspect so; and I think so, because, if you introduce a sound into the bladder of a little boy, where there is a calculus no larger than a grain of sand, it can be detected at once, and you cannot exactly tell its magnitude, but you feel and know for certain that it is there. I will give you a case to prove this.

About twenty-five years ago, a little boy, three or four years of age, came from Goole to the Leeds Infirmary, to be operated on for the stone, because it had been ascertained by the surgeons there that there was one in the bladder. I sounded him, and I felt it immediately, and decided on the operation. Two or three days before it was intended to operate, a small calculus came into the urethra, giving considerable distress and difficulty in passing urine. I introduced the small scoop of this director into the urethra, got behind it, and hooked it out of the glans. A day or two afterwards, I sounded the patient again, and immediately found a stone. Two or three days after that, another calculus got into the urethra. This I got behind with the scoop, and succeeded in drawing it as far as the glans, which it would not pass; but, having made a very small incision, I readily drew it away. A few days afterwards, I sounded him again. No stone could be felt. He never had any more symptoms; and, after watching him carefully and sounding him once more, he was sent home cured of all his ailments. One of these stones was not as large as a grain of wheat, the other was a little larger; but they were either of them readily detected at once; and I think it is possible that, in the Knaresborough case, there may have been a calculus of this kind in the bladder, and that it escaped with the first rush of urine. And this appears very probable, when we remember

the two small calculi found in the ureter, one within an inch of the bladder.

Gentlemen, I am not the only lithotomist who has performed the operation without finding a stone in the bladder. There is an eminent surgeon in London who has done this twice in one of the great metropolitan hospitals; and my then senior colleague also did it twice in his career; and I was once very near doing it a second time myself. I had a patient from Halifax, who was sounded in consultation by both my colleagues, and we decided upon the operation. He was put upon the table, and bound hand and foot; but when I introduced the staff, I could not feel anything. I sounded and sounded. I looked my colleagues in the face, and said nothing, but unbound the ligatures, and sent him to bed. He went home to Halifax, where he died under the care of Mr. Jubb. Some years afterwards, when I was visiting a patient in Halifax, with Mr. Jubb, he showed me the wet preparation of this man's kidneys and bladder. The kidney was as large as my head; the bladder was diseased and rugose; and the diameter of the ureter was equal to the thickness of my thumb. I like to confess my sins of this kind; because you may sometimes learn more when a surgeon is candid enough to tell you his errors, than by hearing of his best exploits. I have never operated since that day without bringing away the stone to shew.

We have now arrived at my twenty-fourth operation, and will go back a little, if you please.

No. 3 is worth looking at, as a very beautiful specimen of a mulberry calculus. I may tell you that this boy, when he was operated on, was thirteen years of age. When he was between fifteen and sixteen I saw him; and he was labouring under severe inflammation of the left testicle. I asked myself, Had this anything to do with the operation of lithotomy? Was any part connected with the left testicle wounded? I thought the duct of the vesicula might have been injured, and thus have given rise to the commencement of this inflammation at that period.

No. 4 is only of importance as showing you the very peculiar form of this lithic acid calculus. James Hardy, from Idle, was operated on February 28th, 1826. The operation was performed with Barlow's knife, and this large stone was readily extracted. From its singular form, you will see that it has the appearance of having been originally two separate calculi, which have been joined together by deposit uniting them; but a section proved there was only one nucleus.

Case x is worthy of remark. Joseph Dean, 14 years of age, from Dewsbury, was operated on February 2nd, 1827. This boy, previously to his coming into the Infirmary, had been under Mr. Jonathan Breary, a Quaker surgeon of that place, who had formerly been a pupil of the Infirmary here; and a very clever young man he was. To that patient he had been administering medicine, with the intention of dissolving the stone. I believe it was mephitic water he gave him, which is a solution of potash highly impregnated with carbonic acid gas. The commencement of dissolution had certainly taken place before he came to the Infirmary. He brought with him and showed me those fragments, one of them of good size, which had passed *per urethram:* he had taken them out with the finger and thumb, after they appeared at the glans. These fragments are in paper No. 1. In paper No. 2, I show you considerable fragments, which he parted with in the same way after he came into the Infirmary; and it is worth while to measure some of these fragments. Here is one five-eighths of an inch long and half an inch broad, parted with without any cutting operation whatever; and there are several other fragments nearly as large. One day, February 2nd, 1827, on going round the Infirmary, I found this boy in very great distress, with a distended bladder, and complete retention of urine. We could not pass any instrument beyond the membranous part of the urethra, in consequence of its being filled up with calculi. Mr. Chorley being in the Infirmary at the time, I called him to see the case; and we were both of opinion that the only way to relieve the boy was to cut down upon these calculi, and remove them. He was accordingly taken at once to the operation-room, and bound as for lithotomy. I made an incision into the perinæum, in the line of the raphe; and I removed from the membranous part of the urethra these four large fragments, of which one is seven-eighths of an inch, and another eleven-sixteenths of an inch broad. After these were removed, I inserted my finger through the wound into the bladder; and there I found another large stone-quarry. I therefore took a scalpel; and, commencing a little above the lower part of my first incision, completed another in the line of the usual lithotomy incision, passed the beak of my knife into the bladder, and extracted with the scoop all these fragments. The boy made an excellent recovery, and went home perfectly cured.

Perhaps you may not believe in the possibility of dissolving a stone in the bladder? I do believe it, and will give you a case to prove it. Rather more than thirty years ago, an elderly gentleman near this town, who had retired from business with an independent fortune, expelled *per urethram* these four lithic acid calculi. Some time afterwards, he became affected with distressing symptoms of stone in the bladder, and was conscious that he had one then which he could not expel. These symptoms afterwards became so distressing that I requested permission, and was allowed, to sound him. I immediately detected a stone, and believed it to be, from the sensation communicated by the sound, of the size of an olive. I distinctly felt and heard it. His symptoms afterwards became so urgent that at length he was wishful to have some operation for its removal. It was at the period when lithotrity was first introduced into this country, and was then performed by two surgeons only in England—the Baron Heurteloup and Mr. Costello. I went up to London myself, and was introduced to these two gentlemen, and saw their instruments. Mr. Key was so kind as to order me a set of Charrière in Paris, which I received.

The operation of lithotrity was then performed in a very different manner from that in which it is done at present. It is now a very simple and successful operation; then it was a very complicated piece of mechanism, very difficult to perform, and not so successful as at present. Then the stone was not seized in the bladder by a curved instrument, as now; but it was a straight instrument of steel, with three branches, covered with a silver cannula, which was introduced into the bladder, closed, as you see there, when it was thus introduced into the bladder, by withdrawing the silver cannula a little, the three blades of steel sprang open; the stone was then seized by these three branches; and the canula was pushed forwards again, which closed the blades on the stone, and grasped it firmly, When thus secured, a drill was pushed forwards upon the stone; by turning a little screw, a branch of the point of the drill was pushed out at an angle. When the whole instrument was firmly fixed in a vice, a bow with catgut was put on the pulley, which was worked as a drill. A large cavity was thus drilled in the calculus, which was ground to the finest powder, until the shell of the calculus was little thicker than an eggshell. Thus, by pushing up the cannula forcibly upon the three branches, they were closed upon the thin shell of the calculus, and broke it into fragments. I never got up my courage to perform this difficult and dangerous operation in this manner; although I was the first in this neighbourhood to do it after the two branched curved lithotrity instrument was introduced.

The old gentleman, whose case I am relating, could not place confidence in me to perform the operation, as I admitted that I had never done it. But Mr. Costello passing through Leeds, and calling upon me, we went together to see my patient; and he received a retaining fee. It was agreed that an operation should be performed; and the terms were £300 if done in London, and £500 if in the neighbourhood of Leeds; and there was no stipulation about "no cure no pay". Mr. Costello saw him, injected the bladder with warm water, and sounded him in my presence; and we both at once, without any difficulty, detected a stone, of the size I mentioned, in the bladder. The operation was followed by rigors and a smart attack of fever, which confined the patient to his bed several days, and reduced him considerably. He afterwards visited Harrogate, and there met with Colonel King, the owner of a celebrated race-horse. This gentleman told him there was a schoolmaster in the neighbourhood of Harrogate who compounded a most excellent medicine, a vegetable composition, for dissolving stone in the bladder; and that he knew several persons who had derived very great advantage from it. My patient went to this schoolmaster, got the medicine, and took it freely, with very great relief. He came home with a two-gallon bottle of it; and was accustomed to take a wineglassful several times daily. I saw him, and admitted at once that it had been of immense advantage to him. But, I thought, what can it be? It does not appear like a vegetable substance. I ascertained that the schoolmaster admitted that he could only make a small quantity of it at once. Now, gentlemen, you know if it had been a vegetable composition, he would have got his vegetables together, and made a brewing-vat full; but as he could only make a small quantity of it at once, I concluded from its appearance, that it must be mephitic water. I got a Nooth's apparatus, and made a strong solution of sub-

carbonate of potash, and charged it well with carbonic acid gas, bottled it, took it to my friend, and I said to him: "Take a wineglassful of this, and a wineglassful of your own, and tell me if you can detect any difference?" He could not. "Then," I said, "my conjecture is right; it is mephitic water; you shall have an apparatus, and make it for yourself." I purchased him a glass apparatus, and taught him to brew this "vegetable substance" for himself. I got him a quantity of pounded marble, sulphuric acid, and subcarbonate of potash. He kept the apparatus constantly going, and took it freely for years. He parted with much fine sand in his urine; and, after he had taken it several years, he expelled in January 1835 this lithic acid nucleus; and from that moment he never had any more symptoms of stone in the bladder. Some years afterwards, in consequence of great enlargement of the prostate gland, he was attacked with retention of urine. I passed him the catheter three times daily for some time. I then supplied him with two large elastic gum catheters, with directions to keep the stilette constantly in them, excepting when used, in order that they might retain their proper curve. I taught him to use this instrument for himself, by oiling it well and withdrawing the stilette just previously to its introduction. When I passed the catheter myself, I used the silver instrument; and being aware of his previous condition, I tried, but I never could detect the least appearance of stone. The catheter was introduced repeatedly every day up to the day of his death, which took place in 1843, when he was 83 years of age, after he had lived many years in the state I have described to you. He died during the time when I was abroad for six weeks, taking the long holiday of my life. He had, during my absence, residing in his house with him a retired surgeon, who was a family connection; and after his death a *post mortem* examination took place. There was no stone found in the bladder; and this surgeon was under the impression, because there was none when he died, that there never had been one in it at all.

Transactions of Branches.

SOUTH-MIDLAND BRANCH.

CASES OF STRANGULATED HERNIA, AND OPERATIONS: WITH REMARKS.

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[*Read September 30th*, 1858.]

The cases of hernia now about to be recorded, are offered to the attention of the members, from the circumstance that certain peculiarities were presented which have not been noticed in the surgical works of those British writers who may be considered as our best and as our most accessible authorities in surgical science. The exceptional occurrences in these cases are also more worthy of record, from the fact that the exceptions, such as will be described, call forth the application of prompt and determinate treatment.

Case I. *Strangulated Inguinal Hernia in an Elderly Female; Operation; Peritoneal Coat of Intestine in a state of Sphacelus; Large quantity of Omentum removed by Incision; Recovery.* The first case which I have to mention is one in which the patient was a lady, aged 68. She had for some years been subject to inguinal hernia on the right side, for which she had worn a truss. Occasionally, the hernia had come down to a considerable extent, through a severe cough, to which she was subject; and on two occasions she had found some difficulty in reducing it.

The day before I was called to this patient, the hernia had descended, and she could not return it. The swelling had become tender, and the symptoms of strangulation were strongly presented. I found her labouring under incessant vomiting and hiccup. The vomited matters were not stercoraceous, but what is commonly called bilious, and contained a dirty coffee-ground kind of sediment. The pulse was 90, and feeble; the countenance anxious. On examining the swelling, I found it tender, very tense, and large as a full sized orange. The taxis was applied, but with much gentleness, on account of the tenderness; and a bladder of ice was afterwards placed over the tumour. Finding that no impression was made upon the size of the swelling by these measures, and the symptoms of strangulation becoming still more urgent, I determined upon operating; and, with the kind assistance of Dr. Witt, at once proceeded.

Dr. Witt saw her for the first time at ten o'clock P.M., and coincided with me that it would not be safe to leave our patient until the morning.

Operation at 11½ P.M. The operation was performed in the usual manner. On opening the hernial sac, a large quantity of omentum presented itself; behind which was observed a large loop of intestine, of dark appearance. The stricture was divided, and the intestine was attempted to be returned. In making the attempt, about two square inches of the peritoneal coat of the intestine was peeled off by the pressure of the finger and thumb. The abraded surface was of a dark colour, and the structure was somewhat softened. Having decided to return the intestine to the abdomen, and to run the risk of having its peristaltic action restored, we carried out the intention without much difficulty. Our attention was then directed to the omentum, which was protruding in considerable quantity. We attempted several times to return it to the cavity of the abdomen, but were foiled in consequence of the mass which had fallen down, and the tension of the abdomen. Having repeatedly failed to return the omentum, we decided upon passing a strong silk ligature around the neck of the projecting substance at the highest point to which we could carry it; one end of the ligature we cut through near to the knot, and there we removed the portion of membrane *en masse*. The loose end of the ligature was brought out at the wound, and carefully secured by a strap of adhesive plaster. The neck of the omental mass formed an admirable plug for the inguinal canal. The edges of the wound were brought together and dressed in the ordinary way.

At nine o'clock on the first day after the operation, I found the patient still vomiting; but the vomit was not stercoraceous. The pulse was 110; the hiccup still troublesome; the abdomen tense and painful on pressure. A dirty looking thin fluid was oozing from the wound. I administered a pill of calomel and opium every three hours, and prescribed a free enema of gruel with castor oil.

At eight o'clock P.M., the report ran that the enema had been retained two hours, when it came away deeply tinged with feculent matter. The bowels were afterwards freely moved three times, and the sickness and hiccup had considerably subsided. The abdomen was still tense and tender; the pulse 114; the skin moist. Wine had been freely administered.

At nine o'clock on the second day, she had not had sickness for the previous four hours, nor had the hiccup returned. The bowels had acted once; the abdomen was still tense and tender; and there was a free escape of thin brown fluid from the wound; the pulse was 112. She had slept two hours during the night.

The pill of calomel and opium was continued, and simple effervescing medicine added.

In the evening, the pulse was 116; the skin moist; the abdomen still tense and tender; the bowels had again acted; but no sickness or hiccup remained. She slept a little during the day; and the pill and medicine were continued.

After this date, she gradually improved. The pills were continued until the gums were slightly tender.

Some years afterwards, I was called to a distance to see this patient, then aged 78, and found her labouring under a slight hernial protrusion at the site of the operation. A truss was adjusted, and nothing more occurred to her to the time of her death, which took place a year or two afterwards.

Remarks. The omentum removed in this case weighed five ounces and a half. The two circumstances which deserve attention in the case, are—first, the fact of recovery after the existence of so much mischief in the intestinal wall; and, secondly, the removal of so large a portion of protruded omentum.

In this case, while there was undoubtedly incipient disorganisation of the peritoneal covering of the intestine, the muscular and mucous coats were, fortunately, not so much injured as to prevent the restoration of the intestinal action.

With regard to the omental mass, so large was it, and so great was the difficulty of returning it into the abdomen, that we at once decided upon removing it entirely. The vascularity of it indicated the propriety of placing one strong ligature around the root of the mass, in lieu of dividing and securing the vessels one by one. I perceive that this latter plan is recommended by Sir Astley Cooper, in his admirable monograph, *The Anatomy and Surgical Treatment of Abdominal Hernia.* The plan of applying the ligature round the whole

of the protruded omentum, and of allowing the omentum to slough away, is certainly inadmissible.

The accession of peritonitis was to be feared after the operation; but the patient was early brought under the influence of mercury, with the happiest effect. Whether it is desirable to give mercurials in every case of hernia, immediately after the operation, or even before it, as was suggested by Mr. Vincent (*Observations on Some of the Parts of Surgical Practice*, page 327), is questionable. I have not found it necessary in any other hernia case to combat a decided tendency to peritoneal inflammation. Whether it is advisable to apply a number of leeches to the abdominal parietes in order to avert inflammatory action, is also questionable, though suggested by Liston himself (*Practical Surgery*, p. 559; third edition). I should certainly, for one, omit this line of treatment.

Case II. *Strangulated Inguinal Hernia in a man; Operation; Sac containing a Long Band of Omentum; Persistence of Symptoms of Strangulation; Death; Post Mortem Examination; Extensive Stricture of Intestines by the Omentum within the Abdomen.* A man in the prime of life sent for me in 1849. I found him labouring under all the symptoms of strangulated inguinal hernia on the right side. Every effort failing to reduce the tumour, I obtained the kind assistance of Mr. Hurst, and operated at once. On opening the sac a considerable quantity of turbid fluid escaped; but we could find no portion of intestine. A long band of omentum, very vascular, passed through the entire length of the inguinal canal, through the external ring into the scrotum. Some flakes of lymph were removed from the surface of this omental protrusion, and it was returned into the abdomen. The precaution was taken of inserting a finger through the internal ring, for the purpose of ascertaining if there were any portion of intestine adherent to the parietes within reach. No such adhesion was found, and the wound was dressed in the ordinary manner. An enema was ordered; but we left the patient with the impression that no relief could possibly accrue from the operation. The symptoms of strangulation continued, and the patient died during the next day.

Examination twenty-six hours after death. The abdomen was tense, and on cutting through the parietes, a small quantity of turbid serum escaped. The intestines were much distended and considerably injected. On carefully examining the distended parts of the intestines, they were found to be divided into two portions by a deep furrow, along which passed the cord-like omentum. This band of omentum embraced the convexity of the stomach, especially towards its cardiac end—and the transverse arch of the colon—extending obliquely across the abdomen to the right internal inguinal ring. At the ring, and in close contact with it, lay the extremity of the omental prolongation, which we had returned into the abdomen the day previously. The band of omentum from above downwards was exceedingly well defined, firm, as if twisted, broad above, gradually tapering to a point below; it had some delicate lymph adhesions to the structures on either side of it. So firmly did it press upon the intestines along its entire course, that there was a deep furrow in the parts which were traversed by it; the portions of intestines pressed upon were empty and pale; on either side they were distended and considerably injected.

Remarks. Here was a case offering every sign of inguinal hernia, with strangulation of intestine; but with omentum simply protruding through the ring. It was a case in which operation could afford no relief whatever; yet one in which operation was demanded, since the failure could not have been predicted beforehand. The operation revealed the certainty of some internal strangulation; but we were not prepared for such an extensive strangulation, produced by such a morbid mal-arrangement of the entire greater omentum. Mr. Hurst, during his extended surgical experience, had never seen a case of this kind; nor have I found any record of a similar case. It is to be feared, too, that the relation of a case of this kind is rather pathologically curious than practically useful.

Case III. *Strangulated Umbilical Hernia in a Female; Reduction under the Continued Application of Ice.* I must offer one brief sentence on a case of umbilical hernia, in which the symptoms of strangulation were so urgent as to justify operative procedure. After applying ice for four hours, and repeatedly trying the taxis, I called in Dr. Witt, who carefully, but unsuccessfully, applied the taxis, and coincided with me in the propriety of operating. I therefore went home for my instruments, leaving the bladder of ice in contact with the hernial protrusion. On returning, I made the necessary arrangements for the operation, and removing the ice, grasped the tumour for one final trial of the taxis. The hernia at once, and suddenly, receded into the abdomen, very much to the gratification of the patient.

Cases IV and V. *Close Adhesion of Sac to Intestine; Deficiency of Serum between the Sac and Intestine. Remarks.* I would just allude to a fact which is not sufficiently insisted on in elementary works on surgery; viz., that we may now and then meet with cases of hernia where the hernial tumour is simply intestinal and so tense, and the serum within the hernial sac so small in quantity, as really to lead to much greater difficulty in operation than we would expect from mere written descriptions. I recall to mind two cases at least of this character. In one of them, a case of Mr. Couchman's, it was most difficult to distinguish the opening of the sac, in consequence of the absence of serous fluid. In fact, the only criterion was, the readiness with which the sac was pealed from the distended surface of the intestine. In the other case I was very much puzzled by the additional complication of a considerable adhesion between the sac and the intestine. These are cases in which it is necessary for one, who has not frequently operated for hernia, to exercise great caution, not to incise rashly, lest the intestine itself might be wounded; an accident which I have known to occur from want of caution.

The only writer who mentions this necessary precaution, as far as I am aware, is Howship, (*On the Discrimination and Appearances of Surgical Disease*), who says "The instances in which close adhesion between the bowel and sac existed, are much less important as creating additional difficulty in the operation, than as offering so many exceptions to the rule by some laid down as invariable, that the operator will always be apprised of having opened into the hernial sac, by the escape of a little serous fluid. A rule which, if trusted, might evidently sometimes lead to opening the intestine as well as the sac." (p. 299.)

Sir Astley Cooper incidentally alludes to the fact, that sometimes there is no fluid contained in the sac of femoral hernia; but not as a circumstance adding to the difficulty of the operation, or requiring more than common caution. (*Anatomy and Surgical Treatment of Hernia.*)

Liston mentions a case in which there was no possibility of pinching up the sac with either the fingers or forceps; it contained no fluid, and was impacted most firmly with bowel. The membrane was thin, and observing a pellet of fat underneath, he scratched very cautiously with the point of the knife in the unsupported hand, until a puncture was made sufficient to admit the blunt point of a narrow bistoury. These are cases in which great caution is required. Undue boldness must be fatal to the patients.

Case VI. *Strangulated Femoral Hernia in a Man; Operation; A Large Inguinal Gland Overlying, and Firmly Attached to the Hernial Sac; Division of the Stricture External to the Sac; Recovery.* This case was one of femoral hernia on the right side, occurring in February last, six miles from my residence. I was called to the patient in the morning, and found him labouring under symptoms of strangulation. I gave directions for the day, and instructed them to let me know in the evening, if there were no amendment. The message was unfavourable; and I prepared to operate, taking Mr. Couchman with me. We decided that the operation, performed immediately, would give the patient the best chance. On cutting down to what I thought was the hernial tumour, we encountered a large inguinal gland, which appeared to be very much in the way. The impulse on coughing was very decided, and the question which presented itself to our minds was, the best way of proceeding with the glandular mass. It was large and overlying the hernial sac. Moreover, it seemed to be firmly adherent to it. I separated it as far as I could from the surrounding parts—and on lifting it up somewhat, I could see a semi-transparent part of the hernial sac just beneath it. It appeared so large and so firmly adherent to the sac, as to preclude the idea of cutting through it, in order to enter the hernial sac; nor could it be dissected away and thrust aside. Under these circumstances, I decided upon dividing the stricture external to the sac, and thus reducing the intestine, if possible. The left fore finger was passed up on the inner side of the hernial tumour; the nail was inserted within Gimbernat's ligament; a blunt-pointed bistoury was passed, with its flat surface in contact with the finger, beyond the edge of the ligament, when its edge was turned inwards; and the ligament was divided to the extent of about two lines in the direction *upwards and inwards.* On making gentle pressure, the small sac was apparently emptied, and the wound was dressed in the usual manner.

The symptoms of strangulation continued through the night; and on the next day I ordered an enema. Twenty-four hours after the operation a copious fæcal evacuation passed, and the vomiting gradually subsided. The man recovered without a bad symptom.

Remarks. In this case I was naturally led to attempt the relief of the patient without opening the sac. In fact, the operation of Petit, Key, Luke, and others was performed not from choice, but from compulsion, in this case. No case had before this come under my notice, in which an inguinal gland had afforded such an obstacle to the ordinary method of operating. The case at first sight, and without a more minute and careful examination, seemed to be one of simple inguinal glandular enlargement; but the evident impulse on coughing, and the finding a small portion of the semitransparent hernial sac beneath the gland, soon dissipated that erroneous diagnosis. Whether the firm adhesion of the gland to the hernial sac were of recent date or not, I am unable to say; but the adhesion was certainly very firm, and so firm as not to yield to considerable force. We were somewhat puzzled how to proceed under the circumstances. To slice away the gland piecemeal, or to cut through it cautiously, in order to get to the sac, or to tear it aside from the sac, seemed quite impracticable. All these points were maturely considered by my friend Mr. Couchman and myself in an adjoining room, and we came to the conclusion that the only practicable method of terminating the operation, with the most reasonable chance of success for our patient, was to attempt the relief of the strangulated intestine, by dividing Gimbernat's ligament without opening the sac. The result justified our decision. I was favourably impressed with the facility with which the operation was done; and I have determined, should other cases present themselves, although not fraught with the difficulties of this one, to adopt the same plan.

On referring to a paper on hernia, by Charles H. Todd, in the first volume of the *Dublin Hospital Reports*, p. 250, I find that he mentions the case of a lady on whom he operated; where the fascia propria had become so thick and compact as to resemble the cyst of a tumour; it had also connected with its anterior surface an enlarged lymphatic gland, which it was necessary to remove before the hernial sac could be exposed.

Case vii. *Strangulated Femoral Hernia in a Female; Operation; Division of Gimbernat's Ligament External to the Sac; the Contents of the Sac Incapable of being Returned; the Sac Opened and found to be Constricting the Contents at its Neck; the Stricture Divided, and the Contents Reduced; large Quantity of Serous Discharge from the Wound during Recovery.* In July last, at mid-day, I was sent for to see a woman residing in Bedford, and found her with femoral hernia of the right side. She had laboured under hernia for many years. This had been strangulated some fifteen years ago, when I reduced it with the greatest difficulty.

On this last occasion, every effort to return it failed, and with the assistance of my friend, Mr. Couchman, I proceeded to operate early in the evening. In this instance it was my intention to follow Luke's method of dividing the stricture without opening the sac; although up to the period of dividing the stricture, I determined upon making the incisions in the usual way, and of the ordinary extent, in order that I might have ample room in which to see my way. On reaching the sac, I inserted the nail of the left forefinger within Gimbernat's ligament, and by means of a blunt-pointed bistoury, divided it for a line and a half or two lines in the direction upwards and inwards. Ample room was made for the tip of the finger to pass into the femoral ring. Notwithstanding the free division of Gimbernat's ligament, the contents of the sac, consisting of omentum as well as of intestine, could not be returned into the abdomen. Every attempt in this direction was ineffectual. We then determined to open the sac along its entire extent, and found it to contain a considerable quantity of omentum, enveloping a knuckle of intestine. On passing the finger upwards and inwards towards the neck of the sac, I found that the sac was exerting a considerable degree of constriction upon the intestine, although externally there was ample space for the tip of the finger to be thrust through the femoral ring. The nail of the finger was then introduced within the neck of the sac, a blunt bistoury introduced, and a short incision made. The intestine was then readily returned—and the mass of omentum, with more difficulty. The wound was dressed as usual, and the patient did well. One circumstance during her convalescence attracted my attention, namely, the large quantity of serous discharge which came away for some time afterwards. This was to so great an extent as to soak all dressings and clothes daily for upwards of a fortnight after the operation. The patient nevertheless made a good recovery.

Remarks. This was a most interesting and instructive case. To my mind it was clearly an illustration of the continuance of the stricture at the neck of the sac itself, after the external stricture had been divided. In all probability, had the hernial sac and its contents been returned into the abdomen after the division of Gimbernat's ligament, the symptoms of strangulation would have continued, from the strength of the stricture at the neck of the sac. Liston states that this untoward event has actually occurred. (*Practical Surgery*, p. 556.)

In this case there was also some amount of constriction from the bands of *fascia propria* about half an inch below the femoral. These bands were, of course, divided before opening the sac along its entire extent. Even then,—and although Gimbernat's ligament had been freely incised, and so freely incised, that I dare not push the edge of the bistoury farther,—it was impracticable to return the intestine. Nothing but a free incision of the neck of the hernial sac itself sufficed to give room for the reduction of the intestine.

The large quantity of serous fluid which was discharged in this case, was probably a kind of natural cure. Vincent, in his very valuable and practical work, remarks: "It has sometimes seemed to me, that in peritonitis of a low degree of action, the membrane may be relieved of this inflammation by merely secreting in a large quantity the usual serous fluid. I have often seen during an operation, a large quantity of serum pouring out from the abdomen; on which occasions the cases have generally done well, the peritonitis afterwards apparently subsiding into a more healthy function." (p. 326.) In my case there was no excess of fluid during or immediately after the operation; but it commenced on the second day afterwards, and continued to a marked extent for a fortnight.

In conclusion, I would remark that the few cases which have been enumerated, as occurring under the notice of one individual, have been sufficiently varied to suggest the difficulties often encountered in the operation for hernia. There can be no doubt, that in a considerable number of hernia cases, many will occur which cannot be classed under any of the descriptions given by our surgical writers. Nor can there be any doubt that there is a great advantage in meetings of this kind, when the difficulties which have been actually met with at the bedside are described, and our younger friends are forewarned as to their nature and treatment.

With regard to the result of the operation for hernia, I look upon it as one of the simplest and least dangerous of operations in surgery. The two grand rules to be followed for the safety of the patient, who has unfortunately become the subject of strangulated hernia, are: not to defer the operation too long; and to avoid powerful and drastic cathartics, both before and after the operation. With regard to the first rule, I do not think any fixed time for the operation can be laid down; but the plan I have invariably followed, has been to operate as soon as possible after well-applied taxis has failed conjointly with the use of cold.

MM. Boyer and Manec some years ago drew a comparison between the results of herniotomy after the protracted trial of the taxis, and in cases where it was scarcely, if at all, resorted to; and the statistics were confirmatory of the fact that "the employment of the taxis is productive of much harm." Their conclusions are: first, that the operation for hernia, performed at an early period, and before the symptoms for peritonitis have declared themselves, is almost free from danger; and secondly, that peritonitis never occurs subsequently to the operation, if it has not been present before its performance. (Ranking's *Half-Yearly Abstract*, vol. vi, p. 247.) Desault was opposed to the use of the taxis. (*Œuv. Chir.* t. ii, p. 335.) I would refer also to some remarks on Dr. Pirrie's Paper in the Report on Surgery in Ranking's *Half-Yearly Abstract*, vol. viii, p. 287; and N. Ward on some points in the Surgery of Hernia, *ib.*, vol. xxiii, pp. 195 and 197.

The "protracted" application of the taxis cannot be too strongly condemned; but the careful, cautious trial of it for a short period, should invariably be practised before the operation. The results in my own cases certainly tend to justify the remarks of MM. Boyer and Manec, on the comparative harmlessness of the operation when early resorted to.

After the operation, as well as before, I have strictly avoided the administration of purgatives by the mouth, and have relied upon the use of enemata. The bowels, by the use of enemata, have thus been induced as it were to act, not forced; and I have had good reason to be satisfied with the results.

What, I repeat, is the proper time for operating in strangu-

lated hernia? This is a vexed question in surgery. Some contend with Bichat, that the operation is a last resource, and ought not to be resorted to until all other means have been exhausted (*Edinburgh Journal of Medical Science*, vol. ii, p. 78). Others, with Desault, Boyer, and Manec, object even to the use of the taxis. These are the two extremes of opinion, and the correct practice will probably be found in the medium.

It is impossible to lay down any precise rule. There can be no doubt, however, that a hernia suddenly formed, and consisting of intestine alone, will require to be relieved by operation much more quickly than one the approach of which has been more insidious, and in which the hernial sac contains omentum as well as gut. Generally, too, old standing cases in elderly people may be delayed longer than acute cases in young subjects. Of all the means of reducing hernia before proceeding to operate, I certainly place the most reliance upon the *taxis*, applying the pressure in the proper direction after having placed the patient in the most favourable position. *Chloroform* has been used with success; but I have not tried it, nor have I had recourse to *bleeding*, nor to the *hot bath*. In country practice, with the patient perhaps six or eight miles off, these expedients are not of easy application; and, in truth, the patient often has the best chance, if operated upon during the surgeon's first visit, provided that the judiciously applied taxis has failed. A full dose of *opium* may be given, where a little delay is not important; and *O'Beirne's long tube* may sometimes be used with success (*Lancet*, vol. ii, 1838-39, pp. 544 and 653). *Cold* applied to the hernial swelling has sometimes reduced it; and my Case III was an illustration of this fact. *Tobacco* and *purgatives*, in my opinion, should especially be avoided: the former, because it is a powerful poison, uncertain and uncontrollable in its effects; and the latter, because they are physiologically and mechanically wrong, as applied to cases of the kind which have been described in this communication.

Discussion. Mr. Mash cited some cases where the taxis had been very useful in the Northampton Infirmary, while the patients were under the influence of chloroform. He was averse to operating hastily; and advised the cautious trial of the taxis under chloroform, and due consultation with our brother practitioners.

Mr. Terry, sen., remarked that with chloroform the success had been astonishing. He was aware that no rule could be laid down; but in practice, he found that the taxis with chloroform succeeded in numberless cases.

Mr. Daniell was once going to operate, and bethought himself that he could try the tobacco enema, and it succeeded.

Mr. Mash had also used the tobacco enemata. In one case, of six days duration, with perfect success.

Reviews and Notices.

On Medicine and Medical Education: Three Lectures. With Notes and an Appendix. By W. T. Gairdner, M.D., Fellow of the Royal College of Physicians, and Lecturer on Physic, Edinburgh. Edinburgh: Sutherland and Knox. London: Simpkin, Marshall, and Co. 1858.

It would have been a matter for regret if these lectures of Dr. Gairdner, replete as they are with high moral tone and sound sense, had been allowed to die away into thin air, like mere ἐπεα πτεροεντα, leaving an impression here and there only amongst those who heard them.

The volume consists of an Introductory Address, delivered at the opening of the medical session 1856; a Note on the Introductory Address; an Essay on the Medical Art, considered in connection with Popular Education, read before the Scottish Educational Institute, April 1857; the Study of Medicine as an Art—an Introductory Lecture to a Course of Practice of Physic; Notes on the preceding Lecture—a Triad of System-Builders—Paracelsus, Brown, and Hahnemann; and an Appendix, on Sessional Examinations in Medical Study.

The Introductory Address which commences the work contains a code of excellent advice for students. The object is to "direct attention to those parts of medical study which, being less prominent than lectures in the programme, are somewhat apt to be slurred over;" to insist on the necessity of studying *things*, in place of laying in mere store of words. The author argues forcibly for practical instruction, as preferable to the present plan of exhausting the student by attendance on numerous lectures; and for divided or sessional examinations. We commend his remarks on these matters to the careful perusal of the teachers in our medical schools—among whom he will find many to think with him.

In his lecture on Medical Art in connection with Popular Education, Dr. Gairdner points out the relations that should exist between the medical profession and the public. Medical men, he says, instead of being, as is commonly supposed, uninfluenced by the general current of human sympathies and activities, and "drawing inspiration from some mysterious revelation of traditional philosophy," are in reality "nurtured on the same intellectual and moral diet with the rest of the population, and only differ in possessing a technical knowledge of things relating to disease." To blame the medical art wholesale, therefore, is to criminate the age; for the age stamps its impress on the art. Taking up the position of the medical man towards society at large, Dr. Gairdner asserts that this is not dependent on law, nor on preference of sect or party: but on the conviction that he, as a medical man, knows the issues and remedies of disease, and on the individual confidence inspired by his personal character and professional reputation. And here it is impossible that the physician should be a mystery-man, enshrouding himself in the arcana of his science: the public are beginning to know too much. Many of our readers will doubtless recognise the picture which Dr. Gairdner draws of the hysterical lady, who deciphers her physician's prescriptions, and leaves him no resource but to "ransack the stores of the chemist for the last organic compound with a name of six syllables, or to operate with metals more unfamiliar than even cerium, and titanium, and palladium;" who has tried homœopathy, and hydropathy, and mesmerism; who has been enlightened by a *clairvoyant* about the neurilemma of her great sympathetic nerve, and has been made aware of many sufferings which she has had for ages without knowing anything about them. All who have met with such a patient must have found her, as Dr. Gairdner expresses it, "like an old bird, not to be caught with chaff."

This tendency on the part of the public to know, or think they know, the grounds of medical opinion is not, however, to be treated with ridicule: it is a fact, and must be dealt with as such, whether we regard it as a movement for the better or the worse. How is it to be met? Charlatans, taking the tide in its flow towards novelty, "boldly proclaim a new doctrine, and treat with studied contempt the trammels of authority;" and "from their secure, or at least not very easily assailable, position of absolute and entire irresponsibility to medical traditions, they discharge all sorts of missiles against what they call 'old medicine.'" "Let them live their day," says Dr. Gairdner; "they are the woodpeckers of science. The grand old Hippocratic oak will outlive them: the insects that nestle in its bark will become their lawful prey." So much for quackery.

"But can the art of medicine, rooted as it is in the past, remain calm and unmoved in the midst of these vagaries of the popular sentiment? Are we who practise that art to maintain a contemptuous indifference to the effervescence which is going on around us in the public mind? Or are we rather to make a bold appeal to intelligent public opinion, and to seek for ourselves and our art a position more elevated and secure than hitherto? Clearly, in either course there is danger: but the one is simply impossible; the other only difficult, and, because difficult, full of hope for the future to the man that loves and has faith in art. No man of noble instincts and of genuine courage, can hesitate for a moment between an advance amidst hostile opinions, which call him into contact, perhaps even into collision, with the stirring movement of the human mind; and a retreat upon mere authority, which leaves

him high and dry on the rock of antiquity, but removes him from the pleasant and warm current of human sympathies, as well as from the boisterous surges of human passion. In medicine, as in all other arts which are closely interwoven with the delicate fabric of life, which minister directly to man's comfort, happiness, and existence, an isolated position is an impossibility. . . . The physician . . . must be an integral part of his age, and must yield neither to the intellectual conceit of appearing above it, nor to the licentious sophistry by which some unworthy men contrive to accommodate themselves to the time and place in which they live, by denuding themselves of everything personal and characteristic, which might happen to give offence. The true physician must enter into the aspirations of his time, combat its prejudices, examine its fair and reasonable judgments, profit by its hard-won experience. But he must, if he would be a true physician, be the representative of its wide and varied humanity, and not of its sectional or party feelings, still less of its quackeries, its delusions, and its cant." (Pp. 38-40.)

This is sound moral doctrine: and no less sound is the teaching which Dr. Gairdner has given the public in this same address on the popular fallacy regarding medicines. He has taken care to point out the utter absurdity of the notion that when something is wrong, the doctor *must* set it right—that he must not only *do something*, but do it brilliantly and suddenly. The author describes the duty of the physician as that of a servant of Nature: a remover merely of the obstacles that stand in her way. And, in this legitimate performance of his duties, the physician has to call into action his moral feelings no less than his intellect or his professional knowledge. No true physician will "vaunt *his own* remedy, *his own* peculiar method, *his own* infallible or precious specific, or that of his sect, like the charlatan or the enthusiast." In the face of the popular ignorance of nature, the physician has a difficult task, and the quack acts at a temporary advantage: but we believe that the time must come when the public will call in the physician, not to dose them day and night with drugs, nor to make them believe he is doing something great, but to perform those simple duties which the Father of Medicine laid down for him more than two thousand years ago, and which are the same now as they ever were. "The physician must not only be prepared to do what is right himself; but also to make the patient, the attendants, and externals cooperate."

In his address on the Study of Medicine as an Art, Dr. Gairdner gives some excellent advice on credulousness and scepticism in medicine, on delusions, and on controversy; and lays down some of the most important characteristics of the medical art. These characteristics, as we gather from the address, are:

1. "The true medical art refuses to be compressed into a formula, imprisoned in an epigram or an aphorism."

That is, Dr. Gairdner will probably agree with us, unless the epigram or the aphorism be of the most comprehensive kind, of which the first Aphorism of Hippocrates is the most complete instance that we know.

2. "The true medical art is too great and too free to be placed under the protection of a great name, or confined within the boundaries of a sect."

3. Medicine "is a precious legacy which has come down to us from the past, enriched by many observations and means of cure from a remote antiquity, but also increased by new riches and resources which stretch down in a lengthened line to the age in which we live."

4. "Medicine is doubly founded, first on experience, then on *reasoned* experience."

On each of these the author has some remarks, which we recommend to the careful perusal of all practitioners and students: for we are sure that they will gain profit therefrom, and will join us in heartily thanking Dr. Gairdner for the clear and honest expression of sound doctrine in regard to medicine, which he has put forth in the addresses of which we have been giving an outline.

The Veterinarian's Vade-Mecum. By John Gamgee, M.R.C.V.S., Lecturer on Veterinary Medicine in the Edinburgh New Veterinary College, etc. With numerous illustions. Pp. 337. Edinburgh: Sutherland and Knox. London: Simpkin, Marshall, and Co. 1858.

This is a compendium of the veterinarian materia medica. It consists of an introductory chapter on the forms of medicines and their administration; a *Pharmacopœia Veterinaria;* a *Formularium Veterinarium*, or collection of prescriptions; *Memoranda Toxicologica*, or Notes on Poisons; and *Memoranda Therapeutica*, or concise instructions as to what is to be done in cases of disease and accident. It appears to be a very useful little work.

A Guide to the Treatment of Diseases of the Skin: with Suggestions for their Prevention: for the Use of the Student and General Practitioner. Illustrated by Cases. By Thomas Hunt, F.R.C.S., Surgeon to the Western Dispensary for Diseases of the Skin. Third Edition. Pp. 216. London: T. Richards. 1858.

The rapid disposal of the second edition of Mr. Hunt's *Guide to the Treatment of Diseases of the Skin*, has rendered its republication necessary at a comparatively early period. The author has carefully revised the work; but has made no material alterations.

British Medical Journal.

SATURDAY, JANUARY 8th, 1859.

THE CRIMINAL RESPONSIBILY OF THE INSANE.

As we surmised, the correspondence in the *Times*, relative to the Responsibility of the Insane, has attracted the attention of the press; and the *Examiner*, in an article which Dr. Mayo tells us "exhausts the subject," has, of course, taken up the cudgels against the "mad doctors," and poured out upon them an amount of vituperation which has, we trust, relieved its bile. We can quite understand a facetious print bringing abuse to bear upon the labouring professors of mental psychology, but we confess we cannot understand the President of the College of Physicians applauding the effusion.

Dr. Mayo must submit, however, with his fellow-alienist physicians, to have his opinions designated as the "silly speculations of a college of mad doctors" by the Editor of the *Examiner;* and he must submit with a good grace, for he has gone out of his way to advise this abuse. We do not wish, however, to deal with personalities where a principle is in question of such vital importance to society, as the criminal responsibility of the insane. Dr. Mayo, in his first letter to the *Times*, says, and says truly: "The interests of the public and the prisoner are mischievously at variance in our present mode of applying the plea of intellectual deficiency or perversion. So far as it protects the one, it places the other in jeopardy. Until he has committed a frightful crime, the delinquent is a vicious brute, subject to all the minor penalties of the law. Let him only murder the woman whom he has ruined, and he becomes the subject of a metaphysical exculpation, and is maintained for the rest of his life at the public expense." No doubt the interests of society and those of the prisoner are at variance; but will Dr. Mayo tell us how they

can be assimilated. Certainly not by hanging the poor wretch to encourage the others. The difficulty of the problem undoubtedly lies in the fact, that we must wait until the blow is struck ere we can satisfy a jury that the patient has really graduated in lunacy. Under the present law we can only lock the stable door when the horse is stolen.

Dr. Mayo, however, believes in the wholesome effect, even upon the insane, of the fear of punishment. "The most unquestionable lunatics can be influenced by motives—a fact well recognised and applied by all judicious managers of asylums." In other words, Dr. Mayo holds that the fatal noose should be dangled before the insane, for the sake of society. This doctrine would, if carried out, at once empty the criminal wards of Bethlem. The insane are, without doubt, influenced by motives; but the word "motives" here is very loosely used. We know that the eye of the attendant will often keep homicidal maniacs in order; but let the attendant leave his post for a minute, and the motive fear disappears. Had a policeman dogged the footsteps of McNaughten, in all probability he would never have shot Mr. Drummond. Fear, then, is a very uncertain preventive check in the mind of the insane; and we do not believe that the remote terrors of the law would have the least influence upon a certain class.

Dr. Mayo is no doubt right in his remark, that "unsoundness of the moral principle gives many elements of character closely resembling those of the insane"; but who is to draw these nice distinctions between "unsoundness of the moral principle" and unquestioned insanity? Will the philosophical applications of the laws of moral responsibility ever enable us to make such delicate distinctions—the life of a human being hanging in the balance? We confess we should not like to be on a jury to which such subtle problems were presented for solution. We are, we fear, a very long way off the time when we shall be able to group cases as Dr. Mayo suggests, without doing fearful injustice to individuals. Meanwhile, we believe that we must judge every case upon its own merits, and not be afraid lest the jury and the judge should give way to a too mawkish sensibility instilled by the "mad doctors". When there is doubt, it should be given in favour of the prisoner; and surely Calcraft has been busy enough of late to satisfy even the Editor of the *Examiner*.

THE WEEK.

We would call the earnest attention of our associates to the proposed scheme for regulating the duties and emoluments of Poor-law medical officers, drawn up by the President of the Poor-law Board. The document is printed at page 35 of the present number, together with some alterations which Mr. Griffin proposes to introduce. The latter are easily distinguishable by being printed in italics. Gentlemen having any comments to make or amendments to suggest, should at once communicate with Mr. Griffin. It is to be hoped, that, now that Mr. Sotheron-Estcourt has shewn an intention to meet the desires of the union surgeons for reform, they will not let the opportunity pass by, of obtaining as much as they can of that for which they have so long agitated. Their cause will have our earnest good wishes and support. For the present, we will give no further counsel to them, than to commend to their careful attention the letter of Mr. Griffin which accompanies the scheme to which we have referred.

A Union Medical Officer in the country has, in a note bearing date January 4th, informed us that he had that day received a circular from the Poor-law Board, calling his attention to the fact that, if he be not registered before the 2nd of February, he cannot legally continue to hold his present appointment. Taking this in connexion with the notice given last week by Dr. Hawkins, that probably a considerable time would elapse before the applications for registration could all be acknowledged, our correspondent asks what is likely to be the consequence to him if Dr. Hawkins should *not* be able to find time to enter his name before the 2nd of February? No doubt many other medical men may be in the same condition; but we scarcely think that any difficulty will arise. Dr. Hawkins could, there is little or no doubt, procure an extension of the time allowed by the Poor-law Board, if he found it impossible to complete the registration within the period mentioned by our correspondent.

In the Journal of October 23rd, 1858, we mentioned that Mr. Harmar Smith, one of the medical officers of the Sheffield Union, informed the Board of Guardians that he had adopted homœopathy in the treatment of the sick poor of his district; and that the guardians had applied to the Poor-law Board for advice on the subject. At a meeting of the guardians last month, a letter was read from Lord Courtenay, the Secretary of the Poor-law Board, in which he said:—

"I am directed to inform the guardians that the Board have received a letter from Mr. Smith on the subject, in which he states as follows:—'If in any case homœopathy, according to my knowledge of its resources, did not yield a remedy adequate to the requirements of the case in hand, I should undoubtedly resort to one which I had found available in the practice of the old school.' Having regard to this assurance, the Board do not feel that it is necessary to require Mr. Smith to resign his office of medical officer, provided the guardians are fully satisfied with the manner in which he discharges the duties of the office, and his general treatment of the sick poor under his care."

The plain meaning of this letter is, that the Poor-law Board see no harm in the conduct of an union surgeon who would make the poor under his care the subjects of a series of homœopathic experiments, and then resort to ordinary treatment when—perhaps too late—globules had been tried and had failed. The Sheffield guardians, however, take a much more proper view of the matter. They object to forcing homœopathy on Mr. Smith's patients; and consider the Union Workhouse not the place for making experiments in a new practice, and one in which there is much doubt. They naturally object, also, to the responsibility for the results of Mr. Smith's treatment, which the letter of the Poor-law Board would fasten on them. In consequence, they have passed the following resolution:—

"That the Board, while acknowledging that Mr. Smith had acted with kindness and attention to the sick poor in his district, the guardians cannot make themselves responsible for any deviation from the practice in operation when he was appointed; and that a copy of this resolution be forwarded to the Poor-law Board, with a request that they will favour the guardians with their further views thereon. The guardians, therefore, call on Mr. Smith to practise upon the old system, or to resign his appointment."

The conduct of the Sheffield guardians in this matter is most praiseworthy.

THE LATE CHARLES COTTON, M.D.

SURGEON TO THE WEST NORFOLK AND LYNN HOSPITAL.

We announce with regret, in our obituary of to-day, the death of Dr. Charles Cotton, an old and worthy member of the Association, and a man of excellent reputation among our provincial surgeons. Subjoined is a brief sketch of his career, for which we are indebted in great measure to a local paper.

Charles Cotton was born in Lynn in 1811, and was articled, it is believed, to Mr. Morris, surgeon, of Gosberton in Lincolnshire. He obtained the diploma of the Royal College of Surgeons in 1833, and the license of the Apothecaries' Company in 1834. He then returned to Lynn, and was elected house-surgeon to the Lynn Dispensary, in which office he continued till the institution was dissolved. He then entered into partnership with Mr. Ingle, and upon that gentleman's retirement, succeeded to the whole of his practice. He had previously been elected surgeon to the West Norfolk and Lynn Hospital, succeeding Mr. Ingle on his resignation of the appointment. He obtained the fellowship of the Royal College of Surgeons of England in 1844, by examination; and the degree of M.D. at St. Andrew's in 1845. He held the responsible position of surgeon to the West Norfolk and Lynn Hospital for several years, until compelled, by threatenings of phthisis in the form of a severe attack of hæmoptysis, to resign it, together with his general practice, and limit his attention to that of a physician and consulting surgeon. His failure in health was also increased by the death of his son. On the occasion of his retirement from the surgeoncy of the hospital, he received from the governors a silver inkstand as a slight testimonial of their genuine esteem towards himself and appreciation of his valuable aid. On the death of Mr. Sayle (the then senior surgeon to the hospital) in 1857, Dr. Cotton, upon the earnest solicitation of several friends of the institution, was induced to become a candidate for the vacant appointment, and was re-elected. He continued to perform the duties of his office until within a few weeks of his death, and then resigned from conviction of the fatal character of the illness by which he was attacked. Unfortunately, the impression which he felt proved too well founded, and he died peacefully and resignedly at nine o'clock on Friday morning, December 31st, 1858, at the age of forty-seven years.

The professional reputation of Dr. Cotton was deservedly high. As an operator he was particularly skilful, and attained to a deserved eminence in that respect amongst his professional brethren, by whom he was held in the highest esteem. One of his earliest performances was the successful excision of a knee-joint, a case amongst the first of the kind on record. He contributed some articles of merit to the literature of practical surgery, chiefly descriptive of important cases which he had treated. Most of his contributions, if not all, were presented to the Journal of this Association: they are, in general, descriptions of cases operated on, principally for excision of joints.

He was an ardent lover of his profession, and in every way in his power demonstrated his well-founded belief in its importance to, and claim upon the respect of, the community. He was also a most zealous and efficient supporter of the Royal Medical Benevolent College, of which he was for some length of time local honorary secretary. He served the municipality for six years, as an alderman; and also for several years as a borough magistrate; of both of which offices he discharged the duties actively and honestly, with a strong desire (however he might have differed in opinion occasionally from some of his coadjutors) to promote the public welfare. This, indeed, was an object which he steadily held in view throughout his career; and to a public servant no higher praise could be awarded. He was of amiable disposition, though at times hasty: and his benevolence (unmarred by ostentation) was of a most practical character.

MEDICAL REGISTRATION.

LIVERPOOL MEDICAL REGISTRATION ASSOCIATION.

The Registrar under the new Medical Act having requested the Registration Societies to receive the applications and fees of all qualified members of the profession desirous of being registered,—Notice is hereby given that, in consequence of the numerous applications that continue to be made for Registration through this Association, the Sub-Committee will attend at the Medical Institution, Mount Pleasant, between the hours of Twelve and One, on Tuesday the 11th, Thursday the 13th, and Friday the 14th instant, for the purpose of receiving such applications, etc., and transmitting them to the Registrar. Forms of application for registration will be supplied.

A. T. H. Waters, *Honorary Secretary.*

Liverpool, January 5th, 1859.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

MIDLAND BRANCH: MEDICAL REGISTRATION.

A general meeting of the medical practitioners residing in Derbyshire, convened by circular, to discuss the subject of registration, was held in the board-room of the Infirmary, Derby, on December 30th. J. Whitaker Johnson, Esq., President-elect of the Branch, was called to the Chair. There were also present: J. Adams, Esq. (Matlock); R. R. Allen, Esq. (Belper); J. W. Baker, Esq. (Derby); A. Borman, Esq. (Derby); C. Borough, Esq. (Derby); F. Borough, Esq. (Derby); H. Brigstock, M.D. (Derby); G. Calvert, Esq. (Derby); T. C. Cade, Esq. (Spondon); J. Clark, Esq. (Derby); P. Fant, Esq. (Derby); S. W. Fearn, Esq. (Derby); J. T. Featherstone, Esq. (Butterley); J. German, Esq. (Derby); H. Goode, M.B. (Derby); C. Grant, Esq. (Hearne); R. Hamilton, Esq. (Derby); J. Heygate, M.D., F.R.S. (Derby); W. Hollis, Esq. (Alvaston); — Ingle, Esq. (Melbourne); J. Jones, Esq. (Derby); W. R. Lomas, Esq. (Matlock); N. Mant, Esq. (Wirksworth); G. B. Thorpe, Esq. (Staveley); J. S. Turner, Esq. (Alfreton); H. W. Watson, M.D. (Derby). Letters expressing a desire to co-operate were received from several gentlemen who were unable to attend personally.

The following resolutions were brought before the meeting, and adopted; viz.:

"1. That, to ensure an accurate registration, an Association be formed of the qualified medical practitioners in this neighbourhood, to be called 'The Medical Registration Association for Derbyshire'.

"2. That, to cover expenses, all members pay an entrance-fee of two shillings and sixpence.

"3. That a committee, with power to add to their numbers, be now formed, to communicate with every person practising medicine in this neighbourhood, in order to obtain an authentic list of their qualifications; and also to receive the applications and fees of persons wishing to be registered, and forward them. The committee to consist of the following gentlemen: J. Whitaker Johnson, Esq. (Derby); J. S. Walters, Esq. (Bakewell); J. Skivington, Esq. (Ashbourne); N. Mant, Esq. (Wirksworth); and of the Honorary Secretaries.

"4. That H. Goode, M.B., and A. Dolman, Esq., be Honorary Secretaries and Treasurers."

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, January 5th, 1859.

Edward Rigby, M.D., President, in the Chair.

The first meeting of this Society was held on Wednesday evening, in the library of the Royal Medical and Chirurgical Society, a large number of Fellows and visitors being present.

INTRODUCTORY ADDRESS. BY EDWARD RIGBY, M.D.

Dr. Rigby, having taken the chair, and some formal business having been gone through, spoke as follows:—

"We are met together, gentlemen, this evening to celebrate the opening of a new Medical Society, which although confining itself to one department of the healing art, will, I trust, receive the interest and approbation of the whole profession. It is, indeed, difficult to explain why, in the greatest metropolis of the world, and amidst the numerous scientific societies which have been established in it, a society for the promotion of obstetric knowledge is only now commencing. This is the more remarkable as, for many years, obstetrical societies have flourished in several of the universities and metropolitan cities, not only of the Continent, but even in our own country; and I am sure you will join with me in a cordial expression of thanks to those gentlemen who have not only the merit of starting the idea, but who have devoted themselves with such praiseworthy zeal and energy to the establishment of a society which, I am confident, will be soon second to none either in extent or usefulness. When we consider the vast amount of obstetric practice and observation which is daily and hourly going on amidst the huge population in and around London, we shall all feel with regret what an enormous stream of valuable experience has been allowed to run almost entirely to waste for so long a succession of years. In saying this, I of course do not allude to the more distinguished members of this department of the medical profession, who have zealously availed themselves of those valuable opportunities of observation which have been afforded them by their hospital and consultation practice, and to whose valuable writings, whether in separate works or in the medical journals of the day, we are all so much indebted; but I allude more especially to that numerous body of our brethren extensively engaged as general practitioners, who spend long and active lives in the practice of midwifery, and who will undoubtedly be able, through the medium of a society like this, to contribute inexhaustible stores of obstetric experience of the highest interest and value. I believe, therefore, that I am not only expressing my own opinion, but that of the gentlemen who have promoted the formation of this society, in saying that we shall look with special interest to the general practitioners for the results of their obstetric experience, which must necessarily be of deep interest as well as of great value."

Dr. Rigby then proceeded to take a retrospective review of the obstetric literature of this country and the continent, alluding particularly to the valuable collection of cases made by Mauriceau between the years 1669 and 1704, to the smaller collection by Paul Portal, published in 1685, and to the writings generally of La Motte, Deventer, Giffard, and Smellie. After making some interesting and extended remarks on the great value of a number of well-recorded cases, the President continued:—

"I pray your indulgence, gentlemen, if I have rather tired your patience in dilating upon what appear to me to be the great objects, and what will form the great strength and importance of this society—I mean the collecting valuable facts on questions of obstetric practice; but there is still another point which I must not omit, viz., the effects it will produce on our social position. In the first place, it brings together the members of this department of medical practice; it enables us to know each other; it binds us together with a social bond which must ever be, not only a source of sincere satisfaction, but of mutual improvement and advantage. The friction together of different minds, earnestly engaged in similar pursuits, is peculiarly valuable, for it is scarcely possible for any man who has felt the responsibilities, and experienced the hours of painful anxiety, which are ever connected with the management of difficult and dangerous cases in midwifery, not to have meditated so deeply on these subjects as to have gained some original thoughts which he may communicate with benefit to his professional brethren. Then, again, it raises us in our public position; for to be a member of it cannot but be an honourable distinction, as well as a positive recommendation in practice, since it shows that as such he is in close and immediate connexion with the great body of his brother practitioners in this department of the healing art, and that he also has at his command those accumulated stores of experience which will place him on a par with the most distinguished ornaments of his profession, and rank him amongst that great band of fellow-workers who are earnestly devoting the best years of their existence to the noble cause of allaying suffering and preserving life amongst that class of patients who must ever hold the first and foremost claim upon our interest, our sympathies, and our affections."

After a few more general observations, Dr. Rigby concluded, wishing the society a long and prosperous career, by hoping that it may continue for very many years to be the great centre of collected English knowledge and experience in all that relates to obstetrics, and by trusting that it may extend its beneficial influence over the length and breadth of the land.

EPIDEMIOLOGICAL SOCIETY.

Monday, December 6th, 1858.

B. G. Babington, M.D., President, in the Chair.

EPIDEMIC THROAT AFFECTION OR DIPHTHERIA, AS IT APPEARED AT GAINSBOROUGH IN 1857-8. BY DRAPER MACKINDER, M.D.

The paper was read by Dr. McWilliam.

Dr. Mackinder commenced by observing that, in the majority of cases of the epidemic throat-affection, diphtheria, no pain is experienced until the disease is fully developed; and consequently it has to be sought for, in order to treat it in its primary stages. When first observed, the cases might be mistaken for ordinary faucitis and stomatitis, with occasional enlargement of the tonsils; but, on a narrower inspection, it will be perceived that the inflammatory blush is less vivid, more rubeolated and mottled, more diffused, and less abruptly marginated. If the disease be not arrested at this stage, small points of lymph, or lymph-like material, are deposited on the inflamed membrane.* These points then seem to enlarge circumferentially, until, in some cases, the fauces, uvula, and soft palate, become enveloped; small patches are also found on the tongue and about the mouth. In some cases, exacerbation of the mucous surface seems to pervade the deposition of the new matter, and in others no such destruction of tissue was observed until the false membrane had been removed; and, in most cases, the integrity of the surface is preserved throughout. Generally there is troublesome cough, of the gastric enteric irritation, and nearly always considerable depression, and sometimes absolute prostration of the vital powers. When seen early, the application of the nitrate of silver mitigated and often arrested the diphtheritic condition, the chlorate of potassa being at the same time given internally. Whatever may be the nature of the disease, whether it be an exudation of organisable or inorganisable material, or the deposition of a parasitic cell, which the microscope may hereafter reveal,† it is of an adynamic type, and tolerates, if not demands, the liberal use of stimulants.

Dr. Mackinder gave a succinct account of the meteorology of each quarter of the period during which the disease came under his observation; but observed that the vicissitudes of season exercised little influence on the epidemic. Comparing his daily register of sickness with that of the weather, he could find no meteorological condition operating as an excitant; nor did the absence or presence of ozone appear to exert any influence on the disease. The disorder, indeed, seemed suddenly to develope itself rapidly, to extend itself through all parts of society, and as strangely to make its exit. Dr. Mackinder alluded to the coincidence of throat-disease affecting horses while diphtheria prevailed among mankind; and stated that the disorder among horses, although generally

* The fibrinous exudation is not, according to Dr. Mackinder, a *sine quâ non* of diphtheria; in other words, the disease called Diphtheria may and does exist without that pathological condition which furnishes the name, as in an epidemic of scarlatina, cases occur without the characteristic eruption.

† Professor Berg, of Stockholm, discovered a fungus, the *oidium albicans* in thrush; and Dr. John Lowe, of Lynn, has frequently seen the *oidium albicans* under vitiated conditions of the body—in aphtha and croup. According to Dr. Lowe, the *oidium albicans* is but an imperfectly developed *aspagyllus glaucus*. Dr. Mackinder does not consider this fungus as the cause of diphtheria; but that the vitiated condition of the system furnishes a pabulum for the propagation of the fungus.

amenable to treatment, in some cases proved fatal from supervenient pleurisy. The successful treatment of horses, as of men, in throat-disease, was stimulant. Of four hundred cases that came under the author's observation, one only proved fatal. His treatment consisted mainly of the local application of the nitrate of silver, with the internal administration of chlorates of potassa and soda, hydrochloric acid, the preparations of iron and quinine, with a most liberal diet and the free use of wine. He attached great importance to the necessity of carefully noting the disease in its different stages. In the first stage, the disease must be sought for; since there was no pain, and often no feeling of indisposition; but this was the time for treatment.

Dr. Murchison considered that the members of the Society were under great obligations to Dr. Mackinder for his paper; but for various reasons, amongst which was the infinitesimal mortality in Dr. Mackinder's cases, compared with the results elsewhere, he was disposed to think that many of the author's cases were not, in reality, diphtheria. In investigating the nature of this throat-disease, two points deserved special attention—whether the patient had been exposed to scarlatina poison, or whether he had previously been the subject of scarlatina. With regard to the immediate cause of death in diphtheria, he was of opinion that, while asphyxia from the local disease sometimes led to a fatal termination, syncope from blood-poisoning, without local lesion of any importance, was the more common cause. Scarlatina had been more prevalent during the present year than for ten previous years. Tonsillitis and inflammatory affections of the glandular system generally had been much more common, as sequelæ of disease, than usual. Dr. Murchison thought that an eruption of the skin threw great doubt upon the existence of diphtheria.

Dr. McWilliam said he was at present attending a custom-house officer with diphtheria, who had no skin-eruption, but whose family, consisting of several children, were laid down with scarlatina. He had been informed by Dr. Ryegate, a gentleman in extensive practice in the eastern district of London, that several cases, more especially among children, had come under his observation, in which the throat-affection appeared comparatively slight, but which had proved fatal from syncope by blood-poisoning. Dr. McWilliam considered that the presence of the *oidium albicans* on the tonsils and fauces should be further investigated.

Dr. Camps said that, in his paper on Diphtheria, read before the Society last year, he also had divided the disease into three forms; and he was of opinion that Dr. Mackinder's cases were not all cases of diphtheria. He had seen many cases of diphtheria prove rapidly fatal.

Mr. Radcliffe had not seen diphtheria, but it seemed to him desirable that the various stages of the disease should be watched and marked. He pointed out the necessity of observing the course of all epidemics, and noting how far the curves of various epidemics coincided. The investigation of the coexistence of epidemic diseases on the lower animals, with the same class of diseases prevailing amongst mankind, was also a question of much importance.

The President had seen but few cases of diphtheria; but, so far as his observation went, it did not bear out the rapid course towards death which had occurred elsewhere. He had seen three children in whom the complaint lasted five or six days. In a case which proved fatal, there was a deposit of false membrane; and in another case, which recovered, the membranous deposit was brought up.

The President suggested the formation of a committee to investigate the subject of diphtheria. Dr. Bird and Dr. Seaton spoke to the same effect; and the meeting adjourned at ten o'clock.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

Letter from John W. West, Esq.

Sir,—Will you allow me, through the medium of the British Medical Journal, to make a few observations on the "Heads of a Scheme for a New Arrangement of Medical Relief"? I think, and I have no doubt the majority of the Poor-law medical officers will acquiesce with me in saying, that, taking the scheme as a whole, it is the most objectionable that could have been proposed. Instead of being a benefit to the profession, it will, if carried out in its present form, prove a great injury.

The greater part of the present Poor-law medical officers have their appointments for life. This was a judicious arrangement of the Poor-law Commissioners, as it did away with the necessity of an annual election of surgeons to the Union, and consequently prevented them from coming so frequently in contact with the guardians by being compelled to make a personal canvass for their support. It is now proposed that the contract shall only extend to three years.

The next objectionable part in the new system is the proposal to appoint two surgeons to each parish; and that the poor people are to choose which of the two they prefer. I am confident such a plan as this would be productive of the greatest animosity, rivalry, and ill-feeling, that could possibly exist; and, moreover, would place the poorer classes, with respect to their medical attendant, in a very unfavourable position. It will be much better for the present salaries of the medical officers to be increased, according to the amount of time and labour they have to bestow on the poor, in reference to distance and number. I take it, it is not the present system of medical relief to the poor that the bulk of the profession are desirous to have altered, but merely an augmentation of salary in comparison to their services, which is certainly not now generally the case.

I think the first, second, fourth, and tenth articles of the new scheme the most objectionable; and that the scheme will require an entire alteration before it can, as a whole, be tolerated. It will be very unfair for those who are now permanently elected to have their appointments cancelled, and others, whom the caprice of the guardians may think fit to choose, placed in their stead.

I hope the remarks I have made on the proposed scheme will elicit from others their opinions on this all-important subject. I am, etc., John Wickens West.

Poole, January 1st, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Edmunds. On December 24th, 1858, at 2, Spital Square, the wife of James Edmunds, Esq., Surgeon, prematurely, of a daughter.

Elliott. On December 26th, 1858, at Heathfield House, Woolwich, the wife of J. W. Elliott, M.D., R.N., of a son.

Keys. On January 3rd, at Warwick Street, Regent Street, the wife of G. F. Keys, Esq., Surgeon, of a son.

Kingsley. On December 29th, 1858, at Stratford-upon-Avon, the wife of *Henry Kingsley, M.D., of a daughter.

Marcet. On January 3rd, at 36, Chapel Street, Belgrave Square, the wife of William Marcet, M.D., F.R.S., of a son.

Mason. On December 25th, 1858, at Surbiton, Surrey, the wife of Charles J. Mason, Esq., Surgeon, of a son.

Nash. On November 8th, 1858, at Bezoarah, the wife of J. Pearson Nash, M.D., Madras Army, of a son.

Travers. On January 1st, at 32, Castlenau Villas, Barnes, the wife of Benjamin Travers, Esq., Surgeon, of Dover Street, Piccadilly, of a son.

MARRIAGES.

Childers—Mostyn. Childers, Eardley W., Esq., Lieutenant H.M.'s Madras Artillery, to Henrietta, third daughter of the late H. T. Mostyn, M.D., H.M.'s 47th Foot, at St. Mark's Church, St. Helier's, Jersey, on December 31st, 1858.

Hooker—Wildash. Hooker, E. M. C., Esq., Surgeon, of Sheerness, to Anne, daughter of J. Wildash, Esq., of Davington Hall, at Davington Church, Kent, on Dec. 29th, 1858.

DEATHS.

*Cotton, Charles, M.D., Surgeon to the West Norfolk and Lynn Hospital, at King's Lynn, of phthisis, aged 47, on December 31st, 1858.

Dunman, George, Esq., Assistant-Surgeon Madras Army, at Kerwer, Jubbulpore, on June 14th, 1858, aged 30.

Harwood. On December 29th, 1858, at Derby, Thomas, infant son of *Charles Harwood, M.D., Surgeon 1st Derby Militia.

Hunter, James, M.D., late of Islington, at Greenhithe, aged 43, on January 3rd.

Muir, Henry, M.D., formerly Superintendent of Health of the Ionian islands, at Milnholm, Strathaven, Lanarkshire, on December 8th, 1858.

Noble, James, Esq., Surgeon, at Kendal, aged 63, on December 26th, 1858.

Reynolds, Michael, M.D., late Surgeon H.M. 59th Regiment, at Staplegrove House, Somerset, aged 83, on December 25th, 1858.

APPOINTMENTS.

*Webb, Francis C., M.D., elected Physician to the Islington Dispensary.

PASS LISTS.

Royal College of Surgeons. The following gentlemen have just passed their examinations in anatomy and physiology, viz.:—

Adams, James, St. Bartholomew's Hospital
Ashley, John, Bristol
Baker, Thomas Young, St. Bartholomew's Hospital
Bancroft, Joseph, Manchester
Barter, Clement Smith, St. Bartholomew's Hospital
Bellringer, George Hext, St. Bartholomew's Hospital
Bett, Robert L., St. Bartholomew's Hospital
Bone, William, St. Thomas's Hospital
Booth, Samuel, University College
Bracey, Charles James, Birmingham
Bread, William, Middlesex Hospital
Brighouse, John, Leeds
Brigstock, Richard Wish, St. Bartholomew's Hospital
Brooks, Brinsley, Guy's Hospital
Buszard, Frank, Guy's Hospital
Cann, Thomas, St. Bartholomew's Hospital
Close, Henry Ashlin, St. Bartholomew's Hospital
Creswell, Pearson R., Middlesex Hospital
Dawker, Frederick Woodcock, St. Bartholomew's Hospital
Downs, Peter, King's College
Dowson, Alfred P., University College
Drake, Charles Henry, St. Thomas's Hospital
Empson, Charles Frederick, Leeds
Evans, George Moule, King's College
Evans, Nicholl, St. Bartholomew's Hospital
Fagg, Charles Hilton, Guy's Hospital
Farrington, William Hicks, St. Bartholomew's Hospital
Freshfield, Allen, Guy's Hospital
Gaye, Arthur Charles, University College
George, Ambrose Brooke, Liverpool
Godfrey, Charles V., St. Bartholomew's Hospital
Godwin, Charles H. Y., St. Bartholomew's Hospital
Grabham, Charles, St. Thomas's Hospital
Greenwood, Newton, Guy's Hospital
Gregory, Bradley, St. Bartholomew's Hospital
Hamerton, Ernest, St. Thomas's Hospital
Harrison, Reginald, St. Bartholomew's Hospital
Head, Robert Turner, St. Bartholomew's Hospital
Hilditch, John, St. Thomas's Hospital
Horniblow, William Robert, Edinburgh
Hudson, George, Hull
Illingworth, John Alfred, St. Thomas's Hospital
Jones, Thomas, St. Bartholomew's Hospital
Kempster, Felix Henry, University College
Kennard, David, Westminster Hospital
Lloyd, Francis, St. Bartholomew's Hospital
Long, Alexander, Liverpool
Moore, Thomas, St. Bartholomew's Hospital
Moreton, Thomas, St. Thomas's Hospital
Murray, William, University College
Myers, Arthur B. R., St. Mary's Hospital
Noble, Samuel Clarke, Middlesex Hospital
Nunn, John Robert, St. Bartholomew's Hospital
Parker, Robert, St. Bartholomew's Hospital
Pearson, Henry Walker, Middlesex Hospital
Quennell, John Cooper, St. Bartholomew's Hospital
Robinson, George, St. Bartholomew's Hospital
Rutter, Joseph, University College
Saunders, G. J. Symes, King's College
Sharp, Edward, King's College
Sherwin, Henry Chrippes, St. Bartholomew's Hospital
Simmons, Edward Lamburn, St. Thomas's Hospital
Stone, Thomas Westcott Gale, St. Bartholomew's Hospital
Taylor, Herbert, Middlesex Hospital
Terry, Joseph Garside, Guy's Hospital
Trend, Theophilus William, Westminster Hospital
Van, Arthur F., St. Bartholomew's Hospital
Wales, John, Guy's Hospital
White, Francis Thomas, St. George's Hospital
Williams, Humphry, Guy's Hospital
Wilson, Jacob Affriatt, St. Bartholomew's Hospital
Winterbotham, Washington L., University College
Workman, William, King's College
Worthington, Francis S., Middlesex Hospital

Apothecaries' Hall. Members admitted on Thursday, December 30th, 1858:—

Acey, Thomas, Hull
Arnold, George Richard, Ratcliff
Ferguson, George, St. Bartholomew's Hospital
Fuller, Harry, Stowmarket
Harris, William Henry, Hampton Court
Low, William, Stepney Green
Lynch, John, 1, St. James's Terrace, Shadwell
Medd, William Henry, Heaton Norris, Stockport
O'Doherty, William, Londonderry
Ord, George Rice, Army
Packman, Alfred William Kennett, Puckeridge, Herts
Phillips, William Weld, Birmingham
Pinchard, Benjamin
Rolfe, Alfred George, Newcastle-on-Tyne
Spurrell, Flaxman, Bexley Heath, Kent
Waits, Joseph

HEALTH OF LONDON:—WEEK ENDING JANUARY 1st, 1859.

[*From the Registrar-General's Report.*]

The total number of deaths registered in the metropolitan districts in the last week of the year was 1494. In the ten years 1848-57, the average number of deaths in the weeks corresponding with last week was 1315; but as the deaths in the return for last week occurred in a population which had increased, they should be compared with the average after it is raised proportionally to the increase, a correction which will make it 1446. The comparison shows that the deaths of last week exceeded by 48 the number which the rate of mortality as derived from the fifty-second week of previous years would have produced.

If the deaths in London last week had been according to "the healthy rate" of mortality derived from certain selected English districts in the last quarter of the year, they would have been 765; and the excess above this point which the true number exhibits is 729, and represents what may be termed the *unnatural* part of the mortality.

Fatal cases of diseases of the zymotic class numbered last week 400; the corrected average for corresponding weeks being only 298. Measles, scarlatina, whooping-cough, and typhus, all exhibit an increase on some previous weeks. Scarlatina was fatal in 135 cases. Five of these occurred in the Kensington Town sub-district; six in that of Christchurch, Marylebone; five in Kentish Town; seven in Poplar. This disease continued very fatal in the Pancras district. Measles carried off 53 children; it prevails chiefly in the north and central districts. Whooping-cough carried off 61 children; eight of these in the east sub-district of Islington. Of the 52 deaths from typhus, one occurred in Butcher Row, Deptford, in a family consisting of ten persons, of whom seven have been attacked by the disease. The premises are described as being in a filthy condition. Last week the deaths from bronchitis were 167, the average being 134; and those from pneumonia (inflammation of the lungs) were 122, the average being 106.

Nineteen women died last week from diseases incidental to childbearing. Three persons died from intemperance. The deaths of one man and three women (widows) occurred at the age of 90 years and upwards; their respective ages as registered being 90, 93, 95, and 100 years. But the Registrar believes that there is good ground for questioning the alleged age of the centenarian.

Last week the births of 981 boys and 1013 girls, in all 1994 children, were registered in London. In the ten corresponding weeks of the years 1848-57, the average number was 1541.

At the Royal Observatory, Greenwich, the mean height of

the barometer in the week was 29·744 in. On the last two days the mean reading was above 30 in. The barometrical readings varied from 29·15 in. to 30·15 in. The mean temperature of the week was 41·4°, which is 4·4° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week. The highest temperature was 49·8°, and occurred on Sunday, the 26th ult. The lowest was 31·9°, and occurred on Thursday. The range of the week was therefore 17·9°. The mean daily range was 8°. The range of temperature on Friday was only 4·5°. The difference between the mean dew-point temperature and air temperature was 3°. The mean degree of humidity of the air was 88; on Thursday and Friday the humidity was 98, almost the point of complete saturation. The mean temperature of the water of the Thames was 41·8°. The wind blew generally from the south-west. On Sunday evening lightning was seen; and on that day rain fell to the amount of 0·16 in. The total amount in the week was 0·22 in.

POOR-LAW MEDICAL REFORM ASSOCIATION.

The following letter has been addressed by Mr. Griffin to the Poor-law medical officers in England and Wales:—

"12, Royal Terrace, Weymouth, January 5th, 1859.

"Dear Sirs,—The President of the Poor-law Board has forwarded for our consideration, as well as for that of the Guardians, 'The Heads of a Scheme for a New Arrangement of Medical Relief', which is of a most comprehensive character, and deserves our earnest attention. I have ventured to make certain amendments, and now submit them for your opinion; and shall feel obliged by your returning me your suggestions on each clause objected to, in *one week* from this time, in order that I may speedily lay before you the result of the general feeling, and that thus we may be prepared to give a tolerably unanimous answer to the President of the Poor-law Board by the end of the month.

"The 'Scheme' at first sight has appeared to many as most objectionable, particularly that part which annihilates all our appointments 'at a given period', and makes our successors only triennial officers. This part I have amended; and, if it meet your views, I trust it will be yielded to us by the Poor-law Board. The reasons why it should be so are recorded in the pamphlet entitled *The Grievances of the Poor-law Medical Officers*, p. 16; and also in the circular of the Poor-law Board dated February 15th, 1855.

"Clause 3, I am aware, will not be agreeable to the majority of us; but I am disposed to recommend that we should yield on this point, if we get permanency of appointment, for both will not be granted. This clause will not act so stringently as it may at first sight appear, as in country districts, if it be possible to appoint a neighbour to each of our parishes, we in return shall be appointed to his. Of course there will be exceptions; and in towns an addition to the medical staff will undoubtedly be made, which will be of advantage to the profession as a body, though perhaps not to us individually; but the increase of pay for each case will be some compensation for the loss in numbers.

"The salary of the medical officer will naturally demand our closest scrutiny; and if we can obtain two shillings and sixpence per case, in addition to the one shilling and sixpence upon the average number of persons in the parish in receipt of relief, with mileage and extras, let us, by all means, yield some points, as it will be a great boon to a body of hard-worked and ill-paid medical men, although not so large a sum as we hoped to obtain; but I strongly counsel moderation in our requests, now that we have a Poor-law Board disposed to assist us.

"I have introduced a clause relative to the appointment of a Medical Commissioner at the Poor-law Board, as the immense medical department of the Poor-law, involving annually the treatment of upwards of a million persons, requires to be presided over by a medical man. Frequent communications will doubtless be required with the Medical Council, whose members, from their high position, are not conversant with the details of our office; and therefore it is the more necessary that the man who consults them should be practically acquainted with the subject. Other reasons are recorded in my Commentary, in the pamphlet, p. 25. I trust this will meet with your approbation.

"I need scarcely remind you that the Guardians, as a body, are opposed to their medical officers having an increase of stipend. We must, therefore, be prepared for a powerful opposition, which cannot be met without ample funds: it will, therefore, depend upon you individually whether we shall act with vigour, or allow ourselves to be defeated after a fairly sustained struggle of three yeers.

"Those gentlemen who have not sent any subscription for the last twelve months, or decline to join the Association, after this notice, must not complain if they do not receive any further account of our proceedings, as the expense of printing and postage is too heavy to be incurred for those who refrain from affording us any assistance.

"I am, dear sirs, faithfully yours,
"Richard Griffin, *Chairman*.

"To the Poor-law Medical Officers.

"Subscriptions for 10*s*. and under may be forwarded in stamps, or by post-office order.

"Should there be any gentleman who has not received a copy, and will write to me to that effect, I will forward one immediately."

Heads of a Scheme for a suggested New Arrangement of Medical Relief, by the President of the Poor-law Board, dated November 30th, 1858; amended by Mr. Griffin.

[The parts of the original scheme omitted by Mr. Griffin are included in brackets: Mr. Griffin's additions are printed in *italics*.]

1. *Appointments of present and future medical officers shall be permanent, with power to resign on giving a reasonable notice, as is the case now; but* existing contracts [and appointments], and existing division of unions and parishes into medical districts, shall cease at a given period, *when those parishes now held by each medical officer shall again be allotted to him, provided it does not entail upon the guardians more expense for mileage than the appointment of another medical man; and a triennial reallotment shall be made on the same principle.*

2. The qualification of medical officers shall remain the same as at present, except in regard to residence; but registration under the new Medical Act will be required in addition.

3. Guardians shall appoint (if possible) two medical officers for each parish in their union, between whom the poor, when sick, shall be allowed to make choice, subject to this condition, —that a poor person who has been attended by one of the medical officers of the parish shall not change to another *whilst his order is in force, or* for a period of twelve months [after any such attendance] *if on the permanent relief list.*

4. *The [appointment and] contract with a medical officer shall be made for a period of three years, renewable, if both parties are willing, *on a fresh calculation of the three preceding years.*

5. The contract with each medical officer shall be to this effect: that he will attend, when applied to, any poor person in the parish for which the contract is made; viz.:

Without an Order, in the class of—

1. Those who are on the permanent relief list.
2. Those who are in receipt of temporary relief, either for the head of the family, or any member of it.
3. Urgent cases, whether of resident or casual poor.

With an Order—

4. Any poor person named in such order.

6. Orders for medical relief may be given by each guardian of the parish, as well as the relieving officer, *in all cases;* and *by the* overseer in urgent cases.

7. If, in any of the three first named classes, the medical officer has grounds for doubting whether the applicant has not sufficient means to provide medical attendance at his own cost, he may require such applicant to produce an order before he gives his attendance, *or he may discontinue his attendance unless an order be procured, if he have so informed the patient.*

8. If the medical officer shall have attended a case, and the guardians shall afterwards determine that the further attendance of the medical officer at the charge of the parish ought not to be given, such case shall, notwithstanding, be reckoned as one case in the yearly total.

9. Each medical officer shall make a weekly report to the guardians of the cases under his care, and shall attend the Board when summoned, as at present.

10. Medical officers shall discontinue a practice which exists in many Unions, of ordering a specific quantity of nourishing food or drink. They shall order the kind of treatment or

* "Contracts" and "appointments", it must be observed, are differen things.

nourishment which, in their opinion, the case requires, but not the quantity, except in special cases.

Remuneration.

11. For Workhouses. A salary shall be fixed [as at present] *on a uniform and definite system, with mileage where the distance of the house is above one mile from the residence of the medical officer*, and it shall be revised every three years, and a fresh contract made *on the same principle.*

12. For Parishes. A salary shall be fixed by the guardians, with the sanction of the Poor-law Board, for a period of three years, upon the following basis :—

1. Not less than one shilling and sixpence per head upon the average number of persons in the parish in receipt of relief, in the first week of January and the first week of July in each year.
2. Not less than one shilling and sixpence per case upon the number of cases attended in the parish upon an average of the last three years, *where the guardians find the medicines, and two shillings and sixpence per case where the medical officer finds the medicines.*
3. An additional sum per case to be fixed by the guardians, with the sanction of the Poor-law Board, *of not less than one shilling for each mile the patient may live from the residence of the medical officer*, as a remuneration in respect of the distance which the medical officer may have to travel in attending the sick poor, or in respect of other local circumstances.

13. When two medical officers shall have been appointed to attend any parish, the salary computed upon the foregoing three elements, and which shall be fixed in the contract, shall be divided between them, in proportion to the number of cases attended by each during the last twelve months.

14. A table of fees for midwifery and surgical operations, and a list of more expensive drugs and appliances, shall be drawn up by the Poor-law Board with the advice of the Medical Council appointed under the new Medical Act. Every medical officer appointed to attend any workhouse, town, or country parish, shall, in addition to his salary or other remuneration, be entitled to his fee according to such table, after attending a case included in it; and any such medical officer shall be at liberty to direct any drug or surgical appliance included in such list, to be made up and supplied by some chemist approved by the guardians, or at their own dispensary, if they shall have established one.

15. The clerk of the Union shall keep a record of the number of cases reported weekly in the journal of each medical officer, and his share of the salary shall be determined according to such record.

16. In cases of attendance upon continuous sickness, extending beyond three months, and not being on the permanent relief list, each of such cases shall be considered, after every three months attendance, as a fresh case.

17. *A medical man, having been in Union practice at some period of his life, shall be appointed a Medical Commissioner to the Poor-law Board, and have especial control over the medical department, subject, however, to the opinion of the Poor-law Board in all matters of importance.*

Suicide of Dr. Engledue. On Friday, Dec. 31st, 1858, an inquest was held at Southsea, touching the death of Dr. W. C. Engledue. Dr. R. P. Sparrow had known the deceased for seven or eight years. He was forty-five years of age. In the months of April, May, and June, he had a very severe attack of erysipelas, followed by abscess, and he had occasion during its continuance to take large doses of opium. As he got better he gradually abandoned the use of it. He went into the country, and returned to active practice in the month of July, but he had not thoroughly recovered his strength. He continued to practise to the 20th December, when he requested witness to assist him. Witness found him labouring under general derangement of the liver and digestive organs. From that time witness attended him, with Mr. Case and Mr. Garrington. Deceased had lost his usual vivacity of manner, and assumed the despondency of a hypochondriac. This hypochondriacal feeling daily increased up to the 26th, when he appeared to rally a little. Witness visited him on Monday the 27th. He was still depressed, but not quite so moody in his manner; he was totally unlike himself. Mr. Garrington had also visited the deceased on that day, and remarked that his manner was so changed that, had he not been a great friend, he should have left him with the feeling that there was great want of cordiality and kindly feeling. The last time witness saw the deceased alive was at ten o'clock on the evening of Wednesday the 29th. He seemed better and more cheerful than he had been for some time. On the morning of the 30th December, a little after nine o'clock, witness was summoned to visit Dr. Engledue. He attended immediately, and on his arrival found him dead. He was lying on his back on his bed, partially dressed, his drawers and stockings being on, and covered with the bedclothes. There was no peculiar appearance of the body, and he had but just ceased to breathe. Witness noticed a slight odour of prussic acid from his mouth. Miss Margaret Engledue, sister of the deceased, told witness she had been summoned hurriedly to her brother's chamber, in consequence of some noise having issued therefrom, and on entering the room she observed him make two or three convulsive gasps, and being alarmed, she sought his (Dr. Sparrow's) aid. She handed him a bottle, labelled "Acid—Hydrocyanic," which, she stated, she had taken from the chamber utensil, which was at the right hand of the deceased by the side of the bed. She also gave him a tumbler, which she said she had found on the bed, in a situation as if had fallen from the right hand of the deceased. It appeared to have contained a liquid like water, but no odour arose from it. The bottle contained about two drachms of fluid, and emitted a strong odour of prussic acid. Witness firmly believed that the cause of death was prussic acid. Mr. Garrington, surgeon, of Portsea, corroborated the previous evidence. He said that, when he last saw deceased, he appeared to be unusually taciturn; he answered witness constantly in monosyllables, and left him to lead all the conversation, which was very unusual. Witness believed that he was labouring under functional derangement of the liver and digestive organs. He was of opinion that the deceased's mental faculties were very much impaired. His impression was, that he was the last person who would commit suicide; but he feared that his mind was giving way, and that he was in a very different condition from what he had been in all his life before. Witness was fearful rather of permanent insanity than of any act of this kind, yet he was not in that condition which would induce him to recommend his friends to keep a strict watch over him. Major Vallancy, and Mr. Case, surgeon, of Fareham, corroborated the testimony of the previous witnesses. The jury returned a verdict:—"That the deceased died from the effect of prussic acid, taken while in a state of unsound mind."

The Burial Pits of the Slain at Marston Moor. The following are extracts from a letter which has appeared in the *Morning Post:* "Without another word of preface, let me, in these days of sanatorial progression, state 'facts, which are stubborn things,' namely, that the mal-odorous *débris* of animal matter, and especially of human bodies, may be subterraneanally bottled up and hermetically sealed for more than a couple of centuries in a clay soil, and afterwards let loose, as from Pandora's box, upon the world. In confirmation whereof I turn at once to the burial-pits of the slain at Marston-moor, in the Ainsty of the county of York, and, without touching upon the tug of war between Old Noll with his Roundheads and Rupert with his Cavaliers, A.D. 1644, I shall simply mention that once upon a time (213 years after the battle, consequently little more than one year ago), with a view to relieve a large waterlogged district, it became pre-eminently necessary to drive a large leading drain at a considerable depth right through Marston-moor. Instructions were given to avoid, not only the tumuli as indicated in the old maps of the district, but also the legendary localities of sepulture. However, long before the completion of the work the navvies came upon the Golgotha of the battlefield. There was nothing for it but to go ahead. To make a *détour* in the drainage either to the right or left would certainly have been 'to go further,' and probably 'to fare worse.' I quote from the statement (confirmed by numerous witnesses) of the intelligent foreman of the work;—'We cut twelve yards long and about eight feet wide, through the grave, and found most bodies about four feet from the surface, but I consider that we got to the bottom of it, as we took two "draws" (diggings through it after, and the ground below seemed untouched. At one place bodies, about twenty or twenty-five of them, were laid one over the other in all directions and postures; the forms of many were left in the clay. At this place there was much of a sort of deposit that looked like soot, not slime, but damp; the smell at first was intolerable, and could be felt at some distance; it was so bad the men could only work short spells.' The skulls had preserved their shape, but crumbled away when exposed to the air. One poor fellow's passport to eternity was picked up by the foreman. He says, 'There was a bullet in one skull, which

dropped out when the skull fell to pieces; the bones, especially the large ones, did not crumble away, but were very brittle when touched with the spade. The teeth were quite perfect, and many of them taken away by the drainers.' This is true with regard to the teeth, which were sound at the time of death, but the carious teeth in many jaws gave unmistakable evidence that toothache was in the ascendant, and dental surgery at a discount in those days."

ROYAL MEDICAL BENEVOLENT COLLEGE.

Desirous that the residents of the Royal Medical Benevolent College should participate in the festivities which are so appropriate to this particular season, the benevolent founder and treasurer of that noble institution, John Propert, Esq., of New Cavendish Street, London, gave a dinner to them, at half-past four o'clock, on Monday, January 3rd, at the Dining Hall attached to the establishment at Epsom. The refectory was tastefully and appropriately decorated for the occasion with flowers, evergreens, mottoes, etc., and about fifty guests sat down to a repast, which was excellent, abundant, and ably served up, consisting, as described by the kind donor, of good old English fare—turkeys, roast beef, and plum-pudding, comprising the substantials. The chair was taken by J. Propert, Esq.; and among the company were Mrs. and the Misses Propert, Dr. Webster, Dr. Wynter, Dr. Hancock, Mr. Churchill, Mr. Hird, Mr. Freeman (secretary), and the resident officers of the institution.

After dinner, the Chairman proposed the usual loyal, patriotic, and clerical toasts. These having been responded to, Mr. Propert gave the health of the President of the institution, Earl Manvers, and alluded to the liberality, kindness, and urbanity which had characterised the acts of his lordship in connexion with the college.

Dr. Sharp (one of the pensioners) proposed "The Founder of the Institution." On behalf of himself and his fellow-pensioners he tendered their heartfelt thanks to Mr. Propert, and alluded to the home he had founded for them, and the high classical education which was being imparted to the scholars.

The Chairman observed that the position in which he stood was both painful and gratifying to him—painful, inasmuch as he felt incompetent to express to them how delighted and pleased he was that they had been permitted to meet together on such an occasion—and gratifying, because Almighty God had blessed his efforts, and those who had so kindly and generously assisted him, in raising that noble and valuable institution. He also felt that he occupied a proud position to-day in being honoured at this festive board with the presence of those who had accepted the invitation and partaken of his humble hospitality. He trusted it might please Him who ruled all things to further bless their efforts, and permit them again to assemble for such a purpose. Sorry was he to think that those he saw around him were compelled to seek shelter in such an asylum, but he trusted that they might live there for many years in the enjoyment of comfort and happiness, and that their end would be everlasting peace. In conclusion, he begged to extend to them, one and all, right and left, the hand of good fellowship, and to implore Almighty God to grant them his mercy. [*Applause.*]

The "Medical Press" having been associated with the names of Dr. Wynter and Mr. Churchill, Dr. Wynter, in returning thanks, said that he could conceive no prouder thing for a man to do than to plant on this barren down such an abode of love and benevolence as the Royal Medical Benevolent College; and he felt certain that the medical press of this country would always be found most willing to give wings to the record of such a noble deed.

Various other toasts followed, including "Long life, health, and happiness to the Residents," "the health of Mrs. and the Misses Propert," "the Council," "visitors," etc.

Even to those who have taken a less active part in the good work, it must have been interesting to witness the happy assemblage of so many men, who in past years bore the heat and burden of the day, and devoted their unremitting exertions to assuage human suffering, but are now compelled to seek refuge in a "harbour" provided for them by their more fortunate fellow-labourers. How truly satisfactory this sight must be to all the members of the noble profession, and more especially to those who have so generously devoted their best energies to establish an emporium of learning to the young, and an asylum of comfort and happiness to the old. Should there be a few members of this profession, who have not yet participated in the happiness which naturally belongs to those by whose untiring exertions this noble work has been achieved, it is to be hoped they will no longer withhold their aid, but will lend a helping hand to the good cause, and constitute the Royal Medical Benevolent College the noblest of its kind in this country.

Death from Poisoning by mistake. On Friday, December 31, 1858, a coroner's inquest was held at Eckton Hall, near Moulton, in Northamptonshire, on view of the body of the Hon. Mrs. Anson, the widow of the late General Anson, Commander-in-Chief of India. The deceased lady was a visitor at Eckton Hall, the seat of Mr. Ambrose Isted. She had suffered considerably from gout, and was in the habit of taking draughts, and applying laudanum externally for the purpose of alleviating her suffering. On Wednesday evening she was in her chamber dressing for dinner, and, fearing an attack was coming on, she took from one of the drawers a bottle containing, as she supposed, one of the draughts, and, emptying the contents into a tumbler, she drank the whole off. Experiencing some few minutes afterwards a disagreeable sensation, she desired her maid to look at the bottle from which she had taken the liquid, when it was discovered that the unfortunate lady had taken the laudanum in mistake for the draught, although the bottle was properly labelled "Poison." Oil, salt and water, etc., were immediately administered in order to produce sickness, and several medical gentlemen of the district called in. Dr. Francis of Northampton, and Mr. Durham of Guy's Hospital, who was on a visit to Dr. Francis, were with the lady the whole night. The stomach-pump was applied, fresh emetics, then cold effusions, but with no satisfactory result. Galvanism was resorted to, and its powerful effect in rousing the patient justified some hope that eventually it would be successful. As a last resource, Dr. Marshall Hall's plan for restoring suspended animation was tried. All failed, however, to counteract the effect of the poison, and at half-past nine o'clock on the following (Thursday) morning the unfortunate lady breathed her last. The jury returned a verdict to the effect that the deceased lady died from the accidental administration of laudanum, in mistaking it for a draught.

London Medical Registration Association. A meeting of the General Committee of this Association took place at the British Coffee House, Cockspur Street, Charing Cross, on Wednesday evening last, when a Report brought up from the "Vigilance Committee" was read and adopted.

North London Medical Society. The next meeting will take place at the Bedford School Room, Charrington Street, Oakley Square, on Wednesday, January 12th, at eight o'clock. Dr. Hillier will read a paper on Diphtherite. Officers for the ensuing year will be proposed for election. Fellows are requested to bring pathological specimens, as usual.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

A Union Medical Officer. 1. Your first query is answered under the head of "Week." 2. The registration fees under the Medical Act was never intended to be, and will not be, an annual tax: the fee once paid, it is paid for all time.

Communications have been received from:—Mr. T. M. Kendall; Mr. W. H. Cary; Mr. T. Hopley; Mr. I. B. Brown; Mr. G. M. Humphry; Mr. T. Holmes; Mr. J. Birkett; Dr. Harwood; Dr. Goode; Dr. P. H. Williams; Mr. Griffin; Mr. J. W. West; Mr. H. W. T. Ellis; Dr. Mackinder: Mr. Holmes Coote; Dr. T. Herbert Barker; Mr. Stephen S. Alford; Mr. Henry Johnson; Mr. Robert Appleton; Mr. S. Smith; Mr. C. F. Hodson; Dr. J. R. Hughes; Mr. A. T. H. Waters: and a Union Medical Officer.

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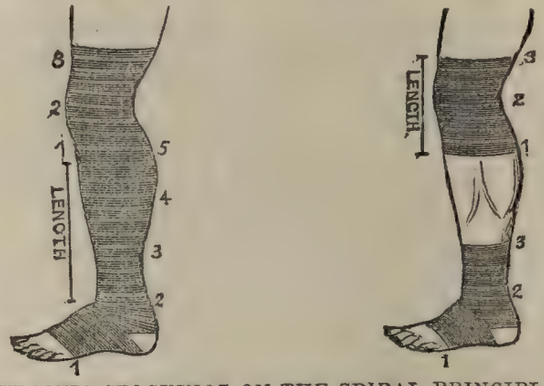
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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

UNIVERSITY COLLEGE HOSPITAL.

OVARIOTOMY.

Under the care of J. E. ERICHSEN, Esq.

[*From Notes by* J. S. WILKINSON, ESQ., *House-Surgeon.*]

MARY H., aged 28, unmarried, was admitted under Mr. Erichsen's care, November 5th. Up to the time of admission, she had enjoyed good health, with the exception of irregularity of the catamenia since May last.

In May 1855, she noticed a tumour in the left iliac region, which she described as a smooth soft lump, attended by an uneasy sensation, but painless. Her abdomen was then observed to swell, and continued to enlarge. She put herself under medical treatment, and was tapped. Twenty-nine pints of fluid were drawn off. In the ensuing August, she was again tapped, and half a pint of tincture of iodine was injected. After suffering severely for two months, she apparently recovered. The resulting mass in the left iliac fossa remained stationary for some time, but disappeared lately. She continued well till last May, when the abdomen again swelled, and has continued increasing up to the present time.

On admission, the patient was cheerful, and only complained of want of power; her general health appeared good; her bowels were open; urine free; and there was no irritability of the contiguous viscera. On examining the abdomen, a tumour was felt, occupying the left iliac, umbilical, and partly the right iliac region: these regions were found dull on percussion. Palpation revealed the existence of several independent cysts; and below, on the left of the umbilicus, was felt a hardened circumscribed mass, occupying an area of from two to three square inches—the supposed remains of the cyst which had been previously injected. Fluctuation could be easily felt in the several cysts; but no undulation could be detected on the one side of the tumour whilst the opposite was percussed. There was no pain in the tumour or neighbouring parts, except on the right and a little below the umbilicus. The patient felt conscious of an increasing enlargement.

Dr. Murphy examined the uterus, and reported the tumour to be independent of that organ. A consultation was held with Drs. Garrod and Murphy, who concurred with Mr. Erichsen that it was a fit case for an operation, which was delayed at first in consequence of the appearance of the catamenia (Nov. 10th), and afterwards (Nov. 17th) on account of bilious vomiting and a low irritable condition.

During this interval, the tumour increased considerably, causing great distress from its pressure on the surrounding viscera. The abdomen now measured (Nov. 20th) thirty-two inches and a half in circumference, on a level with the crest of the ilium. Two large cysts could now be discerned, through which independent fluctuation could be detected when either was percussed. The larger occupied part of the left lumbar and umbilical regions, and encroached on the left hypochondriac, epigastric, and right lumbar regions, where there was some tenderness at the anterior part of the right lumbar region.

November 23rd. The bowels acted spontaneously and freely. Half a drachm of laudanum was given in the evening.

November 24th. The patient was conveyed to a small room, raised to a temperature of between 70° and 80° Fahr. Chloroform was administered, and the operation begun. An incision was made in the linea alba to the left side of the umbilicus, extending from an inch and a half below the ensiform cartilage to about the same distance above the pubes. Immediately on opening the cavity of the abdomen, a quantity of fluid made its escape. Two or three large cysts now presented at the upper part of the tumour, which were opened, and a quantity of gelatinous fluid flowed from them: this considerably reduced the size of the tumour. The surgeon then passed his hand round the tumour, easily detaching a few recent adhesions; and, raising the mass, brought it out of the abdomen. It was attached to the body merely by its pedicle and an adhesion on the right side: the latter consisted of a narrow piece of omentum, four inches long, attached longitudinally, and having a large artery pulsating in it. This was secured by a ligature. The pedicle consisted of the parts in the broad ligament of the left side; it was pierced by a strong double ligature, secured, and divided. The cut edge was just on a level with the wound, the part bearing the ligature being within the cavity of the abdomen. The intestines were somewhat rough from recent peritonitis; and a red patch of lymph occupied a corresponding site on the peritoneum to where pain had been complained of near the umbilicus. Some two or three bleeding points required ligaturing. The intestines being replaced in the abdomen, the edges of the wound were brought together by six figure of 8 sutures over pointed silver probes, and two interrupted sutures. The ligatures through the pedicle and around the piece of omentum were firmly attached to the lowest silver probe. The interspaces between the silver probes were defended by broad strips of plaister, and a napkin and flannel roller were applied over all. The pulse after the operation was regular, but very weak, 140. The patient vomited whilst under chloroform, and again on taking thirty drops of laudanum after the operation. She suffered during the two next days principally from uncontrollable vomiting and great prostration. She was supplied freely with stimulants, ice, and barley-water. Black drop, hydrocyanic acid, etc., etc., were administered occasionally, without much benefit; and flannel bags, filled with heated camomile flowers, were applied over the abdomen. She rallied somewhat on the evening of November 26th. On the 27th, however, she became very low, with shooting pains in the abdomen, hiccough, and a sensation of sinking, which increased towards the morning of the 28th, when she again rallied. Symptoms of peritonitis, however, showed themselves towards the morning of the 29th. The pulse rose to 160, and she complained of great pain in the left iliac fossa. She now sank rapidly, and died at 8 P.M.

POST MORTEM EXAMINATION. On removing the probes and sutures, the edges of the wound separated. They had not united, but had contracted adhesions by their inner surface to a piece of omentum extending the whole length of the wound, which again was adherent to the intestines. These adhesions were soon broken through; and, on reflecting the walls of the abdomen, the effects of general peritonitis were seen. The peritoneum was much roughened, and adhesions had taken place between the several viscera from the liver to the bladder. In the left iliac fossa, where most pain was complained of, the ligatured remnant of the broad ligament was situated: it was drawn up and adherent to the edge of the wound; and the sigmoid flexure of the colon had contracted a firm adhesion to the surrounding parts, thus inclosing a space in the iliac fossa which was filled with pus and lined with a false membrane.

On examining the opposite ovary, it was found also to be affected with the like disease. This was a mass of about the size of an egg, constituted of cysts, varying from the size of a pea to that of a sparrow's egg; one cyst was as large as a pigeon's egg.

On examining the tumour, it was found to weigh between eight and nine pounds (some of the larger cysts having been emptied during the operation, and two or three quarts of fluid allowed to escape); it consisted anteriorly and laterally of superficial large cysts; but the body of the tumour was made up of small firm cysts, intersected by fibrous laminæ; the cysts all contained a colloid substance, much resembling

starch paste, and of like colour; but one or two were of a browner hue than the rest.

There was no trace of the cyst that had been previously injected; and the part of the tumour which was mistaken for it during life, was a part of the central dense mass without a larger peripheral cyst, projecting immediately against the wall of the abdomen.

The contents of the tumour were examined by Dr. Harley, who found some microscopic pseudo-colloid cells.

The following was the result of the chemical analysis:—

Water		97·27
Organic Solids.	Albumen	1·58
	Meta-albumen	
	Casein	
	Gelatin?	
Inorganic Solids.	Phosphate of magnesia	1·15
	Phosphate of lime	
	Phosphate of iron	
	Chloride of sodium	
	Chloride of potassium	
		100.00

Remarks. The interesting case, of which the notes are given above, was one of the unsuccessful operations to which we called attention in a recent number. The other, which was under Mr. G. B. Childs's care, will be found published in the *Medical Circular* for December 8th. In the instance before us, the fatal result appears to have been due (besides the formidable nature of the operation) to the impossibility of drawing the tied extremity of the pedicle up to the outside of the wound, and it shows most clearly the disastrous results of such a focus of abscess and peritoneal inflammation within the abdomen. All recent experience seems to point to the conclusion that these cases in which the pedicle is too short to be drawn out of the belly, are those in which the operation promises least success, and the ingenuity of those surgeons who occupy themselves more especially with this department of operative surgery is busy in contriving means for meeting this difficulty. Thus Mr. Jonathan Hutchinson showed us the other day an invention by which a whipcord ligature was to be drawn tight through the pedicle, so as to raise the end of the latter by gradual traction as much as possible into the wound; his idea being, that if after all it was found impossible to draw it external to or into the incision, the ligature might be dragged through the pedicle next day, when all chance of hæmorrhage would have passed away. Another interesting point in the case is the effect of iodine injection, which seems to have been satisfactory as far as the obliteration of the single cyst which was then discovered. The unfortunate obscurity which attends the diagnosis of these cases is strongly shown by the fact that the same disease was present, in a latent form, in the opposite ovary, and that therefore the present operation, if successful, would only have suspended the progress of the disease.

KING'S COLLEGE HOSPITAL.

CASE OF OBLIQUE INGUINAL HERNIA IN A WOMAN.

Under the care of R. Partridge, Esq.

[*Reported by* J. Walters, Esq., *House-Surgeon.*]

Mrs. S., aged 54, was admitted on November 7th. On the previous day, during a fit of coughing, a swelling became apparent in the situation of the inguinal canal on the left side. She stated that she had never before suffered from rupture. The bowels had not been open since the 5th; and after the swelling came down, she suffered from vomiting and pains in the abdomen.

On the morning of November 7th, she was seen by a surgeon, who immediately detected a rupture, and returned it without much difficulty.

The pain in the abdomen, vomiting and constipation continuing, in the evening she applied to the hospital. On admission, she complained of slight general pain over the abdomen when pressure was made; she vomited every two or three hours, a quantity of dark stercoraceous matter. On examining the abdomen, a small swelling, resembling an enlarged gland, was discovered over the external abdominal ring on the left side. An enema of castor-oil and gruel, and a large dose of opium, were administered.

November 8th. The symptoms of strangulation still continuing, Mr. Partridge was sent for. Chloroform was administered, and an incision made over the swelling situated over the external abdominal ring. The integuments were carefully divided, and then something resembling the sac of a hernia was come upon. This was opened, and found to contain some fat like omentum. This was partly returned, and the rest cut off. The finger was then passed apparently along the inguinal canal, through the internal ring, but no protrusion of the bowel could be detected. The wound was then closed, and the patient removed to bed. Opium was freely administered, and large injections of warm water were thrown up into the bowel by means of a long elastic tube, without bringing away any feculent matter. The abdomen remained somewhat tender to the touch, but was not particularly tympanitic. There was no marked tenderness at any particular spot. After the operation, the patient suffered from constant vomiting, the bowels remaining obstinately constipated.

She died on November 11th, apparently of exhaustion.

Post Mortem Examination. On dissecting downwards from the surface, a mass of fat, appearing very like omentum, and corresponding to that observed during the operation, was found at the external ring and occluded it. More deeply, however, no connection could be traced between the mass and the omentum. It extended but a very short distance through the inguinal canal, and no scar or other indication of a former sac could anywhere be discovered. What strengthens the view that the mass was not omentum is, that a similar piece was observed in the opposite side of the body, also occupying the external ring. Both these pieces were formed of subperitoneal fat, as follows. The inguinal canal was much distended and lined by a fibrous membrane, forming a false sac. This membrane consisted, for the most part, of transversalis fascia, which had been left behind when the sac was returned, and, perhaps, since become thickened by inflammation. The subperitoneal fat, everywhere very abundant, descended in front of the hernia, and was left as a mass at the external ring. The false sac was that which was seen at the operation, and in appearance closely resembled the outer surface of a true sac. At the internal ring a loop of intestine, two inches in length, was found tightly girt by the neck of the sac, strengthened by transversalis fascia. The ring was large enough to admit the forefinger. The exact position of the hernia was between the peritoneum and the muscles, external to the ring. Thus, in attempting to reduce the rupture, the gut and sac had been pushed aside, separating the peritoneum from the abdominal wall, but not relieving the stricture. There were few evidences of recent inflammation, only a little soft lymph close to the internal ring. The strangulated gut was congested, dark, but firm, not gangrenous. On the opposite side of the body, two hernias were found, one inguinal, the other femoral; these contained no gut, and their sacs were large and loose.

Original Communications.

ON DISEASES OF THE EYE, THEIR MODIFICATIONS FROM CLIMATE, etc., AS OBSERVED IN INDIA.

By William Martin, Esq., F.R.C.S., late Superintendent, Calcutta Eye Infirmary, and Professor of Ophthalmic Surgery, Calcutta Medical College.

It is to be expected that diseases of the eye, like those of other parts of the body, although to a certain extent invariable, considered with relations to their causes, predisposing, exciting and proximate, will be found to be variable, in different climates considered with relation to the form of disease, the kind and degree of inflammation, the prognosis that may be pronounced the effects of the disease upon the organ affected, and upon the constitution.

There are several circumstances incident to a tropical climate which will give rise to the modifications alluded to; the principal of these are the excessive heat, the glare of the sun, the excessive amount of dryness or of moisture of the air, according to the season of the year; and it must be borne in mind that we have in such a climate a very large variety of every condition of the atmosphere, except that the cold is never positively excessive. Relatively, it undoubtedly is; and the relation between the amount of cold and heat at certain times as, for instance, during the day and during the night, varies

much according to the particular circumstances of each region. When the soil is of a dry, sandy nature, and there is little vegetation, there will be much variation of temperature between the day and the night, the chief cause of this being the rapid evaporation from the surface of the earth. On the other hand, where the soil is of a moist alluvial nature, and the vegetation luxuriant, there will be frequently a cloudy atmosphere, in accordance with the law which regulates the formation of dew; consequently the evaporation will be but slight, and there will be but little difference between the temperature of the day and the night. Exemplifications of this difference may be seen in the climate of the North West Provinces and Bengal. In the former, the alternations being great, particularly in the cold season, where the sun is unclouded and powerful, diseases in general, and, as a matter of course, eye diseases, may be expected to be, and experience confirms this expectation, more acute than in the latter. The cold weather in the north west lasts five months at least, and this is in contrast to the cold weather in Bengal, which can only be said to last about three months, and to be quite a different season from that in the north west. It may, however, be more healthy, *i.e.*, there is less to excite acute disease, although the season has not the invigorating effect upon the European constitution that the north west winter has. At the same time, it seems to agree best with the constitution of the native; for even the more hardy denizen of the north west, like the Bengalee, cannot easily endure the vicissitudes of temperature.

Next in importance to the temperature and the amount and degree of its alternations, is the constitution of the atmosphere as regards humidity. The excessive humidity of Bengal no doubt predisposes to those eye diseases which arise from debility and cachexia, such as amaurosis, glaucoma, arthritic ophthalmia, etc., while the equally excessive dryness and tenuity of the atmosphere in the north west, the amount of dust floating in it, the emanations from numerous substances, animal, vegetable, and mineral, give rise to and keep up the more acute inflammations, particularly those of the conjunctiva, cornea, and parts most exposed to such influences—the great distinction being, that in the north west there is a tendency to the sthenic, in Bengal to the asthenic diseases of the eye.

There will be found corresponding differences between the diseases of Europeans, as found in Europe and as found in India; and again, between the same diseases, as exhibited in Europeans and in natives.

Having premised these considerations, with reference to the differences between the tendencies to distinct classes of disease, as found among the inhabitants of India, European and native, according to the part of the country they are in, the nature of the season, etc., I shall proceed to state what modifications seem to me to be traceable to peculiarities of climate, taking each principal class of eye disease *seriatim*.

I. Injuries and Wounds of the Parts about the Orbit. Little need be said on this head; certain injuries will produce results almost identical, but the effects will be modified to a certain degree, according to the kind of nervous temperament each class possesses. The European in India is for the most part in a state of exaggerated nervous sensibility, and the native of India in a state precisely the reverse. The native will be found to be, in general, more phlegmatic or apathetic in disposition; the European more sanguine, and in India, from the effects of heat, an indolent life, etc., still more nervous and excitable. Hence we find that the European's power of bearing up against injuries is not in proportion to his power of recovery from diseases of debility. The native will outlive wounds, particularly those of the head, which would cause the death from cerebral excitement of the European. The comparative immunity from cerebral irritation, arising from whatever cause, injury, or idiopathic disease, in the native of India is even more remarkable than the predisposition to the same class of diseases among the Europeans.

II. Diseases of the Lacrymal Apparatus. Diseases of the parts which secrete the tears are rare in India; those of the excreting lacrymal organs are not unfrequent, and, according to my experience, the most troublesome are generally induced by neglected acute inflammation of the sac, or what is far more common, of the soft parts over and around the sac; but there is little of those affections of the sac and appendages, contractions of the canals, etc., irritable mucous membranes, etc., which arise from and are kept up by an irritable state of constitution, and are so obstinate in Europe, particularly in wet and cold seasons of winter and spring, and in strumous and cachectic habits. The native is by no means prone to this form of disease, and the European in India less than in Europe, and this is owing to the greater amount of heat, the relief experienced by mucous membranes in general from the functions of the skin being called specially into action.

III. Diseases of the Appendages of the Eye. These do not differ materially from them as observed in Europe: entropium from relaxation of integuments, and trichiasis, are common; phlegmonous inflammations of lids, erysipelas, etc., are not common; syphilitic ulcerations, eruptions, etc., are by no means common, in accordance with what we see to be the case, that syphilis is of a mild character in India, particularly among the natives. Of cancerous and other malignant affections of these parts I shall treat hereafter. Nævi materni, aneurism by anastomosis, etc., are rarely seen among the natives, and where they exist, the veins and not the arteries are in fault.

IV. Diseases of the External Tunics. 1. *Conjunctiva.* I have not observed any material difference between diseases of this membrane as observed in India and Europe, as regards frequency; but the causes are in general different, being connected with extreme elevation of temperature, and the influence of the direct rays of the sun, instead of the frequent combination of coldness and moisture. Granular conjunctiva is neither so frequent nor so intractable among the natives, but is quite as troublesome among the Europeans and Eurasians, or coloured population, as in Europe. The muco-purulent ophthalmiæ do not show any material modifications, but, as has been observed, are to be traced rather to the influence of heat than of cold or moisture. In my opinion they generally require local depletion, and bear the plan of local stimulation, which is so much in vogue in catarrhal inflammations, even worse than in Europe. The peculiarities of strumous ophthalmia, whether affecting primarily the conjunctiva or cornea, are not so well marked in the native constitution. It is, according to my experience, rare to observe the strumous countenance, such as we see it so often in ophthalmic hospitals in Europe: the bleared eye, the swollen and inflamed Schneiderian membrane, the tumid upper lip, the complications of enlargement or ulceration of the glands of the neck, etc., etc., and the corresponding inflammations are less intractable. The constitution of the European in childhood or in youth seems to be better able to resist the tendency to the various forms of scrofulous disease in India; this is undoubtedly the case with reference to the formation of tubercular deposits in the lungs and elsewhere, and we may anticipate what we find to be the case, that strumous inflammations are more tractable in the eye; but where a strumous tendency has been brought into action by an exciting cause which is also connected with debilitating disease, as variola, measles, etc, the consequent ophthalmiæ are often as intractable, both among natives and Europeans in India as in Europe.

2. *Sclerotica.* Pure sclerotitis is very rare among the natives; but I have occasionally seen the form, which exhibits detached patches of inflammation, and which have existed independently of any inflammation of conjunctiva or cornea, with no red zone round the margin of the cornea, etc. Rheumatic affections are by no means rare, but they are attended by a lower form of inflammation in India. Where the sclerotic is materially affected it is in combination with disease of the iris and cornea.

3. *Cornea.* Corneitis, acute and subacute or chronic, is common among the natives, as a form of inflammation brought on by ordinary exciting causes, as much as it is in Europe, and its characteristic arrangement of vessels is well marked. Ulcers of cornea are often attended by a low form of inflammation, and are intractable, particularly where they co-exist with any special cachexia, that arising from small pox, syphilis, etc., more so than in Europe. Wounds of the cornea, if large, do not heal so readily with the native; this is exemplified in the comparative want of success in operations involving the wounding or section of any considerable portion of the cornea, as in the operation for extraction of the lens.

3. *Iris.* Affections of the iris are very common, both among natives and Europeans. A slow insidious form of iritis, with no marked symptoms, except those of gradual loss of sight, is very frequent; and, by the amount of adhesive deposits thrown out, which obscure the pupil and cover the capsule, vision is, in the large proportion of cases, irremediably injured, where the cases, as too often happens, have been allowed to go on a long time without appropriate treatment. We have also, both among Europeans and natives, a large number of cases of the parenchymatous form of iritis, with prominent deposits variously figured, and tumid iris, etc. These are often seen in cases which owe their origin to some peculiar constitutional disorder, or complication of disorders,

the most marked of which are syphilis, rheumatism, the mercurial action, gonorrhœa; but in none have I been able to discover any well marked collection of symptoms such as some authors have considered to be pathognomonic of the disease, or arising from a peculiar cachexia; viz., in the syphilitic, the pupil tawny and drawn inwards and upwards, cinnamon-coloured deposits, or condylomata, as they are called, etc: such appearances and collection of external symptoms I have often seen, in various degrees, and mixed up in various proportions; but any or all of these so-called pathognomonic symptoms I have not observed at all, where there was every reason for thinking that syphilis was the predisposing, if not the exciting cause of the disease. And, again, I have seen some of all of them in cases evidently brought on by the ordinary causes of inflammation, and in which I could not trace any syphilitic taint, or special taint of any kind. In the same way I have often recognised an arthritic state of the system, as well as of the eye; but not any peculiar state of the iris, as to colour, mode of distortion, character of deposits, which could be said to exhibit any pathognomonic signs of arthritic iritis. The same with rheumatism. The only apparent exception to this, according to my experience, is that, in the inflammation arising from a gonorrhœal taint, there has been a peculiar diffused deposit covering the greater part of the iris, as if it was plastered over it; but this very same appearance, again, I have seen in cases which seemed to have no other cause but a constitution affected with leucorrhœa; so that I can with confidence add my testimony to that of the many who assert, from their experience, that there are no special objective symptoms which can be considered to be pathognomonic of the forms of iritis which arise in connexion with certain constitutional cachexiæ. As regards the treatment of iritis, with which may be joined that of inflammation of the internal tunics generally, I have found that the same plan, with slight modifications, will answer for the native and the European. The native will bear moderate depletion, the action of mercury, etc., as well as the European; and I have not found that the disease will be cured by any other means but those most in repute. It would be desirable in all cases that the use of mercurial medicines could be dispensed with; but, unfortunately, in the present state of our knowledge, we cannot do so; and I am inclined to think that many of the bad effects which may be attributed to its constitutional action in cold climates, are altogether absent in a tropical climate, both with natives and Europeans. There is not that amount of predisposition to scrofula with the native; and in both races the products of the mercurial action seem to be more speedily eliminated from the system, principally in consequence of the greatly increased function of the skin.

The remarks here made with regard to iritis will apply also to inflammation of the aqueous membrane, choroid, and retina. Aquo-capsulitis is a disease, independent of the corneitis particularly affecting the posterior epithelium, I have rarely seen, but in conjunction with that, it is by no means uncommon among the natives, and often met with among the Europeans, particularly scrofulous and delicate children.

5. *Choroid.* Congestive and inflammatory affections of the choroid are very often met with among natives, and we are generally called upon to treat the results of disease which has been going on a long time; consequently, in a large majority of cases, the sclerotica has already given way, staphylomatous protrusions have occurred, the globe is disorganised, and the sight is irremediably injured. This complication seldom arises from over-exertion of the organ, but from exposure to the sun and heat, conjoined to deficient nutrition. The retina is not apt to take on acute inflammatory action, probably because the natives are seldom exposed to much intense and concentrated light, as is the case with those Europeans who work at optical instruments, the microscope, minute needle-work, etc., for an inordinate time; but only to rather a large amount of heat and sunlight; to which, however, they have been in great measure accustomed from their infancy. They are subject to subacute and chronic inflammations, the cause being in many cases complicated with want of proper nutrition. A large proportion of these cases, attended with considerable loss of sight, are curable entirely or partially: it would seem that the nervous tunic becomes often paralysed from want of proper nutrition.

I do not consider that the diseases of the internal tunics among Europeans in India present any very marked difference from them, as seen in Europe. The retina, I believe, becomes more often paralysed, not from want of nutrition, but from congestion; and acute internal inflammations are certainly more common. Vision also becomes affected by long residence in India, most probably from the retina becoming exhausted, as a consequence of long continued over-excitement: but while, in the native, this over-excitement exists to only a slight degree, if even it can be said to be present at all in most cases, and is joined in a large majority of cases to a state of anæmia, with the European it is much greater, is persistent, and joined almost always to a state of plethora, general and local. This is owing chiefly to the habits of life of the European, which are too luxurious—an excess of nutrition, a deficiency of occupation for the body and mind: the result is a premature debility; the energy of the nervous system, etc., affecting the retina more than any other part of the eye.

[*To be continued.*]

PATHOLOGICAL CONTRIBUTIONS TO MEDICAL JURISPRUDENCE.

By William Boyd Mushet, M.B.Lond., late Resident Physician at St. Marylebone Infirmary.

To the majority of practitioners, few opportunities are presented for the practical pursuit and study of questions connected with medical jurisprudence.

When I was medical officer of St. Marylebone Infirmary, unusual advantages were afforded for the prosecution of inquiries bearing on the subject, but many interesting cases were not chronicled, want of leisure frequently precluding the minute accuracy and detail essential in matters intended for report. The importance of forensic medicine, however, in its scientific and social aspects, induces me to conceive that any instalment to our knowledge will not be altogether unacceptable; and I therefore offer the following cases, although incomplete and unconnected, trusting that they may elicit further contributions, and more earnest and extended cultivation of this department of the profession.

It is to be regretted that medical witnesses, from hasty and illogical conclusions, or expression of contrariety of opinion, are often exposed to animadversion, and even ridicule, in courts of justice.

These occurrences act injuriously, by depreciating us in public estimation, and are only to be obviated *by adhering to facts.* When in doubt, our doubts should be honestly admitted, being unbiassed by preconception of the case or of the guilt of the prisoner. Possibilities, as well as probabilities, should be well considered, as appearances presumedly inconsistent or inexplicable may be in accordance with ordinary physiological or pathological laws.*

The evidence derived from books may be accepted as a confirmation or corrective; but no authority should be unreservedly subscribed to if opposed to observation or experience, as a number of cases, arising from any given operation—whether accident, violence, poison, or disease—necessarily exhibit diversities in the character and evolution of symptoms, and in the textural alterations revealed by the scalpel.

It would be here out of place to dwell at length upon the propriety and utility of coroners being elected from the ranks of medicine; but these functionaries, when of the *legal* order, for the most part exercise an obstructive influence in the performing of *post mortem* examinations, which ought almost always to be instituted in sudden, violent, and suspicious deaths,† as, if not immediately demanded for the inquiry at issue, such inspections may prove important indirectly in future cases; and if, by law, a full and faithful record were insisted on from the medical man in every judicial investigation,‡ valuable statistics would be accumulated, and the welfare of society advanced—such an enactment evidently tending to the greater repression of crime.

I.—Destitution.

J. R., aged 54, was admitted into the Infirmary on the evening of October 3rd, 1856. He was much emaciated, and in a state of great prostration and filth, with brown dry tongue, slight œdema of legs, and unpleasant exhalation from the body; and the evidences of destitution were corroborated by his previous history. He was ordered acetate of ammonia with nitric ether, and arrowroot, wine, beef-tea, and milk.

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* In illustration, I have heard a very eminent hospital physician and lecturer remark, that a gentleman (who afterwards became a professor of pathology) brought a liver some years ago before one of the medical societies, as a sample of melanosis, the margin of which had undergone black discoloration by the action of the abdominal gases after death!

† Had this been observed in the instance of Palmer's brother, subsequent tragedies might have been prevented.

‡ To be furnished to the Registrar-General.

On the following morning, he was in a soporose condition, and could not answer questions rationally. His tongue was dry and brown; the legs were slightly œdematous. There were erythematous patches over legs and arms, and a vesicular eruption over arms and face. The pulse was a little full, but very compressible. The patient had much thirst. The bowels had been loosely opened, but were not relaxed; and he did not resent pressure over the abdomen. He had no spots like those of fever, no injection of conjunctivæ, and no delirium. The skin was hot and moist; the face pale. No affection of lungs or heart could be detected on physical examination. The urine was slightly albuminous. He was directed to continue the nourishment and wine. He appeared much the same in the evening.

October 5th. The legs were less swollen; the erythema less marked; and he appeared a trifle better. He had taken the nourishment well. In the evening he was asleep and breathing easily on my visit to the ward; and was, therefore, not disturbed, as he was reported to have had very little rest since admission.

October 6th, I was summoned early in the morning, and found him sinking, apparently from exhaustion. Wine was ordered, which regurgitated, and he sank about 12 A.M.

The body was examined three days after death by direction of the coroner. The weather was warm. Rigor mortis was slightly marked. The face was calm. Vesicular spots were seen over the arms. There was some subcuticular lividity of the legs, and sugillation on the posterior part of the trunk. There was abrasion of the skin over the left elbow. The œdema of the legs had almost disappeared. There was very little fat in the abdominal wall or around the viscera.

Head. The scalp was natural; the calvarium thin; the dura mater normal. There was some subarachnoid effusion; the pia mater was somewhat injected. The brain-substance was consistent, a little more vascular than usual; and the white substance of the hemispheres had a fine pinkish tint. A little fluid was found in the ventricles, and about an ounce of serum in the base of the skull. The cerebral vessels were healthy. The sinuses were filled with dark fluid blood.

Chest. Old pleural adhesions were present, especially on the left side. Some serum was found in the right pleura. The lungs were pale anteriorly, but congested behind; they crepitated well. The bronchial tubes were healthy, and contained a very slight amount of secretion. There was a slight appearance of scattered tubercle at the apices; no consolidation. The trachea was pale. The heart weighed eight and a half ounces; it was healthy. There was a black coagulum in the right auricle, passing down into the ventricle, where it became partly decolorised and firmly interlaced with the columnæ carneæ, extending thence for some inches into the pulmonary artery, where it again became black. Dark fluid blood escaped from the pulmonary veins on section. Dark coagula were found in the left side of the heart. The valves were healthy. The aorta was healthy. About an ounce and a half of serum was found in the pericardium.

Abdomen. The stomach contained about two or three ounces of yellow fluid of acid reaction. The mucous membrane was pale and softened. There was some prominence of the veins, and pigmentary discoloration, but no vascularity. The pancreas was firm; apparently healthy. The spleen was small, pale, firm. No fluid was found in the peritoneum. The bladder was nearly empty. The liver was pale; the gall-bladder contained some dark bile, but was not distended. The right kidney weighed five ounces and a half; it was large, pale, not granular; the capsule separated well. The left weighed five ounces, and presented much the same characters. The intestines, opened throughout, contained no solid fæcal matter, but a small quantity of yellowish brown fluid and yellowish flakes. No ulceration or prominence of the Peyerian patches was seen; and there was no lymph on the serous coat. The ileum was injected for two or three inches, about nine inches from the cæcum, and at two or three spots higher up. The large intestines were healthy. The coats of the intestines seemed thin.

Remarks. In this case, during life, there was absence of positive disease; no proof of chest affection, no evidence of specific fever (typhus or typhoid), or of organic disease of the liver, heart, or kidney; the œdema subsiding rapidly on rest. There was not the flush of fever, no spots, pain over the belly, diarrhœa, delirium, nor subsultus occurring before death. The albumen in the urine was probably a transient condition, as it is not uncommon in persons subjected to exposure, from causes readily appreciated. Excluding the diseases enumerated, the dirty state and offensive odour of the patient, the dry brown tongue, hot breath, thirst, prostration, with excitement, œdema gradually disappearing, and rapid exhaustion (with the collateral evidence or even without it), induced me to conclude that death occurred from exhaustion, the result of destitution.*

The *post mortem* appearances confirmed the opinion. There was no ulceration of the intestines; no visceral disease; and the blood was not fluid. The appearances were, in fact, negative, except the fine pink tint of the brain, the serum in the skull, and the injection of the small intestines. The alimentary canal contained no fæcal matter; there was marked emaciation; and the clots in the heart pointed to death from asthenia.

CASE OF SEVERE *POST PARTUM* HÆMORRHAGE.

By Thomas T. Blease, Esq., Altrincham.

The following case I have been induced to narrate, from an impression that it would interest a fair share of the readers of this Journal; not only because it points out to what an amount of severe treatment the human female can be subjected without suffering any serious consequences, but also on account of the way in which the hæmorrhage was suppressed, viz., by the plugging of the uterus, and not the vagina. Taking into consideration the success of the treatment, the question arises, whether, if the same had been adopted in fatal cases, their termination would have been such.

Case. On the afternoon of Tuesday, October 5th, 1858, I was summoned to attend in labour Mrs. H., who resided three miles from my house. I arrived about half-past five, and found the os uteri fully dilated, the membranes entire, and the vertex presenting, though situated very high. After waiting an hour, I ruptured the membranes; the uterine contractions, previously strong and frequent, were now almost uninterrupted. In the course of two or three hours, the head began to enter the cavity of the pelvis, but made no further progress. Knowing that my father had delivered her in her first (the present being her second) accouchement with the forceps, after she had been in labour a day or two, symptoms arising which called for immediate delivery, I completed the labour with the assistance of the forceps, at 11 P.M., five hours and a half from the time of my arrival. The child, a very fine one, though exhibiting few signs of animation, was soon resuscitated. The placenta was expelled in twenty minutes or less; and the patient appeared to be going on satisfactorily. I had a female manipulating and pressing the abdomen from the birth of the child. In a few moments, symptoms of internal hæmorrhage manifesting themselves, I applied my hand to the denuded abdomen, when I found the uterus large, but on firm pressure, it contracted, and expelled a large quantity of coagula. I administered half an ounce of ergot in divided doses; in addition, I introduced my hand into the cavity of the uterus, but could not get it into a state of permanent contraction. The uterus relaxed still more, and the hæmorrhage continued, although I irritated its internal surface with my left hand, while I compressed it with the right externally. I poured cold water from a height suddenly, and also in a continuous stream, upon the patient's bare abdomen, but all to no purpose. As a last resource, I plugged the uterus with a large piece of linen steeped in cold water; I then applied cold wet napkins to the lower parts of the person, and a large compress over the uterus, secured with a bandage; and, after waiting a reasonable time, finding my patient rallying a little, and knowing that it was almost impossible for the hæmorrhage to recur, I left her. In the course of a few hours, my father called, and withdrew the plug, without a repetition of the flooding.

The only medicine the patient took, was one grain of solid opium, and a little castor oil. Her recovery was complete.

* Destitution comprehends want of food, proper lodging, and rest. I have, unfortunately, had too much experience of it; but the examples have been less severe than the one detailed, not proving directly fatal. It is one of the most important elements in parochial practice, modifying considerably the type and treatment of disease. I regard cases of pure starvation to be of very rare occurrence.

Clinical Lectures
ON
LITHOTOMY.
DELIVERED IN
THE LEEDS GENERAL INFIRMARY.

By Samuel Smith, Esq., Senior Surgeon to the Infirmary.

Lecture III.

Gentlemen,—The last case that I related before we parted was that of an old gentleman who had a stone of considerable size in the bladder, and who, after taking mephitic water for several years, and expelling much fine sand, at length expelled also the nucleus of a calculus; after which he was cured of his symptoms of stone, and lived many years. In that case, the strong hereditary tendency to the disease is thus proved. His father died with a large stone in the bladder; and his only brother also died with several large urinary calculi in the bladder, which were removed after death. I think, from the circumstance of his having expelled four lithic acid calculi before such urgent symptoms of stone took place as induced me to sound him; from my finding a stone in his bladder; from the fact that the symptoms were so manifold that he requested an operation; from the fact that Mr. Costello saw him, injected the bladder, and in my presence felt and heard a stone;—from this combination of circumstances, I think, you will rather agree with my opinion than with that of the gentlemen who denied that there had been a stone in the bladder, because one was not found after death.

Case No. 21—John George, operated on September 16th, 1830, is a case worthy of remark, as proving the early period of life at which a stone can be formed in the bladder. This boy was 2¾ years of age, and made an excellent recovery. On the 4th of February, 1829, I removed from his urethra this small calculus, when, of course, he was only sixteen months old, and when he had probably partaken of no other food but his mother's milk.

You will see, then, that when I had operated twenty-three times, I had only had one fatal case, that being my first; and, therefore, that my average of deaths at this period was 1 in 23; but the death of No. 24, the case of the little boy from Knaresborough, reduced my average at once to 1 in 12.

I had now three cases in succession that did well; but my twenty-eighth case died—Samuel Kay, 59 years of age, from Wakefield. This was not a favourable case; for the man had had the operation of lithotrity attempted to be performed upon him by some one. I do not know by whom. If you look at this stone, which is of considerable magnitude (two inches and five-eighths in diameter) and of a very hard material, I think you will be convinced that the fracture which you see in it was not made during the operation of lithotomy, but by the attempt at lithotrity. The stone is heavy, and not of that material which breaks down under the pressure of the forceps. Here you see another stone, which was removed at the same time, with a surface evidently fitted by attrition with a concave surface to receive the convex extremity of the large oval calculus.

Case No. 29—David Sidebottom, aged 29, of Wakefield—did well; and the only circumstance worthy of remark is this. I see a memorandum on the box, "This patient was cut for stone by Mr. Hey seven years before". Here was a man 29 years of age, subjected to the operation at 22 years of age, and again at 29, doing well on both occasions.

Case No. 15—John Ratcliffe, of Leeds—had also been operated on before by Mr. Stansfield, my predecessor.

Case No. 30 was fatal. The patient was a man 50 years of age, of very gross habits, weighing about twenty-two stones, certainly the largest man I ever saw subjected to the operation of lithotomy. He was, therefore, not in a favourable state for recovery. By that fatal case my average was reduced to the rate of 1 death in 8; after which nine cases in succession did well, raising it to nearly 1 in 10. But, in consequence of two fatal cases taking place, both operated on in the same day, viz., October 7th, 1844, and both dying on the 11th, my average was reduced to its lowest point—1 in 7. After this, twelve cases in succession did well, the average rising to 1 in 9. But in June and November, 1851, I had again two fatal cases; since which I have only lost one patient—Wm. Scarborough, upon whom I operated May 5th, 1855. He died on the 26th of May, three weeks afterwards, from the consequences of hæmorrhage occurring on three different occasions, under which he sank, although it was restrained by the usual means. Since this time I have not lost a single case; and my average now stands at 1 death in 8.

Now, gentlemen, it is unfair to make an average from a small number of cases; and it is unfair to make it from a selected number of patients. You must make it from all the cases you have ever had, to arrive at the truth. You are aware that in Norfolk, probably in consequence of the great quantities of cider drunk in that county, stone in the bladder prevails in a greater degree than in any other portion of the United Kingdom; and therefore the surgeons residing in that locality have more numerous opportunities of performing this operation than many others. I stated to you that Martineau, who was an eminent surgeon of the Norwich Infirmary, had performed eighty-four operations in succession, out of which number he had only lost two cases: there was an average, you see, of one death in forty-two. But these were not all the operations Mr. Martineau performed; for his success was not equal to this, either before those eighty-four cases or afterwards. Now, I will tell you the real average of Mr. Martineau in all his operations. He was considered the most celebrated and successful lithotomist of his day; but I will prove to you that his success was no better than mine, upon the whole. Here is a paper which I extracted from a memoir in a Norwich newspaper sent me by my friend Mr. Crosse, of the Norwich Hospital. Dr. Rigby and Mr. Martineau were surgeons there at the same time, and both very eminent for this operation. Here I give you the true statement of all their operations:—"Dr. Rigby lost three in the first fifty, or at the rate of one in sixteen; and one in four and three-fourths of the remainder, amounting to more than double, so as to reduce his average below one in seven. Martineau lost eleven in his first fifty (those were not included in his eighty-four cases), or at the rate of one in four and a half; and, in his remaining cases, one in thirteen and three-quarters; making the average in the end to be one in eight"—the same as mine.

Dr. Rigby's hospital operations amounted to one hundred and six, and to fifteen deaths. Martineau's hospital operations were one hundred and forty-seven, among which were seventeen deaths.

Now, gentlemen, I remember having an interesting conversation on this subject with the late Mr. Michael Thos. Sadler, of this town; and he informed me that the surgeon of a provincial hospital in a neighbouring county had told him that the average of deaths after his lithotomy operations only amounted to one in a hundred. When you hear such statements as that made, do as I did—smile, but say nothing. It would not be polite to give your opinion in plain English upon a statement of that kind. The house-surgeon of the Infirmary, a short time ago, said to me, "We have been very lucky in lithotomy lately, sir." Gentlemen, there is no such thing as luck in lithotomy at all; I have no belief in it. Where an operator has his average of deaths very low, it is a proof of skill; and where he has many deaths, it is a proof of want of skill. I believe that, if it were possible to subject a hundred sound healthy men, who had no stone in the bladder, to the incision made in the perinæum, the knife being carried forwards into the bladder, partially incising the prostate, then a pair of forceps passed, opened, shut, and withdrawn, my opinion is, that a given proportion of such men would die from such a wound. But if, in addition to these circumstances, you imagine each of these persons having a stone in the bladder, and having that bladder diseased to a certain extent by the presence and irritation of that stone, and probably also at the same time labouring under disease of the kidneys, the proportion of individuals who would die of the operation, under the latter circumstances, would be likely to be much greater.

It is singular, yet it is a well established fact, that a greater proportion of elderly men recover from this operation than men of middle age. Every man, without exception, who was turned 60 years of age when I operated upon him, recovered. Several of them were approaching 70 years of age, and one was 73. The case of Patrick Clarke is worthy of remark. Here was a man 66 years of age (not at all an unfavourable circumstance for operation). I remark upon his case, because I think I saved his life by a little ingenious manœuvre. He was operated on on the 27th of April, 1854; and these two large urinary calculi were removed from the bladder. He had been a patient of mine two years before. He came on my admission day—a big, powerful, loud voiced, broad chested, muscular Irishman. His symptoms were so manifestly those of

stone, that I sounded him at once, and detected two stones in the bladder, recommended him strongly to submit to the operation, and told him that every moment he delayed the case would be rendered worse. I did everything in my power, so far as argument was concerned, to induce him to submit; but he wilfully declined it, and disappeared. In the spring of 1854 he returned, a very altered man. He had lost his powerful voice; his shoulders were approaching towards his ears; he was bent; he had lost upwards of three stones of flesh; and it was clear that the irritation of the stone was doing its work—that it was destroying him. Still he would not hear a word of being cut for the stone, when a bright idea struck me. I said to him, "You are a Catholic?" "Yes, I am, sir." "Then go to your priest; consult him; tell him all I have said to you; and ask his advice." The priest was a sensible man, and advised him to submit at once to the operation, as giving him the only chance of saving his life. Thus he took the advice of the priest, when he paid no regard to that of the doctor. He submitted to the operation, made a most favourable recovery, regained his voice and his flesh, and went out of the Infirmary again a big broad chested Irishman.

Cases No. 39 and 35 are worthy of remark, from the circumstance that Thos. Waterhouse, of Horsforth, aged 66, was grandfather of Robert Waterhouse, of the same place, aged 4, shewing a strong hereditary tendency to the disease.

It is surprising with what facility little boys recover from this operation. I will prove this to you by the report of my last five operations on little boys under 7 years of age.

Benjamin Hustler, of Farsley, aged 5, was operated on April 14th, 1856; and went home perfectly well May 9th—that is, on the twenty-fifth day.

Michael Corney, 7 years of age, was operated on June 9th; and J. W. Roberts, 5 years of age, was operated on the same day. Both went home perfectly cured on the 27th of June, or eighteen days after the operation; and one of these little boys was actually bowling a hoop in the Infirmary garden on the fourteenth day after the operation.

William Hainsworth, aged 5 years, from Wakefield, operated on September 7th, 1857, went home cured on the twenty-fifth day after the operation.

Now, how could these wounds be healed in such a short space of time? It was because, in all these cases, it was ascertained that the stones were small; and consequently, although the incisions were deep, they were no longer than necessary. As soon as the urine ceased to flow from the wound, which would be somewhere between the seventh and tenth days, these wounds healed very rapidly; and in all these cases there was not a single untoward symptom.

The ages of those patients who did not survive the operation of lithotomy, as performed by me, were 5, 6, 21, 40, 46, 50, 51, 55, and 59. In some of these cases, the stones were very large. Here is one, removed from Benjamin Greenwood, weighing nearly four ounces, and of that horrible form, the mulberry calculus. You will see it has the appearance of a dozen or two mulberries placed in a glass, and cemented together by lime. There was not much difficulty in extracting it, proving the sufficiency of the incision; but I am sorry to say that the poor man died in a few days. In fact, a favourable result could hardly be expected with such a stone as that.

My average, gentlemen, would have been different, if I had selected my cases; but I took all comers. Where there seemed to be a chance of saving life by the operation, I performed it. Now, in Mr. Crosse's book, he states that Martineau was very particular in selecting his cases, and refusing to operate upon patients who did not appear likely to do well.

There is a case worthy of remark, upon which I operated on the 5th of June, 1850. He was a private patient, who had been for a long course of years subject to stricture in the urethra. He was under his own treatment, and was in the habit of continually wearing a gutta percha bougie night and day, excepting when he was emptying the bladder; and the extremity of the bougie was bent over the glans, to prevent it from slipping into the urethra. Several months before he consulted me, the bougie had slipped into the urethra beyond the glans. He went to a physician, who, instead of cutting boldly upon the bougie when it was in the membranous portion of the urethra, attempted to poke it out, and, in doing so, poked it in. Shortly afterwards, he had all the symptoms of stone in the bladder. When he consulted me, there were small fistulous openings in the perinæum. He declared most emphatically that he could feel the presence of the bougie in the bladder every time he passed urine. I searched, by means of the probe, the fistulous openings in the perinæum, and also sounded the bladder; but I could detect no foreign body. His symptoms were so manifest, and he was so urgent himself for an operation, that I called Mr. Hey in consultation, and we decided to perform the operation of lithotomy, which was done with the smallest curved grooved staff I ever saw, and which was made for the occasion, being very little thicker than a knitting-needle, as nothing larger would pass into the bladder. I performed the operation in the usual way; but I incised the prostate with Sir Wm. Blizard's lithotomy-knife, which is the very thing for such a case. This knife was beautifully adapted, by the narrow curved point of the beak, for passing nicely along the narrow groove of a very small staff, and thus penetrating the bladder. Well, gentlemen, as soon as the prostate was incised, I introduced the forefinger of my left hand, and found immediately, to my great satisfaction, that the bougie was there, curled in a semicircular form, resting in that cavity behind the prostate, and the two ends coming up on each side of it, so that it was impossible that any instrument could touch it or detect its presence. As soon as my finger dipped beyond the prostate, it was felt at once, and was readily extracted by a pair of small forceps. This specimen is worthy of remark, as shewing you what a small amount of deposit took place upon this bougie, which had remained in the bladder a hundred and fifty-nine days. You must contrast it with these portions of elastic gum catheter I now shew you, and which I see labelled, "This portion of a catheter was broken, and left in the bladder, by a surgeon in the country; ten days after which it passed into the membranous part of the urethra, and was cut from thence at the Infirmary by Mr. Hey." Now look at the deposit upon that catheter in ten days, and look upon the deposit upon the bougie in a hundred and fifty-nine days: the one which had been in the bladder ten days has ten times more deposit of calcareous matter on it than the one which had been a hundred and fifty-nine days in the bladder.

Now you may say to me, "That catheter being removed by Mr. Hey, how came you in possession of it, Mr. Smith?" I will tell you. Mr. Hey called me in consultation, and requested my assistance in the operation, which was done in the ward while making our rounds. These portions were readily extracted (from a small incision in the line of the raphe of the perinæum), and put in a little wooden dish. Mr. Hey washed his hands quickly, and marched away. I washed my hands very slowly, remained, took these portions, washed them carefully, wrapped them up, and put them in my pocket; and, as no inquiry ever afterwards was made for them, I thought them very honestly my own, and I kept them. That is the way, gentlemen, to make a museum.

Among my specimens of urinary calculi are many which have been removed from individuals who have refused to submit to the operation. I have generally kept my eye upon such patients, and have had an opportunity of removing the stones after death. I have also all the urinary calculi which were removed by the operation of lithotomy by my former pupil, John Clayton Cooper, of Bradford, who, I think, was the first lithotomist who ever performed several operations in that town. I have also all the calculi removed by operation by Mr. Lucas, who was Mr. Chorley's predecessor, and twenty years surgeon of this Infirmary, and who afterwards retired to Ripon. A few years ago, when attending in consultation in that town, a surgeon made me a present of all these specimens, formerly belonging to Mr. Lucas. This, you will see, weighs nearly five ounces.

Here is another very heavy urinary calculus (shewing a specimen as big as a cricket-ball, and weighing 6¾ ounces), which was expelled from the urethra without laceration, without creating any sloughing of the parts or incontinence of urine. I will give you the case. A very excellent old mare, belonging to Mr. Morphet, of Camp Road Mills, in this town, was known to have symptoms of disease in the bladder, constantly suffering from strangury and bloody urine. One day, a dose of strong physic was given to her; and, the next morning, this calculus was found behind her heels in the stable. A little blood had been parted with, and a little abrasion of the mucous membrane of the meatus took place. Calling at the mill on business, a day or two afterwards, I was shewn this, and saw the mare. There is no doubt whatever that this is an urinary calculus, and that it was expelled in this manner. I begged it; and I consider it a very valuable specimen indeed.

There are also in this box a great number of urinary calculi, which have been removed by me from the urethra, most of them without incision, some of them by the aid of the knife. How are you to remove a calculus from the urethra? Here are little gimcrack French instruments for that purpose. I

have had these instruments many years; I have never used them once for that purpose, and never intend to do so. They are very nice to look at; but, when you get a stone in the urethra of a patient of yours, this is the instrument to remove it with. Get the scoop of a small silver director passed into the urethra; and, when you once feel the stone, manœuvre to get the scoop beyond it: you then have it safe; alter the angle of the instrument, and it readily comes forward. Every stone I have removed from the urethra has been by this instrument. It is a far superior plan to the use of forceps of any kind. It is like what is seen in removing a pea from the ear of a child: if you attempt to do it with forceps, you will do what was done with the bougie; instead of poking it out, you will poke it in. But if you get a little scoop beyond it, you will soon have it out.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

THE IMPORTANCE OF PRESENTATION OF THE BREECH OR INFERIOR EXTREMITY IN CASES OF INFANTICIDE.

By William Bird Herapath, M.D.Lond., F.R.S.Ed., Analytical Chemist and Chemical Toxicologist.

[*Read December 16th*, 1858.]

In introducing this subject to your attentive consideration, I do so with the more pleasure, as it appears to be one which, although it has hitherto escaped the attention of medical jurists, may, from the peculiar state of the English laws with respect to infanticide, yet be occasionally the means of bringing home the crime to the guilty party, and of awarding that punishment which it so richly deserves.

Professor Taylor justly says, that the great question on a trial for child-murder is, "whether the child has been born alive?" and in Chapter xlii, wherein he discusses the various proofs of a child having been born alive he adduces evidence derivable from the organs of respiration, from marks of violence, from changes in the umbilical vessels, foramen ovale, and ductus arteriosus—evidence from the discovery of food in the alimentary canal, and the detection of live birth by the application of chemical tests to the contents of the stomach; and he concludes this chapter, with a well founded complaint that our signs of live-birth are so few and defective, in these appropriate words: "The slightest consideration will show that the signs of live-birth above described are weak, and of purely accidental occurrence. If the child be destroyed during birth, or within a few minutes afterwards, there will be no medical evidence to indicate the period at which its destruction took place. The external and internal appearances presented by the body would be the same in the two cases. It is most probable that in the greater number of instances of child murder, the child is actually destroyed during birth, or immediately afterwards; and, therefore, the characters above described can rarely be available in practice. If any exception be made, it is with respect to the nature, situation, and extent of the marks of violence; but the presence of these depends on mere accident. Hence, then, we come to the conclusion, that although medical evidence can often show, from the state of the lungs, that a child has really lived, it can very rarely be in a condition to prove, in a case of infanticide, that its life certainly *continued after its birth.* We could only venture upon this inference when the signs of respiration were full and complete, or food was found in the stomach. Why the destruction of a child should be treated in the one case as a venial offence, and in the other as a capital crime, is one of those anomalies in our criminal jurisprudence for which it is impossible to account. The inference which we may draw from these observations is, that if positive proof of entire live-birth be in all cases rigorously demanded of medical witnesses on trials for child-murder, it is scarcely possible, when the prisoner is ably defended, that any conviction for the crime can ever take place. The only exception would be, when a confession was made by the accused, or the murder was actually perpetrated before eye-witnesses. The numerous acquittals that take place on trials for this crime, in the face of the strongest medical evidence, bear out the correctness of this opinion. The child is proved to have lived and breathed, but the medical evidence fails to show that the living and breathing took place or continued *after entire delivery.*"

He also sums up the conclusions to be drawn from the facts contained in this important chapter, under the following seven heads:—

"1. That if the lungs be fully and perfectly distended with air by the act of respiration, this affords a strong presumption that the child has been *born alive*, since *respiration during birth* is, in general, only partial and imperfect.

"2. That the presence of marks of severe violence on various parts of the body, if possessing vital characters, renders it probable that the child was entirely born alive when the violence was inflicted.

"3. That certain changes in the umbilical vessels, and the separation by a vital process and cicatrisation of the umbilical cord, as well as a general peeling or scaling off of the cuticle, indicate live birth.

"4. That the absence of meconium from the intestines, and urine from the bladder, are not proofs that a child has been entirely born alive, since these liquids may be discharged *during the act of birth.*

"5. That the open or contracted state of the foramen ovale or ductus arteriosus, furnishes no evidence of a child having been born alive. These parts may become closed and contracted *before birth*, and therefore in a child born dead; or they may remain open after birth in a child born living, even after the establishment of respiration.

"6. That the presence of farinaceous food, sugar, milk, albumen, or other food in the stomach, proves that the child has been entirely born alive.

"7. That, irrespective of the above conclusions, there is no medical sign which indicates that a child which has died at, or about the time of birth, has been *entirely* born alive." (*Medical Jurisprudence*, Sixth Edition, p. 484.)

I have made the preceding extensive quotations from this usually excellent authority on subjects of this nature, in order that you might be fully in possession of the position of the question I am about to bring before you. With the majority of these conclusions of Professor Taylor we must all most fully concur; but with respect to the last, I hope, in the course of this paper, to adduce *another source* of evidence which we may possess under some circumstances, and which may enable us to prove that *a given child* has *been entirely born alive.* I here allude *to the nature of the birth itself.* It is well known that there are in most cases of parturition certain appearances left upon the infant's body, arising from the character of the birth and due to the nature of the presentation. Now, under such circumstances, it would be possible to adduce these as evidence, that the child had acquired a vitality independent of the mother, subsequent to its entire expulsion from the body of the parent. For it is not alone necessary to prove that the child had fully inflated its own lungs; it is also demanded of the medical witness to prove that the act of inspiration of the child was *not performed* whilst the body of the infant was still engaged in the pelvis and inferior outlets of the mother. Now when the presentation has been that of the *breech*, *knees*, or *feet*, or of only *one of the inferior extremities*, it follows that should the infant's body exhibit evidences of any one of these having been the presenting parts, there can be *no reasonable doubt that the whole of the body of the child must have been expelled from the body of its parent before respiration could have possibly commenced;* and consequently, if in the same case, we also find the lungs fully and perfectly inflated, it is presumptive evidence, not only that the child has been alive in a medical sense, but that it has equally acquired a legal right to protection from violence, as such a condition of the organs of respiration would indicate that the infant had also lived *sufficiently long after its birth* (which was necessarily *entire*,) to perfect the respiratory act, and thus overthrow the whole fœtal circulation.

Without further prelude, I will now proceed to adduce the particulars of a case which, having recently occurred to me, has most forcibly brought the matter prominently before me.

Post Mortem Examination, made on the body of the illegitimate child of Elizabeth Pyne; by order of the coroner, August 28, 1858, at 12·30 noon.

It was a mature female child, having talipes of both feet. *The left leg* at once arrested the attention from its swollen state and deeply purple colour; this discoloration reached as high as the inguinal region. It had evidently been the presenting part, and must have been some time in the vagina. *The right leg* was much smaller, and of the natural size and colour, with the exception of one purple swollen patch on the patella—this was probably from the same cause. *The umbilical cord* was about two and a half inches long—untied, and the extremity

very ragged, as if torn, or cut with a blunt knife; it also presented the mark of a cut on its right side, about half an inch from the extremity. There was no corresponding mark on the opposite side; so that no ligature could have been applied; but no blood had been lost. *The body* was clean, and the child had evidently been washed; its surface was marked by numerous purple coloured spots or patches, some of large size; these were not more on the posterior surface than on the anterior; and did not, therefore, appear to be produced by gravitation. There were no abrasions on these patches; but they altogether presented the appearances of discolorations arising from asphyxia. Some of these patches existed on the abdomen, the right shoulder, and breast. *The head and face* were much swollen, excessively congested and livid; the tongue was swollen and protruding between the gums, as if bitten by them, and the papillæ were congested on the tip. The inferior eyelids were congested internally and somewhat ecchymosed; the left ear presented some slight abrasions; a few scratches were visible on the anterior inferior angle of the right parietal bone, and a few punctiform perforations on the left frontal eminence, and over the angle of the eye. The scalp did not present any appearances of *caput succedaneum*. *The posterior surface* of the body was marked by several superficial linear scratches, which, like those on the parietal bone, were mostly directed from head to feet; and, it subsequently was found, had been produced after death by pushing the body head foremost into a hedge of hawthorn or brambles. On the shoulders, however, from the anterior extremity of the spine of the left scapula to the posterior borders of the right scapula were four scratches, or dark indented lines, extending in a somewhat fourfold interrupted line, broken into three parts on the anterior surface of the right side of the neck, crossing midway between the sternum and larynx, and appearing continuous with those on the left shoulder and left side of the neck, posteriorly. These transverse marks appeared to have been produced by a fourfold ligature, such as of coarse twine, or deeply creased or folded tape; the whole mark was half an inch in breadth, and exhibited the appearance of portions of cutis pinched up, marked by congested bloodvessels; the more elevated ridges even vesicated, and the depressed sulci between these, were white and colourless. In some portions, the cuticle was abraded in the course of this transverse mark. The whole appearance of this mark of the ligature, led to the conclusion that it must have been applied *during life and some time previous* to death; whilst the numerous scratches on the dorsal surface of the body, were as evidently produced after death. The thoracic cavity was everywhere resonant upon percussion, and had the external appearances of an infant which had lived and respired freely. Upon reflecting the integuments of the scalp, numerous ecchymoses appeared, consisting of small clots of extravasated blood; some of these coagula were as large as split peas; others, mere punctiform spots; but one or two long narrow coagula were at least an inch and a half long. *The left platysma myoides* was very much congested, bruised, and infiltrated with blood, as were the two thyroid lobes and the œsophagus—corresponding with the course of the ligature. *The whole of the vessels of the brain* were congested and presented some few extravasations, and some fluid blood had escaped into the subarachnoid space. On opening the thorax, the *lungs* were found to fill both pleural cavities, were florid in colour, and had the appearance of having performed healthy respiration; the cells were everywhere filled with air, and even some emphysematous bullæ existed upon the margins of the right middle lobe, probably arising from violent attempts at expiration with a closed glottis or trachea. The lungs were removed, with the heart, thymus gland, and larynx attached, and were sufficiently inflated to float the whole of these viscera in water easily. On dividing the left lung, and forcibly expressing the air, it was further cut into twenty-two pieces, all of which floated on water. The *right lung* was, after firm compression, divided into twenty-six pieces, and every one floated readily on water. *The blood* was everywhere dark, venous, and fluid. *The whole body* was perfectly destitute, both inside and out, of any appearance of decomposition; it was perfectly fresh, and could not have been dead more than two or three days, as the thermometer stood at a maximum temperature of 71° Fahr.*

The mother, Elizabeth Pyne, a girl about 20 years of age, presented all the signs of having had a recent delivery; and the absence of milk in her mammæ, with the existence of lochial discharge, would probably fix the time at two or three days at the utmost.

The following conclusions are derivable from the facts obtained at the *post mortem* examination:—

I. That this mature female child had not been dead long, was fairly derivable from the absence of decomposition.

II. The condition of the mother pointed out the period of birth to have been within three days.

III. The condition of the left leg clearly indicated that the presentation had been a footling one, and, like most of these cases, had probably terminated in the birth of an asphyxiated child which recovered itself on exposure to air.

IV. The examination of the lungs equally demonstrated that the child had lived sufficiently long to perfect the respiratory act, and completely fill the air-cells of the lungs.

V. Although the umbilical cord showed no appearances of having been tied, no blood had been lost in consequence of such neglect, as the cord had probably been torn off or cut with a blunt knife. This conclusion was also borne out by the lividity of the whole surface of the body.

VI. The whole appearance of the child and the existing well defined marks of a fourfold ligature, demonstrated asphyxia to have been the mode of death; whilst the pressure of the umbilical cord would have been inadequate to have produced such a peculiarly well defined mark. It was more probably occasioned by some inelastic substance, such as a fourfold piece of cord or string.

VII. As the "footling birth" presupposes the entire expulsion of the body, before the act of respiration can commence, no doubt can exist as to the child having been entirely born alive, in a legal point of view.

VIII. The superficial linear scratches on the integuments were occasioned simultaneously in the hasty attempt at the disposal of the body after its death.

The above conclusions were rapidly arrived at during the examination of the body of the infant, and formed the subject of my evidence given before the coroner. Most of these inferences were confirmed and corroborated most satisfactorily by the evidence of the other witnesses subsequently examined by him in the progress of the case.

It was elicited, that the girl, Elizabeth Pyne, had been confined, early on the morning of the 26th of August, whilst in the erect position, and partially supported at a table by her own father. Immediately upon the birth of the infant, which fell suddenly to the ground, the mother fainted, and as no other parties were present at the time, *no direct* evidence could be obtained of the subsequent proceedings of the father, Isaac Pyne; as the newly made mother remained unconscious, until she found herself upstairs on the bed, and in the act of being undressed by her own father, who was also known to be the father and grandfather of the infant, into the cause of whose death the coroner and jury were called upon to inquire.

The next fact given in evidence was, that the child had been subsequently delivered by Isaac Pyne to another daughter, Eliza, for burial. This girl (a forward little minx of about 16 years of age,) having carried it in her apron to Crew's Hole, a place about a mile and a half distant, instead of burying it as directed, pushed it head foremost into a hawthorn hedge. The neighbours, having become suspicious of the existence of an infant, made a stir in the matter, which, after some delay, ended in the child being again produced, when its dark livid colour, and other marks of external injury, confirmed their suspicions of foul play, and led eventually to the inquest and charge of infanticide against the father, Isaac Pyne.

The evidence was sufficiently conclusive to the coroner and jury to warrant his committal for trial for the crime of wilful murder; and the prisoner has only recently stood before a jury of his country at the late winter assizes at Gloucester, as you may be aware.

In the course of my evidence I enforced the importance of these appearances of footling presentation as one of the principal proofs in our possession of the legal rights of the child; but the counsel for the defence thought proper to ridicule such proof as "a mere medical opinion and not a fact." He also attempted to raise a doubt in the minds of the jury, whether it were possible for the suspected party to commit such an act, whilst his hands were both occupied in the support of the mother; and urging further, that it was more likely that the mother herself destroyed the child, as although insensible, she might not have been incapable of using her hands to the injury of her child. He also dilated upon the greater probability that

* The thermometer kept at the Philosophical Institution in Park Street registered, during the three days in question—

	Minimum.	Maximum.
August 26th . .	48°	71°
„ 27th . .	51°	70°
„ 28th . .	51°	68°

the father would have used the knife, with which he had severed the cord, for the purpose of destroying the child, as it was at hand and ready for his use; and not have taken the trouble of seeking for a ligature to accomplish his purpose, had he been so inclined. The speculative and theoretical character of these assumptions did not strike the barrister or jury—the positive evidence of the body of the child itself was ignored.

The sneer of the counsel, perhaps, together with the well known reluctance of a jury to convict in capital cases, was enough to decide them in their verdict of acquittal, and the prisoner is again let loose on society, somewhat wiser than when he went there; for the judge distinctly pointed out to the whole court, that "a child only half born may be murdered in England with perfect impunity," and as incest is not a crime in the eyes of our honest lawyers, the prisoner will benefit by the information he has acquired to shape his course for the future; the present acquittal being an eternal triumph for him over the moral effect of public opinion.

With respect to the principal question herein discussed, we may observe that the value of the sign will of course depend upon the possibility or impossibility of a child born footling, performing any act of respiration whilst within the body of its parent.

As far as my own experience goes, (and I have seen a hundred cases in which the cephalic extremity of the child has been the last delivered), I have invariably found that the vaginal sphincter closes so tightly around the neck of the infant, that no act of breathing can occur until after the complete expulsion of the mouth; and the mouth once fairly born is so soon followed by the rest of the fœtal head, that no question of entirety or *non entirety* of the birth can depend upon such a possibility. The reason for this appears to be, that the occipito-mental diameter of the child is greater than the occipito-frontal; therefore the latter would offer less resistance to its expulsion from the mother. The proportion of dead children produced by labours of this description is very high (as we all know), arising from the very great difficulty of establishing the respiratory process, and the pressure upon the umbilical cord. In fact, one-third of these children are still born; and the remaining two-thirds, although produced alive, are almost dead from the same causes; the heart alone is not exhausted, but continues to beat in a feeble manner; the impulse of cold air upon the integuments of the face induces a respiratory effort, which is gradually followed by others, increasing steadily in power and frequency, until at length the child is restored from its partially asphyxiated condition.

In the majority of these cases, the practitioner in attendance is called on to produce artificial respiration, to assist the efforts of nature; and, in order to avoid such complications and danger, it has been proposed by certain practitioners to conduct air to the mouth of the child, whilst it is *in vaginâ;* and various methods have been devised of accomplishing this purpose; but of course these would be out of the question in all cases of spontaneous delivery, and which really form the majority of those instances in which the charge of infanticide is ever likely to arise; and in the case of any unqualified person, as in the present instance, assisting at the birth, the ignorance of the party would preclude any such efforts at resuscitation. I should, however, much like to formally put the question to the meeting:

Whether under any circumstances, in cases of spontaneous delivery, where the fœtal head is the last expelled, it is possible for the child to respire, with any portion of the head within the vaginal walls; and whether any case of respiration under such circumstances has occurred to any of the practitioners around me, *without* any effort on his part to facilitate the process?

With regard to the nature of the evidence, which the fœtal body may exhibit of such a mode of birth having happened to it, the signs may be thus enumerated:—

1. The negative evidence of any sign of the head having been the presenting part; consequently, it must show no appearance of *caput succedaneum.*

2. The appearance of congestion, ecchymosis and swelling of the leg, knee, breech, or other portion of the caudal extremity of the infant.

3. The absence of any evidence of the cord having been the cause of such enlargement of the inferior extremity.

4. The dissection of the leg, etc., would probably exhibit evidence of extravasated blood, in the muscles or cellular tissue.

The mere appearance of discoloration upon any of these parts would not be sufficient to establish the point; but the existence of *swelling in addition* would make the sign dependant upon an act of vitality, and consequently nearly of diagnostic value.

It does not appear to me possible for the umbilical cord to produce appearances such as these, without leaving distinct traces of its having acted as a ligature, and without, at the same time, showing that those appearances were not solely due to the mere presentation, which is of course a phenomenon, due to the combined effect of the powerful pressure of the uterine walls, and the dependant position, and therefore less supported condition of the capillaries of the presenting part.

The novelty and importance of the whole subject so deeply impressed me, and the responsibility attached to my evidence appeared so great, that, shortly after the inquest, I thought it but right to lay the whole matter before Professor Taylor, for his opinion and support; and I have now great pleasure in reading to you his kind and courteous reply, from which you will see that his opinion is not averse to the conclusions I have drawn. He has, further, since given me his full permission to publish this letter, for which I now beg publicly to express my kind acknowledgments and thanks.

"15, St. James's Terrace, Regent's Park, Sept. 6th, 1858.

"Dear Sir,—I am much obliged to you for sending me a report of the alleged case of infanticide, of which I had only seen a short notice in the *Times.*

"From the medical evidence, as it appears in the report of the Bristol paper, your conclusions appear to me to be fully borne out and justified by the facts. The mother, Elizabeth Pyne, may make some statements to the effect that she saw the child move or heard it cry after it was entirely born. If no such statement is made, then it will bring at once to an issue the evidence of entire live birth from the state of the lungs; while the appearances of the lungs clearly shew that the child had fully breathed, and that the breathing had probably taken place after it was entirely born. I shall be glad if you will inform me what is the *certain sign* of a *footling presentation,* or birth by the feet, on which you rely. If we are in a condition to prove that the head was born last in any given case (beyond all reasonable doubt), then it follows that, in every similar case where the lungs are distended with air, the child must have been entirely born alive, and the act of respiration performed subsequently. The important question, therefore, will be, in this case, whether the proof of birth by the feet is so conclusive as to satisfy a jury.

"I have no doubt you will be able to meet and answer all the absurd objections regarding the hydrostatic test, which barristers are accustomed to raise upon the authority of Dr. Hunter.

"I am, dear sir, yours faithfully,

"Alfred S. Taylor.

"Dr. W. B. Herapath, F.R.S."

CASE OF A LUNATIC SWALLOWING STONES.

By J. G. Davey, M.D., Northwoods.

[*Read December 16th,* 1858.]

An insane gentleman under my care was observed to be unwell, not in his ordinary state of bodily health. There was no such thing as obtaining any information from him, his mind not being in a state to express whatever ailed him. The attendant was desired to watch him closely, and an opportunity was sought to ascertain the characters of the renal and intestinal excretions. An examination of the latter of these revealed not only a very morbid state of the digestive apparatus, but also the presence of two or three small pebbles. The fact stated suggested the idea of more pebbles within the intestinal canal; and, with the view of getting rid of them, some aperient medicine was given, and repeated according to circumstances. The patient was put under the closest surveillance; and the evacuations were day by day examined, and the stones found therein removed and preserved. During six successive days, stones continued to pass *per anum.* The collected stones are now before you: the weight of them is one pound and a half, *minus* half an ounce. Seven and a half ounces were at one time passed at stool.

It may seem to us almost impossible for this large quantity of stones to be at one time within the stomach and intestines and the patient not to exhibit signs of acute abdominal disorder; Such was, however, the case. The possibility of such an occurrence it is well to remember. A medico-legal question might arise in connexion with stones of this quantity, or what not, in the *primæ viæ;* and the fact as stated is valuable, as offering a satisfactory reply to the same.

It may be asked, What prompted the patient to pick up those stones from the garden-walk, and swallow them? It is, I think, likely that he suffered from pain or uneasiness of some kind within the abdomen; and that this was to be referred to a state, more or less depraved, of the digestive apparatus. Bearing in mind the sympathies existing, both under circumstances of health and disease, between the brain and the digestive organs, we can easily understand why a temporary and abnormal condition of the latter named should, and particularly in a person insane, develope peculiar and morbid cerebral impressions, and under the operation of which the patient swallows stones or other foreign bodies. I need not remind you that we can hardly venture on the treatment of the disordered mind without having our attention well directed to the state of the stomach and bowels. I am well satisfied that insanity is very commonly symptomatic only, and caused by indigestion in some one or other of its Protean shapes. The majority of lunatics suffer from indigestion, either as a cause or a consequence of cerebro-mental disease.

The case thus briefly stated is, I believe, not without interest to us—a sufficient interest, I trust, to excuse my detaining you as I have.

Reviews and Notices.

Observations on the History, Pathology, and Treatment of Cancerous Diseases. By Oliver Pemberton, Surgeon to the Birmingham General Hospital. Part I. Melanosis. pp. 38. With four coloured plates. London: Churchill. 1858.

This is the first part of a series of observations on cancerous diseases generally, on which Mr. Pemberton is occupied: and, from the specimen that has come before us, we are led to believe that when the work is completed, it will be highly valuable.

"The subject of melanotic cancer", says Mr. Pemberton, "has claimed the attention of pathologists and surgeons during the past half century." And of the facts which have been thus accumulated, the author has, with great care and labour evidently, made a historical collection. At the end of his work, he has given tables showing, from recorded cases, the total duration of the disease from its first appearance to its termination; the duration of life after operation; and the period at which recurrence took place at the original seat of the disease, and at which secondary deposits manifested themselves externally.

In regard to treatment, Mr. Pemberton arrives at the following conclusion.

"Medicine has yet afforded no aid in the relief of melanosis beyond that which belongs to the requirements of cachectic conditions generally. The consideration of the facts contained in the cases I have detailed, leads to the conclusion, that the removal of the disease by the knife is followed by the same results as have hitherto attended the removal of medullary cancers. At present there are no data from which the average time can be ascertained, that patients have survived after the removal of melanotic growths by the knife, which lead us to presume that that proceeding is attended by any more successful results than it is in cases of encephaloid in the same organs. We are not, therefore, in a position to lay down any rule of treatment different from that which is now generally received by the profession in cases of malignant disease. I, however, hope, before long, to resume this part of the subject. In the meantime, I am desirous of calling the attention of all interested in this matter, to the greater comparative duration of life in those cases that I have related that were treated by caustic, and I deem it desirable, in the highest degree, that further trials should be made of it, either by itself, or in conjunction with the knife, in the treatment of this most malignant disease." (p. 38.)

The gratification we have derived from the perusal of Mr. Pemberton's remarks on Melanosis, leads us to look forward with hope and pleasure to the appearance of his essay on Encephaloid Cancer, which is promised to be the second in the series of his observations.

Hooper's Physician's Vade-Mecum: or a Manual of the Principles and Practice of Physic; with an Outline of General Pathology, Therapeutics, and Hygiene. Sixth Edition, considerably enlarged and improved. By William Augustus Guy, M.B.Cantab., Fellow of the Royal College of Physicians; Professor of Forensic Medicine, King's College, London; etc. Pp. 696. London: Renshaw. 1858.

It is not necessary for us to do more than mention the appearance of a new edition of the *Physician's Vade-Mecum*, under the able management of Dr. Guy.

An Expository Lexicon of the Terms, Ancient and Modern, in Medical and General Science: including a complete Medical and Medico-legal Vocabulary, and presenting the correct Pronunciation, Derivation, Definition, and Application of the Names, Analogues, Synonymes, and Phrases (in English, Latin, Greek, French, and German) connected with Medicine, and employed in Various Collateral Sciences. By R. G. Mayne, M.D. Part viii. London: Churchill. 1858.

This elaborate and useful work is advancing steadily towards completion. The part before us extends to the word "Strobiliferus." It possesses the same evidences of hard work and accuracy on the part of Dr. Mayne as have characterised the former parts of his *Expository Lexicon*.

British Medical Journal.

SATURDAY, JANUARY 15th, 1859.

THE OFFENSIVE "ORDER" AT THE TAUNTON HOSPITAL.

The governors of the Taunton and Somerset Hospital have had a great triumph. They have determined to protect their medical officers against any possible imputation of blame. Notwithstanding the urgent entreaties of those gentlemen that such kindness should not be thrust upon them, protection they are in future to have! We are not accustomed to find country squires so solicitous respecting the fair fame of the doctors; and consequently we are not surprised to find that the protected individuals would much rather be left alone. Blame they are prepared to bear, if any fault can be found with them; but they very properly decline to accede to "protection" in the form of a new regulation, which is nothing less than a standing suspicion against their honesty and integrity. If the governors cannot trust them, they will not submit to time themselves for the purpose of satisfying the impertinent doubts of gentlemen who "gratefully accept their gratuitous services."

Dr. Woodforde, in an able address in favour of rescinding the obnoxious rule, that "the date and time of each attendance be entered in a book prepared for the purpose", brought forward, in support of his argument, the replies he had received to a letter which he, Dr. Burridge, and Mr. Welch, had addressed to each of seventy-nine hospitals in the United Kingdom, and which letter was published in this Journal for December 25th, 1858. Of these replies, fifty-four stated that no such rule had ever been proposed in the respective hospitals; an unsuccessful attempt had been made to carry out the rule in four; in two, the rule had existed for a time and had been rescinded; it was in operation in five; while no replies had been received from fourteen hospitals.

Our readers would think that this overwhelming evidence in favour of rescinding the obnoxious rule would have been duly weighed by the governors; but they know little of the stuff Somerset squires are made of. To have budged a step in the way of setting themselves right with their outraged medical officers, would have been, as one of them observed, "to stultify themselves"—a sacrifice too awful for us to contemplate! Accordingly, the governors refused to budge; and, as a natural result, Drs. Burridge and Woodforde, and Mr. Welch, are no longer officers of theirs.

Of all the miserable shams which flourish in this world, the sham for the sake of which these governors have turned out gentlemen who have served them well is the most flagrant. No word has been uttered against the honourable conduct of the medical officers of the Taunton and Somerset Hospital; no imputation has been directed against them. On the contrary, they are dismissed "with the warmest thanks of the governors, and the public generally, for the zealous, assiduous, and able manner in which they have discharged their duties since their connection with the Hospital." If such was the opinion of the governors, as to the manner in which their medical officers have behaved, what possible excuse could they have for passing a resolution which they know must prove offensive?

And what do they expect to gain by this sham? They force their medical officers to sign their names and time of attendance in a book, but have they, by so doing, advanced one step towards proving their more earnest attention to their patients? If any medical officer is inclined to shirk his duties, will this petty entry have any possible effect in holding him to them?

Each day the entry will be a source of irritation to the high-minded men who sign it; for it will be a silent intimation to them that their good faith is doubted. Half confidences, as the Reverend W. A. Jones very justly observed in the discussion, are injurious both to those who give and to those who receive them; and we predict that there will be no more peace in the Taunton and Somerset Hospital until the Governors have rescinded their very objectionable order.

An attempt was made by Mr. Badcock to accommodate matters, by moving that the order should be made prospective, and not retrospective; that it should not affect the present officers of the hospital, but only their successors. We are glad to find, however, that this attempt at postponing the difficulty was defeated. If the retiring medical officers decline to receive so gross an insult, we scarcely think that they should acquiesce in its being offered to those who may wish to succeed them. They may rest assured that the obnoxious order will share the fate of similar ones previously made in other hospitals; in which case they will return to their posts with the proud satisfaction that their protest was made on the behalf of the profession, irrespective of their own personal interests.

Meanwhile, this unjust move on the part of the governors should lead medical men to consider whether, in justice to themselves, they should continue to give their services gratuitously to hospitals. If, instead of honour and respect, they gain nothing for their labours but insult and misconstruction, we say they have no right to make the sacrifice; and we should like to know what all governors would say if the profession were, only for one week, to prove true to itself, and *strike* from all hospital work. At all events, we trust that no medical man will be found to fill the posts rendered vacant by the extraordinary conduct of the Taunton Governors; and, if any do come forward, they must expect to be marked as black sheep by those who have the power and the resolution to resent the tyranny of even such local magnates as the Governors of the Taunton and Somerset Hospital.

THE WEEK.

The "scheme" of the President of the Poor-law Board is likely to excite a good deal of attention among the Poor-law medical officers. This day's Journal contains several letters on the subject, mostly deprecatory of several of the proposed alterations: and we have been requested to publish the following note from Mr. Griffin.

"Mr. Griffin presents his compliments to the Poor-law Medical Officers, and hopes they will not reply to the 'Scheme' of the President of the Poor-law Board until they have received the re-amended plan, now in preparation, in which important changes will be made, founded upon the suggestions already received.

"12, Royal Terrace, Weymouth, 12th Jan., 1859."

In addition to the meeting at Chippenham, of which the resolutions are given at page 55, we learn that a conference of the medical officers of the metropolitan unions was held at the Freemasons' Tavern, at eight p.m., last Thursday; and that a meeting of the profession in Norwich and its neighbourhood is intended to be held on Wednesday next, under the presidency of the senior physician of the Norfolk and Norwich Hospital, to take Mr. Estcourt's proposed plan into consideration. We would earnestly press on the profession in general the importance of doing all in their power to promote Poor-law medical reform, now that the President of the Poor-law Board invites the opinion of those who are interested in the subject of medical relief.

The formation of Medical Registration Associations is proceeding steadily, and much good may be expected from their labours. Besides those the institution of which has been already chronicled in the Journal, two others have been formed, at Bedford and Chichester. The resolutions which were passed at these places have been forwarded to us; but we have been obliged to defer their insertion, on account of the length of the report of the proceedings at the Taunton and Somerset Hospital. We would again urge on our readers to form registration associations; and would direct their careful attention to the abstract of the report of the Committee of the London Medical Registration Association, which they will find in this day's number.

Association Intelligence.

YORKSHIRE BRANCH.

A Special General Meeting of the above Branch will be held at the Medical School, Leeds, on Wednesday, the 19th instant, at half-past Two p.m.,

"To consider if any, and what steps, shall be taken to secure efficient Registration, under the new Medical Act."

George Hornby, *Hon. Sec.*

York, January 10th, 1859.

MEDICAL REGISTRATION.

NEW REGISTRATION OFFICE.

The Medical Registrar presents his compliments to the Editor of the British Medical Journal, and begs to inform him that an office for the business of Registration is now opened at 32, Soho Square, where all letters for the Registrar or for the Medical Council should be addressed.

Office hours from 11 to 4.

January 10th, 1859.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Monday, December 20th, 1858.

Present:—Dr. Smith, in the Chair; Drs. Apjohn, Leet, Williams, Corrigan, and Stokes; Dr. Maunsell, *Registrar*.

The minutes of last meeting were approved and signed.

Several claims for Registration of Diplomas obtained from Foreign Universities having been considered, it was resolved—

"That they should be reserved for the General Council, under the provisions of the forty-sixth section of the Medical Act."

Claims for Registration from persons acting as Medical Officers of Public Institutions, without qualifications, were also reserved for the General Council, in accordance with the same provisions.

In reply to inquiries, the Secretary was directed to state, that the Branch Council consider that qualifications that may be obtained after the 1st of January, 1859, may be registered by persons whose names already appear upon the Register, on payment of a fee of five shillings for each such Registration in addition.

Ordered—"That a notice stating the names of the several bodies from which certified lists have been obtained be published once in the *Advertiser* and six other journals."

Mr. T. Roney was then appointed Clerk, at a salary of £80 a-year, the engagement to be terminable at any time at a month's notice. The hours of attendance to be from ten till four daily.

The Council then adjourned till Monday, 3rd January.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, December 14th, 1858.

Sir Charles Locock, Bart., M.D., President, in the Chair.

CASE OF EXCISION OF THE HEAD OF THE HUMERUS.

BY JOHN BIRKETT, ESQ.

A man, aged 57, came under the care of Mr. Birkett in July 1855, on account of acute disease of the right shoulder joint. He was cachectic and much reduced, and suffered intense pain. Two years and a few months before, he had the right shoulder injured by being thrust violently against a wall. The clavicle was fractured; inflammation and suppuration of the shoulder-joint ensued, and abscesses and sinuses were developed. From local indications, it was quite clear that diseased bone existed; and Mr. Birkett, being unable to feel the dead bone with a probe, exposed the head of the humerus, and sawed it off. There was a piece of necrosed bone in the head, but all the other parts and the glenoid cavity were healthy. The wound healed rapidly, although sinuses formed and remained open for some months after. The health of the patient rapidly improved, and all pain subsided. In about eighteen months after the operation, the sinuses were all healed; and for very nearly the last two years, he has been able to use the limb in the varied occupation of a farm labourer.

The details of another case were given, in which Mr. Aston Key excised the head of the humerus from a healthy man, aged 34, in January 1849. The bone, especially the cancellous tissue, was affected with scrofulous degeneration. The case was highly successful, and the man has been actively engaged now for many years as a workman in an engineer's factory. The head of the bone was shown, together with a drawing illustrating the condition of the upper extemity seven years after the operation.

DISARTICULATION OF THE SCAPULA FROM THE SHOULDER-JOINT, WITH REMOVAL OF THE ACROMIAL END OF THE CLAVICLE.

BY GEORGE MATTHEW JONES, ESQ.

[*Communicated by* F. C. Skey, Esq., F.R.S.]

The patient, a girl aged 14½ years, had enjoyed good health until December 1857, when she first felt pain at the top of the left shoulder, ascribed to the exertion of carrying a heavy child; severe inflammation about the shoulder followed, being most intense over the upper part of the humerus; an abscess formed, and burst spontaneously. The constitution suffered severely. When Mr. Jones first saw the patient, there were four large fistulous openings over the left shoulder; two communicating with the clavicle, one with the head of the humerus, one with the glenoid cavity, and one with the dorsum of the scapula, bare bone being easily felt in each. Several small fistulæ, which did not apparently lead to necrosed bone, existed in the scapular region, and yielded an offensive discharge. The textures covering the shoulder were generally thickened and puffy, and tender to the touch. The patient's health and strength were failing rapidly; and on the 19th of May, 1858, the patient having been placed under chloroform, the operation was performed. An incision was first made along the whole extent of the spine of the scapula, and carried an inch beyond towards the mesial line of the back; another incision was then made to meet this along the upper border of the bone down to its angle. The integuments were raised by careful dissection; and by this process the whole bone was fairly exposed, its periosteal investment being everywhere found so thickened, pulpy, and softened, as to yield easily to pressure of the finger. The acromial end of the clavicle being found to be softened and altered by disease, an inch of the bone was removed. The posterior scapular artery was the only vessel which needed a ligature; several small ones were closed by torsion. Sutures and strips of plaster were used to bring the edges of the wound together, the deeper cavities, including the glenoid fossa, being plugged with lint. The operation occupied three quarters of an hour.

On examination, the scupula was found so extensively diseased that its characters were almost destroyed. The glenoid surface and neck were entirely removed, and no vestige of the spine remained, its position being occupied by new, irregularly-deposited osseous matter, at the base of which lay a deep chasm, that extended three-fourths across the body of the bone. The inferior angle of the bone was the seat of extensive caries. The body of the bone presented two deep perforations, and all these different cavities contained sequestra of dead bone, while other portions of the scapula were in different stages of exfoliation. There was also a large amount of new osseous matter deposited in different situations about the bone. The head of the humerus was found healthy, and covered with its natural cartilage.

With the exception of a very critical condition during the first two or three days, which was ascribed to the action of the chloroform, the patient made a good recovery. The wound healed entirely by granulation, the head of the humerus being exposed for some time. She was unsparingly supplied with nutritious diet and stimulants. She left her bed and walked in the garden in three weeks and as many days, and at the end of a month she could sew without pain or difficulty. At present she can raise her arm twelve inches from her side, and can support it horizontally from the body, with very slight exertion; she can raise the hand to the opposite shoulder or to the mouth with ease, but not to the top of the head; she can put her arms behind her, can lift a large and heavy hospital register book, and can scrub the floor or make her bed. There is a decided falling of the shoulder, but by no means amounting to deformity. There is no wasting of muscular substance on the chest or back, and when dressed it would not be perceived that any serious operation had been performed. The deltoid is fully developed. The head of the humerus is easily felt moving freely in its new bed, and not the slightest pain is felt on any amount of motion. Up to this present time, the range of this motion has steadily increased, and, with the exception of the movements for which the scapular organ of the deltoid

is indispensable, it may be confidently expected to increase still further, and nearly to equal that of the other arm.

The author concluded his communication by observing that he considered there was much less danger from hæmorrhage in the removal of the entire bone, than, as in Mr. Liston's case, in the excision of only a portion; that he should prefer the former operation in any future instance, and he trusted that the relation of this successful case would go far to remove many prejudices now existing against this operation.

Mr. Fergusson regarded with interest both the papers before the Society, but particularly the case related by Mr. Jones. It was too much the fashion to report operations as successful when the history of the case extended only a day beyond the operative proceeding. In the case of Mr. Birkett, results after a lapse of years were given. The successful issue of cases of resection of the head of the humerus was creditable to modern surgery, the patient being relieved from suffering, and retaining the use of the extremity. Resection of the scapula was a more important operation from its rare occurrence. He believed that Mr. Jones's case was a second authentic one brought before the profession of this country; and it appeared to be the result of carrying out a principle laid down some few weeks since by Mr. Syme in that Society. It was true that the scapula had been frequently removed, but not until after amputation of the superior extremity. Mr. Jones's and Mr. Syme's cases differed in many particulars. Mr. Jones's patient had the very great advantage of having youth on her side, and it was a case of simple necrosis. In Mr. Syme's case there was a tumour in the bone, either an aneurism or a very vascular medullary sarcoma. Mr. Jones's case afforded a good example to follow. Mr. Liston some years since suggested the removal of the scapula after amputation of the upper extremity, but he could find no one who would countenance so formidable a proceeding. In a case in which he (Mr. Fergusson) had removed the scapula after amputation of the upper extremity, he believed that if the plan followed by Mr. Jones had been resorted to, the patient might have had a useful arm.

Mr. Ure suggested that by making a straight incision between tubercles of the humerus, the tendon of the biceps would be avoided, and that this proceeding would be preferable to the V-shaped incision resorted to by Mr. Birkett.

Mr. Holmes Coote had performed resection of the shoulder by a straight incision; and the only difficulty he had experienced in this proceeding, was in the separation of the tendon of the sub-scapularis muscle. Except in gun-shot wounds, however, the tendon of the biceps was rarely to be found, it having disappeared or become reduced to a fibrous cord in most cases of disease. His experience was rather in favour of the operation of resection of the shoulder-joint, the cause of the rarity of which consisted in the fact that there was often in these cases osseous anchylosis of the head of the humerus to the glenoid cavity. He recollected Mr. Skey removing the scapula some thirty years since at St. Bartholomew's Hospital.

Mr. Skey observed, that highly creditable as was Mr. Birkett's case to him, there were precedents for it; Mr. Jones had very few precedents for the proceeding which he adopted, and in which great accuracy of diagnosis was conjoined with the most skilful application of the operative art. Mr. Coote was not quite correct in stating his (Mr. Skey's) case as one of removal of the scapula. The patient was a man about forty years of age, who suffered from a fibrous tumour three-fourths of the size of an ordinary hat, which was situated at the base of the scapula. He (Mr. Skey) never saw hæmorrhage more frightful than in this case, and which was only arrested by the immediate assistance of several of his colleagues. All but the glenoid cavity of the scapula was removed, and the man recovered so far as to be able to use his arm; but he eventually fell a victim to the return of the disease. In Mr. Jones's case, which he had seen, and which was one of the greatest interest, the girl was able to use her arm for all ordinary and most of the extraordinary requirements of daily occupation. He (Mr. Skey) believed that the patient would, however, never regain the power of elevating the arm, inasmuch as the bones forming the attachment for the muscles which raise the arm had been removed, in addition to which three-fourths of the trapezius, four-fifths of the deltoid, and all the super-spinatus, had been taken away. The patient, however, could bring the biceps fully into action, but she could not rotate the arm either inwards or outwards. She could elevate the arms to an angle of about forty-five degrees from the body.

Mr. Luke had some years since removed the greater portion of the scapula of a woman for supposed malignant tumour. She had since been married twice, had had several children, and her arm was nearly equal to the other in power and usefulness.

Mr. Birkett had employed the V kind of incision in his case, in consequence of the presence of fistulous openings, which communicated with the bone. In any future case he might probably be disposed to make a single incision, as this proceeding would involve less destruction of the deltoid muscle, and there might consequently be a better use of the extremity. With regard to the tendon of the biceps in this operation, he believed that it was so completely altered in its position, that it would not come in the way of the knife. In his own case, a portion of the glenoid cavity was entirely denuded of cartilage, and he was not certain that he should not have to remove a portion of that cavity. This condition kept up the mischief for some time, but the parts eventually healed, probably from some exfoliation having taken place.

HARVEIAN SOCIETY OF LONDON.

Annual Meeting, January 6th, 1859.

G. Hamilton Roe, M.D., President, in the Chair.

IMPACTION OF A CHERRY-STONE IN THE LARYNX. BY G. HEWITT, M.D.

Dr. Graily Hewitt related the case of a boy at the Samaritan Hospital, who had a clangy cough, attended with much resonance. He was ordered ipecacuanha wine, and, on his next appearance, was said to have vomited a cherry-stone, with some pus. It was then learnt for the first time that he had swallowed a cherry-stone a fortnight previously. The case was interesting, as shewing the tolerance of the larynx of the cherry-stone. The symptoms subsided as soon as the stone was got rid of.

STRYCHNINE IN CHOREA. BY H. W. FULLER, M.D.

Dr. Fuller asked if members had used strychnine in chorea. He had met with a gentleman (Mr. Pinching) who had used this alkaloid, in doses from the sixteenth to the eighth of a grain, three times a day; and the case was cured. Dr. Fuller had employed the same treatment in three cases at St. George's Hospital: two of these were cured in a fortnight, and in the third it entirely failed.

Dr. Handfield Jones had used it himself successfully in one case, and with no benefit in another. He believed that Trousseau had used it in Paris with marked benefit. It was beneficial where tone was required, but contraindicated where there was febrile action.

SEDATIVE INJECTIONS INTO THE CELLULAR TISSUE. BY H. W. FULLER, M.D.

Dr. Fuller mentioned the injection of morphine, etc., into the cellular tissue for the relief of local pain. By injecting frequently in one spot, inflammation and suppuration sometimes ensued; but, by injecting at distant parts of the body, the same relief was obtained without the formation of matter. A case of delirium tremens was cured by two injections of half a grain of morphine, shewing the advantage over its administration by the mouth.

Mr. Henry Thompson had used these injections into the cellular tissue without any benefit.

Dr. Handfield Jones found benefit from it in two distinct instances, but never saw a case of neuralgia cured by it. In all cases, the injection had caused disturbance of the stomach.

Mr. Weedon Cooke wished to ask what advantage this method possessed over the endermic mode of administering morphine and other alkaloids.

Dr. Fuller thought that its readiness, painlessness, and quickness of action, gave it the advantage.

NEW OFFICERS.

The following gentlemen have been elected officers of the Society for the year 1859:—*President:* E. Hart Vinen, M.D., F.L.S. *Vice-Presidents:* Graily Hewitt, M.D.; J. E. Pollock, M.D.; Henry Thompson, Esq.; Haynes Walton, Esq. *Treasurer:* Henry W. Fuller, M.D. *Honorary Secretaries:* Weedon Cooke, Esq.; Charles H. Stewart, Esq. *Council:* William Adams, Esq.; H. A. Aldred, M.D.; W. H. Allchin, M.B.; Thos. Ballard, Esq.; I. B. Brown, Esq.; Walter Bryant, Esq.; R. H. Goolden, M.D.; Headlam Greenhow, M.D.; George Reece, Esq.; Burdon Sanderson, M.D.; W. Wadham, M.D.; Charles Webber, Esq.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

Letter from Henry Hare, M.D.

Sir,—I was astonished on finding, in the Journal of the 8th instant, a solitary letter on the subject of Poor-law medical reform. Considering the great change that will be effected if the scheme for a suggested new arrangement of medical relief by the President of the Poor-law Board be carried out, I imagined that your pages would have been inundated with communications on the topic.

In the sentiments expressed on the subject by Mr. West, in the Journal of the 8th, I entirely concur; and I would add further, that, if the system of payment per case be carried out, the poor and the medical officers will, instead of being gainers by the new arrangement, be losers. I believe that great difficulty will be experienced by the poor in procuring orders; and that the endeavour will be made to drive them into medical clubs. But those who know the agricultural districts, and the present rate of wages (and the small farmer cannot afford to pay higher, at the price of wheat, as it now stands), are well aware that the poor labourer has nothing to spare for medical relief. Another grave objection to the per case system appears to me that, if it be adopted, the interest of the medical man will be to obtain as many orders for attendance as he can procure: in short, the more the cases, the more his remuneration. Now, I think his interest and endeavours ought to be to prevent sickness among the poor. Surely Boards of Health, the public, and common sense, would say that this should be the legitimate mission of the enlightened medical practitioner of the present day. I much fear that the agitation which has been got up by Mr. Griffin (influenced, no doubt, with the best motives) will, if the proposed new arrangement be carried out, instead of being beneficial to the profession, be detrimental to it and to the poor. Many of the surgeons of Poor-law unions have been accused of apathy and indifference, because they did not support Mr. Griffin with the sinews of war. I believe that they were not apathetic, but that they clearly foresaw that no good to themselves, the profession, or the poor, would result from joining in his agitation, or helping it on in any way. As far as I can judge, Mr. Griffin seems to wish for a uniform system to be carried out through all the union districts. Now believe me, sir, you can no more have that than you can uniformity in religion, except by compulsion; and then it will prove unnatural, and eventually be cast aside as impracticable. What is suited to one locality will prove injurious to another. I hope we shall not find one system forced, *nolens volens*, upon us, the union surgeons. I am, etc., H. Hare.

Great Baddow, near Chelmsford, January 10th, 1859.

POOR-LAW MEDICAL REFORM.

Letter from C. C. Wallis, Esq.

Sir,—As in your notice of "The Heads of a Scheme for a New Arrangement of Medical Relief" you commend the careful attention of the Poor-Law Medical Officers to Mr. Griffin's letter on the subject, and thereby tacitly approve of his suggestions, I trust you will allow me (as a medical officer to a considerable district ever since the formation of the Union,) to record my opinion of the utter worthlessness of the scheme, both as proposed and amended.

As far as my experience goes, I should say an entire change of system was never required, but only an augmentation of salary on the present basis, and a clearer definition of the class of poor entitled to claim medical relief. I have never yet joined any agitation for these changes, because the plans that have been from time to time suggested, appeared to me so crude and impracticable, that it seemed better "to endure the ills we have than to fly to those we know not of." The issue of Mr. Griffin's agitation shows the wisdom of this reserve; for if his amendments should ever be carried, our position will be worse instead of better, and we shall have good cause to cry, "save me from my friends." The most objectionable clauses in the proposed scheme appear to me to be the 1st, 3rd, and 10th; but I agree with Mr. West, whose sensible letter appeared in last week's Journal, that the whole affair must be remodelled if it is to be anything but oppressive and unjust to those whom it was intended to benefit.

I have reason to believe that a large majority of union surgeons would indorse the opinions I have advanced; and, if I am right in this belief, I earnestly call on them to record their views both in this Journal and in their communication to Mr. Estcourt; unless they are prepared, after having "borne the burden and heat of the day," to see their appointments, which had been guaranteed them for life, thrown open to competition just when there is a desire on the part of the public and Poor-Law Board to requite their services better than has yet been done. I am, etc.,

C. C. Wallis.

Castle Cary, January 11th, 1859.

POOR-LAW MEDICAL REFORM.

Letter from J. H. Gramshaw, Esq.

Sir,—I shall be obliged by the insertion of the accompanying letter in the British Medical Journal. I am, etc.

J. H. Gramshaw.

To the Poor-law Medical Officers of England and Wales.

Gentlemen,—We have all, no doubt, by this time received the programme of a scheme for a new arrangement of medical relief, and also Mr. Griffin's suggestions and amendments to the same. Such an arrangement, it appears to me, would make the surgeon more dependent on the caprice of his Union patients than on that of his private ones: for the latter, when of the lower class, do stand in some degree in fear of his bill, and when of the higher, are generally able to judge of his skill and attention; whereas the pauper would often feel neither dread nor respect, and would be induced to make his selection, in towns at least, by many circumstances quite unconnected with the skill, and galling to the feelings of every right thinking medical man. Those who could afford time to pay the most visits, although often quite unnecessary, and who would order or recommend the most extras, and those who were most taken by the hand by district visitors (themselves very often unable to judge of medical skill), would be sure to find most patients and the heaviest purse. Scarcely an union exists where, if a complaint is made by a pauper of neglect on the part of the medical officer, the guardians are not always ready to listen and to compel redress.

There are three Poor-law medical men resident in this town. One, the North Aylesford officer, has held his appointment sixteen years; I have held mine about thirteen; and the Gravesend officer has held his nearly as long. Surely it is unjust, when we apply to have our salaries more equably proportioned to our labours, to have these cut up and distributed amongst a greater number of medical men without any complaint having been made of the way in which we have performed our duties. The total amount of salary given is to be increased undoubtedly; but it is so partitioned that, as individuals, we shall actually be losers by the change. We none of us complain of the amount of work we do, though that is frequently very great. We only ask for proportionate remuneration and consideration. The only alterations in the existing Poor-law medical arrangements which appear to me to be urgently called for are the following:—

1. To pay medical officers better and more uniformly, 5*s*. per case (which is for about twenty-eight days attendance), this sum to vary a little according to circumstances, as when the patients are very close together.
2. To give us a more extended list of extras.
3. To pay us a mileage.

There have been several meetings of Poor-law medical men in London. Now, when we have before us the "Heads of the Proposed Scheme of Alteration," a consideration of them at another such meeting seems most urgently called for. Let Mr. Griffin, then, in his capacity of chairman, call us again together, without delay, that we may consult on the answers to be returned to Mr. Estcourt. Your obedient servant,

J. H. Gramshaw,
Medical Officer to the Milton division of the Gravesend and Milton Union.

P.S.—This letter was written before I saw Mr. West's in the British Medical Journal. He will see that my feelings on the subject are perfectly in unison with his own. I think the third clause, making us more completely under the thumb of paupers than of private patients, the most objectionable of all. One thing more occurs to me. How can we be justly called upon to assist any more with money a movement which is to deprive far the larger portion of us of our independent position, and a part of our salaries? J. H. G.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Beaman. On November 27th, 1858, at Hoshungabad, the wife of Ardern Hulme Beaman, Esq., Surgeon 28th Regiment Madras Native Infantry, of a son.

Cooper. On January 6th, at 19, Berkeley Square, the wife of W. White Cooper, Esq., Surgeon, of a son.

Crossman. On January 11th, at Whites Hill, Hambrook, near Bristol, the wife of *Edward Crossman, Esq., Surgeon, of a son.

Diplock. On January 10th, at 1, Sydney Street, Fulham Road, the wife of Thomas B. Diplock, M.D., of a son.

Godfrey. On January 4th, at Carlton House, Enfield, the wife of Benjamin Godfrey, M.D., of a daughter.

Haldane. On January 6th, at 5, Shandwich Place, Edinburgh, the wife of D. Rutherford Haldane, M.D., of a daughter.

MARRIAGES.

Allen—Maddy. *Allen, Richard, Esq., Surgeon, of Didsbury, near Manchester, to Catherine, eldest daughter of the late William Maddy, Esq., of Fairfield Mount, near Liverpool, at St. Stephen's Church, Kirkstall, on January 5th.

Anderson—Hutchinson. Anderson, Thomas Goldsborough, Esq., of Carshalton, to Celia, daughter of Francis C. Hutchinson, M.D., of Brisco, Carlisle, at Upperby, Carlisle, on January 5th.

Carr—Knaggs. Carr, John Rodham, LL.D., barrister-at-law, Durham, to Ellen, daughter of John Knaggs, Esq., of Euston Square, London, at St. Pancras Church, on Jan. 6.

Harris—Cooper. Harris, Henry, Esq., Surgeon, of Park Street, Grosvenor Square, to Caroline Augusta, youngest daughter of the late William Cooper, Esq., of Eaton Square, at St. George's, Hanover Square, on January 8th.

Kempthorne—Thompson. Kempthorne, the Rev. John, M.A., of St. Paul's School, to Eliza Gertrude, eldest daughter of Theophilus Thompson, M.D., F.R.S., at St. George's, Bloomsbury, on January 4th.

Lucy—Swain. Lucy, William, Esq., Surgeon, of Fenny Stratford, to Kate, younger daughter of the late Captain Swain, of Sea Mills, near Bristol, on January 6th.

Muriel—Lynn. Muriel, William George, Esq., Surgeon, of Wickham Market, to Susan, elder daughter of the late Edward Lynn, Esq., of Runcorn, Cheshire, at Wickham Market, on January 8th.

Reynolds—Price. Reynolds, Robert, Esq., Surgeon, of Helions Bumpstead, Essex, to Martha Mary, only child of Joseph Price, Esq., of Mile End, at St. Dunstan's, Stepney, on January 6th.

Simpson—Sibbald. Simpson, B., M.D., Bengal Medical Service, to Agnes, eldest daughter of the late Brigadier Sibbald, C.B., Bengal Army, at Trinity Church, Upper Chelsea, on January 8th.

Steggall—Kenwrick. Steggall, Charles, Mus. Doc. Cantab., of Grafton Square, Clapham, to Henrietta, youngest daughter of George Kenwrick, Esq., Surgeon, of Halesowen, at Christ Church, Marylebone, on January 4th.

Tyrrell—Wrench. Tyrrell, Walter, Esq., Surgeon, of St. Helen's Place, Bishopsgate, to Sarah, eldest daughter of the Rev. Thomas W. Wrench, rector of St. Michael's, Cornhill, at All Saints', Norwood, on January 7th.

DEATHS.

Archer. On January 4th, at Kentish Town, aged 2½, George Lewis, son of Lewis Hitchin Archer, Esq., Surgeon.

Clack, William G. S., Esq., Surgeon, at Eton, on January 5th.

Clarke, Frederick, Esq., Surgeon 2nd Dépôt Battalion, Fermoy, at Cork, aged 33, on January 3rd.

Jarman, Thomas, Esq., Surgeon, late of Holbrook, at Ipswich, of aneurism of the heart, aged 40, on Nov. 26th, 1858.

Pickering, William Boulton, Esq., Surgeon, at Denton, of disease of the heart, aged 43, on December 18th, 1858.

Ray. On December 29th, 1858, at Dulwich, aged 6, Jessie Emma, youngest daughter of *Edward Ray, Esq., Surgeon.

Young. On December 6th, 1858, at Marchfield, Barbados, Marianne Charlotte, wife of Dr. Young.

HEALTH OF LONDON:—WEEK ENDING JANUARY 8TH, 1859.

[From the Registrar-General's Report.]

In the week that ended last Saturday, January 8th, the number of deaths registered in London was 1338. In the ten years 1849–58 the average number of deaths in the weeks corresponding with last week was 1227; but as the deaths returned for last week occurred in a population which has increased, they should be compared with the average after the latter is raised in proportion to the increase, a correction which will make it 1349. The actual number of deaths in last week approximates very closely to the result obtained by calculation.

The deaths from zymotic diseases, which in the previous week were 400, decreased last week to 317; but they are still rather above the corrected average, which is 299. Measles declined from 53 to 43, scarlatina from 135 to 119, whooping-cough from 61 to 45, typhus from 52 to 31. Last week there were 15 deaths from small-pox. There were 2 from intemperance, besides 4 in which the cause is returned as delirium tremens. A woman died from destitution in the Westminster workhouse, to which she had been removed before her death.

Last week the births of 886 boys and 852 girls, in all 1738 children, were registered in London. In the ten corresponding weeks of the years 1849-58 the average number was 1561.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·421 in. The mean daily reading was above 30 in. from December 31st to January 8th, both days included, and last Saturday it was so high as 30·526 in. The barometrical readings varied from 30·25 in. to 30.56 in. The mean temperature of the air in the week was 35·4°, which is 0·6° below the average of the same week in 43 years. The thermometer in the shade attained its *highest* point 43·5° on Tuesday; and fell to its *lowest* 29° on Saturday. The range of the week was therefore 14·5°. The mean daily range was 7·4°. The difference between the mean dew-point temperature and air temperature was 1·8°. The mean degree of humidity of the air was 94; on Sunday and Tuesday the humidity reached 100 (or complete saturation). The mean temperature of the water of the Thames was 40·8°. On the last four days the wind blew from the north-east. The amount of rain in the week was only 0·04 in. Fogs were prevalent.

HEALTH OF LONDON DURING THE QUARTER.

In the thirteen weeks that ended January 1st the mortality in London was high. The deaths registered in that period rose to 17,688, whereas in the four corresponding autumnal periods of 1854-7 they ranged from 13,840 to 17,238, the latter number having been in part the result of cholera and scarlatina in 1854. The excess of mortality in the quarter that has just passed arose from two causes: scarlatina (including diphtheria) which has been extremely prevalent throughout the period, and in the earlier part of it carried off about 160 persons in a week; and bronchial complaints which became unusually fatal towards the end of November, the air at that time having been remarkably cold for the season. Though the mean temperature for the quarter, 44°, was high, the early severity of the weather and its quick transitions proved fatal to young and infirm constitutions. Pulmonary diseases, which include chiefly bronchitis and pneumonia, carried off 4,075 persons; in the four corresponding quarters the numbers ranged from 2,510 to 3,732. Scarlatina was fatal in 1,814 cases, 70 of which occurred in Westminster, 141 in Marylebone (59 of these in the sub-district of Christchurch), 206 in Pancras, 84 in Islington, 88 in Poplar, 110 in Lambeth. These are some of the parts in which it was rife.

Of 471 *violent* deaths, 396 were by accident or negligence, 12 by murder or manslaughter, 63 by suicide.

POOR-LAW MEDICAL REFORM.

MEETING AT BEDFORD.

At a meeting of members of the medical profession of Bedfordshire and Northamptonshire, held at the George Hotel, in Bedford, on January 6th, 1859, for the purpose of forming a Medical Registration Association, and of considering the heads of a "scheme for Poor-Law Medical Relief", submitted by the Poor-Law Board, it was resolved *nem. con.*:—

"That this meeting expresses its confidence in the judgment of Mr. R. Griffin, relating to the 'Heads of a Scheme',

lately issued by the Poor-Law Board: that Mr. Griffin be requested to negociate for the alterations suggested in the several clauses of his amendment, and for the addition of Clause 17. That Mr. Griffin's attention be directed to Clause 10, which, in the opinion of this meeting, does not leave the diet of the patient sufficiently under the direction of the medical officer; and, lastly, that he be requested, if possible, to procure the withdrawal or modification of Clause 3, inasmuch as it appears that this clause will be likely to act prejudicially to the profession."

MEETING AT CHIPPENHAM.

At a well-attended meeting of the Poor-Law Medical Officers of North Wilts, held at Chippenham, January 10, 1859, the following resolutions were passed:—

"That this meeting accepts Mr. Estcourt's invitation to comment upon the scheme submitted to medical officers, and are unanimously of opinion—

"1. That every union appointment should be permanent: and such opinion having been affirmed by a parliamentary committee, and sanctioned in most cases by the Poor-Law Board, those gentlemen holding union appointments regard them as vested rights, and are unwilling to make any surrender or modification of a privilege conceded to all other public officers.

"2. That their own interests, and the public service, would both suffer by a system which would subject the medical officers to pauper suffrage—introduce a system of professional rivalry into every village—unnecessarily concentrate the medical staff of a union on every parish in succession—and entail considerably increased expenditure, by rendering the area of service unlimited—and also interrupt that professional harmony which recent legislation tends so much to encourage.

"3. The meeting unanimously accepts the principle of a sufficient fixed salary, based upon a system of payment per case, revisable triennially, and begs to call attention to the undermentioned notes agreed to by them, and signed by their chairman.

"Clause 1. Dissented from. Appointment to be permanent. 2. Agreed to, but residence in district not necessary. 3. Dissented from *in toto*. 4. Dissented. 5 to 10 inclusive. Agreed to. 11. On a uniform and definite scale, with mileage, if one mile from residence. 12. Remuneration insufficient both on 1st and 2nd heads, and 3rd head a definite sum necessary. 13. See No. 3. 14, 15, and 16. Agreed to."

Arthur Adye, *Chairman.*

MEDICAL REGISTRATION: MEETING AT BAKEWELL.

A meeting of medical gentlemen was held at the Rutland Arms, Bakewell, Derbyshire, on Monday, 20th December, 1858. There were present—James Walters, Esq., Chas. Evans, Esq., Thomas H. Newsam, Esq., and David Knox, M.D., of Bakewell; John Gregory, Esq., and Edmund Spencer, Esq., of Youlgreave; William Condall, Esq., of Baslow; John Armitage Pearson, Esq., of Buxton; Edward Brown, Esq., of Matlock; John L. Parke, Esq., of Tideswell; Thomas Fentem, Esq., of Eyam. James Walters, Esq., F.R.C.S., was called to the chair, and the following resolutions were passed.

1. Proposed by W. Condall, Esq., seconded by J. A. Pearson, Esq.—

"That an Association be formed, and that it be called the Bakewell and North Derbyshire Medical Registration Association."

2. Proposed by Thos. Fentem, Esq., seconded by T. H. Newsam, Esq.—

"That the object of the Association shall be to cooperate with the Medical Council and Registrar in carrying out the provisions of the Medical Act."

3. Proposed by J. Gregory, Esq., seconded by E. Spencer, Esq.—

"That the sum of 2*s.* 6*d.* be paid by each member on admission towards defraying the expenses of the Association."

4. Proposed by W. Condall, Esq., seconded by C. Evans, Esq.—

"That a committee be formed of all the gentlemen present, three to be a quorum."

5. Proposed by J. A. Pearson, Esq., seconded by E. Brown, Esq.—

"That Dr. Knox be appointed Honorary Secretary and Treasurer."

6. Proposed by J. A. Pearson, Esq., seconded by J. Gregory, Esq.—

"That J. Walters, Esq., be the Chairman of this Association. That the Hon. Secretary be requested to invite every legally qualified orthodox practitioner in the district to join this Association."

7. Proposed by J. A. Pearson, Esq., seconded by W. Condall, Esq.—

"That this meeting stand adjourned to Monday, January 17th, 1859."

A vote of thanks was then accorded to the Chairman for his efficient conduct in the chair, after which the meeting separated.

David Knox, M.D., *Hon. Sec. & Treasurer.*

LONDON MEDICAL REGISTRATION ASSOCIATION.

The General Committee of this Association met on Wednesday, January 5th, at the British Coffee House, Cockspur Street. The "Vigilance Committee" brought up a Report, in which they stated, that they had waited on Dr. F. Hawkins, and had recommended the adoption of a form to be filled up by every applicant for registration. They had also sought an interview with the Executive Committee of the Medical Council for England; and, in doing so, had enclosed copies of the following resolutions, passed at a meeting of the Committee of the Medical Registration Association, on December 22nd, 1858:—

"1. That this committee having learnt from Dr. Hawkins, the Registrar of the Medical Council, the mode at present adopted for registering practitioners under the New Medical Act, declare their conviction that such mode is loose and inefficient, and does not afford an adequate security against fraudulent registration.

"2. That it is within the knowledge of this committee that many persons are practising the medical profession with diplomas fraudulently obtained, and that as such persons may seek to be registered under the New Medical Act by virtue of such diplomas, this committee would urge upon the Executive Committee of the Branch Medical Council the necessity of adopting a 'form' of declaration of qualifications to be used by *all* persons applying to be registered, and which should be duly attested by the signature of a credible witness, whereby persons obtaining registration by fraud would be amenable to Clause xxxix of the Act."

No reply having been received from the Executive Committee, the committee have drawn up and forwarded the following protest to Sir B. Brodie, the President of the Medical Council:—

"*To Sir Benjamin Brodie, Bart, F.R.S., D.C.L., etc., President of the Medical Council.*

"Sir,—As office-bearers and a Committee of the London Medical Registration Association, we beg most respectfully to call your attention to the plan of registration as at present adopted by the Registrar, Dr. Francis Hawkins, and we are induced to do so because we feel that the profession to which we belong is in peril of being deprived of the boon which the recent Medical Act undoubtedly confers on it, by the inefficient and unsatisfactory manner in which the provisions of the Act relating to registration are put into practice. The Association which we have the honour to represent, perceives, with much concern and regret, that the instructions given to the Registrar by the Executive Committee of the Medical Council do not require him to pursue a mode of registration sufficiently stringent to prevent unqualified persons from enrolling themselves on the register, and thereby usurping the privileges of duly-qualified medical practitioners. All that has been hitherto required for registration consists in the payment of a fee, and the handing in a name which appears on one or other of the 'certified lists.' Any production of the documents conferring the qualifications professed, evidence of the lawful possession of these, or proofs of identity, are deemed unnecessary, the *exception* being thus followed rather than the rule prescribed by Clause xv of the Medical Act. We therefore feel it incumbent upon us to protest against a course which is so palpably inefficient and open to abuse.

"A deputation from our Association waited on Dr. Hawkins on the 22nd ultimo; and, on learning from him that he was acting under the directions of the Executive Committee, we communicated by letter with that body, but, not having received their reply, we address ourselves to you as President of the Medical Council, in the full assurance that you will not disregard so strong an expression of opinion from your medical brethren on a subject which so materially affects their interests. We earnestly hope that you will, without delay, use

your influence to improve the present system of registration, which must result in the publication of an inaccurate and incomplete register, alike injurious to the public and the profession. Before closing this communication, we think it right to express it as our opinion, that it is essential to registration that the Registrar should, in the case of *every* applicant, require a simple form of declaration to be signed, to the effect that he is (or has been) lawfully *possessed* of the document of the qualification which he claims to register, and that he is the person mentioned in the document or documents evidencing his qualifications; this declaration to be attested by the Registrar, or some credible witness. Such a plan, we believe, will be both simple and effectual, and will not impose an irksome task on the qualified members of our profession, while it will deter unqualified persons from attempting to register, by bringing them within the severest penalty of the Act, as provided by Clause xxxix. We respectfully inclose a copy of a form which appears to us to be suitable for the purpose. Awaiting your reply,

"We have the honour to remain, sir, your very obedient servant,

"Geo. Webster, M.D., *President.* John Brady; John Lavies; John Propert,—*Vice-Presidents.* Theo. E. Ladd, M.D., *Hon. Secretary.* William Adams; Robt. Cross, M.D.; Charles Day; E. A. Kirby, M.D.; Matthew Ledger; Wm. Thorn, M.D.; H. G. Wright, M.D.,—*Members of the Committee of the London Medical Registration Association.*

"Committee Room, British Coffee House,
27, Cockspur Street, Jan. 9th, 1859."

A large number of members have joined the Association, and Mr. Fergusson has consented to become one of its Vice-Presidents.

TAUNTON AND SOMERSET HOSPITAL: DISMISSAL OF THREE MEDICAL OFFICERS.

A special meeting of the governors of the Taunton and Somerset Hospital was held on Thursday, January 6th, in conformity with the subjoined circular:—"The governors, at the last general annual meeting, having made a rule requiring each of the medical and surgical officers to record his attendances at the hospital in a book provided for that purpose, the Committee have received communications from three of those officers that they consent to comply therewith, and from the other three that they decline so to do. The Committee, therefore, hereby give notice, that a special general meeting of the governors will be held at the Hospital, on Thursday, the sixth day of January next, at one o'clock in the afternoon, to consider the said communications, and to take such steps thereon as the governors at such meeting shall think fit."

F. W. Newton, Esq., presided, and there were also present Messrs. E. A. Sanford, J. R. Allen, R. K. M. King, W. E. Gillett, J. Young, W. Barrett, F. Rossiter, T. Rawle, W. Blake, C. H. Cornish, F. Welch, F. H. Dickinson, D. Blake, R. M. King, A. G. Lethbridge, W. Moody, Jno. Wood, B. Abraham, R. Hedley, jun., T. P. Broadmead, Jno. Norman, and R. G. Badcock; Revds. W. A. Jones, T. Sotherby, W. J. Allen, J. M. Cox, G. R. Lawson, F. Howse; Lieut.-Col. Todd, Capt. Patton, Drs. Kinglake, Woodford, Lidden, Burridge, and Metford; Messrs. W. W. Coker, C. A. Moody, M.P., W. H. P. G. Langton, M.P., G. Trenchard, S. Pollard, W. F. Elliott, H. Alford, H. J. Alford, W. Kelly, G. Beadon, E. Beadon, J. Halliday, J. C. Easton, C. Bluett, W. Rawlinson, W. P. Pinchard, H. C. Trenchard, F. Welch, and B. Pinchard.

The Chairman having opened the proceedings,

The Secretary read the resolutions and letters relating to the subject before the meeting. The resolutions of the annual meeting added to Rule 6 of the "Regulations for the Medical Department," a proviso that the physicians and surgeons of the hospital should, "at each of their attendances, enter the date and time of such attendance in a book to be provided for that purpose." To this regulation the medical men objected; and communications passed between them and the Committee, resulting in Dr. Kinglake, Mr. Alford, and Mr. C. H. Cornish assenting to the regulation, and Dr. Burridge, Dr. Woodforde, and Mr. F. Welch refusing to do so, on the ground that it was derogatory to the profession to which they belonged.

Dr. Kinglake stated that he was no willing convert to the regulation. He proposed compliance therewith to his colleagues because he thought their resignation—and to his mind there was no other course open—would be more injurious to the interests of the hospital than conforming to the rule would injure their professional *status*.

Dr. Woodforde thought it would tend more to the harmonious settlement of the question if he at once entered into the reasons himself and his colleagues had for declining to accede to the proposition. They had been told, and he believed it was the only reason which had been assigned for the alteration of the rule, that the alteration had taken place with a view to protect the medical officers. As the alteration had taken place, it was stated that in declining to accede to the rule they resisted the authority of the governors. He begged most respectfully to disclaim altogether anything like a feeling or desire to resist either the rules of the hospital, or the proper, just, and legitimate authority of the governors. He was himself a governor, and the only motive which actuated him in taking the part he did, was a warm desire to promote the interests of the institution. His colleagues and himself believed the practice proposed was unnecessary; that the rules which previously existed were sufficient both for their protection and the true interests of that institution; and upon that ground they declined to comply with the clause imposing a duty upon them which did not form any part of their original agreement. They had taken that view of the question upon professional grounds—personal grounds they altogether disclaimed. He hoped and trusted that every one would dismiss all such feelings, and that they would simply discuss the subject with a view to the benefit of the hospital and the patients who came there for relief. [*Applause.*] He had deemed it requisite, as far as possible, to ascertain the feeling of the profession on the subject throughout the kingdom; and on the 22nd of December last he addressed a letter, a copy of which he produced, to the medical staff of every hospital in the country, amounting altogether to seventy-nine. Although that appeal was made under disadvantageous circumstances, inasmuch as it was not signed by the whole of the staff, they had received replies from all but fourteen institutions. In his hand he held a table arranged according to counties alphabetically, of every one of the seventy-nine hospitals, against the names of which he had written an extract from the letter received therefrom, embodying, as far as could be in a brief space, the contents, spirit, and tone of the letter. In a great proportion of cases, the gentlemen applied to had sent copies of the rules of their hospitals, and the medical staffs had formally passed a resolution specifying their opinion. The number of hospitals out of the seventy-nine in which no such rule had ever existed or been proposed was fifty-four; the number in which it had been attempted to carry such a rule without success was four; the number in which such a rule had existed for a time, and then been rescinded, two; the number in which some such rule was in operation was five; and the number from which replies had not been received was fourteen; making a total of seventy-nine hospitals. He would first read a few of the replies from hospitals in which no such rule existed, nor had been proposed. Dr. Woodforde read replies from the medical officers of the Radcliffe Infirmary, Oxford; the Addenbrooke Hospital, Cambridge; and the Bristol General Hospital; in all of which it was strongly stated that such a rule as the one in question would be offensive, and would not be by them complied with. The tone of all the fifty-four letters was the same. All the writers were quite unanimous in declaring the regulation derogatory. Dr. Christison of Edinburgh expressed his belief that such a rule did not prevail anywhere in Scotland. He had now done with the fifty-four replies and the fourteen not received, and would proceed to deal with the remaining eleven. In four institutions such a rule had been attempted to be introduced, but had never been carried. The Leeds Infirmary was one of these; and the medical officers stated that, on their declaring they would rather resign than accede to the proposition, it was not urged. At the Sheffield General Infirmary, on two occasions, the committee had threatened to introduce the practice, but had never brought it before the general board of governors. There were two institutions in which such a law had for a time existed, and had been rescinded. One was the Worcester Infirmary, where the proposition was carried because one of the surgeons did not attend. Sir Charles Hastings had told him that, when the rule was in operation, it was productive of no good result, was found to be inconvenient, and, at the quarterly meeting of the governors on the day preceding the date of his letter, it was rescinded. In the Essex and Colchester Hospital, the rule was rescinded on the medical officers protesting against it. He was quite willing to place the whole of the letters in the hands of the committee, or to show them to any governor. He had now to direct the attention of the

meeting to the institutions where the rule existed. The first was Queen's Hospital, Birmingham, where he was informed by Mr. Gamgee that the regulation in question was strictly adhered to. This hospital formed one of those exceptions which proved the rule. Like the London hospitals, it was connected with a large medical school, and the staff of the hospital was in receipt of considerable emoluments in the shape of fees from the students. On this account, the record was kept very properly and justly. The whole staff of the Birmingham General Hospital had signed a letter declaring such a rule offensive and derogatory. In the Newcastle-upon-Tyne Infirmary, the regulation was carried out: that institution was connected with a large medical school. At the Stafford General Infirmary the rule had passed; but Dr. Knight informed him that it was never enforced; that it was intended to protect the medical officers from false charges sometimes made by discontented and unreasonable patients; and that he (Dr. Knight) had never signed his name in the book, and did not expect to do so, although he had been in continuous attendance on the patients for upwards of half a century. The only two hospitals similar to the Taunton and Somerset were those of Canterbury and of Devon and Exeter. In the latter, the law required that surgeons should sign the book, and that physicians should not. The rule was there strongly objected to; and one of the surgeons had never signed his name. At the Canterbury Hospital, the medical staff now acting had been elected long after the establishment of the rule, and therefore had no ground whatever to oppose it. He thought the governors must see that their medical officers had the unanimous opinion of the profession with them on this question; and that there was a very strong feeling that they ought not to be subjected to any such protective rule, even assuming protection to be the only ground on which the rule was imposed upon them. He submitted whether it would not be more calculated to restore the harmony which ought to subsist between the medical officers of the hospital and the hospital authorities, if the new rule were rescinded. He asked them, as an act of generosity and justice to him and his colleagues, and as an act of justice to the patients, either to move, or to support him in moving, the rescinding of the rule. [*Applause.*]

Dr. Metford proposed—

"That the clause added to Rule 6 of the regulations for the medical department at the last annual meeting be rescinded." He observed that, in their report for 1857, the committee said, "On the occasion of the forty-seventh anniversary of this institution, we have pleasure in congratulating you upon its prosperity and continued usefulness;" and at the end of the report it is printed, "Your committee wish to bear their sincere testimony to the kindness and attention manifested towards the patients of the institution by your medical and surgical officers, and most gratefully acknowledge those services." Now, after that report of their committee, he did not think it at all proper that any rule inimical to the medical staff should be enforced. [*Hear, hear.*]

Dr. Burridge seconded the resolution.

Mr. John Wood would endeavour to confine himself to two or three remarks in a most peaceful and amicable spirit. He was ignorant of the proceeding which led to the adoption of the additional rule by the governors. He would assume that they had cogent reasons for wishing to amend the rule; and as they had done so, it seemed to him they would be stultifying themselves if they did not carry out that alteration. He had heard in Dr. Woodforde's statement no reason of such a cogent character as to induce the governors to relax and to turn back. It seemed to him to be a most extraordinary proceeding, that when a matter of that kind was brought before the board of governors, and the issue appeared to be whether the etiquette of professional men should prevail against the decision of a body of governors, they should be met by a heap of correspondence, in which they heard only the medical officers of the institutions referred to. What would be said if the governors, who were anxious that this rule should be carried out, had sent a circular to the governors of every hospital throughout the land, and then come there with an answer to every letter? Dr. Woodforde seemed to think that there was something uncourteous in the rule, and that it was inexpedient that medical men should be so coerced. They seemed to think that, rendering gratuitous services to the hospital, for which he and the other governors were much thankful, they ought not to be subjected to this rule. They came to the hospital: how could the record of that fact at all militate against their professional status? He was very glad that the motion had taken the form it had—that the resolution should be rescinded. That seemed to be a plain and simple issue. What the governors had done was known not only in Taunton, but throughout the county of Somerset; and there being a strong wish to support them, it would be absolutely impossible for the governors to recede. [*Hear, hear.*] If he had the pleasure of the personal acquaintance of Dr. Woodforde and the other gentlemen, he would beg and entreat them, and it would be looked upon as an act of grace, favour, and manly dignity, to yield to the wish of the governors.

Mr. Sandford said he could not support the resolution before the meeting, because only a very short time ago he voted for the annexation to the rule, and he had heard nothing that day from Dr. Woodforde to induce him to alter his opinion. He would merely add his personal entreaty to Mr. Wood's, that the medical gentlemen would acquiesce in the wishes of so large a body of their fellow governors.

The Rev. W. A. Jones observed that, by enforcing this rule, it was intended to establish a means of ascertaining whether the medical officers had fully and properly carried out the objects of the charity. His own conviction was, that under the rule, the governors were as dependent upon the honour of their medical officers for the full and faithful discharge of their duties as they were before the clause was appended to Rule 6. What was the extent of the record to which they attached so much importance? It simply amounted to this; that the medical officer, at some time, was in that room, and recorded his name in the book. The official might have under his care twenty or thirty patients; but the record did not tell that he had visited one of those patients, or what time he had devoted to them, or what care he had bestowed upon them. [*Hear, hear.*] It was infinitely better that they should openly place themselves, so to speak, at the mercy of their medical officers for the faithful discharge of their duty, than to require compliance with a formula exceedingly distasteful to the members of the profession, and useless for the purposes for which it was intended. [*Hear. hear.*] The rule was represented as a means of protecting their officers against any imputation of blame. But the medical officers did not choose to avail themselves of that protection; they said to the governors, "We are obliged to you for your consideration, but we do not require that protection." If they did not require it, why should it be enforced upon them? Then, was it required to protect the patients? As he had shown, they could not, by its agency, protect the patients to the full extent which would be necessary, if they had not perfect confidence in their medical officers. He considered the regulation as ineffective; and if it was ineffective, or if there was any doubt whether the regulation would accomplish its object, it became a serious question whether they were justified in disturbing the affairs of the hospital for an uncertain good. He knew, many of the poor out-patients looked forward with very great dismay to the possibility of a severance of the relation they sustained to the medical officers of that charity. [*Hear, hear.*] There was respect likewise due to professional feeling. The feeling of the officers of the hospital was almost universally shared by the medical profession throughout the kingdom. There was an *esprit de corps*, which members of a profession know how to rightly appreciate. [*Hear, hear.*] The reverend gentleman ended by submitting that a case was clearly made out, which would fully justify the governors in rescinding the rule. [*Applause.*]

Mr. C. A. Moody said that, if they were to adopt the suggestion which the Rev. Mr. Jones had made—though it hardly amounted to a suggestion—if they were to require the insertion in the book of the names of the persons visited, that would be exceedingly derogatory. They had not the slightest suspicion of their medical officers doing their duty amply, ably, and most conscientiously. The rule, or addition thereto, did not rest on any suspicion towards them, but had been made on other grounds. He would earnestly wish that the medical officers would do what they had been requested to do, for he could not see that it would be in the least derogatory. [*Hear.*]

Mr. R. Badcock said that it was not his intention to vote for the rescindment of the resolution. He felt a warm sympathy with the medical officers. He could not agree with what had fallen from Mr. Moody, that there had been no want of confidence in the medical gentlemen. It had been rumoured about, that some of the officers of that institution had neglected their duty, and it was the opinion of many that on that account the rule under discussion had been passed. This might have been disclaimed, but he had never heard it disclaimed. If any of the medical officers had neglected their duty, the charge should have been brought home to them, and they should have had an opportunity of meeting that charge. He did not wish to

shirk his duty in this matter; he wished to do justice to the medical officers, and to himself as a governor. He thought, seeing the feeling of the profession at large, seeing also the length of time which their medical officers had served the hospital faithfully and diligently, they might make the disputed alteration prospective instead of retrospective, viz., that the officers who had been appointed when no such rule existed, and who objected to conform thereto, might be excused, and that it might have effect only with their successors. [*Hear, hear.*]

Mr. W. Moody said that the rule was made to protect the committee as well as the medical officers. Complaints were constantly carried from hospitals by patients that they had not been properly attended to. The committee asked the medical men to enter their attendances, so that the imputations of neglect could be at once disproved by reference to the book.

Dr. Woodforde observed that the letters he had brought forward contained the opinions, not only of the profession, but also of the boards of governors of all the hospitals who made the rules thereof. It was not a fair statement to say it was only the opinion of the profession. As Mr. Jones had very ably pointed out, the signature in the book did not at all protect them from the insinuations thrown out against them. How could the committee say when he had signed his name in the book that he had seen the patients? Whenever a complaint against the medical officers was made, let there be strict investigation. It was surely not a more invidious thing to investigate the truth of a complaint than to impose a law upon them, which might expel from their hospital officers, the junior of whom had served the institution faithfully for twelve years. He should be satisfied with the adoption of the suggestion Mr. Badcock had thrown out.

Dr. Burridge thought Mr. Badcock's suggestion was the best. The governors had created a penal enactment, and had constituted themselves legislators, judge, jury, and witnesses, and to-day they had come to inflict the punishment. For what? For nothing at all! If he had transgressed in any way in the performance of his duty towards the poor people committed to his charge, he was ready to meet anything in the shape of a sensible charge, anything that could be brought to bear upon his conduct with regard to the hospital during twenty-two years. Let them make a charge substantially, and not subject him to a penal enactment before proving anything. Was that English? He was at a loss how to characterise such proceedings.

Mr. Cornish said if the rule were derogatory to them it would be equally derogatory to their successors.

Mr. R. Badcock proposed as an amendment—

"That the clause appended to Rule 6 at the last annual meeting of the governors, requiring the medical staff to record their visits to the hospital, be not enforced on those medical officers whose appointments date anterior to the adoption of the clause."

Mr. H. Trenchard seconded the amendment.

Mr. Alford would have seconded the amendment if Mr. Trenchard had not. He had inserted a letter in the papers recommending the same course, believing that that was the right manner to settle the matter without injury to the charity. His own practice shewed that he did not think the rule derogatory to the profession. [*Hear, hear.*]

Mr. C. A. Moody would vote for the amendment. He hoped that by such a resolution the medical men who had refused to sign their names on compulsion would be induced to do so voluntarily.

The mover and seconder of the original resolution withdrew it in favour of Mr. Badcock's amendment.

After a discussion in which Messrs. Dickenson, W. Moody, Sandford, J. Wood, and Badcock, and Drs. Woodforde and Burridge took part,

The Chairman then put Mr. Badcock's motion to the meeting, 22 hands being held up for it, and 25 against it. The motion was declared to be lost.

Mr. W. Moody suggested an adjournment; but this being objected to, he moved—

"That the offices of physician and surgeon to this hospital, now held by Dr. Woodforde, Dr. Burridge, and Mr. Welch, on each and all of them having refused to comply with one of the standing regulations of this hospital relating to their offices, be declared vacant, and that the committee be authorised to take the requisite steps for filling up the said offices respectively, and for providing for the medical care of the patients in the meantime."

Mr. J. R. Allen seconded the motion.

The Rev. Mr. Lawson observed that many governors felt strongly that if the law could be made prospective in its operation it would meet with the approval of the profession and meet the wish of the governors. It would also smooth the way exceedingly, and take away all cause of difficulty, if the gentlemen who objected would resign their offices and offer themselves for re-election according to the new terms.

Mr. Dickinson did not think it fair, on a matter of etiquette like this, to ask gentlemen to place themselves in such a situation. He moved that the question be adjourned.

Capt. Patton seconded Mr. Dickinson's amendment.

The Chairman put Mr. Dickinson's amendment, when nineteen voted for it, and nineteen against it. Mr. King asked that his vote might be taken as two, as representing the Taunton Union, and on the show of hands being retaken, the amendment was lost, eighteen voting for it, and twenty-two against it.

On a division being taken on the original resolution, 23 hands were held up for it, and 6 against it. It was therefore carried. The medical officers at once left the room.

Mr. R. K. M. King proposed—

"That the Chairman be requested to communicate the resolution just passed to Dr. Burridge, Dr. Woodforde, and Mr. Welch, accompanied by an expression of sincere regret that the alteration of the rule in question—having for its object the advancement of the general benefits of the hospital, and without, as they believe, imposing any new duty which may be considered irksome on the medical or surgical officers, or derogatory to their professional *status*—has resulted in the loss of their services, to whom, nevertheless, the warmest thanks of the governors and the public generally are due for the zealous, assiduous, and able manner in which they have discharged their duties since their connection with the hospital."

Mr. Sanford seconded the resolution, which was carried unanimously.

On the motion of Mr. Dickinson a vote of thanks was accorded the Chairman for his impartial conduct in the chair on that trying occasion.

The meeting then separated, having lasted two hours and a half.

TO CORRESPONDENTS.

Communications have been received from:—Dr. Woodforde; Dr. Mc William; Mr. T. T. Blease; Dr. W. H. Colborne; Mr. C. S. Jones; Mr. J. Knaggs; Mr. S. Smith; Mr. C. Anderton; Dr. Ranking; Mr. J. Jarman; Mr. S. Barton; Mr. J. H. Gramshaw; Dr. Henry Hare; Mr. C. C. Wallis; Dr. Herapath; Dr. D. Knox: Dr. F. Hawkins; Mr. H. W. T. Ellis; Dr. J. G. Davey; Mr. William Martin; Dr. W. B. Mushet; Mr. T. Holmes; Dr. Mackinder; Dr. J. Bullar; Mr. E. Crossman; Mr. Griffin; Dr. John Hughes; Mr. R. S. Stedman; and Mr. Stone.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

NECROSIS OF THE UPPER PART OF THE FEMUR AND PELVIS.

Under the care of W. BOWMAN, Esq.

[*From Notes by* J. WALTERS, ESQ., *House-Surgeon.*]

THE following case is one of considerable interest, from the unusual situation of the necrosed bone, and from the slight symptoms which accompanied so extensive a disease in the immediate neighbourhood of the largest joint in the body, as well as from the success which attended a comparatively slight operation. The latter circumstance shows forcibly the importance of a careful examination of the part, under chloroform, whenever anomalous symptoms or appearances in the neighbourhood of important parts present themselves. The cases are almost innumerable which are sent into London hospitals, either from the country or from metropolitan districts, where a disease has been allowed to progress for a considerable time for want of very slight surgical treatment, and the patient exposed to all the expense and trouble of a removal; and all because no opportunity has occurred for such a thorough and uninterrupted examination as can only be obtained in a state of insensibility. It ought to be more generally known (or more generally believed) that the administration of the quantity of chloroform necessary for this purpose is, when properly conducted, a matter of no danger; and often clears up in five minutes points which months of the most careful and intelligent clinical observation leave doubtful.

W. W., aged 14, living in Bucks, was admitted into King's College Hospital, under the care of Mr. Bowman, in June 1858. About four years ago, some of his fellow-workmen, fancying he was a spy on them, "paid him out" by stretching him, a man taking hold of each extremity; and, in doing this, they injured his left thigh. The boy kept his bed for a few days, and had never been able to walk since without the aid of a stick. In January last, an abscess formed over the left hip, and burst: this kept him in bed until a few weeks before admission, when he began to hobble about on crutches.

On admission, the left leg appeared much shorter than its fellow; but, on measuring, no difference was discovered between them, the apparent shortening being due to obliquity of the pelvis. As he lay in bed, the left thigh was slightly drawn inwards towards that of the opposite side; when in the erect posture, the limb was somewhat everted.

There were three discharging orifices, one of which had existed for a week only; they were situated on the outer part of the thigh, about four inches below the great trochanter, and on a level somewhat anterior to it. They discharged very slightly. The parts around were swollen, but were not painful on pressure. There were occasional pricking pains running up the sinuses. There was slight motion between the head of the bone and the pelvis; but, on flexing the thigh on the belly, the pelvis rolled with it. His general health was good; but he said that of late he had lost flesh, although he was still very stout.

June 14th. Mr. Bowman (when the boy was insensible by chloroform) found that a probe passed through either of the orifices into a sinus, which ran upwards to the outside of the great trochanter, and there came upon a considerable surface of bare bone. The orifices were laid into one opening; some small pieces of bone were found loose in the sinus; but the finger was prevented from reaching the cavity over the trochanter major by a firm constriction.

The wound was kept open; but, no bone working its way out, Mr. Bowman determined to remove it by an operation.

July 10th. The patient was taken into the theatre, and made insensible by chloroform. Mr. Bowman passed a probe from the wound about six inches upwards to the front of the great trochanter, and made an incision over it about three inches long, in a vertical direction. The finger then passed into a larger cavity above and in front of the great trochanter, in which several loose fragments of bone were lying; these fragments were somewhat rounded, and consisted of cancellated bone-tissue, in size varying from a marble to a pea: these were readily taken out; and then the cavity was found to be in front of the acetabulum, the anterior lip of which was probably destroyed and the joint exposed; but this could not be positively stated from the alteration in the parts. The surface of the pelvis about the anterior inferior spinous process of the ilium, and the horizontal ramus of the pubes, was extensively laid bare, and had lost its characteristic shape, probably by the separation of some loose bone. The cavity did not extend either towards the dorsum ilii or the sciatic notch.

Mr. Bowman thought that the disease, in all probability, had commenced in the joint, and had extended to the front of the pelvis and trochanter major. A certain degree of motion was found to exist between the head of the bone and the bed in which it rested.

The operation was followed by little or no constitutional disturbance; and, on July 19th, it is noted that he can bear the thigh to be flexed without the slightest pain; but this is accomplished with very little motion in the hip: also, on sitting up in bed, the pelvis remains almost stationary; and this change of position depends upon the great mobility that exists in the lumbar portion of the vertebral column.

His general health improved much, and the wound healed. On July 25th, when he was discharged from the Hospital, he could walk about very well with a stick.

ST. MARY'S HOSPITAL.

CROUP: TRACHEOTOMY.

By W. H. BROADBENT, M.B., Resident Obstetric Officer.

THE following case of croup, in which the operation of tracheotomy was performed on a child ten months old, the child dying thirty-three hours after the operation, presents some points of interest.

On Monday, December 20th, 1858, a child, just ten months old, strong and stout in appearance, was brought to me at St. Mary's Hospital, exhibiting all the symptoms of advanced croup. The mother had first noticed that the child appeared ill on the previous Saturday (the 18th), but had imagined it to be suffering from a mere temporary ailment incident on teething. It had become rapidly worse through Sunday, and when I first saw it, about 11·30 A.M., on Monday, the child was struggling for breath, each inspiration being attended by the characteristic sound of croup, while the drawing in of the lower ribs, and projection forwards of the sternum, showed the difficulty with which air was drawn into the chest. No diphtheritic exudation was to be seen in the mouth or fauces. I judged from the degree of dyspnœa, and from the sounds in breathing and coughing, that the disease had already advanced far into the second stage. The time when any good effect might be hoped from medical treatment was long past; I, however, gave calomel and antimony in alternate doses, and ordered the warm bath, but neither leeches nor blisters.

At 6 P.M. I again saw the child. The progress of the disease had been even more rapid that I had anticipated; there was no

longer the strength requisite to produce the croupal sound, or the vocal chords had become too densely coated to vibrate; the child was half-unconscious; and paroxysms of suffocating cough threatened every instant to put an end to its sufferings. I at once proposed tracheotomy; and the parents consenting, I returned to the hospital, and obtained the aid of Mr. A. G. Lawrence, house-surgeon, who undertook the operation in the absence of the surgeons of the hospital. On reaching the house, we again explained the operation, the uncertainty as to the ultimate result, and the possibility even of the child's dying under our hands. The evident and imminent danger rendered any argument on our part unnecessary; the parents consented, and Mr. Lawrence proceeded to operate.

The shortness of the neck, the depth of fat, the necessity of avoiding, as far as possible, the large veins, rendered the operation no easy task; and a further difficulty was caused by the fright and agitation of the old woman, our only assistant, whose duty it was to hold the solitary candle, by the dim light of which the operation had to be conducted. However, the structures being carefully divided, and the veins drawn aside when possible by aneurism needles, used as the most convenient instruments at hand for separating the sides of the wound, the trachea was fairly exposed, and all bleeding having ceased, was seized by a tenaculum, and opened upon it, and the cannula was introduced. The quantity of blood lost was very small, and none entered the trachea. At one period of the operation, impending suffocation rendered a resort to artificial respiration, by pressure on the chest, necessary; when it was over, the child soon resumed its natural appearance, recognised its parents, and took readily a little wine. Before we could complete the arrangements of fixing the cannula, and placing over it, round the child's neck, two or three folds of muslin, the child, as is usual in these cases, had fallen into a sound sleep. The temperature of the room was ordered to be carefully kept up, and the steam from a kettle was directed into the apartment, as far as practicable.

When I saw the child, three hours afterwards, the sleep had been calm and uninterrupted. The mother was allowed to take the child into her arms, and it took the breast eagerly and without any difficulty or regurgitation. Two teaspoonfuls of wine were ordered to be given every two or three hours.

At about 6 A.M., on the following morning (December 21st), word was brought that the child was in convulsions. I instantly went to it, and found that nothing like convulsion had occurred; but the breathing again seemed laboured, and I feared that already the disease had extended below the opening in the trachea. On examination, however, I found the calibre of the tube greatly diminished, the mucus driven to the mouth of the cannula at each expiration, having dried in layers and lined the tube. I removed and cleansed the inner tube, and then, as tenacious mucus still rattled in the lower part of the cannula, I dropped into the opening gradually several drops of warm water, so as to soften this. I then added two or three drops at once, so as to provoke cough, by which the entire accumulation was expelled. After this, the child again breathed freely; and to prevent the mucus again drying at the aperture of the cannula, I moistened the muslin over it, through which the air had to pass: this seemed to have the desired effect.

At 11·30 P.M., the child seemed still to be doing well. The respiration and pulse were, however, rapid. The bowels had been freely moved.

At 5 P.M., it was in much the same condition; but now on suckling, the milk returned to some extent by the nostrils.

At 7 P.M., the hands were jerked about as if affected with chorea, and there were irregular spasmodic efforts, which I soon perceived to be attempts at vomiting; but the diaphragm, not having a body of air confined in the chest by the closed glottis as a support, could not oppose a firm floor against which the abdominal muscles could compress the stomach; and the stomach could not by its own contractions expel its contents. By pressure on the abdomen, consentaneously with the natural efforts, the stomach was emptied, and I left the child tranquil, and apparently as well as when I had last seen it. I should mention that the inner cannula was removed at each visit.¶

At midnight, the convulsive movements of the extremities had returned; but the child was perfectly conscious; the opening in the trachea obviating the effects on the brain of the laryngismus and trachelismus, which, according to Dr. Marshall Hall, cause the insensibility in convulsive affections. About 3 A.M. it died, having survived the operation rather more than thirty-three hours.

At the *post mortem* examination, thirty-six hours after death, hypostasis of the blood was observed to have taken place. On opening the chest, slight emphysema of the cellular tissue in the anterior mediastinum was noticed. The lungs were somewhat congested, but everywhere soft and crepitant to the feel. A little mucous froth issued from some of the bronchial tubes on section. The trachea was free from false membrane below the opening made into it, and contained no accumulation of mucus. The cannula seemed to have caused no irritation to the lining membrane. The larynx was found lined throughout by a dense false membrane—especially thick and adherent upon and about the vocal chords, whence it could be detached in large firm pieces. The fauces and pharynx were also now found coated by diphtheritic exudation, and the tongue was of a clay white colour, due either to similar exudation or thick epithelial layers.

Remarks. The points of interest about this case are due chiefly to the early age at which the child was attacked with croup, and the operation of tracheotomy performed. This was, as has been seen, attended with great difficulties; but in spite of these was, by the exercise of skill and patience on the part of Mr. Lawrence, most successfully accomplished, confirming the conclusion I had come to from witnessing the operations, and following the teachings of Professor Trousseau, as to the vast superiority of the cautious and patient method of procedure he so strongly advocates, and which has been so successful in his hands. The loss of blood in bold and rapid operations, when the precautions alluded to are not observed, tells fearfully on the result; and it has occurred that, in despair of arresting the bleeding, the trachea has been opened while this was going on, and, blood being drawn into the air-passages, the cannula, when introduced, has been driven out by the violent reflex cough. The still more ready method would have been utterly inapplicable to this case. The practice of dropping water into the cannula is worthy of a remark. It cannot do harm, and I have seen it result in the expulsion by the cannula of false membranes. The effect may be aided by stopping the cannula at the commencement of the forcible expiration, and removing the finger suddenly, so as to imitate the action of coughing. The return of the milk through the nose, which was first noticed on Tuesday afternoon, was no doubt due to the extension of the disease to the pharynx and velum palati, which, unaffected when the child was first seen, were found at death coated with false membrane, while during the night and the morning of Tuesday, the child took the breast at frequent intervals without any difficulty. The exact cause of the fatal issue is not very apparent; probably the child was too young to withstand the disease and operation. Had it been older, I have little doubt that the result would have been favourable.

SALOP INFIRMARY.

PUSTULAR ERUPTION, AN EFFECT OF THE INTERNAL USE OF IODIDES.

By Henry Johnson, M.D., Senior Physician to the Infirmary.

Within the last two years, on at least three occasions, I have observed a pustular eruption on the face and other parts of the body, following the use of *the iodides*.

Case I. A man, named W. Beech, was admitted into the Salop Infirmary January 1857, with ascites. He was a coachman in a gentleman's family, and had lived well. There were no signs of diseased heart or kidneys; but the urine was very scanty, and highly charged with urerythrine (*purpurine*). The dropsy was therefore attributed to disease of the liver. In March he was tapped, and fourteen quarts of serum were drawn off.

March 19th. He took five grains of iodide of potassium, which was continued till the 24th.

March 31st. He was ordered iodide of mercury every four hours, which he took at intervals through the day till April 28th; it was then omitted, because he had a disagreeable eruption over the face and arms, and his mouth was sore. These effects of the medicine were soon relieved; the man got quite well, went out, *and married*.

Case II. In July of last year (1858), W. Hoggins, aged 25, was admitted under my care. He had diseased heart, œdema of the feet, and his urine was coagulable. He took iodide of potassium in three-grain doses from July 13th to August 4th, when the dose was increased to four grains; and, on August 13th, it was given with tincture of sesquichloride of iron, which he took till August 17th. He was then much better in all respects, but he had a large crop of pimples or small pustules

all over his face. The *iodides* were omitted; and he went out much better in all respects, but not cured.

Case III. R. Foulkes, aged 48, a miner, came into the Infirmary on August 21st, having for six months laboured under bronchitis, diseased heart, œdema of the legs, etc. The urine was very red, from the quantity of blood which it contained. It was, of course, coagulable by heat and nitric acid; specific gravity 1015. Blood-corpuscles and epithelial casts of the uriniferous tubes were seen under the microscope. The expectoration was very peculiar and very profuse. In October, I thought I detected urea in it.

When the disease had become chronic (November 19th), I ordered iodide of potassium twice a day, which he took till November 30th. His eyes were at this time much inflamed. and his face was broken out all over. The pustules on his face and upper parts of his body were so large and numerous, that I believe more than one passer-by fancied we had small-pox in the ward. He died December 7th.

Iodine was easily discovered in the urine of this man at the time the eruption was out, but, I thought, in much less quantity (judging from the amount of blue colour with starch) than in the urine of another man, S. Shakeshaft, who took five grains of iodide of potassium twenty days without any eruptive effect; *his kidneys and liver being at the time in a state of activity.*

Remarks. I do not recollect ever to have seen it stated that a pustular eruption is one of the effects of iodine taken internally. I have, therefore, thought it worth while to place these three cases on record. My friend Mr. Arrowsmith, to whom I mentioned the circumstance, said he had seen such an effect, and even where there was no dropsy. No doubt, this might occur. Professor Lehmann "found that, when several persons had each taken a dose of ten grains of iodide of potassium, some would immediately begin to excrete it in their urine, which, after the lapse of twenty-four hours, no longer contained any trace of the iodide." (*Treatise on the Pathology of the Urine*, etc., by J. L. W. Thudichum, M.D., p. 401.) But if the dose were so frequently repeated that the kidneys could not get rid of it as fast as it was introduced into the blood, or if the kidneys were in a diseased or in an inactive state, as in the three cases above recited, then irregular or injurious effects would be produced.

I have repeatedly given the iodides of potassium and mercury, without any such effects, where the kidneys were in a state of integrity. What I have related confirms the observation of Dr. Thudichum, that "one of the principal reasons why iodine and its preparations are borne very well by some, and have injurious effects in others, is the varying length of time required for its removal from the body." (*Opus supra cit.*, p. 401.)

Original Communications.

ON DISEASES OF THE EYE, THEIR MODIFICATIONS FROM CLIMATE, etc., AS OBSERVED IN INDIA.

By William Martin, Esq., F.R.C.S., late Superintendent, Calcutta Eye Infirmary, and Professor of Ophthalmic Surgery, Calcutta Medical College.

[*Concluded from page 42.*]

IV. Affections of the Humours of the Eye. 1. *Crystalline Lens.* Cataract has been found very frequently in the practice of the hospital—certainly out of proportion to other classes of disease, but it is difficult to say to what extent this disproportion exists; for certainly patients will come from much longer distances to a metropolitan institution to be cured of cataract, than for any other disease. It is not one which materially affects the health, and incapacitates the patient from undertaking a long journey, and even in remote regions the idea is prevalent among the natives, that cataract may be removed by operation. Still, as I have found a large number come for relief, who are quite unaware of the peculiar and curable nature of the complaint, and as there are many native practitioners of the class, which from time immemorial have professed to operate for cataract, flocking to a large town, I think when we find that each year, out of about 2,500 patients, those who apply for relief having cataracts may be counted by hundreds, we may fairly conclude that cataract is a remarkably common disease among the natives. In the course of four years, I find that I operated upon nearly six hundred cases; but the number of patients affected by the disease upon whom I did not operate, whether that I preferred a palliative treatment, or they showed a disinclination to undergo an operation, was very much greater.

It has been suggested that the cause of the disease, which we thus conclude to be so frequent among the natives of India, and, I presume, of other tropical climates, is to be found in an effort of nature to protect the sensitive retina from the destructive effects of a blazing sun and intense heat. The objections which most naturally occur to this view, are, that after all, a very small part of the population are the subjects of cataract, even of those who arrive at an advanced period of life; the remainder, then, must be unprotected, and there is no evidence to show that the subjects of cataract have retinæ more sensitive or delicate than others; then, I have no reason for thinking that nature steps in to protect the European by producing cataract. The adoption of this view would necessitate our concluding that opacity of the lens was the normal state in a tropical climate; whereas all experience and analogy teach us that it is of the utmost consequence that it, like the other refractive media of the eye, should be transparent. This supposition, therefore, may be dismissed as one which will not bear application of the test of common sense.

I have in a few cases among natives been able to trace cataract to an action which was, if not actually inflammation, very like it; but in by far the great majority of cases its mode of origin is as little to be traced, and its progress as gradual as in the European. We seldom see, even in the aged, cataracts as hard and highly coloured. They are often quite soft, occasionally fluid, but most are of a mixed consistence; that is, have the appearance and consistence of a rather solid gelatinous substance. They are more soluble than the cataracts in the European. This is, I think, the deduction fairly made from an examination of the success of the operations for solution and depression in India as compared with Europe. By far the great majority of cataracts have always been operated upon by these methods in the Calcutta Eye Infirmary, as well as by the native operators from time immemorial, and I think the result will show that the disadvantages which have been considered applicable to these operations in Europe, viz., the danger arising from our leaving the lens to act as a foreign body, and to cause irritation and lead frequently to destructive inflammation of the eye, do not apply to these operations, when practised among the natives. The statistics of the Eye Infirmary, as given in my *Report for Four Years of Operations*, show an amount of success, which will scarcely be surpassed in European institutions.

The amount of success which has resulted from operations which have for their object the carrying the lens out of the axis of vision, and, if possible, causing its absorption, has rendered it unnecessary to have recourse, except in comparatively few cases, to operations for removal by extraction; and this is fortunate, for this method is not in general suitable to the native. In the first place, it is an operation difficult to carry out, in consequence of the peculiar physical conformation of the globe and parts surrounding it. The eye is small, deep set, the brow is generally very prominent, and the lens is large in proportion to the cornea and other parts of the eye. In the second place, a large section of the cornea is apt not to undergo the favourable process of union; the cause seems to be a certain defect in the vital power, from which wounds of parts, which are not highly endowed with vascularity, do not readily heal; and on this point we find a remarkable distinction between the European and native constitution. Wounds of what I may call by comparison non-vascular parts, heal well with the former—badly with the latter; on the other hand, wounds of the vascular and sensitive parts do not heal well with the European, but are remarkably apt to heal with the native. There is as often a deficiency of reparative action in the native, as an excess of action with the European; and on this point depends the want of success with the healing of large wounds of the cornea. Having tried the effect of avoiding all depletion and giving unusually good nourishment, and even stimulating after operation for extraction, I have found that the success has been somewhat greater than formerly, when the patient was kept rather low, but when everything apparently was in the highest degree favourable for healing of the section; viz., a clean section large enough to allow a solid lens to pass easily, but not too large, its edges lying smoothly together; a good state of constitution; no amount of restlessness or

pain, etc., I have so often been disappointed at the result from want of union of the section, that I have found every reason to adhere to the opinion contained by almost all ophthalmic surgeons who have practised in India, that extraction is not a method of operation which is applicable in the great majority of cases of cataract among the natives of India, and particularly the natives of Bengal; the conformation of whose eye and appendages is farther removed from the European conformation than is that of the native of the North West Provinces of India. The same remarks are applicable to a certain extent, to the subject of extraction in the European in India. The danger, however, lies, in these cases, not in a want of reparative action, but in an excess of it: a severe and intractable inflammation is apt to come on, and often its effects are disastrous in the extreme. The greatest care is requisite in choosing the season, providing for sufficient accommodation, good ventilation, etc. Should the patient suffering from a hard cataract have lived a hard or irregular life, or in any way suffered from the effect of the climate, it will be a question whether the operation is admissible: again, the same patient will not be likely to do well even with operations for depression or solution; therefore, in a large majority of cases with which we meet, the prognosis is not encouraging. Congenital cataract, as may be supposed, among a population so subject to the complaint, is often met with, although it is seldom recognised by the patients' relatives for several years after birth, unless it should exist in a very marked degree. I am not aware that it differs materially in its character, the treatment required, etc., from the same disease in Europe. I have always found the native infant or child very amenable to treatment, and we may almost always anticipate success to our attempts to restore vision in these cases with confidence. With regard to opacity of the capsule of the lens, I certainly have rarely met with cases in which there was the density and toughness which we so often see in Europe. It is as often found opaque in congenital cataract as in Europe; and with reference to the long mooted point, whether the capsule is capable of absorption or not, I think that I may safely affirm, after having observed a large number of cases, that, if cut into small fragments, and allowed to lie either in the anterior or posterior chamber, these will often create no irritation, and will disappear; and this I have seen to take place so rapidly and completely, when the fragments have been in the anterior chamber, that I think it is fair to conclude, that the opaque capsule is capable of absorption.

It does not appear, that the lens, if unabsorbed and enclosed in its capsule, if displaced, will undergo absorption. I have seen many cases of this, in which, after many years displacement, no irritation was caused by the mass remaining in the chambers, even although it was moveable, and no attempt had been made by Nature to cause diminution by absorption.

V. Affections of the Nervous Apparatus of the Eye. Disease of the nerves of motion and ordinary sensation, as it depends upon ordinary exciting causes, as wounds, the sympathetic action with the nerves of the organic system, etc., does not materially differ from diseases of the same parts with the European. Diseases of the portio dura, third, fourth, and sixth nerves, exist separately and conjointly, giving rise, particularly when in conjunction with disease of the optic nerve and sympathetic system, to paralytic and spasmodic affections of the appendages, to strabismus, diplopia, hemiopia, mydriasis, etc.; and these I have found as amenable to treatment, and not more common than in Europe.

1. *Amaurosis.* This is certainly a very common affection with the natives, whether from a comparatively low state of vital power, or from what reason, it is difficult to say; but it is equally certain that a large proportion of cases involving a paralysed condition of the retina are of the functional or curable kind. They are generally combined with a state of general debillty or special cachexia. It will be apparent that the ordinary habits and diseases of the people, which all are apt to induce deficiency of power, the vegetable diet, the habit of taking intoxicating drugs, smoking to excess, etc., would lead to diseases which are generally attributed to an arthritic cachexia, all states which come under the head of glaucoma would be likely to prevail. They are thought by many to be on the increase, from the increase of intoxication and vicious indulgences, which is said to be the case in late years; but I do not think that the number is equal to what we see in Europe.

It is generally believvd, and I am inclined to think that it is the case, that sight declines faster in India than in Europe, both with the native and the Europeon. The sun, the heat, etc., by stimulating to excess the nervous and vascular apparatus of light must, judging from analogy, cause a corresponding deficiency of nervous energy; but it has always been a matter of interest and satisfaction to me to find that so many cases of amaurosis have been found to derive substantial benefit from appropriate treatment. The great number are eased by a state of anæmia, and are benefited by stimulation. The same gratifying results are not to be found in cases of Europeans, who, in addition to the ordinary exciting causes of eye disease, have a predisposition to amaurosis, arising from the local system being prematurely exhausted by excessive local excitement, as the general system too often is, from over-excitement and consequent exhaustien, caused by heat, the sun, the inactive and too often intemperate habits, excess of nutrition, of drinking, of smoking, etc. A larger proportion of the organic or incurable forms of amaurosis are certainly to be found among Europeans in India, than among natives. The varous inflammations of the eye, too, are very apt to take on an arthritic type, and to end in glaucomatous and dropsical affections of the organ. Nyctalopia, or night-blindness, is a form of eye-disease which is almost confined to hot climates: it is attributed to various causes, among which may be enumerated the sunlight, moonlight, want of food, exposure, etc., etc.; but I have found it as prevalent among those of the lower classes who were not exposed to those influences, as among those, sailors and others, who have been said to be remarkably subject to it. I am inclined to believe that it is simply a form of amaurosis, and that it is caused by anything which may produce a state of anæmia or cachexia. I have found more patients discontinue their attendance very soon after having applied for relief for this complaint, than any other class; from which I conclude that the disease is of the functional or curable kind; and that relief, to a certain extent, speedily ensues from appropriate treatment, in a large majority of cases; but in many I have found it an intractable disease, and in some it has been but the prelude to a condition of permanent amaurosis. Cases of true nyctalopia are to be distinguished from those of nyctalopic amaurosis, in which there is a very marked deterioration of sight after the power of the sun is gone, joined to defective sight with bright light; whereas, in nyctalopia, the change is from fair or good sight to almost total blindness—a change so great and so peculiar as to indicate a very peculiar state of the retina different from what may be found in any of the forms of amaurosis. These remarks are intended to apply only to the natives of India. I do not remember to have seen a case of the disease among Europeans. I believe that cases are met with among them but very rarely.

VI. Diseases of the Globe. 1. *Inflammation and Enlargement.* This form of affection is not uncommonly met with, but the destructive sympathetic inflammations propagated from a diseased or injured eye to its fellow, are not common. I have seldom found any sympathetic inflammation which was not capable of being controlled by ordinary treatment.

2. *Tumours.* Small tarsal tumours are common, and by no means intractable. The same may be said to be the case with non-malignant tumours affecting the globe, whether arising from disease or inflammation affecting the intraorbitar cellular tissue, the fibrous capsule, etc., or not; but from their size, the degree in which they cause extrusion of the eye, stretching of the nerves and muscles, etc., it has been often found necessary to extirpate the globe. In my practice, such cases have almost invariably done well, and the patient, often in early childhood, has been restored to health.

3. *Malignant Diseases of the Eye.* I cannot speak confidently with regard to the comparative frequency of these diseases in India. Few cases apply for treatment at our hospitals; but yet we know that there must be very many spread abroad among the population. It is not a class of diseases for which the patient, who is very often a young child, is liable to be carried very long distances for relief, and unfortunately experience shows us, that the want of medical aid in these cases does not in reality shorten life. On one point I can speak with more confidence, and that is, on the nature of the disease; although I have only a small number of cases to form data from, I have never yet met with cases of fungus hæmatodes, and believe that both it and melanosis are exceedingly rare, either among the natives or Europeans; the cases which I have had under my care, or upon which I have operated, have been either scirrhus or epithelial cancer. In the cases in which I have operated, it has not been so much for the purpose of eradicating the disease (although as I was not previously certain as to the malignant nature of the disease that was one of the indications of treatment), as for the purpose of relieving the pain and distress caused by the portions of the tumour in the orbit, exercising

pressure upon the walls of the cavity. The comparative frequency of scirrhus in India seems to be in accordance with the observations of the best pathologists, who have asserted, that in tropical climates the tendency of malignant disease is to scirrhus, and in cold climates in a much greater degree to fungus hæmatodes, and other forms of malignant tumours.

24, George Street, Hanover Square, January 1859.

ON DISEASED VESSELS; AND THE VALUE OF THE PULSE AS A SPECIAL SYMPTOM.

By Henry Duncalfe, Esq., M.R.C.S., West Bromwich.

[Read before the Queen's College Medico-Chirurgical Society, Birmingham.]

The chief object of my communication is to draw attention to "special symptoms," diagnostic or nearly so of disease; and the consideration of this subject will enable me to record some cases of diseased arteries, which present points of practical importance.

At the primary investigation of a disease, a group of symptoms are presented to us; sometimes our attention will be drawn by the graphic description of the patient, to the principal evidences; at other times, the indefinite descriptions call at once upon our experience, and observation, to analyze them for ourselves; to dismiss the imaginary ones; to modify such as by increased nervous sensibility are magnified to the patients' own preceptions; to determine such as are directly connected with the organic lesion; so that we can describe the remaining dependent symptoms, which we know must follow in the train more correctly and in better order than our patients could themselves explain. Thus it is that we localise disease, and separate such signs as more properly belong to organs, which in the disturbed mechanism become secondarily involved. We do, in fact, recognise two classes of symptoms—the primary, or diagnostic, and the secondary, or the products of the disease resulting from functional disturbance in cooperating organs. We never lose the importance of minute crepitation in pneumonia, or of pectoriloquy in phthisis, or of double bruit in aneurism; but do we always elicit the full information to be obtained from the pulse, skin, secretions, etc. A very interesting "special symptom" in pericarditis has lately been announced by Dr. Barlow, namely, "restricted action of the diaphragm," and without it, the case quoted by him, in which the pericardium was filled with pus, and so the friction-sound prevented, would not have been diagnosed. Without albumen in the urine, would Dr. Bright have associated dropsy with renal disease? and without anæmia would Addison have directed special attention to diseased suprarenal capsules? While it is advantageous to determine diseases to be, by negatively proving them not to be elsewhat, it is equally necessary, and much more scientific, to arrive at once at the nature of a disease under consideration by the positive signs which that disease exhibits.

I premise my communication by these general remarks, as I intend to allude chiefly to the character of the pulse in connection with the cases about to be related.

Case I. *Aneurism of the Posterior Communicating Artery within the Head.* The subject of this aneurism was a child 13 years of age. Of her history I have but little to say; for, being the child of poor parents, little notice was taken of her complainings, and it was only after an order from the coroner, that I became acquainted with it. The parents seem to have known but little of the child's previous state of health; they allow that at times she had complained of headache, had vomited on two or three occasions, and once had fainted. At the time of her death she complained of her head, staggered across the house floor and died.

On removing the brain, a large effusion of blood covered the base; and carefully tracing the arteries backwards, I came to the aneurism (about an inch and a half in circumference,) of the posterior communicating branch of the left internal carotid, which quite covered and concealed the parts contained within the circle of Willis.

The symptoms which marked the interesting case reported by Dr. afterwards Sir Gilbert Blane, are worth enumerating. His patient was a female 64 years of age, who was suddenly seized with a fit of giddiness and dimness of sight, succeeded by acute pain in the forehead, which remained for some time. The indistinctness of vision continued for six months, after which she was seized at intervals with giddiness, headache, and imperfect vision. She for some time saw objects double, and finally showed signs of mental derangement, became maniacal, and died in five years after the first attack.

On examination, the optic nerves were found smaller than usual, and the symptoms so singular were referrible to bulbs five-eighths of an inch in diameter, filling up the hollow on each side of the sella turcica. These bulbs were dilatations of the carotid arteries, and were filled with laminæ of coagulated blood.

That these symptoms were partly produced by pressure seems evident to me, by analogous symptoms which prevailed in the case of a circumscribed abscess of the brain in a patient of my own, and who having had the abnormal changes in the special senses, as enumerated above, also became maniacal and died. In his case, the pulse was measured, slow, and occasionally intermitting, but otherwise regular.

The chief points of interest in the case of aneurism I have described, are, the young age of the patient, and the probability, that even with an aneurism so large, and lying against a structure so delicate, no very urgent symptoms manifested themselves. But scanty as was the information from the parents, the symptoms would have been enough to have created a strict inquiry, and some distrust as to the healthy state of brain. The value of sick-headache in children cannot be overrated; and changes in the organs of vision, as squinting, amaurosis, unequal contraction, or under contraction or dilatation of the pupil, are amongst the most important special symptoms indicative of cerebral mischief. A proof of the importance of the pulse was afforded me some short time since by a medical friend, a careful observer and investigator of disease. When called in consultation to see a little patient, "it was doubtful," he said, "at first to determine whether the child was suffering from bowel remittent fever, or whether the symptoms were produced by some obscure brain affection; but whilst investigating the case, I kept my finger on the pulse, and after two or three minutes I perceived an intermission; that circumstance guided my diagnosis; brain-disease was afterwards manifested by unmistakeable signs, and the child died." I have myself notes of cases where the slow deliberate pulse, occasionally intermitting, but differing from the diseased mitral pulse, in being otherwise regular, has been the chief symptom of commencing cerebral disease; and I would here call to mind the value of the hard, contracted, incompressible pulse of nervous exaltation, as in mania, etc., and the loose, easily compressible, decritus pulse of nervous exhaustion, as in typhus, and the extremity of phthisis, and some other exhausting diseases. How important is the enfeebled circulation, with the quick small pulse, evidenced in the cupping of the fontanelles, as pointed out by Hilton, in infants when reduced by diarrhœa and other diseases, every practitioner can bear witness to!

Case II. *Cirsoid Aneurism.* This case, consisting of an unnatural expansion of the termination of the innominata, and the origin of the common carotid, and subclavian arteries, is an example of disease variously described by authors under the names of *aneurisma racemosum, aneurisma cirsoideum, aneurisma anastomoticum,* and *varix arterialis.* It usually occurs in arteries of the third or fourth order, such as the carotid, temporal, occipital, etc. The subject of the present notice is a lady still living, about 56 years of age, tall, muscular, and well developed, and who, during the greater portion of her life, has enjoyed the most robust health; but within the last two or three years, has been occasionally invalided by pains in the head, giddiness, and dimness of sight. On one occasion she consulted me on account of her inability to articulate distinctly, and from her incapacity to frame an entire sentence. On a second occasion I attended her for numbness of the right upper extremity, and pricking sensations with diminished sensibility in the leg and foot. These attacks were of short duration, and readily yielded to depletory measures. Being in a comfortable position in life, she is indisposed to exercise, prone to corpulency, and fond of good living; and at the time of this illness, February 19th, I was called to arrest bleeding from the nose, which had continued for three or four hours, the blood sometimes flowing in stream. The external application of cold and astringents, together with active purgation sufficed, and there was no return of the hæmorrhage till the 23rd, when I found it necessary to plug the nares with a sponge, saturated with a solution of tannin. Directly both nostrils were closed, the blood was forced up through the lachrymal duct, and flowed *guttatim* from the right eye. Cold applications were applied, the patient was then undressed and removed to bed, the shoulders being well raised. Whilst undressing her, I noticed a pulsating tumour above the clavicle on the right side; and, observing it more minutely, I found it to be a pulsating, vermi-

form vessel, lying about an inch above the clavicle, and corresponding with the middle third of the subclavian artery. After a rest, and the subsidence of the bleeding, I made a careful examination, and found the heart in sound and rhythm, healthy; the chest clear on percussion, a systolic *bruit* not very loud being audible under the sternal articulation of the right clavicle. The innominata could be felt distinctly pulsating at the top of the sternum. The carotid was dilated and removed from its position to the anterior triangle, assuming the shape of the italic letter *S*. The subclavian was also dilated, and on manipulation, the first sensation was that of a globular body; but on carefully examining the tumour, the arteries could be easily separated. I was told on inquiry that she had felt for some time past a throbbing on the right side, especially if she had been excited, or after taking exercise, and for some time she has had a choking sensation, particularly when drinking fluids.

Cases of this description are usually chronic, increasing slowly; and mostly lying quiescent, are a source of discomfiture, but not necessarily of death, for years. The coats of the artery are equally expanded through the whole circumference of the vessel, and, as in the case I have related, the vessels are generally tortuous, analogous to what is commonly seen in varicose veins. The treatment consists in lessening the force of the heart's action, giving support to the enlarged vessels, by pressure, and improving the plasticity of the blood and tone of the vessels by diet, steel, and exercise.

This case is interesting as affording a solution of the grave symptoms which marked the previous attacks of illness; and it was a satisfaction to me to be able to find in the diseased vessels a source from which proceeded symptoms which would have been yet more alarming if I had not been able to assign the exciting cause. Had true aneurism existed in the place of the fusiform, we might have had an exhibition of somewhat similar symptoms, but then the paralytic threatenings would have arisen from the laminæ of coagulated blood diminishing the calibre of the vessels, and the brain, instead of being congested from overgorging of its vessels, would have atrophied from the diminished supply of blood.

Arteries of smaller dimensions are more generally affected; but it is not uncommon to find the aorta itself expanded, and generally in connection with insufficiency of its valves. This condition produces a character of pulse almost diagnostic in itself. When the valves from deposit are thickened and rendered more unyielding, the blood ejected from the ventricle falls back upon the heart, thereby necessitating two conditions, viz., a larger quantity of blood, and an increase of power; thus we have hypertrophy, and dilatation of the heart, and with this extraordinary increase established to overcome what is virtually an obstruction, the blood is thrown with great force into the aorta, and the latter contracting from its over dilated state, with greater resiliency produces the full, strong pulse, we easily recognise as symptomatic of hypertrophy of the heart. But it is impossible that the aorta can be constantly over dilated without losing its elasticity and tone; it becomes more yielding and less contractile, and the blood is then forced by the heart through it, as a mere passive tube, into the smaller arteries, which, after a time, follow the same degeneration as the aorta. We fail then to appreciate the interval of time between the heart's systole and the pulse; the jet of blood is instantaneous, and as the arteries lose their tone and elasticity, they are capable of a certain amount of elongation, the pulse then becomes *full*, but not strong, *jerking*, and *visible*, and this character alone will almost designate aortic valvular insufficiency.

Case iii. *Chronic Inflammation of the Aorta, with Ulceration, and Deposit of Calcareous Matter.* This specimen of diseased aorta was taken from a lady past the prime of life, always of a delicate constitution, and fat without power. For some years prior to her death she suffered from what she was pleased herself to call, "spasmodic asthma." Physical examination left no doubt about the state of the large arteries. From the tattered internal lining, and the roughened edges of the ulcerations, owing to albuminous and calcareous deposit, the *bruit* was loud, grating, and whirring, her pulse was small, and unsteady, and she suffered from severe pains of the chest, feelings of impending death, sudden and prolonged faintings; and from being cautioned against all excitement, and keeping within ready access ether, ammonia, and brandy, she, no doubt, warded off repeatedly the death which at last overtook her.

The heart was found dilated, slightly thickened, and soft; and the aorta and large arteries, with degeneration of the coats, thickened, and the internal lining ulcerated, in patches, and thickened by deposit. I introduce this specimen as showing a condition from which aneurism sometimes takes its origin, and I am disappointed in not having this evening a heart and aorta similarly diseased, where, in addition, the blood had ploughed up the inner and middle coats, distending the external one into an aneurismal pouch.

When the aorta is much diseased, and the heart enlarged and softened, the pulse is generally small, and its character undecided, wavering, with now and then an attempt, as it were, to develope a right pulsation. When the heart is of normal power, or hypertrophied, from the resisting state of the arteries, the pulse is hardened and prolonged; sometimes from atheromatous deposit the arteries are rendered inelastic, and the stream of blood passing through these contracted and unyielding channels, requires a longer time for its transmission, and produces the pulse we have described as *wiry;* and when the deposit is irregular, and perhaps with more of the animal than the earthy matter, the arteries have unequal expansions and contractions, thereby producing a series of little waves of blood in quick succession, giving rise to the character of pulse described as *beady*.

I submit this paper, imperfect as it is, to your consideration, feeling the time will not be lost in calling your attention to the deep importance of "special symptoms." For myself, I can aver that, in consultation, my doubts have been cleared up, on more than one occasion, by the overwhelming evidence of some *one* symptom to which I had not attached its full value.

ANALYSIS OF 2157 CASES OF LABOUR.

By H. W. T. Ellis, Esq., Crowle, Lincolnshire.

I send the analysis of 2157 cases of labour, which have occurred in my practice as well as in that of my brother, and of which a record has been kept.

Number of cases		2157
Twin cases		29
Total number of children	Males 1119, Females 1067	2186
Presentations:—		
Natural		2115
Breech		27
Foot		17
Arm		9
Funis		5
Face to pubes		13
Still-born and premature		71
Illegitimate		72
Placental presentations		7
Forceps cases		9
Acephalous fœtus		1
Hydrocephalic head (in one case breech presented)		5
Spina bifida		3
Talipes varus		5
Hare-lip (single and double), cleft palate and nose		7
Supernumerary fingers		3
Imperforate anus		1
Maternal deaths from causes connected with labour:—		
Puerperal convulsions (death on third day)		1
Puerperal fever		2
Retained placenta (death in three weeks)		1
Exhaustion from difficult labour, etc.		6
Hæmorrhage from placenta prævia (turning)		3
Typhoid fever (death in fifteen days)		1
Paraplegia and paralysis of bladder (survived one year		1
Maternal deaths from causes unconnected with labour:—		
Phthisis		4
Erysipelas of pudendum and nates in mother (recovery)		1
Polypi uteri		1
Severe hæmorrhage (recovery)		16

Chloroform was used but once.

Clinical Lectures
ON
LITHOTOMY.
DELIVERED IN
THE LEEDS GENERAL INFIRMARY.

By Samuel Smith, Esq., Senior Surgeon to the Infirmary.

Lecture IV.

Gentlemen,—Having described my experience of lithotomy, my successes and failures, I propose now to give you plain and simple directions for the performance of that operation; and, in concluding the subject, to explain to you the advantages which the curved staff and the beaked scalpel possess over the straight staff and pointed scalpel.

There are some little circumstances necessary for you to attend to before the performance of the operation.

1. With regard to the preparation of your patient: in the olden time patients were bled, purged, and kept upon low diet before the operation, with a view to the prevention of inflammation and other diseases. Now, depend upon it, that such preparation will manifestly have a contrary tendency; there is no occasion whatever for any such proceeding.

2. Previously to your operation, the patient should be sounded in consultation; and, silence having been obtained, not only should the sensation communicated to the instrument by the stone be *felt*, but the sound should be *heard* also. In sounding a patient, I advise you to use Barlow's bulbous-ended sound; having an extremity of large diameter it more readily enters the bladder,—the urethra does not form folds in front of it as it passes towards the prostate, but is put upon the stretch. The instrument is therefore more easily and more safely introduced than one of smaller calibre. The extremity only being of large circumference, and all the rest of the instrument smaller in proportion, it possesses the advantage of greater freedom in its motions when introduced into the bladder, not being held tight by the triangular ligament and muscles surrounding the urethra. If this sound were of equal diameter throughout, it might probably pass into the bladder equally well, but when there, you would not have the same freedom of motion as that afforded by the bulbous-ended sound.

I always like to pass the grooved staff with which I intend to operate two or three days before the day of the operation, and for this reason,—it prevents the bungling which might occur if you were to attempt, when the patient was upon the table, to introduce a staff which would not pass. It is convenient also at this time to ascertain the depth of the perinæum, and the magnitude and condition of the prostate gland; and for this purpose you introduce the oiled forefinger of the left hand into the anus, and place the tip of it on the apex of the prostate. You have thus, previous to the operation, had a rehearsal of that part of it, and you have gained thereby a considerable amount of information. By such examination you ascertain correctly what should be the length and breadth of the beaked scalpel with which the prostate should be incised.

3. Never perform the operation two or three days after your patient has taken a long journey; for the shaking of the stone in the bladder by the exertion of travelling produces, in most cases, a certain amount of irritation, and if you were to operate at such a time, it is very possible that your patient might then be labouring under a paroxysm of the stone, which would add much to the danger. Therefore wait till such irritation, if it has taken place, shall have subsided, or, if it has not, till there is no probability of its occurring.

4. There is a little dodge which I have practised with regard to children. You are aware that our lithotomy patients, after the operation, are carried into the Retreat, or Garden Ward. We have in the garden two detached wards, and these possess this great advantage, that a patient having undergone so very important an operation, is not after it subjected to the hospital atmosphere. Before this proceeding was adopted I can remember, in one instance, when the external incision, after lithotomy, was attacked with hospital gangrene. I do not like little boys to go, for the first time, direct from the operation-room into the garden ward; I prefer having them in the Retreat with the nurse, to whom they will then have formed an attachment of some days duration previous to the operation; for if a little boy has been a week under the charge of a nurse in the house, and should he immediately after the operation be placed under the care of a stranger, he frets, and is unhappy, wanting the face and voice he had learned to love. I consider this a point worth attending to.

5. On the day of the operation, let the perinæum be shaved. Let an enema be administered an hour or two before the operation, so as to have the rectum empty. Let the patient also retain his urine, according to circumstances and the irritability of the bladder, from half an hour to an hour, or even two hours. Your patient is now prepared, and you are ready for the operation.

I propose now, in the simplest language possible, to describe to you the manner in which I perform this operation myself, and which I hope you will follow. I shall do it in such plain terms that "he who runs may read, and a wayfaring man, though a fool, shall not err therein."

First, then, as soon as you enter the operation-room, it is necessary that you should see that every provision is made for the satisfactory performance of the operation. Go towards the table where the instruments are placed, and see them all, examine them well, and choose the scalpel with which you intend to make the external incision; take care that it is sharp both at the edge and point, and that it is of proper dimensions for your patient. Examine the beaked scalpel you have previously chosen, and ascertain that the beak will run smoothly in the groove of the staff. I recommend you to have two small trays. Upon the first you will have laid out every instrument which is always required, and on the second, those which are only occasionally wanted. The instruments you always require are the two scarlet bandages with which the patient's hands are to be secured to the feet, a little oil, the grooved staff, scalpel, lithotomy knife, and various forceps and scoops. On the second tray, artery forceps, a tenaculum, silk ligatures, blunt gorget, forceps with a lateral curve, the elastic gum tube, and lint for cases of hæmorrhage, and which you saw used with immediate success at my last operation; for although no artery of magnitude was wounded, there was very considerable loss of blood from veins, and that hæmorrhage was restrained at once by the elastic gum tube surrounded by lint. A pair of neat dressing forceps is very useful, indeed, where any small fragment of stone is left in the bladder. I remember a case two or three years ago, where I had a small fragment on the tip of my finger, and which I found could be seized at once with a pair of forceps of this kind, but they were to be sought and found when I wanted them, and some little delay took place in consequence. It is proper, therefore, to anticipate anything of this kind. The straight probe-pointed bistoury, which I have described, is occasionally useful, but only in those cases where the prostate gland is of unusual dimensions and firm structure. A blunt gorget is sometimes useful as a guide for the forceps. Have a towel in the front pocket of your dress, so as to be ready in a moment to wipe the finger if it should be soiled. See that the nurse is provided with sponges, towels, and basons of hot and cold water.

Let me now describe to you the manner in which these bandages should be applied to secure the patient. There is a knack in doing this properly. The loop round the wrist, recommended by some, is quite unnecessary. It is disagreeable to the patient, because it makes a knot which is very uncomfortable. First, draw the hand down to the sole of the foot, place the thumb over the dorsum, and the four fingers to the sole of the foot, then, with the help of an assistant keep the wrist in perfect contact with the ankle, pass the bandage firmly three times round, and then give it the figure of 8 turn, in such a manner that from the wrist it shall first pass over the knuckles and lastly over the fingers; if you allow it to come in contact with the points of the fingers first, and lastly over the knuckles and back of the hand, it will not be so neatly accomplished, and will be more likely to slip; finish by passing it again several times round the wrist and ankle, and then place the pin in a place not likely to inconvenience the assistant who holds the foot.

I introduced the scoop into more frequent practice here about thirty years ago, in consequence of reading Barlow's book; but I only discovered this month that our scoops had never been properly made according to his directions. This is the form of scoop which has been used here above thirty years, and you will see that it is more of the form of a spoon than this new one, which I have had made from the plate in Barlow's book. This new scoop is bent much more than the old one, which allowed the stone to slip. Remember, that in using the scoop you must use it very much as you would a pair of forceps, making the other blade with the

forefinger of your left hand. The stone being once secured in the scoop, must be pressed upon by the forefinger of the left hand while you extract with the right, you thus, if you use Barlow's scoop, prevent the possibility of its escaping.* I also wish to show you an instrument made for me, and which I have found very useful on several occasions. I mean these forceps, with one blade a little longer, and overwrapping the other in such a manner that, when the stone is once grasped, it can be easily extracted without danger of its slipping, and without the necessity of that firm grasp to prevent slipping, which occasionally causes the stone to break. Here is the first calculus which was extracted with this instrument in October 1842. But I have had the instrument improved on the French principle. In these new forceps, when the blades are opened, there is little or no separation of the handles from each other, and consequently no stretching of the wound when the blades are in the bladder. For a flat oval or small calculus these forceps are of great value, because, when the finger is once upon the calculus, you can push it into the blades of the forceps, and when once in you can, if necessary, change its direction, and this without subjecting the parts to any extraordinary pressure, which would be the case with a pair of ordinary lithotomy forceps. Ascertain that the operation table, and the chair on which you are to sit, are suitable for your own size. If you find the latter too low, have two or three pillows placed on it.

The patient having been placed on the table, the first part of the operation is for the assistant to apply the bandage to the right hand and foot, in the manner previously described. Now I say the assistant must do this, because it requires the exertion of a considerable degree of strength; and, by doing it himself, the operator might render his hand unsteady. After the right hand and foot are bound together, introduce the staff, feel the stone, and hear it; obtain silence, and let the bystanders also hear it. When that is done, the assistant will tie the left hand and foot together, in the same manner as the right. The patient must now be placed in position; he must be drawn down, so that the breech shall come close to the edge of the operation-table, or even overhang it a little. He must now be secured in a steady position; and this can only be done by the assistance of three men. One sits astride the operation-table, with a pillow upon his breast, to support the head of the patient, whose wrists he holds; another stands at the right side, grasping the knee with his left hand, and the sole of the foot with his right; a third, placed at the left side of the patient, does the reverse. These two individuals, placed on each side, can separate the knees, and prevent the patient from drawing them together, which he will have a great inclination to do. He being now properly placed and everything ready, the staff is given into the hands of the assistant. It is put in the proper position, and made rather prominent in the perinæum. I do not like to hook up the curved staff in the way recommended by Liston. I like it to be pressed a little, so as to make the membranous part of the urethra rather more superficial. I introduce the forefinger of the left hand, previously oiled, into the anus, and place the extremity of it on the apex of the prostate. This manœuvre you have previously rehearsed, and you therefore know exactly how deep it is situated. Keep the finger on the prostate in this position; then take the midfinger of the same hand, and place it in front of the scrotum, about half an inch below its termination, and in the line of the raphe; then place the thumb of the same hand upon the tuberosity of the left ischium. By this means you keep the integuments in the line of your incision on the stretch. The scalpel is now given into your hand, and you hold it in the same manner as you would a pen. Knowing, from previous examination, the depth of the perinæum and the situation of the prostate gland (and in making your calculations, for you have thought intently on these subjects), you place the middle finger on the back of the scalpel, at that point to which you intend to plunge the instrument into the perinæum. The integuments being upon the stretch, you place the point of the scalpel a few lines to the left of the raphe, about three-quarters of an inch or an inch below the termination of the scrotum, and you plunge it deep, daggerwise, into the perinæum, aiming towards the apex of the prostate, but remembering that, although your finger is placed in the rectum, and touching the apex to give you an indication where that is to be found, it is still placed as a sentinel on guard over the rectum. There is this sort of intelligence betwixt the right hand and the left, that you are not likely to run the scalpel into your own finger; but you will endeavour to come within about half an inch of that point, and then you are safe: you know and feel that the rectum is uninjured, and you go down in an oblique line, as if you were aiming towards the thumb which is stretching the integuments upon the tuberosity of the ischium. As you proceed lower with your incision, you withdraw the scalpel a little, so as not to cut so deep, as you are cutting close by the side of the rectum. When you have got beyond the anus, and see that the transversalis muscles are fairly divided, you may then make a gentle curve away from the tuberosity, and finish your incision at a short distance (varying with the bulk of your patient) below the anus.

Now, gentlemen, I am occupying a great deal of time in describing to you that which is done in a moment. I shall be nearly an hour in describing what you will accomplish in two minutes. Your external incision is probably complete at one stroke. Withdraw the forefinger; plunge it into the wound, and feel its whole length; and, if you find any muscular fibres or fascia interposed, which might offer resistance to the extraction of the stone, press the finger down upon that part, and gently divide it with the scalpel. You have now to cut into the membranous part of the urethra. Probably you may find it an advantage to alter in a slight degree the position of the staff. You now place the forefinger of the left hand upon the apex of the prostate within the wound, and carry the scalpel over that finger, with its cutting edge upwards; you feel the groove of the staff, and perforate it with the point of the scalpel, and cut a little upwards. Your staff is large; the urethra is on the stretch, and the wound in it gapes. Insert immediately the nail of the forefinger into the groove, or, what will do equally well, keep the point of the scalpel there, with its cutting edge directed upwards; hold it with the left hand; take the beaked scalpel in the right; pass it along the side of the scalpel to its point. Withdraw now the common scalpel, and give it into the hands of an assistant. Feel, and let the assistant who holds the staff also feel, that the beaked instrument is correctly in the groove. You leave your chair; stand up; take hold of the staff with the left hand, and, keeping the beak of the scalpel at an angle, pressing firmly against the groove, you depress the handle of the staff. And now comes the most important part of all; that is, the line in which you are to make your incision through the prostate gland.

Your incision must be made in such a manner as to avoid two evils; for, in this case, you have to sail just between Scylla and Charybdis. Here is your Scylla—the rectum. Here is your Charybdis—very important blood-vessels. If you were to carry the knife straight down in the perpendicular line, you would infallibly slit open the rectum. If you carried it directly across in the transverse line, you would very probably wound the artery of the bulb, or other vessels of great importance. You are to carry your incision through the prostate in the median line betwixt these two, and then you avoid both these evils. But I prefer rather that it should be a slight degree nearer the transverse line than the perpendicular one; and this direction is shown by the dotted line in the diagram.

Therefore, the staff being grasped, and the handle depressed to this angle, and the beaked scalpel held at this angle, with its edge directed according to the dotted line, push boldly forwards into the bladder. There is not much danger of its slipping, although you are using a curved staff. As it is held in its first position, you cut into the curve of a grooved staff; but if you take the handle of the instrument, and depress it in this position, with the beaks of the scalpel pressing into its groove at an obtuse angle, it is then a straight staff; the curve is all in the bladder; and you have to go on a straight line. Great part of the instrument being within the bladder, it lifts it up from the rectum, and you will run no risk of wounding it. In all my operations, I have wounded the rectum twice only, and never with the beaked scalpel. In the two instances in which it was done, it was in making the external incision: it was very slight, and followed by no evil consequences; in both cases the patients recovering just as favourably as if no such accident had occurred.

The beaked scalpel having been passed through the prostate into the bladder, a gush of urine through the external wound immediately takes place. You now withdraw the beaked scalpel, introduce the forefinger of the left hand into the bladder, *and on no account withdraw the staff till the stone is felt.* You will almost invariably be able to feel it, if you have a tolerably long finger, unless your patient have an enormously enlarged prostate. Any person with the shortest of fingers can readily do this in boys. In adults with enlarged prostate, it is some-

* Since this lecture was given, the scoop, altered in form according to Barlow's plate, has been used both by Mr. Teale and myself very much to our satisfaction.

times difficult. I have met with two instances, and two only, whether in my own or other operators' cases, in which I could not feel the stone. One was in the last operation but one which I have described, and where the gland was so enlarged that the middle lobe came in the grasp of the forceps in front of the stone, and was then divided, the man doing well. As soon as the forefinger is placed in contact with the stone, the staff may safely be withdrawn. You now instantly come to a conclusion as to what will be its size, position, and form; and what will be the most suitable instrument for its extraction. If the stone be very small, it may be either extracted with forceps or scoop. If the incision be tolerably free, you can readily introduce a pair of forceps or a scoop upon the finger, as a director. If the parts should be very tight, and you find you cannot sufficiently dilate them with the finger, and you believe that there will be difficuly in the introduction of the forceps, pass over the finger (while the tip of it still touches the stone) a blunt gorget without beak. They will thus be readily and safely passed into the bladder; and, the exact position, size, and shape of the stone being known, it will be grasped at once, without any searching.

I consider the seizing and extraction of the stone to be one of the most important parts of the operation, and that on which its success mainly depends. It requires very considerable manual dexterity, the great point being to seize the stone in the most favourable position for extraction. A very considerable majority of urinary calculi are in the oval form; and you see that it would be a very unfortunate thing if you were to grasp a stone, and endeavour to extract it in this manner, with the long diameter across the blades of the forceps. But if, when the stone is once grasped, and before you begin to move it, you place the forefinger of the left hand in the wound, and ascertain its position, it is very easy to place the stone more favourably for extraction, viz., with its long diameter in the axis of the wound. Here is a calculus of a flattened oval form, which I extracted last Monday; its dimensions are two inches and one-eighth, by one inch and a half. It was coming with the long diameter across the wound, and could not be extracted in that position; but, by turning the forceps one quarter round, it came out with ease. If I had persevered in attempting to extract that stone with violence, very considerable mischief must have ensued. (April. This man made a good recovery.)

Now all these little things which take me so long to describe must be done in an instant. You must feel yourself placed in the position of the general of a great army. You must attend to every point, and any little difficulty must be obviated in a moment. If possible, grasp the stone with the forceps before the finger is withdrawn from the bladder. When you feel it and examine it, you can tell very well whether it is of a hard compact material (as lithic acid), or whether it is of a soft and friable nature, and you thus are able to estimate the amount of pressure that may be safely applied to it; for it is very desirable that the stone should, if possible, be brought away entire. When it is grasped by the forceps, always extract it in the line of axis of the pelvis. If you pull upwards you seriously contuse and lacerate the cellular tissue behind the pubis; you do mischief which may be the cause of infiltration of urine and death. Let your extraction be forwards and downwards. Hold your forceps firmly, and with the left hand depress, at the same time that you pull forwards with the right.

If there be any difficulty, stop and ascertain the why and the wherefore. Do not attempt by brute force to overcome this, but by gentle persuasion and perseverance. It is a great deal better that you should be one, two, or three minutes in gently dilating the parts, so as to allow the stone to pass with safety, than by extracting with great force, to gain a little time at the expense of irreparable injury. In those cases where you cannot at once feel the stone with the finger, and where you have to search for it with the forceps, do not grope about with the blades open, but search the bladder with them closed. When you tap the stone, then and not till then, open them and grasp it.

Gentlemen, we will suppose that the stone has been grasped and safely extracted; there is another consideration. Is there another stone? If any one of you had extracted that stone you would know at once there was another. You would see that there are two polished surfaces worn away by attrition. Therefore, when you see any mark of this kind on the stone, you examine with the finger, and you find another. Perhaps you cannot feel it with the finger, then sound with the bulbous ended sound, and do not be satisfied with your own exploration, but give the sound into the hands of your assistant, and let him sound and be satisfied.

A few years ago I performed the operation upon a patient, and took away three or four calculi of the size of very small chesnuts. I thought there might be another. I sounded, but could not feel one. I gave the sound into the hands of my colleague, who sounded carefully and gave his opinion that there was not another, and the patient was unbound and sent to bed. But there was another calculus, and it came away by the wound. How do you account for this? It takes place in this way. Many years ago, I operated on a little boy (and it was a few years after that operation which I have described to you, in which no stone was found). In this case I could not feel one, and I was in considerable embarrassment for some time. My colleague, Mr. Chorley, examined also, but neither could he discover one. I then got the female sound, and detected it grasped in a fold on the fundus of the bladder, which had contracted upon it at the time of the rush of urine on the division of the prostate; it was not sacculated, which is a very rare thing. I brought the stone down from that point, and it was readily extracted. Now the probability is, that this calculus, which defied detection and came away through the wound had been grasped in a similar way, and thus eluded our search. If you feel another stone, proceed according to circumstances, that is according to its size, to extract with the scoop or forceps, as occasion may require.

You now sponge the wound, clear away any blood which may have coagulated in it, and examine whether there be any artery bleeding which requires ligature. If there be nothing but a slight oozing of blood, it requires no attention; but if an artery is throwing out its blood vigorously, *per saltem*, seize it with the tenaculum, or artery forceps, and tie it at once. Examine the wound very carefully, and if there be nothing requiring ligature, let the patient be unbound; dip the finger in oil, lard, or spermaceti ointment, and plunge it to the bottom of the wound so as to lubricate the deeper parts, by that means you prevent them from being glued together at an early period. Were such adhesion to take place, it might prevent the flow of urine, and possibly give rise to infiltration; but the parts being besmeared in the manner recommended, obstruction is prevented, and the urine readily flows through the wound in the course of an hour or two after the operation. This plan answers the same purpose as the elastic gum tube, and is less irritating.

The patient being unbound, cover the wound with a piece of soft dressing the breadth and length of your three fingers. Previously to removing him from the table, let him see what to him will be a very gratifying sight, viz., the stone which you have extracted. I sometimes hold it up between my fingers, and say, "It is a great deal better where it is than where it was, is it not?" The man is pleased, and goes away in good spirits.

Reviews and Notices.

An Introduction to Clinical Surgery: with a Method of Investigating and Reporting Surgical Cases. By Furneaux Jordan, Demonstrator of Anatomy at the Queen's College, and Pathologist to the Queen's Hospital, Birmingham. Pp. 155. London: Churchill. 1858.

Mr. Jordan seeks to do for the student in surgery what has been done already for the student in medicine; viz., to furnish him with a guide in examining and reporting the cases which may come under his notice. The object is by no means to render unnecessary the study of treatises on the art, but to give aid in that most important part of medical education—clinical investigation—by showing the student, in as few words as are necessary to represent the ideas, what are the possible meanings of certain signs and symptoms, and by what combinations of signs and symptoms the various surgical disorders and injuries are denoted. Other objects in connexion with clinical study are also sought to be fulfilled, as will appear from the following description of the contents of the eight chapters of which the book consists.

Chapter I contains a Critical Inquiry into the Present State of Surgical Investigation. Chapter II contains Observations on the Investigation and Registration of Surgical Cases. Chapter III gives a Method of Investigating and Reporting Surgical Cases. Chapter IV contains an Epitomised Method of Inves-

tigating and Reporting Surgical Cases. Chapter v contains an account of Instruments and Agents used for Obtaining Surgical Knowledge. Chapter vi is on the Post Mortem Examination of Surgical Cases. Chapter vii describes the Analytic Estimation of Surgical Phenomena. Chapter viii describes the Synthetic Estimation of Surgical Phenomena.

All really practical surgeons will agree with Mr. Jordan as to the importance of careful and complete reports of surgical cases. Minuteness of detail, even to the noting down of negative characters, is far preferable to superficial description. The want of histories of the kind that we point out is well expressed in the following quotation from the first chapter.

"It is a constant cause for complaint, that statistics, constituting in themselves a science illuminating so many others and affording the greatest approximation to exactness in the inexact sciences, are not, and cannot be, applied to the very inexact science of surgery. The character of the reports of surgical data is such, that statistics have scarcely been attempted, or where attempted have been almost useless. There is little doubt, however, that when statistics attain a tangible character in surgery, at that moment true progress will commence; principles now doubtful will stand out in greater clearness or disappear; new principles will be divulged; and art, long either cramped or blindly venturesome, will glide into higher regions of decision and catholicity." (Pp. 7-8.)

The author gives three examples of this want of surgical statistics, which will strike every one as most appropriate. They are—cancer; amputation of the thigh; and resection of the knee-joint.

We believe that a plan of the kind which Mr. Jordan advocates is in use in some hospitals; but not the less credit is due to him for producing the work before us. It is written with great care and clearness, and will without doubt do its share—not a trifling one—of work in fitting the surgical student for the efficient practice of his art.

Medicines; their Uses and Modes of Administration; including a Complete Conspectus of the British Pharmacopœias, an Account of New Remedies, and an Appendix of Formulæ. By J. Moore Neligan, M.D. Fifth Edition, pp. 620. Dublin: Fannin and Co. Edinburgh: Maclachlan and Stewart. London: Longman and Co. 1858.

"Good wine needs no bush;" and a work that has gone through five editions requires little aid from the reviewer. This excellent work is one of those connected with materia medica, which will be revolutionised by the Medical Act. The consolidation of the *Pharmacopœias* will eliminate from this volume a large quantity of matter, which is now useless to a large portion of readers. One can only realise the absurdity of the old system of separate *Pharmacopœias* by a glance through Dr. Neligan's book. The heptarchy of officinal preparations has only just been abolished; and three nations, speaking the same tongue and obeying the same rule, have only lately admitted that they can abide by one system of materia medica! It really seems as though we had but just emerged from the dark ages of medicine.

The Book of Prescriptions; containing Three Thousand Prescriptions, collected from the Practice of the most eminent Physicians and Surgeons, English and Foreign, etc. By Henry Beasley. Second Edition. London: John Churchill. 1858. Pp. 548.

This is by far the most copious book of prescriptions published; and the young practitioner will find in it everything he may require in the shape of medical formulæ. We do not think, however, that they are arranged in the most accessible manner. The inexperienced practitioner does not so much require to know the interminable combinations of certain drugs, as what are the proper prescriptions in certain diseases. An index of this kind, with a direct reference to each prescription, in addition to the one already furnished, would render this little volume perfect of its kind.

British Medical Journal.

SATURDAY, JANUARY 22nd, 1859.

THE RESPONSIBILITIES WHICH MUST BE MADE TO ATTACH TO MILITARY COMMANDS.

The responsibilities which ought everywhere and at all times to attach to military commands, were not likely to be nicely weighed when our forces were led by a Marlborough, a Nelson, or a Wellington. William III, cold and phlegmatic as he ever appeared, was, according to our great historian, "steeled, not only by professional insensibility, but by the sterner insensibility which is the effect of a sense of duty." In an age when "it was too much the habit even of the most humane and generous soldiers to think very lightly of the bloodshed and devastation inseparable from great martial exploits," William "held the lives of other men cheap as his own." He was, essentially a captain of the heroic school, as were Marlborough, Nelson, Abercromby, and Moore. Wellington, a man of a hard cold school, the very opposite of the heroic, had no knowledge, such as was possessed by Moore (the personal friend of Robert Jackson), of sanitary arrangement and discipline. It does not appear, indeed, that he cared for, or took much interest in, the moral or physical welfare of the soldier; and we are told that the only warrant suggested by the Duke of Wellington, to be found in the War Office, is one requiring that each soldier should have a separate bed.

Thus Wellington grew into greatness in the palmy days of Toryism and aristocratic domination, which he knew well how to turn to his personal advantage, but from both of which Englishmen have since then learned how to relieve themselves. "Sympathy is rarely strong," says Lord Macaulay, "where there is a great inequality of condition;" and sympathy with the sufferings of seamen and soldiers was not even pretended in those days. When Lord Cochrane submitted a measure of ordinary humanity for the benefit of the naval service, the House of Commons passed to the order of the day, in utter contempt of such considerations. It was not then at all, and is not now sufficiently, the habit of the aristocracy to consider the wants or natural wishes of the class from which our seamen and soldiers are recruited, whether the aristocrat happened to be of the personages clothed in black, or of those decked in scarlet and cock's feathers. Even so lately as the Crimean war, we have heard that it was held by certain staff colonels, that for them, or such as them, to meddle with procuring fresh bread for their men was a thing quite beneath their station.

In our fleets and armies sanitary science has been exclusively studied and expounded by the surgeons, and it has not as yet taken any perceptible hold on the minds of naval and military officers, least of all on the minds of commanders—a neglect which we hold to be criminal. On this subject we purpose to adduce the remarkable declarations of Mr. Ranald Martin, believing them to be well founded, and of the greatest public importance.

"In these days of speculative humanity, pseudophilanthropy, and maudlin sentimentality, death for the holocaust even of an entire army must not be so much as mentioned;

yet death has been awarded, and suffered too, for crimes of a very minor degree, comparatively. There must be an end put to this prevalent weakness. Commanders must, in short, be rewarded and punished in like manner as other public servants; and as they always receive the highest rewards, so they should be made responsible in the highest degree. It must be remembered also that the sacrifice of a fleet or an army might prove the ruin of the empire, and that for such a crime soft words and unworthy excuses must no longer be found. I am here speaking of such flagrant sacrifices as those of Walcheren, Rangoon in 1825-26, of Chusan in 1840-41, and of the Crimea; and I have long been strongly impressed with the conviction, that of all the responsible servants of the public, the responsibility of those who undertake the management and command of fleets and armies should be made the most direct and the most immediate. Hitherto, our admirals and generals have been the least responsible of public servants; so much so indeed, that where, as at Walcheren and the Crimea, the most grave punishments were deserved, the greatest rewards were bestowed. In the latter instance, there was hardly a chief or subordinate engaged in the tragedy of horrors, who did not receive some reward or honorary distinction from the Crown. They were each and all rewarded in proportion to the injury they had done their country. *Dat veniam corvis, vexat censura columbas*, was the principal action; the culprits being rewarded first, and tried by a sham Commission afterwards—a Commission which was assembled and designed only to whitewash them. How great must be the perils of a country in which conduct such as this is permitted to ministers or commanders."

The doctrine of responsibility here set forth, while it is greatly in advance of the aristocratic sentiments of the Horse Guards, is by no means in advance of the requirements of the age; that is, if we are to be saved from great national disasters; and Mr. Martin, in his advocacy and in his endeavour to bring the subject home to the military mind, as member of the Army Sanitary Commission, has done good service to the public.

The following scanty acknowledgments were all that Mr. Martin could wring out of his friend Sir Alexander Tulloch:—

Question 6320.—"Have you formed any opinion upon the responsibility which ought to attach to the unnecessary sacrifice of health and life by military commanders; and do you not think that some grave responsibility ought to attach to such sacrifices?"

Answer.—"I think it ought; but I am afraid it does not always happen that when you gain victories or produce great effects, you look to the cost very much."

6321.—"Are there any circumstances within your recollection, apart from the field of actual military operations, under which a commander could be warranted in sacrificing the health and the lives of his men?"

Answer.—"He might be in an unhealthy position; and it might be absolutely necessary to remain, on account of his operations."

6322.—"Would not that very unhealthiness which might destroy one-third of his men, and place the rest of them frequently under treatment in hospital, nullify the post as a military station?"

Answer.—"It is entirely a matter of calculation; even Marlborough once sacrificed a very considerable post for the purpose of producing a desired result in his operations."

Just so—it is entirely a matter of calculation—a statistical question; and so thought Condé.

Condé, who had no feeling for anything but glory, regarded the loss of six thousand men at Freibourg as nothing; declaring that "a single night in Paris gives birth to more men than this action destroyed." But such a question must not be permitted to be thus regarded in our day. The loss of an army of full-grown men—not to speak of the loss of an army of old soldiers—is not to be repaired without years of careful training; and years our enemies may not feel disposed to grant us. On every account, therefore, we regard the responsibility of commanders, along with Mr. Martin, to be of the most grave and pressing nature; and the sooner the public comes to the same conclusion, the better for the service and for the interests of the public.

Mr. Martin's bold and original views are well deserving the serious attention of England. They are plainly such as we may never hope to see advanced by any class of military men; nor would they ever receive the support of the Horse Guards. But military men may be made to suffer by their application when next an incompetent commander takes to destroying the forces committed to his care.

THE WEEK.

It may perhaps be imagined that the spread of sanitary knowledge, and the awful experience gained by the blunderings of the military authorities in the Crimea, would have swept away for ever all further impediments from the path of army surgeons while in the execution of their duty. We fear, however, that improvement in this respect has made as yet but a slight impression; and that military men snub the doctor, when they can do so with impunity, just as much as ever. The following letter, just received from India, proves that we still have commanders of regiments who hold the health of their men a light thing in comparison with their own comfort, and are willing to sacrifice life rather than yield up one atom of their own importance.

"Shortly after the arrival of the regiment in ————, in December 1857, I had reason to remonstrate with the officer commanding, and point out to him the injury likely to arise from the men bathing at a late hour of the morning, by which they exposed themselves to the powerful rays of the sun. Notwithstanding my representation, this practice continued until put a stop to by the authorities in command there, and without any application to them from me on the subject.

"In February 1858, when encamped at ————, a punishment parade, and marching order parade mounted, was ordered to take place at noon! I remonstrated as mildly as possible with the officer commanding, and suggested that the parade should take place after 4 P.M., with which suggestion he complied, with evident annoyance.

"Some times during the month, we were ordered to march from ———, the march to commence at daylight! I waited on the officer commanding, and pointed out to him the exposure the men would suffer marching at such an hour, stating that the march should cease at daylight, instead of commence. He received me and my suggestions with, to use a mild term, contempt. I then wrote him an official letter on the subject, which had no effect. The men were without tents from 1 A.M. to 1 P.M.

"A day or two after this, I was sent for to go to the tent of the officer commanding, and, in presence of the senior major and adjutant, was told by the officer commanding that my letter was bad English, a plagiarism, and that it was an insult to him, the officer commanding; was accused of having interfered three times since my arrival in the country with the officer commanding; viz., about bathing at ————, punishment parade at ————, and the march; and that he thought I had enough of correspondence in the Crimea; 'that he would refer my letter to a general, as he would command his own regiment'; that he had consulted his major and the adjutant, and they said he had done right in marching at the hour he did.

"In either the months of April or May (I cannot ascertain which, not being able to have access to the hospital letter-book, now with the regiment in India), on arrival at the camping-ground, I desired the apothecary to place the hospital marquee at the north-east angle of a large mango tope. As we were to halt for that day and the morrow, I wished to have the sick sheltered as much as possible. After I had made my selection, the officer commanding shifted his flag backwards to the centre of the tope; and, in giving orders to the adjutant relative to the encampment, ordered the hospital to be placed

on some rough stubble-ground in the open. I remonstrated with him, both verbally and by correspondence. The latter referred to the brigadier commanding, without effect. One of the patients, C. M——, complained sadly of the intense heat (110° to 112° Fahr.); but I could do nothing for him, being powerless when not supported by the officer commanding. The next morning, at some distance from camp, I discovered a building, to which I removed the sick; but too late. C. M—— died of heat-apoplexy.

"From that occurrence I met with less obstruction in the discharge of my duties, excepting in one instance, when I met with considerable difficulty and delay in obtaining further hospital accommodation when the sick increased; and then the worst tent that the officer commanding had at his disposal, having been injured by fire, was granted me for the use of the sick.

"Not having the hospital letter-book by me for reference, much of the above statement is written from memory. The facts, however, have left an indelible impression.

"I had a reluctance, unexpressed however, to remove the hospital any distance from the encampment, as a guard was not allowed by the officer commanding."

Had the recommendations of the Commissioners appointed to inquire into the Sanitary Condition of the Army been in force, in all probability "C. M." would have been alive at this moment; for the commanding officer would have hesitated before he refused a shady place for the hospital tent, had he known that his refusal would be officially noticed, and that in all probability he would be called on to justify his inhuman and selfish conduct.

We have exerted every effort to frustrate the extravagant scheme of the Metropolitan Commissioners for the drainage of London—a scheme by which the excremental wealth of three millions of people is to be thrown into the mouth of that very river on whose broad bosom fleets of ships from the other side of the globe, laden with guano, are continually being borne. The absurdity of the thing is so evident, the disgrace to the metropolitan city in thus acquiescing in a proposition at the same time barbarous and wasteful is so manifest, that we can only hold up our hands, and wonder how such things can be. The following translation of a letter, just received by a correspondent of the *Times* from Professor Liebig, will perhaps lead the government to interfere at the last moment, and, so far at least as London is concerned, to rescue its reproductive refuse from the management of a knot of tradesmen, who should never have been entrusted with a great scientific question of this nature.

"Munich, Jan. 9th.

"My dear Sir,—Pray accept my best thanks for your continued interest in my lectures on theoretical and practical agriculture; they are being translated by Dr. Blyth of Cork, who has by this time nearly completed them.

"Since last week I have been lecturing on sewage; and I am firmly of opinion that, if England wishes to remain an agricultural country, she must use as manure the nightsoil and similar residues produced in large cities. This necessity would be increased in the event of a war with America, when the supplies of guano would cease.

"The price of corn depends upon that of guano; and it is most unnatural that, in a country like England, the production of corn and meat should be so dependent on the supplies of foreign manure.

"The heads of even the most enlightened agriculturists have been turned by a theory propounded by Mr. Law—viz., that nitrogen or ammonia are the most necessary ingredients in manure, and that consequently solid excrements are valueless, the urine alone being of use.

"These views expose utter ignorance, and prove that in England leading agriculturists do not pay sufficient attention to the fundamental principles of chemistry. It is difficult, nay, perhaps impossible, at this moment to convince them of their error. I have tried to do so in my *Letters on Chemistry* I have just published; and I shall feel most grateful to you, as well as to all who, like yourself, take an interest in the welfare of their country, for any assistance that may be rendered me in propagating this great truth. "Yours,

"Justus Von Liebig."

A method has been adopted by the Northampton Medical Registration Association, which we think likely to prove of great use in procuring additional security against the intrusion of unqualified persons into the register. The method alluded to consists in requiring, from all applicants for registration, the production of their diplomas to the managing committee, and also their own personal attendance whenever the applicants are not already well known to the committee. The following endorsement of an ordinary "Form of Application" is then signed, and transmitted with the fee to the Registrar.

We, the undersigned Medical and Surgical Practitioners, registered under the Medical Act, 21 and 22 Vict., c. 90, hereby certify the Registrar for England, that we have individually examined the Diplomas of Qualifications of , and are of opinion from such examination, and some personal knowledge, that is legally entitled to be registered as and

(Signed) _____
_____
January 1859. _____
_____

It would seem that if a similar method were adopted in all localities where registration societies exist, and were enforced and made general by the sanction and authority of the Medical Council, an acknowledged deficiency would be, in great measure, supplied. Such a mode of proceeding would speedily effect the registration of the great mass of the profession, in a manner convenient to all persons concerned; suspicious applications would be eliminated for careful scrutiny by the Registrar; the local knowledge of registration societies would be advantageously utilised; and a good guarantee afforded for the purity of the register.

Mr. Griffin proposes several important alterations in the scheme of Poor-law Medical Reform; and we would urge an attentive perusal of the remarks thereon which he has issued —at least, of those portions which are given at p. 75—as thereby much misapprehension may be removed. We are glad to find Poor-law surgeons coming forward to express their opinion, through the pages of this Journal, on the merits of Mr. Estcourt's scheme; and we would suggest that the plan of approving the scheme in general, and pointing out amendments where necessary (as was done at the Bedford and Chippenham meetings, which we noticed last week), is more likely to produce a good result than wholesale condemnation of the plan.

The apprehension of two persons on a charge of conspiracy to obtain by misrepresentations a diploma from the King and Queen's College of Physicians in Ireland, has taken place within the last ten days. In another page, we give an account of the proceedings at the police court in Dublin, which have ended in the prisoners being admitted to bail—but bail of such an amount as will, we should think, ensure their appearance to stand a trial. The prosecution is not undertaken under the new Medical Act, but under the common law regarding conspiracy. The case is one of importance; for, if it be proved that Dr. Reeves passed in Dublin a "most satisfactory examination" for his friend Protheroe, who knows how often examiners of other boards—in the North, for instance—have been gratified with the answers of a mere *umbra?*

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the JOURNAL should be addressed to Dr. WYNTER, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the JOURNAL, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
BIRMINGHAM AND MIDLAND COUNTIES. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Feb. 10th, 6 P.M.

MEDICAL REGISTRATION.

REGISTRATION OF POOR-LAW MEDICAL OFFICERS.

Medical Registration Office, 32, Soho Square, London, W.
January 20th, 1859.

THE Medical Registrar presents his compliments to the Editor of the BRITISH MEDICAL JOURNAL, and would feel obliged by the publication of a letter which he has recently addressed to the Poor-law Board. He has written it with the hope of averting serious inconvenience from many of the Poor-law medical officers through difficulties which do not seem to have been sufficiently considered when the disabling clauses of the Medical Act were framed.

"Medical Registration Office, 32, Soho Square, W.,
January 17th, 1859.

"SIR,—I have had the honour to receive your letter of the 13th instant (No. 47,562), conveying a copy of the circular issued by the Poor-law Board on the 23rd December, respecting medical registration, which shall be laid before the Medical Council. This circular has greatly promoted medical registration. But I am most anxious to submit respectfully to the Poor-law Board that very great difficulty has arisen from the shortness and inadequacy of the time allowed for complying with the provisions of the Medical Act, 21 and 22 Vict., c. 90.

"By the twenty-sixth section of that Act, the Registrar is required to enter no one on the register unless he be satisfied by the proper evidence that the person claiming is entitled to be registered; and, by the fifteenth section, the Registrar is referred for the proper evidence to the certified lists of the bodies empowered to grant medical qualifications.

"But the process of verifying the qualifications of candidates by reference to these lists requires considerable time, especially since most of the claimants demand to be registered on several qualifications.

"The Medical Council was not appointed by the Secretary of State to hold its first meeting until nearly the end of November; and some days more were consumed before a Registrar could be appointed, who was unable, with the utmost diligence, to obtain most of the certified lists until within a fortnight of the close of last year. Some thousands of persons have since applied, and are still applying, to be registered; and many demand certificates of their registration, which cannot be given to them without much time and labour, and interruption of the business of making the register.

"Under these circumstances, would it be asking too much of the Poor-law Board to request that another circular should be issued, directing the guardians not to press for proof that their medical officers are registered until the Medical Council shall be enabled to direct that the register shall be published, as required by the twenty-seventh section of the Act, which will not probably be for three or four months?

"I am desirous also of mentioning that the Medical Registration Office is now at 32, Soho Square, W.

"I am, sir, your obedient servant,
"FRANCIS HAWKINS, *Registrar.*

"W. G. Lumley, Esq., Assistant-Secretary, Poor-law Board, Whitehall."

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

MONDAY, DEC. 13TH, 1858.

W. H. WILLSHIRE, M.D., President, in the Chair.

PARTIAL OR INCOMPLETE FRACTURE OF THE ULNA.
BY E. CANTON, ESQ.

THE accident had happened to a boy, aged 14, under the following circumstances:—The boy, whose employment was that of removing sheets from a printing machine, had his jacket caught by the socket of the roller, and whilst striving to take off the former, so as to extricate himself, his hand was dragged in between the tympan and platen of the machine. When admitted into hospital, the outer side of the hand and forearm were found to be extensively lacerated; the radial artery was torn through, and the lower articular part of the radius was separated from its shaft. The hand was perfectly cold. Mr. Canton amputated the forearm at a short distance below the elbow-joint, although the apparent mischief was confined to the hand, wrist, and an extent of two inches above the latter, inasmuch as he conceived that there might be additional and hidden injury to the soft parts higher up, even though there was not the slightest external mark to warrant the suspicion. On dissection of the part removed, however, the extent of concealed injury became apparent, and the larger and smaller bundles of muscular fibre were infiltrated with blood. The carpal end of the ulna was torn from its shaft. This latter presented a fracture which extended through three-fourths of its thickness, but had left the remaining portion bowed, but intact.

Mr. DE MÉRIC thought that the observation of Mr. Canton, that it was desirable in some of these cases to amputate at a point beyond the seat of injury, was a judicious one; and related a case in which a young girl had both legs crushed by a railway engine, and it was found necessary to amputate one of the legs just below the knee. The injury to the other extremity appeared to be confined entirely to the foot, and the second amputation was performed forty-eight hours after the first, just above the ankle-joint. There was not the slightest evidence of any injury beyond this point, but sloughing commenced, and extended up to the knee. Sloughing also took place on the other side, but this might be explained by a little stretching of the posterior flap, as Mr. De Méric was anxious to give the girl a good knee-stump, although the sound soft parts were rather scanty for the purpose. The girl eventually died of tetanus. It would be interesting, in these cases, to inquire what was the exact nature of the injury which called for amputation at some distance from the seat of the mischief?

Mr. CANTON was unable to answer the question satisfactorily; but in the case which he related, he had been induced to operate higher up in consequence of the great extravasation of blood in the injured part, which was, in fact, universal. He was fortunate, in this instance, in having hit on the exact point at which to perform the operation.

Mr. W. ADAMS considered that in Mr. De Méric's case the sloughing must have been produced from some constitutional condition of the patient. During the siege of Lucknow, it was found that slightly-contused wounds often terminated fatally, from extensive sloughing, which was, doubtless, caused by a deteriorated condition of the constitution consequent upon the privations to which the sufferers had been exposed.

Mr. DE MÉRIC said that in his case the patient was a girl, aged about 14, who had been a general servant, and it was probable that she had been ill-fed and over-worked.

PATHOLOGICAL APPEARANCES IN DIPHTHERIA.
BY W. R. ROGERS, M.D.

Dr. ROGERS exhibited the parts taken from a child who had died of diphtheria. The disease had commenced insidiously, and appeared at first to be a case of simple tonsillitis. Caustic was freely applied, but symptoms of a more severe character set in, and the child died from asphyxia at the end of eight days. After death, the whole of the fauces were found covered by an adventitious membrane, with the exception of the anterior portion of the epiglottis. There was no sign of any ulceration underneath the exudation. Dr. Rogers stated that the disease had been very prevalent in some parts of the country; and a practitioner in the neighbourhood of Tunbridge Wells had stated that he had had four hundred cases, all of which had terminated favourably.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

Letter from William Walthew, Esq.

Sir,—Will you have the kindness, through the medium of the British Medical Journal, to allow me, as a Poor-law medical officer, to state that I fully acquiesce in the views expressed by Mr. West and other gentlemen with reference to the new scheme for medical relief to the poor? I have hitherto avoided joining the agitation for Poor-law medical reform, knowing the subject to be one in which there would be great difficulty to adjust a measure satisfactory to all parties. If the new scheme, or the amended one by Mr. Griffin, is to be the issue on this subject, the position of the medical officers will be very much worse. No amount or increase of pay will reconcile an honourable minded man to the degradation and insults he will be subjected to under Clause 3. Who can prevent a pauper from changing, in the course of twelve months, from one to the other, if two medical men are appointed?

Has the legislature been able to make Her Majesty's subjects conform to the Vaccination Act? If one medical man has the moral courage and integrity to detect imposition assumed for the purpose of obtaining relief, will not the applicant apply to the other, who will be rewarded for having on his list as many cases as he can record? Besides which, he will purchase popularity at no expense to himself; on the contrary, he will be remunerated.

The great deficiency in the plan is, that they forget that we are frequently called upon to act upon feigners and malingerers as checks, to a degree unknown to the naval and military officers; and all this while not being protected from their abuse and maledictions, as they are; nor receiving any credit for the disagreeable business which we are required to perform.

The fourth clause is objectionable, inasmuch as medical men alone are selected for periodical appointments. If the principle is good, let it be applied to all the other officers elected by the guardians; and then the medical men would appear equally trustworthy. I am, etc.,

William Walthew.

Holyhead, January 17th, 1859.

POOR-LAW MEDICAL REFORM.

Letter from H. J. Macy, Esq.

Sir,—The objections to the suggested scheme for a new arrangement of medical relief are so numerous and obvious that it would be tedious and needless to go through them. Would not all necessary changes be summed up in these two?

1. That the workhouses be put upon the same footing as the districts with regard to extra medical fees, which, indeed (if I understand the clause rightly) is virtually the intention of Clause xiv of the proposed scheme. And

2. That the salaries of all Poor-law medical officers be raised, so as to afford them fair remuneration for their services.

Few of us, I think, wish for any further change; and I cannot see that any more is needed than the alterations I have mentioned. Let me urge my professional brethren to stick firmly and simply to the point of increased remuneration.

I am, etc., Henry J. Macy, M.R.C.S., L.A.C.,
Surgeon to the Bedminster Workhouse, and Districts 2 and 3 of the Bedminster Union.

West Town, near Bristol, January 18th, 1859.

POOR-LAW MEDICAL REFORM.

Letter from W. Few, Esq.

Sir,—If, amidst the many proposed schemes for Poor-law medical reform, you deem the following few suggestions worthy of insertion in the Journal, they are at your service.

I am, etc., William Few.

Ramsey, Huntingdonshire, January 18th, 1859.

1. All appointments of union medical officers to be permanent, as they now are.

2. To decidedly oppose the proposed plan of appointing two medical officers for one parish, as quite unnecessary, and, for obvious reasons, very objectionable.

3. To adopt the per case system.

4. Let every order for medical attendance upon a sick pauper entitle the medical officer to the receipt of four or five shillings (as may be hereafter decided upon, according to circumstances) for patients residing within one mile of the centre of the town in which the medical officer resides; the same sum to be applicable to patients living at a greater distance, if they are able to apply personally at the medical officer's residence; but, when journeys are required, one such journey to be charged at one shilling per mile, *e. g.*, a patient residing five miles from the medical officer would require an order for nine or ten shillings, as previously agreed upon.

5. A fresh order, on the same terms, to be given to the medical officer at the expiration of twenty-eight days from the date of the first order, should the patient require further medical attendance.

6. The permanent paupers' tickets or orders to be as in Clause 4, but each ticket to entitle the holder of it to one year's medical attendance for the same amount.

7. The medical officer to have the power of ordering *specific* quantities of meat, wine, or other necessaries.

8. To give an extended list of extras for surgical cases, somewhat in accordance with Clause 19 in Mr. Griffin's pamphlet, entitled *The Grievances of Poor-law Medical Officers.*

POOR-LAW MEDICAL REFORM.

Sir,—I need only echo the sentiments of several gentlemen, who have already written in this Journal, as good and sufficient reasons for the dissatisfaction I experience at the proposed change, and cannot doubt the plan is highly unpalatable to by far the majority of the union surgeons. The whole thing appears to lie in a nutshell. It is a universally acknowledged fact that the parish surgeon is underpaid and overworked. Give him adequate remuneration, and he will be able to give any medicine, expensive or cheap, that the case may need, and a margin will be left to pay for help in the discharge of his duties, if he requires it. It always strikes me as an absurdity for the clergyman of a parish to receive, it may be, from one or two to ten or twelve hundred *per annum* for his spiritual labours therein; and an educated medical man, because he attends the *lowest class*, to be *mistaken for* and paid as if he *belonged to* them himself.

As for having two medical officers to every parish, it is an acknowledged fact that comparisons are odious; and I think the profession will be much to blame if they submit to it. I consider the very proposal as almost an insult. If there are to be *two* medical officers, I am sure the Poor-law Board ought to go a step further, and have two *relieving* officers, two *Union* masters, and (if by multiplying they wish to lessen the evil) two Boards of Guardians to every parish. But a house divided against itself cannot stand.

I remember Mr. Estcourt told a deputation of Union surgeons that waited upon him, that there had been complaints made that Union surgeons were not always as attentive as they might be to the poor. Now, I detest all such general accusations; and what is more, I do not believe in them. It is like the vague suggestion made the other day by a purse proud governor, that some of the medical officers of the Taunton and Somerset Hospital had neglected their patients,—a statement not borne out by facts,—an ungenerous and unfounded rumour,—a mere peg on which to hang an obnoxious rule.

Perhaps I write warmly on this matter; but I sometimes burn with indignation when I think in what an ungenerous way the profession is too frequently used by the public and by various boards. I said that comparisons are odious; but if they are to be made, and by the poor, let them be asked, in most Union districts, who is their friend in adversity? the relieving officer who bullies and growls at them? the Board of Guardians, who shake their heads in solemn council and refuse more than a dry crust to a starving family? or the surgeon who has travelled to be at their bedside at midnight to aid them in an hour of anguish, and who often puts his hand into an ill-stored purse to relieve starvation? And I have little doubt there would be an abundant testimony to that real charity which worketh in secret, "not letting the right hand know what the left hand doeth." I am, etc.

A Suffolk Union Surgeon.

January 18th, 1859.

POOR-LAW MEDICAL REFORM.

Sir,—Will you allow me sufficient space in your pages to make a few observations on the proposed scheme of Poor-law medical reform?

I agree with the greater part of the letter written by Mr. West in your Journal of the 8th inst. But, at the same time, there is no rule without an exception; and I think that, in some districts, a fresh division of the parishes is badly wanted. In this district, for instance, the medical officer lives four miles out of this parish. The consequence is, that poor men lose a day's work in going to him. Rather than do this when any of their families are ill, many of them come to me; and, though I know that many cannot possibly pay me a farthing for my attendance, yet I cannot allow people, as it were, to die at one's door. The guardians some months ago passed a resolution to make this parish and the two adjoining ones into a separate district. The present medical officer (upon the principle, I fear, of the dog in the manger) refused to agree to it; though the guardians at the same time agreed to give him two other parishes nearer his own house, and also make his salary equal to what it was as it then stood. The Poor-law Board was appealed to, but could do nothing, because the medical officer objected to the arrangement. Now, in such cases as this (and I have no doubt there are several such), I think the first article of the scheme is called for. I am, etc.,

A Parish Doctor.

January 18th, 1859.

TAUNTON AND SOMERSET HOSPITAL.

Letter from Henry Alford, Esq.

Sir,—In the last number of the Journal you have inserted a strong leading article on the recent events at the Taunton and Somerset Hospital, at the conclusion of which you denounce any medical men who should come forward to fill the vacant offices, and, by implication, those who have complied with the new rule, and retain their posts at the hospital.

As I have entered my name and the date of my visits in the book provided for that purpose, from the time it was requested by the governors at their annual meeting more than two years since, long before it was made an absolute law, and as I have continued to do so since the law was passed, and intend to continue my compliance for the future, I am, of course, at issue with you, and with three of my late colleagues, as to the effect and bearing of that rule on my professional status and character; so far from considering it in any degree derogatory or offensive, I look upon it as a desirable arrangement to have a record of the amount of my time and services devoted to a public charity; and as every hospital must have some check upon the attendance of its medical and surgical staff, I had much rather keep a record myself than be subject to any mode of espionage or inquiry, as is the practice of some hospitals I know.

The plea, that because we are honorary officers, therefore we are not to be tied down to the duties of the office, or to comply with the rules for regulating those duties, is futile. Every man who takes an office, whether he receive a salary for his services or not, is bound in honour to conform to all the rules, and perform all the duties of that office.

The question, whether the medical and surgical officers of hospitals should not be paid, is quite another matter, and wholly irrelevant to the present question. That the recording in a book the fact of our visits to the hospital is, or can be, in any sense injurious or derogatory to our professional character, is so far from true that I believe the refusal is much more likely to injure our status with the public; and I think this extreme sensitiveness on trifling matters, and excessive jealousy of every interference from without, shows an unworthy distrust of the real honour, dignity, and usefulness of the profession.

What is done constantly in every part of the kingdom by magistrate members of various Boards, and a variety of other unsalaried as well as salaried officers, may surely be done without offence or degradation by medical men.

The fact of being paid for services cannot make that necessary and honourable which is degrading without a salary; and I presume all the salaried medical officers in the kingdom, whether in the army, navy, public boards or poor-law unions, have to make some record of the regular performance of their duties.

The rule in question was first proposed in a friendly and courteous manner, and arose out of a discrepancy of statement as to the regularity of the attendance of one of the surgical staff. On this occasion it was suggested by the committee that a record should be kept by the officers themselves, from which there could be no appeal. The surgeon in question at once availed himself of it, and I followed his example as soon as the governors of the hospital, at a general meeting, had expressed a wish to that effect.

To imply that such a record would be made without the duties being performed, is such a slanderous imputation on the honour and veracity of the medical officers, that it deserves and requires no refutation.

I can see no reason why, under existing circumstances, other medical men should not come forward to fill the vacancies in our hospital; nor do I believe the profession, as a body, will endorse your fierce denunciation of those who will most assuredly do so. I am, etc.,

Henry Alford,
Surgeon to the Taunton and Somerset Hospital.

Taunton, January 18th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Sharpin. On January 14th, at Bedford, the wife of H. W. Sharpin, Esq., Surgeon, of a son.

Warden. On January 15th, at 9, Cherry Street, Birmingham, the wife of *Charles Warden, M.D., of a son.

MARRIAGES.

Bond—Gilbert. *Bond, Charles, M.D., of Lutterworth, to Annie, eldest daughter of Thomas Gilbert, Esq., of Swinford Lodge, on January 18th.

DEATHS.

Appleton. On January 14th, at Stokesley, Yorkshire, Ann, widow of the late Richard Appleton, Esq., Surgeon.

Downes. On January 8th, at the Beeches, Handsworth, Horace Blythe, son of *Wm. Downes, Esq., Surgeon.

Esdaile, James, M.D., late Presidency Surgeon, Calcutta, aged 50, at Sydenham, on January 10th.

Pitcairn, Sir James, M.D., Inspector-General of Hospitals, at Dublin, aged 82, on January 12th. He was born at Little Bedwin, Wilts, in 1776. He entered the army as hospital assistant on the 19th June, 1798, and served on the medical staff as surgeon to the forces in Holland in 1799, and at the whole of the Egyptian campaigns of 1801, for which he received the silver war medal with one clasp. He received the honour of knighthood for his professional services in 1837.

Richardson. On January 14th, at Weymouth Street, Portland Place, aged 37, Catherine Georgina Tregent, youngest daughter of the late Robert Richardson, Esq., of the Madras Medical Service.

*Scott, John, M.D., F.R.C.P., Examining Physician to the Secretary of State for India in Council, at 13, Stratton Street, Piccadilly, aged 61, on January 18th.

*Smyth, William, Esq., Surgeon, of Tolleshunt D'Arcy, Essex, lately.

*Squibb, George James, Esq., Surgeon, President of the Metropolitan Counties Branch, at 11, Montague Place, Bryanstone Square, aged 60, on January 15th.

Teale. On January 17th, at Leeds, Caroline, second daughter of *Thomas P. Teale, Esq., Surgeon.

Warren. On September 11th, 1858, in Australia, Alfred John, son of the late George Warren, Esq., Surgeon.

APPOINTMENTS.

Kendrick, James, M.D., of Warrington, appointed a Magistrate for the county of Lancaster.

Watson, Thomas, M.D., appointed Physician-Extraordinary to Her Majesty, in the room of the late Richard Bright, M.D.

PASS LISTS.

Royal College of Surgeons. Fellows admitted at a meeting of the Council, on Thursday, January 13th, 1859:—

Aikin, Charles Arthur, Southwick Street: diploma of membership dated February 3rd, 1843
Ambler, Edward Holland, Hemel Hempstead: August 18th, 1843
Archer, John, Birmingham: July 2nd, 1830
Brady, George Fraser, Falcaragh: May 17th, 1839
Coles, James, Weymouth: June 3rd, 1825
Condell, William, Bastow, Derbyshire: Jan. 22nd, 1830
Gunn, Theophilus Miller, Langham Street: April 8th, 1842
Hearne, Edwin, Southampton: April 29th, 1842
O'Brien, Peter, Bengal Presidency: June 9th, 1843
Rowdon, Henry Mortimer, Nottingham Place: April 16th, 1841
Tinker, Frederick, Hyde, Cheshire: May 12th, 1843

Members admitted at a meeting of the Court of Examiners on Friday, January 14th, 1859:—

Blanc, Henry Jules, Sedan, France
Coates, Matthew, Clifton, near Bristol
Epps, Richard, Great Russell Street, Bloomsbury
Gregory, James, Sheffield
Griffith, Robert, Carnarvon
Helm, George Frederick, Addenbrooke's Hospital, Cambridge
Horton, Henry, Wednesbury
Jones, John Lewis, Carnarvon
Leach, James, Shaw, near Oldham, Lancashire
Morgan, William Taylor, Carnarvon
Newton, Isaac, Scarborough
Partridge, Thomas, Birmingham
Perrean, Montague, Peckham Rye
Sadler, Joseph, Winterton, near Brigg, Lincolnshire
Spofforth, William Fairfax, Lichfield

Wednesday, January 19th:—

Aubin, Thomas John, Jersey
Brisley, Charles, Huntingdon Street, Barnsbury
Fisher, Henry, Cape of Good Hope
Gwynne, Thomas, West Indies
Hawkins, Thomas, Cape of Good Hope
Hay, John, Savile Row
Humpage, Benjamin Hill, Judd Street, Brunswick Square
Lever, Reginald Croft, Tavistock Square
Lodge, Samuel, Bradford, Yorkshire
McArdle, Charles, Newport, Monmouthshire
Smith, Henry Bennett, Staines

HEALTH OF LONDON:—WEEK ENDING JANUARY 15TH, 1859.

[*From the Registrar-General's Report.*]

The London returns again exhibit a high rate of mortality. In the second week of the year (ending last Saturday) the deaths from all causes rose to 1429, having been 1338 in the first week of the year. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1215; but as the number in the present return occurred in a population which has increased, it can only be compared with the average raised in proportion to the increase, namely, 1337. Hence it appears that the deaths of last week exceed by nearly 100 the number which would have occurred if a rate of mortality equal to the calculated average had prevailed.

Though scarlatina continues to show a decrease, the deaths from it in the last two weeks having been respectively 119 and 102, the fatal cases of zymotic diseases taken in the aggregate have increased. These rose from 317 to 348; and under this head measles increased from 43 to 49, whooping-cough from 45 to 67, typhus from 31 to 41, diarrhœa from 6 to 11, rheumatism from 5 to 14. In the class of "local diseases", the deaths rose from 585 in the previous week to 626 last week; but those from pulmonary diseases in this class were stationary (323 and 322); and the increase was derived from apoplexy, which was fatal in 19 and 33 cases; and paralysis, which was fatal in 18 and 28. Part of the increase in the "local" class was also from diseases of the digestive organs, the deaths from which in the two weeks were respectively 41 and 56. In the present return, 7 deaths are referred to gastritis, 24 to diphtheria. Many persons at an advanced stage of life have succumbed to fate; 319 are recorded who had attained the age of 60 years and upwards, and of these one female was 90 years old, and four widows were 96, 99, 99, and 101 years. The centenarian died in the Strand workhouse, but no evidence of her age could be procured except her own statement at the time she was admitted. A woman aged 53 years died from intemperance; she is stated to have been "a confirmed opium-eater". The widow of a weaver, aged 70 years, died at 44 Sebright Street, Bethnal Green, from "the want of proper nourishment".

Last week, the births of 933 boys and 897 girls, in all 1830 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1604.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·384 in. The barometrical readings varied from 30·64 in. on Sunday to 30·14 on Saturday. The mean daily reading was above 30 in. on every day from December 31st to January 15th, both days included. The mean temperature of the air in the week was 39·1°, which is 3·5° above the average of the same week in forty-three years (as determined by Mr. Glaisher). On Tuesday and Wednesday, the mean temperature was about 9° above the average. The thermometer in the shade fell to its *lowest* point, 28·5°, on Sunday, and rose to its *highest*, 49·8°, on Tuesday. The range of the week was therefore 21·3°. The mean daily range was 9·8°. The difference between the mean dew-point temperature and air temperature was 4°. The mean degree of humidity of the air was 86. The mean temperature of the water of the Thames was 39·7°. The wind blew generally from the south-west. There was no rain.

Fatal Cases of Anæsthesia. There are in London fifteen hospitals where surgical operations are being frequently performed. Some of these are small; we will, therefore, confine our attention to the ten largest metropolitan hospitals. St. Bartholomew's is immensely large; at the lesser Hospital of University College 4,440, and at Charing Cross Hospital 1,600 operations have been performed under chloroform during the last ten years. St. George's, though larger than University College, is probably of medium size, and may therefore be fairly taken as representing the average number of operations which are performed in each of the other nine. In this hospital 3,000 operations are said to have been performed within the period just mentioned. If we multiply this number by ten, which is the number of the principal hospitals in London, it appears that at least 30,000 operations have been performed in the metropolis during the ten years in which chloroform has been used. We are aware that, according to the statistical statements respecting the surgical operations performed in London which have been published in the *Medical Times and Gazette* during the last four years, and which we have carefully examined, not more than 10,000 operations have been performed in London during the last ten years. But those statements only comprise the "principal operations," and must exclude, as indeed we know they do, and, as is proved by the *data* obtained from St. George's, University College, and Charing Cross, an immense number of cases in which chloroform is given. Now, if, without considering the upper classes, who do not resort to hospitals, we regard the hospitals of London as affording surgical aid to all who require it out of a population of, say 3,000,000; if we suppose that the rest of the population of the United Kingdom, and the population of France, Germany, and the United States demand surgical aid in the same numerical proportion as the people in and around London seem to do; and if we estimate the total population of these countries at 120,000,000, we arrive at the conclusion that during the last ten years the number of surgical operations which have been performed in the United Kingdom, the United States, France, and Germany collectively is 1,200,000. We have confined ourselves to these countries because it is from them mainly, though not exclusively, that the reports of deaths from anæsthetic agents have been collected. Among the deaths ascribed to chloroform there are seven the cause of which is uncertain. Assuming four of these to be due to chloroform, the following is a statement of all the deaths which we have been able to learn of, as having occurred either in Europe or America from the inhalation of anæsthetic vapours:—Deaths from chloroform, 68; from ether, 2; from mixture of chloroform and ether, 1; from mixture of chloroform and alchohol, 1; from amylene, 2. Total, 74.—[*Westminster Review* for January.]

Harveian Society. On Thursday, January 20th, Mr. Ernest Hart will read a paper "On the Successful Treatment of Popliteal Aneurism by Flexion of the Knee."

POOR-LAW MEDICAL REFORM.

At a meeting of the Committee of the Poor-Law Medical Reform Association, held on January 14th, 1859, at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, several metropolitan as well as provincial Poor-law Medical Officers being present, the following resolution was unanimously carried:—

"That the thanks of this meeting are due, and are hereby given, to the Right Hon. the President of the Poor-Law Board, for his submission to the medical officers for their opinion of a new 'Scheme for Medical Relief'; but this meeting considers the plan, in its present form, does not meet the views of the medical officers, and will not be conducive to the interests of the poor—the meeting therefore resolves that the following amendments be made to the plan."

1. Appointments of medical officers shall be permanent to those parishes now held by them, subject to the general order of the Poor-Law Board, dated May 25th, 1857, (see Circular of Poor-Law Board, 6th June, 1857, art. 5), and to the rules now in force as to good conduct, but they shall have power to resign on giving a reasonable notice, as is the case at present.

2. Existing contracts and existing division of unions and parishes into medical districts, shall cease at a given period.

3. The qualification of future medical officers shall be double (medical and surgical) and of the class laid down in the 21st and 22nd Vict. cap. 90, but none of the present medical officers shall be removed for want of those qualifications.

4. Guardians may, where parishes are very large, appoint two or more medical officers to each, and divide the parish in such manner as they may think desirable, subject to the approbation of the Poor-Law Board.

5. The contract with a medical officer shall be made for a period of three years, renewable on a fresh calculation of the three preceding years. The payments to be quarterly as at present.

6. The contract with each medical officer shall be to this effect: that he will attend, when applied to, without an order, any poor person in the parish named in the list which shall be furnished to him half yearly or oftener, by the relieving officer of all persons in the receipt of relief, or who have been so within the last six months.

With an Order—Any poor person named in such order.

7. Orders for medical relief may be given by each guardian of the parish, as well as the relieving officer in all cases where a poor person is unable to procure medical aid at his own charge, and by the overseer in urgent cases.

8. If the medical officer shall have attended a case represented to be of emergency and too poor to procure medical aid, and the guardians shall afterwards determine that the further attendance of the medical officer at the charge of the parish, ought not to be given; such case shall notwithstanding be reckoned and paid for according to the scale laid down.

9. Each medical officer shall make a report to the guardians, at each of their relief days, of the cases under his care.

10. Medical officers shall discontinue a practice which exists in many unions, of ordering a specific quantity of nourishing food or drink to those who are feeble from old age only, but they shall order the kind of treatment or nourishment which in their opinion the case requires. To those really ill they shall, however, specify the particular kind of nourishment required, as well as the quantity.

Remuneration.

11. For Workhouses:—A salary shall be fixed on a uniform and definite system, with mileage of not less than 1s. per mile, where the distance of the house is above one mile from the residence of the medical officer, and the salary shall be revised every three years, and a fresh contract made on the same principle.

12. For Parishes:—A salary shall be fixed by the guardians, with the sanction of the Poor-Law Board, for a period of three years, upon the following basis:

1. Not less than one shilling and sixpence per head upon the average number of persons in the parish in receipt of relief, in the first week of January and the first week of July in each year.
2. Not less than one shilling and sixpence per case upon the number of cases attended in the parish upon an average of the last three years, where the guardians find the medicines, and two shillings and sixpence per case where the medical officer find the medicines.
3. An additional sum per case to be fixed by the guardians, with the sanction of the Poor-Law Board, of not less than one shilling for each mile the patient may live from the residence of the medical officer, as a remuneration in respect of the distance which the medical officer may have to travel in attending the sick poor, or in respect of other local circumstances; also extras, as specified in No. 13.

With an Order—For all other cases requiring medical assistance, and for which an order may be granted, not less than five shillings per case with an additional sum for mileage, as in No. 12,—3.

13. A table of fees for midwifery and surgical operations, and a list of more expensive drugs and appliances, shall be drawn up by the Poor-Law Board, with the advice of the Medical Council appointed under the new Medical Act. Every medical officer appointed to attend any workhouse, town or country parish, shall, in addition to his salary or other remuneration, be entitled to his fee according to such table, after attending a case included in it; and any such medical officer shall be at liberty to direct any drug or surgical appliance included in such list to be made up and supplied by some chemist approved by the guardians, or at their own dispensary, if they shall have established one.

14. The clerk of the union shall keep a record of the number of cases reported weekly in the Journal of each medical officer, where orders have been obtained, and the medical officer shall be paid in accordance with the number of orders he produces.

15. In cases of attendance upon continuous sickness extending beyond three months, and not being on the permanent relief list, each of such cases shall be considered, after every three months attendance, as a fresh case.

16. A medical man, having been in union practice at some period of his life, shall be appointed a Medical Commissioner to the Poor-Law Board, and have especial control over the medical department, subject however to the opinion of the Poor-Law Board in all matters of importance.

Richard Griffin, *Chairman.*

Mr. Griffin has circulated the above document among the poor-law medical officers, with a series of comments, from which the subjoined are extracts:—

Clause 1, relating to permanency of appointment, will, I trust, be satisfactory to every medical officer, and also to the Guardians and to the Poor-law Board, who have already full power to divide the districts in any way they may think desirable, by giving six months notice to any officer, be he permanently appointed or not, who refuses his consent to a change in the size of his district.

Clause 2, relating to contracts, requires explanation. By the present law our appointments are to certain districts, houses, or parishes, but our contract is to perform the work for a specific amount of money. If the existing division of unions and parishes into districts be annulled, which it must necessarily be if our appointments in future be parochial, and our mode of payment be changed, then the contract will in future be to do the work for each of the parishes now held by us, at a fixed salary, based on the average number of paupers in receipt of relief in January and July, and in addition to this, a per case payment for those who may be ill, and for orders for those not in receipt of relief, with mileage and extras in both cases.

Clause 3, relating to the qualification of medical officers, is so modified as to render our Scotch and Irish brethren eligible for poor-law medical appointments; at the same time it protects the present medical officers, who do not possess the double qualification, from being displaced.

Clause 4, relating to the appointment of two medical officers to each parish, has been materially altered, and in its present shape will, I trust, meet the views of all. In many large parishes, as Birmingham and other places, especially in the north, there are now several medical men employed, which must necessarily be the case under all circumstances where parishes are very large.

Clause 5, relating to the periodical readjustment of the contracts with the medical officers, is actually necessary, as in many localities the population varies considerably in the course of a few years, and therefore a triennial revision of the salary is but fair to all parties.

Clause 10, relating to the quantity of nourishment to be ordered, is one of vital import to the poor. . . . . I have so modified the clause that the system of indiscriminate orders will be discontinued, but in all legitimate cases of illness we shall, as heretofore, recommend, for order we never could, the quan-

tity as well as the kind of nourishment required; for it would be folly to leave the amount unfixed, as how could a relieving officer on a sudden emergency, or even the Board of Guardians at their usual meeting, ignorant of the case, decide upon the quantity of wine, brandy, porter, or meat necessary for a particular illness?

Clause 11. From 156 of the returns of medical officers having union houses, I find their salaries vary from £7:10 to £150, the average being £36; and the average number of cases attended by each medical officer 290, or after the rate of 2*s.* 5¾*d.* per case. Thus, if there be 627 union houses, as there are unions, the number of paupers in receipt of medical relief, annually, will be 181,830, or half as many again as the number of in-door poor at one time in receipt of relief, which were, in 1857, 122,845. These figures will enable us to form an estimate of the sum each medical officer attending union houses ought to receive, though there are many local circumstances which will require to be taken into consideration when Mr. Estcourt names the mode of payment.

Clause 12, relating to the remuneration of parish medical officers, requires our closest attention, as the present unjust mode of payment has been the principal origin of the Association. The mode suggested by Mr. Estcourt is very imperfectly understood by a great many medical men as well as Guardians, and therefore requires elucidation.

No. 1 fixes a permanent salary for three years at 1*s.* 6*d.* per head upon the average number of persons in receipt of relief in the first week of January and the first week of July in each year. On referring to the Tenth Annual Report of the Poor-law Board, 1857-8, pages 11 to 13, it will be seen that the average number of all classes, including *children*, at one time in receipt of relief was—In-door, 122,845; out-door, 762,165; total, 885,010; which at 1*s.* 6*d.* per head, will give, as our fixed salaries, £66,375 per annum.

No. 2, as amended by us, proposes 2*s.* 6*d.* per case upon the number of cases attended in the parish upon an average of the last three years, when the medical officer finds the medicines.

No. 3, relating to mileage, we have next to consider; and from the data before me I feel confident that four-fifths of the whole of the poor live in cities, towns, and parishes, situate within one mile of the residence of the medical officer, and therefore no mileage will have to be paid for them. I firmly believe that, with due exercise of judgment on the part of the Guardians in assigning the more distant parishes to nearer medical men, the remaining fifth, as far as an average payment is concerned, may be brought within two miles of the residence of the medical officer, which will be of immense advantage to the poor, who have, in some instances, to travel nine miles out and as many home again for a bottle of medicine. The amount for mileage will then be only £30,000, which, added to the £252,561 already accounted for, will give £282,561.

Clause 16, recommending a Medical Commissioner to the Poor-law Board is not in Mr. Estcourt's Scheme, but is introduced here at the desire of a large body of professional men, who regard it as most important to the interests of the poor and to the medical officers, as none but a medical man conversant with union practice can properly carry out duties which involve the welfare of a million and a half of sick poor who annually apply for parochial medical relief.

CHICHESTER MEDICAL REGISTRATION COMMITTEE.

At a meeting of the legally qualified Medical Practitioners of West Sussex, held at the Council Chamber, Chichester, on Thursday, January 6th, 1859—Dr. M'Carogher in the chair—the following resolutions were unanimously adopted:—

1. That a committee be formed, and named the "Chichester Medical Registration Committee" in connection with the South Eastern Branch of the British Medical Association, (as proposed at a meeting of that body, held at Brighton, on December 3rd, 1858), and in accordance with rules then agreed upon.

2. That Mr. C. Sturges Jones, Surgeon, Chichester, be appointed Secretary and Treasurer of the Committee.

3. That the object of the Committee be to assist the Medical Registrar in effectively carrying out the Medical Registration Act.

4. That a sub-committee be formed for the purpose of transacting the business of the Committee, and to consist of the following gentlemen:—Dr. M'Carogher, Dr. Tyacke, E. Leech, Esq., F. A. B. Bonney, Esq., and Dr. Ryding; the Secretary being an *ex-officio* member.

5. That each member pay a subscription of 2*s.* 6*d.* annually.

BEDFORDSHIRE MEDICAL REGISTRATION ASSOCIATION.

A meeting of the medical practitioners in the county of Bedford was held at the George Hotel, Bedford, on Thursday, January 6th, 1859. There were present:—Dr. Evans, Dr. Wharton, Dr. Barker, Dr. Prior, H. W. Sharpin, Esq., W. E. Johnson, Esq., W. Thurnall, Esq., W. Deane, Esq. (Bedford); Dr. Webster (Northampton); T. Farr, Esq. (Dunstable); W. Landell, Esq. (Potton); W. Collingwood, Esq. (Ampthill); N. Godfrey, Esq. (Turvey); J. Gregory, Esq., and J. Gregory, jun., Esq, (Risely); R. S. Stedman, Esq. (Sharnbrook).

Dr. Evans, of Bedford, was unanimously elected as the chairman.

The following resolutions were passed:—

1. That with a view to secure the efficient operation of the New Medical Act, and to afford assistance to the Registrar appointed under the Act in the execution of his important duties, it is in the opinion of this meeting expedient that a Medical Registration Association be now formed, and that it be styled the Bedfordshire Medical Registration Association.

2. That the managing Committee of the Bedford division of the South Midland Branch of the British Medical Association, viz., Dr. Barker, Mr. T. W. Thurnall (Bedford), Mr. Veasey (Woburn), with power to add to their number, be a Committee to receive applications and fees for Registration under the New Medical Act.

The following gentlemen were then elected on the Committee:—H. W. Sharpin, Esq., Dr. Evans, and Dr. Prior.

3. That, for the purpose of defraying the necessary expenses of the Association, a subscription of two shillings and sixpence be levied upon each member.

Mr. Stedman was requested to act as Secretary and Treasurer to the Association.

In accordance with the above resolutions, it was decided that the Committee (three of whom might form a quorum) should meet at the George Hotel, Bedford, on Thursday, January 13th, at two o'clock, and the two following Thursdays, to examine applications and diplomas, and receive fees, to be forwarded, with certificates of such examinations, to the Registrar.

The Secretary was ordered to transmit a notice to this effect, and a copy of the resolutions passed, to every medical practitioner in the county.

CHARGE OF CONSPIRACY TO OBTAIN A DIPLOMA.

On Saturday, January 15th, at the College Street Police Office, in Dublin, two medical men, named John Edward Protheroe and Charles Evans Reeves, were charged by Dr. Steele, registrar of the King and Queen's College of Surgeons, with conspiracy under extraordinary circumstances.

Mr. J. E. Walshe, Q.C., and Mr. William Ryan, appeared as counsel for the College of Physicians, with Messrs. Smith and Whitestone, solicitors; Mr. Charles Fitzgerald, junior, appeared for the prisoners.

Dr. William Edward Steele was registrar of King and Queen's College of Physicians in Ireland. He had received a letter dated 12th March, 1857, which was as follows:—

"Sir,—I am anxious to present myself for examination for the license of the College of Physicians; but before forwarding my certificates, I should feel greatly obliged if you will inform me whether, from having studied at the Hunterian School of Medicine and in Paris, I am eligible, and the nature of the examination: whether a very large knowledge is expected in anatomy, physiology, chemistry, and botany. I ask these last questions, because a long absence from England and bad health prevented me keeping up a minute knowledge of them. "I am, sir, your obedient servant,

"Dr. Steele, etc." "J. E. Protheroe, M.D.

"P.S.—You will also have the kindness to inform me whether the fees are to be sent with the certificates or not.

"18, Store Street, Bedford Square, London, 12th March, 1857."

Witness saw Dr. Reeves in Dublin subsequent to receiving the letter. He signed the documents in this country. Dr. Steele believed the letter to be in his handwriting—in the handwriting of the same gentleman who signed the college books as John Edward Protheroe. (Roll book of the college produced and signature identified.) He appeared before witness for the purpose of being examined for a licence to practise medicine; he presented himself in the name of John Edward

Protheroe. He was examined on the 6th, and again on the 9th of April, 1857. The result of that examination was most satisfactory. Previous to an applicant being examined he is obliged to sign a declaration that he will not practise as an apothecary. One of these declarations was signed "John Edward Protheroe." Two other letters referring to certificates of education and character, and signed "John Edward Protheroe," were also produced. They were as follows:—

"18, Store Street, Bedford Square, March 18, 1857.

"Sir,—I beg to forward you my certificates, and regret that they are, from having been thrown about in a dirty cellar, in such dirty and dilapidated condition. My diploma was lost with my luggage in the Black Sea in 1844. I have written to the Dryam Mens Caizarquer for a certificate, which, as soon as I receive, I will forward. I shall feel obliged by your appointing as early a day as possible for examination. I leave England the 1st of next month.

"I am, sir, your obedient servant,

"Dr. Steele, etc." "John Edward Protheroe."

"30th March, 1857.

"Sir,—I am so anxious to possess an English degree that I will delay my departure for a week. I beg, therefore, to enclose you the sum of £46 : 1, and certificate from my friend Dr. Reeves. I beg to refer you to Dr. Rigby, 36, Berkeley Square; to Dr. Smith, 7, Upper Grosvenor Street; and Dr. Pettigrew, 7, Chester Street. I shall esteem it a favour if the second examination can be made to take place on Saturday. I shall be in Dublin on Thursday morning.

"I am, sir, your obedient servant,

"Dr. Steele, etc." "J. E. Protheroe."

Dr. Steele believed them to be in the handwriting of the person who represented himself as "John Edward Protheroe." There was a second signature entered in the college book by the person who called himself Dr. Protheroe; viz., the signature to the declaration of the admitted candidate that he will observe the bye-laws and statutes. It was signed in the name of John Edward Protheroe by Dr. Reeves. The diploma authorising John Edward Protheroe to practise medicine was produced and proved. It bore date 9th April, 1857; it was signed by Dr. Steele as an officer of the college. He gave that document to the gentleman who, he was informed, was Dr. Reeves, but who then passed examination as John Edward Protheroe. The other gentleman (Protheroe) witness never knew before. Witness had been eight years registrar to the college, and had been present at the admission of every licentiate, and his (Protheroe's) face was quite strange to him.

Dr. William Barker was one of the examiners in the year 1857. He remembered a gentleman under the name of Protheroe presenting himself for examination that year. Witness pointed out Dr. Reeves as the person who so represented himself. He never saw the other gentleman till now.

Dr. John Moore Neligan was one of the examiners in 1857. He examined Dr. Reeves on 9th of April, 1857. Dr. Reeves was the gentleman witness examined as Dr. Protheroe. He never saw the other gentleman before to his knowledge.

Henry Lockyer, a sergeant in the detective force in London, proved the apprehension of Dr. Evans Reeves and Dr. Protheroe, and the finding of the diploma in Protheroe's house.

Mr. Walshe submitted that he had made a clear case. Mr. Fitzgerald, on the other hand, contended there was not a particle of evidence, except that the diploma was found in the house of Dr. Protheroe.

The Bench said that was a question for a jury, and at the request of Mr. Fitzgerald the case was remanded till half-past ten o'clock on Tuesday morning.

The prisoners were again brought up on Tuesday morning, January 18th.

Henry Lockyer, the London detective, had his information read to him, and desired the following addition to be made to it:—After he arrested Dr. Protheroe in London, he said he attended and passed his examination, and got his diploma at "Sir Patrick Dun's." Witness thought he said Dublin also. He asked Protheroe no questions, but stated the nature of the charge against him; he made the statement voluntarily. After he brought Dr. Protheroe to the station-house in London, Sergeant Keegan came in with Dr. Reeves, who called out, "Protheroe, old fellow, how are you?" and he said "Very well." [*Laughter.*] Witness found a cardcase in Protheroe's pocket, and took from it a card, on which was engraved "Dr. Protheroe."

Mr. Walshe, Q.C.—That is very important, as showing that the prisoner styled himself "doctor."

Sergeant Keegan stated that, when Protheroe was arrested, he said he passed an examination at Sir Patrick Dun's Hospital, but he was not sure whether the prisoner said "Dublin" or not.

Mr. Walshe, Q.C., said it was not intended to call up more witnesses. He apprehended there was a perfectly clear case of concert established between the prisoners. They found one gentleman of the name of Reeves writing no less than three letters in the name of Protheroe—then coming over from London to the College of Physicians, and passing an examination, under the same name, and finally getting a diploma for "Dr. Protheroe" to practise. Here was a plain case of forgery and personation. Then they found a gentleman in London of the name of Protheroe practising with the identical diploma so obtained by Reeves. Under those circumstances he thought that a jury would not hesitate a moment in saying that all this was done by pre-arrangement between the prisoners. If the certificate of character had been identified as the handwriting of Protheroe, the case would be placed beyond all doubt. There was, however, such a *primâ facie* case established as warranted him, on behalf of the College of Physicians, who were discharging a public duty in prosecuting, to hold the prisoners to substantial bail, that they would abide their trial at the next commission. The College of Physicians did not desire to put the gentlemen to unnecessary trouble; but it was perfectly plain that gentlemen in the rank of life of the prisoners would not hesitate to pay £200 or £300 to avoid the exposure of a prosecution for the offence charged against them; and, therefore, the bench ought to enforce substantial bail.

Mr. Curran said the prisoners were bound, as honourable men, to appear and take their trial if the bench considered that there was a *primâ facie* case made out against them. In the first place, he wished to ask his learned friend, Mr. Walshe, what indictable offence the prisoners were guilty of? His learned friend said the case amounted to a conspiracy. Conspiracy meant to preconcert an arrangement between two or more persons to commit an illegal act. He could understand a conspiracy amongst persons to commit a robbery, to defraud the revenue, or to perpetrate a murder; but how did the present case involve an offence known to the law? If the case was sent forward, he would ask that the gentlemen be allowed to stand out on their bail. They were well known in London, and it appeared upon the information that they were householders, and enjoyed good practice; so there was no reason whatever why they should expatriate themselves. But it might be impossible for them to get bail in Dublin, where they were unknown. The offence charged was clearly a bailable one.

Mr. Stronge said, the bench were disposed to make the following rule of bail:—Two householders in £100 respectively for each prisoner, besides his personal recognisances in the sum of £300.

Mr. Curran suggested that two householders in £50 each should be taken; but the bench, after discussing the matter, refused to lessen the rule, unless with the consent of the prosecutors, which not being given, the rule mentioned by Mr. Stronge was settled. The prisoners were then removed.

Melancholy Accident. Intelligence was received on Monday of the untimely death of Mr. Thornton J. Herapath, youngest son of Mr. W. Herapath, the eminent analytical chemist, of Bristol, and youngest brother of Dr. W. Bird Herapath. The deceased, who had for some time held the appointment of chief chemist to the Mexican and South American Smelting Company, was on his voyage in the *Annie Fisher*, bound for Swansea, from Herradura, Chili, on a visit home, and on the 9th of December, when in latitude 8° N., longitude 31° W., by some accident he fell overboard. A buoy was immediately thrown to him, and a boat lowered with a view of rescuing him, but unfortunately these efforts were unavailing, and he sank to rise no more. The deceased was a gentleman of high attainments in his profession. His contributions to scientific publications, and his lectures in his native city and elsewhere, had earned for him a foremost rank among the chemists of this country, and procured for him the appointment which is rendered vacant by his melancholy death.

Sir James Wylie. A monument is about to be erected in front of the Academy of Medicine, St. Petersburgh (of which institution he was President) to the memory of this British physician, so long and intimately associated with the late Emperor of Russia.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W. C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

DR. J. C. REID. The subject is a most important one, and we are willing to grant all the space to its consideration that we possibly can. But the article to which you have called our attention is over long for our limits.

Communications have been received from:—MR. T. HOLMES; DR. CHARLES BOND; DR. TORBOCK; MR. HENRY J. MACY; DR. P. H. WILLIAMS; MR. HENRY ALFORD; DR. W. T. GAIRDNER; MR. HENRY GRAMSHAW; MR. WM. FEW: MR. WM. WALTHEW; MR. RICHARD GRIFFIN; DR. C. E. BERNARD; DR. SKINNER; MR. W. EDDOWES; DR. J. C. REID; MR. G. B. KNOWLES; DR. HENRY JOHNSON; DR. CHARLES WARDEN; DR. J. R. HUGHES; MR. T. M. STONE; DR. W. B. MUSHET; MR. W. MARTIN; MR. HENRY DUNCALFE; MR. SAMUEL SMITH; DR. F. HAWKINS; MR. B. GILPIN; MR. J. WEAVER; and MR. J. F. GRAY.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Outlines of Human Osteology. By F. O. Ward. Second Edition. London: Renshaw. 1858.
2. Johann Müller. An Eloge pronounced in the Hall of the University of Berlin, by Professor Rudolph Virchow. Translated and edited by A. Mercer Adam, M.D. Edinburgh: Sutherland and Knox. 1859.
3. The Healing Art the Right Hand of the Church: or Practical Medicine an Essential Element in the Christian System. By Therapeutes. Edinburgh: Sutherland and Knox. London: Simpkin, Marshall and Co. 1859.

ADVERTISEMENTS.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

I. RUPTURE OF THE POPLITEAL VESSELS: AMPUTATION.

Under the care of CÆSAR H. HAWKINS, Esq.

JAMES T., aged 36, was admitted in the morning of October 6th, 1858. His apron had been drawn into a revolving shaft, which carried him round, and dashed him two or three times against the wall. He was not stunned. On admission, he was found to have sustained trifling injury to the face. There was considerable ecchymosis and swelling in the right popliteal space, with great pain. The left leg was a good deal bruised. He complained of dull pain down the middle of the back, and of numbness of the arms and fingers, the muscles of which contracted but feebly; and of pain when he moved his arms. There was no paralysis of the lower part of the body, and no sickness. By the middle of the day, the popliteal ecchymosis and swelling had increased and extended; there was some loss of sensation in the right foot, and to a less extent in the left also. As no pulsation could be felt in the ecchymosed blood, it was hoped that the injured vessel might prove to be merely a vein, and that the parts might recover themselves. A free dose of laudanum was given, and good diet allowed.

Next day, the ecchymosis had increased both in size and extent, reaching up the thigh and down the leg, and being most marked on the external surface. Pressure gave great pain, especially in the popliteal space. The lower part of the limb was much diminished in temperature. The sensation in the sole of the foot was still diminished. He was recovering power in the upper extremities. The face was very pale, and the tongue pale and nervous. The limb was wrapped up in flannel, and the laudanum repeated. The anterior tibial artery was examined on this day, and it was thought that pulsation could be perceived in it.

October 8th. The swelling remained the same, but the discoloration was very extensive. The whole surface of the calf was of a greyish purple hue, and there was some sero-sanguineous oozing both from this part and from the popliteal region. The pulse was quick and feeble. The anæsthesia had disappeared, except in the sole of the foot. The pulsations of the tibial artery were very feeble.

October 9th. The tenseness of the limb was less. The temperature of the foot was very decidedly diminished. The ham was again examined both with the hand and stethoscope, but no beating was either to be felt or heard. On the inner side of the knee, the anastomotica artery could be distinctly felt enlarged. There was no pulsation in the dorsalis pedis.

October 10th. The foot was evidently gangrenous; it was not swollen, but very cold, and the toes livid. This coldness extended to about three inches above the ankle, and was sharply marked off from the warmer parts. The calf of the leg was very tender to slight pressure. He had copious perspirations, but no rigors. His appetite was good, and he did not feel ill. It was decided to defer amputation, as his health was suffering so little, in order to see whether it would be possible to obtain a flap from below the knee. Warmth was applied to the toes, and generous diet with laudanum given.

The case was watched for several days, without any fresh symptoms presenting themselves; and the gangrene did not extend materially; but the whole of the calf was so much infiltrated with blood, and there was so large a collection in the popliteal space, that it was felt that it would be unsafe to form a flap from the parts below the injury to the vessels. Still, even up to two days before the operation, the vitality of the foot was not quite destroyed, for capillary action could be perceived, although foul gas had collected in the cellular tissue (and was let out by incision), and sensation was abolished. On October 20th, however, the coldness extended higher up, and the skin of the calf was seen to be sloughing. Accordingly, amputation was performed next day, the fifteenth after the accident, through the lower third of the thigh. At the operation, it was noticed that the femoral artery was partially closed by a clot, which, however, still allowed some passage for the blood, so that it was necessary to use a ligature.

On examining the limb, it was found to be gangrenous as high as the upper part of the calf, and there was some ecchymosis in the popliteal space above the fascia. Underneath the deep fascia of the leg was a large abscess, containing pus mixed with blood-clot and foul gas, which infiltrated the superficial muscles of the calf. The deep muscles of the calf were comparatively healthy. The superficial cellular tissue was much thickened. The short saphena vein was entire and pervious. The popliteal vein, just below its junction with the saphena, was broken across; the two ends being separated by an interval of about an inch and a half. The lower end of the vein was blocked up by coagulum adherent to its walls, and extending below its bifurcation. The upper end was empty; the coats of the vessel at its point of rupture were somewhat contused, but not otherwise altered. The vein and artery above the seat of rupture were closely matted together. The mouth of the femoral vein, where it had been cut through, stood open. The femoral artery, where it had been cut through, was partially closed by a small clot. The popliteal artery was ruptured at the same place as the vein, and the ends separated to the same distance; but the two ends remained connected by a string of cellular tissue. The upper fragment of the artery was firmly plugged by red coagulum for the space of about an inch, above which the clot only partly filled the vessel: the lower fragment was partially closed by clot, and by the remains of the middle and internal coats. A small mass of condensed cellular tissue, of cartilaginous hardness, was found lying at the inner side of the upper fragment. The vessels lower down were healthy.

It is not necessary to follow the details of the case further. The man has now nearly recovered from the consequences of the amputation, but he still retains some of the weakness in his hands, and his opposite (left) foot has also partly lost power. His general health, however, is good; he may be pronounced convalescent, and has left the hospital.

REMARKS. The lesion of the great vessels of the ham, which is described above, was accompanied at first by few of the symptoms that would have been expected; since, although both artery and vein were found completely interrupted, no symptoms of gangrene occurred till several days after the receipt of the injury, and no pulsation was at any time detected in the effused blood. That the vein was torn completely across at the time of the accident, hardly admits of doubt, from the appearance of the clot which plugged its lower end, compared to that of the upper—a contrast so decided as to shew that the two parts of the vessel had been subjected to quite different conditions from the first; but it is not so clear that the continuity of the artery was interrupted at the time, as the circulation appeared to go on for some time in the injured limb with sufficient power to produce pulsation in the tibial vessels, which could hardly have resulted merely from the indirect circulation. It suggested itself, therefore, to some of those who saw the case, that it was possible that the wound of the artery might at first not have been so extensive as it was when the limb was examined, and might have been so far occluded by the clot as to have allowed the circulation to go on; and then might have afterwards yielded under the weight of the column of blood. The powers of nature in maintaining the circulation under the most unfa-

vourable circumstances could not be more forcibly illustrated than by this case, in which the only channel for the direct supply of blood to the leg was, at any rate, seriously injured, and the principal vein broken off, leaving no channel for the return of blood, except the internal saphena vein; and yet where mortification was delayed until the establishment of the collateral circulation, and the deep parts retained their vitality throughout.

II. RECURRENT FIBRO-PLASTIC TUMOUR COMMENCING IN A GANGLION OF THE WRIST.

Under the care of Prescott G. Hewett, Esq.

At p. 902 of last year's volume will be found the account of a case (continued from p. 239) in which a fibro-plastic tumour, originating, as it appeared, in a ganglion connected with one of the extensor tendons of the thumb, had been treated in various ways, and had at length been entirely excised, and a cure effected. This cure, however, has proved to be only temporary; for, although the wound healed perfectly, and the patient's health improved considerably after his discharge, the tumour soon reappeared in the neighbourhood of the cicatrix; and, when he presented himself at the Hospital a few days ago, a disease exactly resembling the original one had been reproduced, and was growing rapidly. The surgeons of the Hospital, in consultation, recommended the amputation of the limb; but the patient would not (at any rate, at present) consent to this measure, and he left the house on the following day. It is very probable that we may have an opportunity of laying before our readers the further progress of this case.

III. NECROSIS OF THE LOWER END OF THE FEMUR: OPERATION: PYÆMIA.

Under the care of E. Cutler, Esq.

Joseph S., aged 17, a very fine healthy looking young man, was admitted on November 3rd under Mr. Cutler's care, on account of necrosis of the femur in the popliteal space, which had existed for five years. The cause of the disease was unknown. There was a sinus on the inner side of the lower part of the thigh, in which a loose piece of bone could be plainly felt.

On November 18th, Mr. Cutler proceeded to extract this exfoliated portion by dilating the sinus. This was done carefully, on account of the proximity of the vessels; and a piece of bone, about three inches in length, comprising a thin shell of the surface of the bone, was extracted without accident. On November 20th, he was very feverish, and was attacked with a severe rigor; and this was succeeded by great pain in the head and delirium, accompanied by redness of the skin of the left side of the neck and face, and, later on, gradual protrusion of the eyeball. He became intensely jaundiced, and displayed other unequivocal symptoms of pyæmia, of which he died on November 26th, nine days after the operation.

On examination of the body, it was found most intensely jaundiced. The wound at the inner side of the ham was filled with pus of an intensely yellow colour. The cellular tissue about the wound was very much condensed, apparently from old inflammation. The wound led down directly upon the popliteal space of the femur immediately beneath the femoral vessels, which were separated from the wound only by a very thin layer of the condensed cellular tissue. The popliteal space of the femur, from which the dead bone had been removed, was covered by granulations. A minute spicula of loose bone, which lay at the upper part of the wound, was the only visible remnant of diseased bone; but the part of the femur from which it had separated was somewhat softened. No exposed bone could be found. The veins of the limb, as far as they could be traced, were quite healthy. There were extensive secondary abscesses in the liver and lungs; and one in the cellular tissue behind the left eyeball.

Remarks. It is well known that necrosis, when it attacks the lower end and back part of the femur (a very usual seat of this affection), terminates, as a rule, in superficial exfoliation, without the deposition of any new bone; and that the operation required to remove the dead bone is, therefore, one of considerable risk, from the proximity of the artery, which is not defended by any intervening substance, and may, even when not hit by the incision, very easily be lacerated by the sharp points of the sequestrum. This accident has frequently occurred; and a preparation illustrating some of the dangers of operations on this part of the femur exists in the Museum of St. George's Hospital, where, in trephining the femur, the operator has wounded the artery either with the instrument or with a sharp point of bone. The operation (which was performed many years ago) proved fatal. In the case before us, perhaps the condensation of the areolar tissue might have protected the vessels from mischief, even had the sequestrum required more force to extract it. The fatal event of the case is a rare exception to the usual innocence of operations of this kind, and is remarkable as occurring in a case where the cancellous tissue of the bone did not appear to be exposed, where no incisions had been made into the bone at the time of the operation, where no phlebitis or diffuse inflammation had followed; and, finally, where the patient was young, temperate, and healthy.

UNIVERSITY COLLEGE HOSPITAL.

We regret to observe, on looking over our report of Mr. Erichsen's case of ovariotomy, in last week's number of the Journal, that we omitted to state that the chemical analysis of the contents of the tumour, of which the result is there given, was made by Dr. Harley. As this analysis was a matter of considerable labour and care, it is only right that it should be attributed to the proper author.

Original Communications.

CASES OF DIPHTHERIA.

By J. R. Hughes, M.D.Edin., Denbigh.

I trust the imperfect knowledge of the nature, character, pathology, and nosology of diphtheria, as well as the importance of the subject to the public, are sufficient apology for reporting in the columns of the British Medical Journal the histories of two cases.

Case I. A boy, aged 4½, a strong, healthy-looking lad, the son of a farmer. He lived where all the requisites of health were apparently combined,—pure air, commodious, clean, well-ventilated house, abundant supply of sparkling mountain spring water; and he was provided with all domestic wants and comforts. The house was situated by itself on an elevated, inclined ground; it was dry; the subsoil was gravelly; the neighbourhood generally well drained. There was no evident cause of miasma, or apparent unhealthiness of the vicinity, to create a malignant case. There had been, two months previously, a few cases of scarlatina in the village, about a mile off, with which there had been no traceable intercourse or communication. On November 23rd, on returning into the house after standing by a spring pool for about half an hour on a very cold day, he complained of cold feet, and soon became languid, heavy, and drowsy. During the following night he was feverish and restless, had headache, and occasionally vomited, but slept the night comparatively comfortably.

Nov. 24th. I first saw him. The skin was piercingly hot; no exanthemata were to be seen on any part. He had stiff neck; the chin was held to the left side. There was swelling over the right parotid and submaxillary glands and the neighbouring lymphatics. The tongue was very slightly furred. Deglutition was easy; he swallowed four ounces of fluid in my presence with perfect ease. I could not ascertain the state of the fauces without using force. The palate looked healthy. There was a peculiar and well-marked breath-odour, more allied than anything I can imagine to the smell of a human body in the incipient stage of putrefaction. I never perceived a similar odour in aggravated or scarlatinal sore throat. He was rather thirsty; had taken no food; the bowels were costive; the urine scanty. The face was not flushed, and the expression was good; the pulse was quick, 100; he had no nervous excitement. I then considered it an acute case of cynanche parotidea. I ordered bran poultices to the neck, a bath, gentle aperients, and stimulating diaphoretics.

Nov. 25th. The boy's father came to my surgery to say that his bowels were still costive; I ordered five grains of calomel; otherwise he was about the same.

Nov. 26th. I again visited him. He looked paler and more prostrated; the skin was not so hot; the swelling in the neck had not increased; he had no difficulty in swallowing;

the tongue was slightly furred, the breath-odour more intense. I forced his mouth open for a more complete examination of the fauces and palate. The back part of the palate was of a *clear white*, exactly as if it had been cauterised with nitrate of silver. When my friend, Dr. Roberts of St. Asaph, and myself, again visited him the same day and made an examination of the throat, a piece of about the size of a half-crown, and as thick as a shilling, was peeled off the palate by my finger. The surface was as white as parchment. The right tonsil was felt filling the right half of the fauces to the uvula; the left tonsil was of natural size. A considerable quantity of sero-bloody purulent matter flowed into the mouth in making the examination; it came, I think, from the right tonsil. When the coriaceous-looking membrane was held to the light, it presented pits or depressions, the marks of the outlets of the mucous follicles. He had taken no food of any kind; the bowels had been moved; pulse 120. I ordered a mixture of quinine and chlorate of potass, and alternate injections of beef-tea and wine and eggs, should he continue to refuse to take food. The part affected was rubbed with nitrate of silver.

Nov. 27th. He was moribund, comatose, and convulsed, and died on the fourth day from the onset of the attack. During the last twenty-four hours of his consciousness, he partook liberally of wine and egg and beef-tea. The power of swallowing remained easy to the last.

Post-mortem Examination forty-eight hours after death. The roof of the mouth was pearly white; the tongue clean. The tongue, tonsils, pharynx, œsophagus, and trachea, down to the bifurcation, were removed together. The right tonsil was enlarged; the surface was rugged, soft, moist, and villous, bespeckled over with black spots; it appeared to be in an incipient stage of sphacelation, rather offensive. The left tonsil was healthy. The spot on the palate where the piece of membrane came off during life was equally covered with the same coriaceous layer; the pearly white appearance on the roof of the mouth could not easily be scraped or peeled off. The surface of the pharynx and the epiglottis were covered by a membrane of the same kind, of about the thickness of a sixpence, but softer, and more easily torn from the submucous tissue, which appeared granular and inflamed. The larynx was considerably inflamed, and covered with frothy mucus, but it lost the membranaceous appearance two or three rings down. The right parotid submaxillary and lymphatic glands were enlarged. The lungs were healthy, as well as the other organs of the body. The head was not examined. My colleagues, as well as myself, agreed that the pathological changes observed in the throat were not sufficient to cause death. The following were the different pathological appearances, and conclusions thereon:—

1. The thickening of the epithelial mucous layer by exudative product gave the white parchment appearance to the mucous membrane.

2. That desquamation of the exudative, hypertrophied, epithelial mucous layer may account for the membranaceous expectoration in these cases.

3. The coriaceous membrane had been evidently successively renewed, as the roof of the mouth, where it had been peeled off during life, was equally covered.

4. In some parts, as the pharynx, the submucous membrane was bare and granular, but there was no defined ulcer, in the common acceptation of the term.

5. The right tonsil was soft, and in an incipient stage of sphacelation; hence the peculiar breath-odour during life.

Remarks. This case pursued a most curious and insidious course. There was painless deglutition, though the tonsils were inflamed and enlarged; no cough nor difficulty of breathing though the epiglottis was diseased and inflamed. What could be the reason? The most probable way of solving the question is, by taking into consideration the impaired nutrition of the parts, as well as the effect of the hypertrophied epithelial membrane covering the papillæ in physically blunting their sensibility. How far this affection, diphtheria, is a distinct kind of zymotic disease, having for its cause and origin a different kind of blood-poison from the modified malignant scarlatina, to which, I have no doubt, it is more allied than any other disease of the order exanthemata, I have had too limited experience for a satisfactory analyses. The course, symptoms, and pathological appearances were as clearly different from scarlatina as from the rest of this order.

Case II. J. J., aged 20, dairymaid, a strong and healthy looking woman, was taken ill twenty-two days after the death of the above patient, in whose family she lived.

December 18th, 1858, I visited her. She said that, on the 16th, she was taken suddenly with headache, shivering, and considerable prostration, which disabled and obliged her to go to bed. During the following night, she was exceedingly hot and thirsty; her throat became sore, and the voice so husky, that she could not be understood when speaking. She had frequent vomiting; the bowels had not been moved after several doses of castor oil. On examining the throat, I found the right tonsil enlarged, and bespeckled over with few irregular white spots (as if caustic had been applied), varying in size from a pin's head to a small ivory button; the mucous membrane of the palate appeared milky; the external cervical glands were puffy; the pharynx looked healthy; the voice was hoarse; pulse 90. The bowels were costive; the urine scanty; the skin hot; there was no rash. She had no pain in swallowing. I ordered hot bran poultices to be applied to the neck, and repeated the castor oil till the bowels were moved; and gave a mixture of tincture of sesquichloride of iron. She had so improved by the second day, that it was thought unnecessary for me again to visit her.

Remarks. I have no doubt the above case was one of simple modified diphtheria as regards the pathological results. The two cases fully illustrate that there are varieties of degrees and intensity of the morbific influence of diphtheritic poison, or that the latter case was abated and shortened in its course and effects by tincture of sesquichloride of iron.

DIPHTHERITE; ITS NATURE AND TREATMENT.

By C. E. Bernard, M.D., Weston-super-Mare.

As Diphtherite has held, and holds a prominent place amongst prevailing disorders, and is yet destined, no doubt, to invade districts hitherto free, possibly the following remarks thereupon will not be out of place. I would not claim for them any great amount of originality. The object is more to separate the grain from the chaff, and place it so that they who run may read. Anything new in them will, of course, discover itself.

The term Diphtheria, or Diphtherite, is itself in some degree objectionable; first, because being new it conveys to the mind of many the idea of a new disease, and a new disorder suggests a new remedy, and a resort to the last *new system* upon the principle *similia similibus;* and the advocates of the 'opathies' and 'ologies' see a favourable opportunity of advancing and recommending that heresy which may chance to be the peculiar weakness of each; and were the professors as active as the disciples, mischief might result. But fortunately the disease in question is too serious a matter for trifling. But independent of this collateral complication, the simple fact of a patient supposing that he labours under a new and hitherto unknown disease, adds materially to the constitutional *prostration* by which the setting in of the disease itself is characterised, just about in the same proportion as we would wish to elevate the vital power by—hope and confidence. It is useless to argue with the sick, and often more so with those about them. It is manifest, of course, that no form in which disease presents itself can be really new to the practitioner, whose diagnosis and treatment are based upon sound and recognised principles. It gets classified immediately, and is but a rare variety. Who, indeed, at the present moment can so distinctly draw the line as to separate all cases of diphtheria from diseases of almost daily occurrence at some season or other of the year? But the truth is that the disease, even under its present name, is not new.

Without going back to ancient authority, it is thirty-five years since Bretonneau published his work, "*Des Inflammations spéciales du Tissu muqueux, et en particulier de la Diphthérite,*" etc., and this was several years before spasmodic cholera prevailed epidemically in this country; nevertheless, the "*new* throat disease" is an every day expression. To deprive it of its novelty would, in my opinion, take some of the venom from its sting. The term *Angina membranacea* seems scientific, and characteristic of the special nature of the malady.

The mortality arising from the disease in question is great, if we are to believe *all reports.* Wherefore, it would be safer to believe only such as are vouched by medical authority. Every practitioner knows that some of the worst cases of scarlet fever are those in which the rash comes out sparingly or not at all; and, doubtless, many such are smuggled, by the

uninformed, under a name now "familiar in our mouths as household words," and confessedly too familiar in our throats. Yet it is of great importance truly to distinguish the actual disease; and I am of opinion that, to deprive the bugbear, which is haunting the public mind under the name of diphtheria, of some of its prestige, would of itself be no small service.

Pure cynanche membranacea, or diphtheria, is not of itself a dangerous disease. It becomes so by complications, the most common of which is an extension of the false membrane into the air-passages; or, in fact, croup. Another point worthy of remark is, that *gangrene* does not occur in true diphtheritis, as is proved by the integrity of the subjacent parts after the removal of the false membrane (after death or otherwise); and this absence of gangrene is insisted upon by some French writers as *the* diagnostic sign betwixt this and other affections of throat. But the false membrane itself will run into a state of putrefaction, judged by the smell only, very much simulating gangrene, and this smell is of importance in other respects.

As to treatment: it seems singular, that while the very name of croup is instantly suggestive of *calomel;* yet the other affection, whose most dangerous complication is croup, does not appear to have been treated, to any great extent, with calomel, and certainly not as the leading remedy. The recorded observations of some, indeed, go to show that calomel has not, in their experience, proved useful; others declare it worse than useless. Many, nevertheless, strongly advocate its early employment; and it is difficult to understand how calomel can be so effectual on one side, and so ineffectual on the other side, of the very narrow line which divides the pharynx from the larynx,—a line so fine that, to demonstrate it, would require as much acumen as would be necessary for feeling the edge of the equator when passing over it. Still, reasoning as we do in other instances of false membrane, calomel should not be hastily abandoned. The efficacy of calomel, even in croup, was not, probably, all at once established.

Caustic, solid or in strong solution, is much advocated. How does it act? Some say as a stimulant,—some, an astringent. I doubt them; but I believe that, where it has a beneficial effect, it acts purely as a *caustic*, destroying some portion of the mucous membrane, and thus making, artificially, that boundary betwixt the pharyngeal and laryngeal membrane, which, in the normal state, is only arbitrary, and circumscribing spreading inflammation, as in cases of erysipelas. I believe it further acts by setting free, at any early stage, unhealthy fluid occupying the submucous tissue, and which, if not set free might, seeking a vent elsewhere, involve the case in something like œdema of the glottis. This leads to the question, whether this submucous tissue is not often the primary seat of disease, aggravated by the unyielding state of the membrane, and whether the membrane itself, partially detached, might not (altered in appearance) simulate false or adventitious membrane; or, again, whether the first patches of false membrane that appear so frequently are to be considered altogether of a morbid character, or are the first efforts of nature to replace a membrane, to her watchful eye already doomed. The excess of her efforts, and extension beyond required limits, has many a parallel, for instance, *granulation.* Ten or twelve years ago I suggested (in the Provincial Medical and Surgical Journal, vol. for 1846, p. 78) the application of caustic, upon the principle to which I allude, in cases of cynanche tonsillaris, then prevailing in quite an epidemic form. But, as some cases of the present epidemic run a very rapid course, might not the knife, upon the same principle, be substituted for the caustic, and free scarification be practised. The difficulty of getting a good view of the parts involved is a common embarrassment. Hence, frequent examination of the throat, and *educating* the tongue to submit to depression with some familiar instrument of unsurgical appearance, give an advantage when most needed.

The careful removal, from time to time, of shreds of detached membrane, hanging into the pharynx, by curved scissors, is very advisable, as these catch and retain particles of food which run rapidly into a putrescent state.

Guaiacum in some hands seems to have acted almost as a specific, and to have maintained the credit it has enjoyed in cynanche tonsillaris heretofore, given in twenty grain doses to adults alone, or combined with chlorate of potass.

Chlorine in gargle is strongly advised, and, as a disinfectant alone, must be very serviceable. With the exception of it, perhaps, the less we use of medicated gargles the better; but very frequent ablution of the pharynx with warm or cold water will, by removing the disinfected and putrid matter, act favourably. One cannot dismiss local applications, however, without allusion to *alum*, which does not appear to have been much resorted to in treatment of the epidemic at present prevailing. M. Velpeau used nitrate of silver in 1819, and *alum* about 1828 or 1829. He strongly recommends it (*Gazette Médicale*, about 1830) either in solution or in powder, applied by means of the finger moistened, or a brush or sponge, to the *whole* of the inflamed surface; or the powder might be blown through a tube into the throat; the application might be repeated twice or three times a day, a strong solution (a drachm to half an ounce or an ounce of water) being used as a gargle in the intervals, always gargling before the application to remove secretions, etc. This treatment is said to have been amongst the practical lessons conveyed by Bretonneau to his pupil Velpeau, who speaks of it as being employed so late as the seventh or eighth day, and marked by subsidence of pain and fever rapidly, and convalescence in three or four days, even when these are accompanied by tumefaction, and difficulty of swallowing and breathing. In milder cases, the use of the remedy one day was followed by convalescence on the next. One effect of this plan is to prevent the well-known tendency of angina to recur. Some of Velpeau's cases, at least, have distinct reference to angina with membranous exudation.

With children, the difficulty of using gargles is great; yet, as chlorine at least is of much service, its solution might be brought into contact with the pharynx by injection through a catheter passed in at the nostril.

Tincture of sesquichloride of iron and quinine are principally relied on in the epidemic of the present day. The former is used locally as well as internally. In regard to quinine, I would observe, that if cholera justifies large doses of calomel, so does diphtheritis of quinine. We can hope little from tonics, at the ordinary dose, in twenty-four hours, but much from calomel in the same time in large doses; and yet remedies from the vegetable produce ordinary effects more rapidly than those from the mineral kingdom. I am persuaded that I have often checked ague from reaching even a *second* paroxysm after commencing the use of quinine, by beginning with five or six grains for a dose, giving half the quantity every three or four hours after, till about the fourth or fifth dose, then smaller quantities at longer intervals; *hydrochloric acid*, applied locally, and administered internally, has found favour with some. A generous diet, with wine, is by all authorities held essential.

I have remarked above, that actual gangrene does not take place. The detached mucous membrane runs into a state of decomposition, causing fœtor of the breath, which, in cases where mercury has been employed, might be erroneously attributed to it. Now, seeing the existence of this decomposing and fœtid matter so close to the great respiratory avenue, what must be its effect upon all the air taken into the lungs, which, if charged before with malaria, must here become surcharged as from a fresh and more concentrated reservoir? Is not asphyxia, in some cases at least, a probable cause of fatal termination? If so, tracheotomy, or even laryngotomy, by admitting air through an unaffected channel, will seem to be indicated. Even in asphyxia from mechanical obstruction of the larynx by membrane, some hold that it does not extend beyond the chordæ vocales; but several *post mortem* examinations (recorded) seem to have revealed it extending as far as the bronchial tubes. There is strong evidence in favour of and against tracheotomy and laryngotomy; further trial of either seems to be necessary.

The internal administration of *chlorine* does not, so far as I have observed, seem to have been recommended in so called diphtheria; yet, whatever may be the difference in the condition of the throat, beyond doubt the form of fever (by far the most serious part of the malady) is very like that observed in suppressed scarlatina, which induces me here to repeat a formula familiar, perhaps, to many, but, like other things, not always at hand when needed:—Two drachms of chlorate of potass, dissolved in two ounces of hydrochloric acid previously mixed with two ounces of distilled water; this solution, in a stoppered bottle, to be kept in a dark place for use. Two drachms of the solution in a pint of distilled water constitute the chlorine mixture. The dose is a tablespoonful or two, according to age, frequently. For its employment we have high authority; with others, I think, Dr. Watson.

I have exceeded limits; so I will only hint at *oxygen gas* inhaled into the lungs. It is easily and cheaply obtained from chlorate of potass and peroxide of copper. The same also could be applied, endermically, with a simple vapour bath apparatus, mixed in any proportion with atmospheric air.

It is to be feared that diphtheria, like charity, is made to

cover a multitude of sins, and cloke diseases to which it has no resemblance. Let us be careful, whilst we seek to suppress quackery, we do not permit any fashionable title to be used, on *medical authority at least*, which the pretender might turn as a weapon against us, with the rebuke "tu quoque".

I would offer these remarks with much diffidence, simply adding,

"Si quid novisti rectius istis,
Candidus imperti: si non, his utere mecum."

PATHOLOGICAL CONTRIBUTIONS TO MEDICAL JURISPRUDENCE.

By William Boyd Mushet, M.B.Lond., late Resident Physician at St. Marylebone Infirmary.

II.—Obscure Cerebral Symptoms (possibility of Violence or Poison?) satisfactorily interpreted, on Autopsy, by Natural Disease.

F. W., aged 52, a gentleman of eminence in the scientific world, was brought to the Infirmary about 1 A.M. on October 6th, 1856, having been found insensible by the police. He was completely unconscious to external impressions; the pupils were contracted and immoveable to light; the face was pale; but the conjunctivæ were much injected. The respiration was performed at long intervals, and was of a sighing character, not stertorous. There was continual nictitation. He had no deviation of mouth, or other paralysis; no rigidity, nor convulsion. The pulse was full and laboured, but compressible; the surface was cool; the feet cold. A soft systolic murmur was heard at the heart's apex. No fracture was discoverable. There was no smell or suspicion of opium. An abrasion existed over the left malar eminence; and there was tumefaction of the upper lip, from extravasation of blood into its substance. He was ordered a drop of croton oil, sinapisms to the calves, hot bottles to the feet, and a blister to the nape; the head to be moderately raised.

I remained with him about an hour and a half, when I retired to bed, as no alteration had occurred. At half-past 8 A.M. he was breathing stertorously, which, the nurse informed me, had a short time before supervened; and there were slight convulsive twitches of the left side of the face, and mucous *râles* in the throat. The pulse was small and thready, and the surface cool and moist. Wine was ordered, but he could not swallow; and he died at half-past 10, nine hours and a half after admission.

The body was examined for inquiry two days after death. The weather was warm. Rigor mortis was slight in the upper limbs, more marked in the lower. The pupils were moderately dilated. The face was calm. There were marks over the left cheek and upper lip corresponding to the injury noted during life. The body was well nourished.

Head. The scalp was pale. The dura mater was natural, but a little to the right of the longitudinal sinus, about its middle, was a small osseous body (*glandula pacchioni*) of the size of a small pea, which occupied a depression in the cerebral substance. There was some opacity of the arachnoid, and some subserous effusion. The substance of the brain was a little congested, and presented unusual (ramiform) injection. The section of the brain exhibited more *puncta vasculosa* than natural, and its consistence generally was below the average. Much fluid was found in the lateral ventricles. The central portions of the brain were much softer than in health. The fornix throughout its extent was very soft, almost diffluent; as was also the hippocampus major of the right side. The thalami and corpora striata were also less consistent than normal. On careful section, a small clot, not more than a drachm of effused blood, was discovered in the right anterior lobe of the hemisphere, anterior and external to the extraventricular portion of the corpus striatum, and encroaching on the grey matter at the base of the brain. At this spot, the surrounding cerebral substance was softened and disintegrated. The vessels of the brain appeared healthy. About an ounce and a half of reddish serosity was found at the base. The cerebellum and other parts were natural in appearance. There was no fracture of the calvarium, or of the base of the skull.

Chest. The heart weighed nine ounces and a half: it was apparently quite healthy. The right side was flaccid and contained dark coagula. The left side was contracted; its cavities were empty. There was slight atheroma of the coronary arteries. No deposit was seen on the valves; and the mitral appeared to be perfectly competent. About an ounce of serum was found in the pericardium. The lungs were remarkably congested, but crepitated well. The lining membrane of the bronchi and their divisions was dusky red; and there was much frothy mucus in the air-tubes. There was slight tubercular deposit at the left apex. No pleural adhesions were present. About three or four ounces of reddish serum were present in each side of the chest. A great amount of frothy serum escaped on section of the lungs.

Abdomen. The stomach was very large, distended with dirty looking fluid, of slight sour smell. The mucous membrane was pale, not softened. The rugæ were prominent; and there was some fulness of the veins near the *cul-de-sac*. The spleen was small, pale, soft. A gall-stone was found in the gall-bladder, of about the size of a very small marble. The liver was pale at various spots; and small whitish fibrous nodules, of very firm consistence, were scattered over its substance, chiefly affecting the surface. When the left kidney was handled, a large stone was readily discernible through its walls, imparting the sensation of a solid body in a bladder of fluid. On section, a very large irregularly shaped lithic acid calculus was exposed, which was found to branch and extend firmly into the calices, which were atrophied and absorbed, so that at points the capsule alone intervened between the concretion and the surface. The structure of the organ was very pale; it weighed six ounces after extraction of the stone. The right kidney was large and pale; it weighed five ounces and a half; it was very firm, not granular or lobulated: the capsule separated well. One or two small spots of commencing cystic condition were observed. The intestines were natural. The bladder was distended. There was no stricture of the urethra.

Remarks. In this case, the objective phenomena pointed to cerebral lesion of some obscure kind. The depression, infrequent respiration, and diminution of temperature, were suggestive of concussion; but the laboured, though compressible character of the pulse, the immobility of the pupils, and the perfect insensibility to external impressions, led me to infer that some condition must exist *plus* the concussion (if concussion were at all a contributing agent) to account for the gravity of the symptoms; as concussion *per se*, sufficiently violent to induce so strongly marked results, would express itself by greater prostration and coldness of the surface, almost total obliteration of pulse, and sympathetic action of the stomach. The symptoms, again, were unlike those of apoplexy, poisoning, or fractured skull.

I felt, therefore, inclined to regard the case as one of softening *plus* concussion; and I think it must be admitted that the *post mortem* appearances ratified the diagnosis. Some of these appearances deserve notice. The evidences of asphyxia were very marked, more marked and characteristic than I ever observed in any case of drowning or death from pure apnœa. The clot was on the opposite side to the external injury, and occupied a very unusual position. This clot seemed almost too small and circumscribed to have determined fatally; but we must bear in mind the extensive softened condition of the brain, the clot superadded, and probably concussion, which might have caused the clot; or the clot, occurring from morbid causes, might have induced vertigo, the fall, and consequent concussion.

The mitral murmur is a point of interest. It was observed in the recumbent position only, the state of the patient forbidding the upright posture. No lesion of the heart or incompetency of the bicuspid orifice was discoverable, although attention was especially addressed to this organ. Two or three similar cases have at times come under my observation, in which a systolic murmur *at apex* has existed, in absence of any appreciable pathological change. I regard the morbid sound detected in this patient to be due either to disturbed innervation, the consequence of the coma, producing irregular contraction of the fleshy columns, or, which is more probable, to deficient lentor, or altered mobility of the blood arising from the cystic condition of the kidneys, which must have greatly interfered with their depurating function.

The sudden invasion of the fatal seizure was a remarkable feature in the case. It was elicited from the relatives at the inquest, that no fit or other indication of disease of the brain had previously manifested itself, except at times a certain alteration and peculiarity of manner.

Clinical Lectures
ON
LITHOTOMY.
DELIVERED IN
THE LEEDS GENERAL INFIRMARY.

By Samuel Smith, Esq., Senior Surgeon to the Infirmary.

Lecture V.

Gentlemen,—I have now to describe to you the after treatment. About a hundred and sixty years ago, there flourished an itinerant lithotomist, Frère Jacques, who travelled all over Europe, and reckoned his operations, not by hundreds, but by thousands. After he began to use the curved sound with a groove in it, his success was very great, greater than that of any other lithotomist of that day. His after treatment was this. He went up to the patient, shewed him the stone, and said to him, "L'opération est finie; Dieu vous guérira." It is not, however, advisable to imitate Frère Jacques in this. There are certain things to attend to.

First, when the patient is put to bed, if he be not very young, give him an opiate, and watch him very narrowly for several hours. You are anxious to see that the urine flows through the wound at an early period; and you also wish to see that no hæmorrhage ensues, which would produce inconvenience, and might endanger life. He is placed on his left side, with the knees gently drawn up towards the abdomen. One very important point to attend to is the management of the "draw sheet". A sheet is folded in four folds, and one end is rolled up like a calico bandage; the patient's breech rests upon the other end, while the roller portion lies by his side. In the course of an hour or two after the operation, you expect to find this sheet soiled and stained by bloody urine that has flowed through the wound. This is a satisfactory sign. You now order the soiled portion to be drawn away; and the patient's buttock rests upon a dry part of the sheet. Perhaps the next stain it receives contains a very slight tinge of blood.

If, in the course of four or five hours, you observe that the stain is purely from urine, without any discoloration, you are satisfied that all is going on well. But if, on your visit to the patient two or three hours after the operation, you find the sheet is unsoiled, that there is no discharge from the wound, but that its sides are glued together, the case is not going on satisfactorily, and interference may probably be required. If this condition be not remedied, your patient will soon begin to experience pain and distress from distension of the bladder by urine, and perhaps also by coagulated blood. If you think the proper time has arrived, do not delay, but at once pass the forefinger (previously oiled) through the wound into the bladder; and the urine will immediately flow. If that is not sufficient, you may with great propriety, after a few hours, insert the tube, as recommended by Mr. Liston from the first; but do not insert this tube unnecessarily. I am sure it sometimes does harm; and I have very rarely found it necessary. If you attend to this condition early, and make with your finger a free passage from the bladder, you will, as a rule, have done all that is required. It is of very great consequence that this should be attended to in the first three, four, or five hours. If neglected, it may be the cause of infiltration of urine.

If, two, three, four, or five hours after the operation, there be such a degree of hæmorrhage as to give you uneasiness, clean and sponge the wound well, and carefully examine it. If you see an artery pouring out its blood, tie it. If there be venous oozing to any extent, introduce the tube surrounded with lint, so that the naked extremity of the tube for an inch and a half shall penetrate through the prostate into the bladder, and that part surrounded by lint come into contact with the wound. This will arrest any hæmorrhage, except from an artery of magnitude. It is generally advisable to allow the tube to remain from twenty-four to forty-eight hours. I have not found it necessary to introduce this tube above three or four times in all my experience.

See every day that the nurse is very attentive to the draw sheet. This is of very great importance, because, if you have a negligent nurse, who allows the patient to remain with the buttocks on the soiled sheet hour after hour, you will have excoriation of these parts. Therefore see that the buttocks are well washed with a sponge, dried with a towel, and that the draw sheet is moved constantly from under them when soiled; this can be done without any fatigue or disturbance of the patient. As it comes forward, you fold it like a bandage *on the soiled side*, and secure it to the bed; you then secure your patient from the annoyance which he would suffer from the smell of evaporating urine, if the sheet were left unfolded and exposed to the air.

All going on well, and no untoward symptoms having taken place for four days, you may begin to give your patient more generous diet. I have adopted Martineau's plan for many years. I give a little beer and a little meat after the fourth day, and I have never had occasion to regret doing so.

After the urine has ceased to flow by the wound for three or four days, strap it up with adhesive plaister; you gain time by doing so. The length of time that elapses before the urine ceases to flow by the wound varies. In boys, it is generally from seven to ten days; in adults, a few days more. It is very beautiful to see how suddenly a patient under these circumstances improves in his personal appearance. Previously to the operation, he has been subjected to great anxiety of mind, as well as great bodily pain; but, having seen the stone in the hands of his surgeon, his mind is at ease, and he sometimes thrives rapidly from that moment.

Having now described the operation, and explained the points necessary for you to attend to in the after treatment of the case, perhaps you will feel some surprise that I have never once mentioned the word chloroform. Now I will give you my opinion by telling you a little story. Many years ago, a gentleman in London, by the exertion of powerful influence, obtained the great favour of being present in the prison-yard of Newgate to witness the execution of several criminals for high treason. Shortly afterwards, he was relating to a party of friends the behaviour of the culprits at the drop. He stated how hardened they all were but one—a butcher—who closed his eyes, and moved his lips in silent prayer. On making this statement, he was suddenly interrupted by one of his friends exclaiming, "He did right—never lose a chance." Now, gentlemen, I say you will do right never to lose a chance in lithotomy; and, if you give chloroform, you lose two chances. You run the risk of its immediate effects, and the risk of its after consequences. In estimating the number of deaths from chloroform, we ought not to consider those cases only in which the immediate result was fatal. We do not reckon the number of deaths from chloroform by scores; but I suspect the number may be reckoned by hundreds. Some years ago, there were upwards of fifty well attested cases recorded in books; and depend upon it there were many fatal cases that had not been recorded at all. A surgeon, who had performed lithotomy upon a private patient, told me that the man died afterwards from an affection of the brain produced by the administration of chloroform.

Look at the condition of a patient who has undergone a capital operation under the influence of chloroform, and compare it with the condition of another who has undergone a similar operation without its administration. In the first case, how often do you see it followed by sickness, obstinate vomiting, and long continued headache! Are these the symptoms we have been accustomed to see after the capital operations of surgery, before the introduction of chloroform? I say, No. Are these symptoms likely to conduce to the favourable recovery of a patient? I say, No. And I also say, that the fatal results after the capital operations in surgery have been far less numerous in the Leeds Infirmary since chloroform was less frequently administered than they were when it was always given; and I am very proud to have been the leader in the reform which has taken place in that respect.

Chloroform has been most grossly abused in this country; and I think I need not say more to prove this when I inform you that it has been administered during the operation of tapping for hydrocele—an operation in which no more pain is inflicted than by the pricking of a pin, and which occupies no more time than this snapping of my fingers. Is not that an abuse of chloroform? Not that I would not use chloroform under certain circumstances. I think it is a great discovery, and may be of great advantage; but I hope to live to see the day when it will be far more sparingly used than it is at present. I would rather hear the shrieks and cries of a patient undergoing a capital operation, than be present when a man, under such circumstances, was swearing blasphemously, or singing an obscene song, both of which I have often witnessed.

My last four colleagues in the Infirmary have all performed

the operation according to the plan recommended by the late Mr. Key—that is, with the straight staff and long pointed scalpel. It gave me very great pleasure, many years ago, to have reported to me by an old pupil of this Infirmary, that Mr. Key, in his lectures on lithotomy as performed with the scalpel and straight staff, was in the habit of mentioning my name as a provincial surgeon who had discarded the use of the cutting gorget, and had operated with the staff and scalpel twenty-two times in succession without a death. I suspect Mr. Key would not have been able to make that statement if I had operated with his staff and his scalpel. My opinion is, that a beaked scalpel is safer than one without, and that a curved staff is also safer than a straight one. Let me enumerate the advantages which you possess in having a curved staff.

1. In the first position, it makes the membranous part of the urethra more prominent, and consequently more easily reached; that is to say, it pushes it forwards, and makes it more superficial.

2. It is a far better and more efficient sound than the straight staff. It will explore all parts of the bladder; and, having the same curve as the urethra, it is much more easy of introduction.

3. When introduced, there is no possibility whatever of its escaping from the bladder, however the patient may struggle. If the handle of the curved staff is held, it is impossible for the point of it to escape in front of the prostate. Let us prove this. Here is the pelvis, placed in position for the operation; and here is the curved staff, also placed in position. You perceive at once it is impossible for it to slip out, however the patient may struggle. Now let us put alongside of this curved staff Mr. Key's straight staff, and see the difference. See how easy it will be for Mr. Key's instrument to escape in front of the prostate gland. If such an accident were to happen (and it has happened), what would be the consequence? The knife would pass between the rectum and the bladder, and perhaps wound the rectum.

4. Previous to the division of the prostate, and when the curved staff is placed in its second position, it lifts up the bladder from the rectum, and consequently renders it less liable to be wounded.

5. In the second position, when the handle is depressed, it is to all intents and purposes a straight staff for the passage of the knife. Let us prove this. Here is the first position, the membranous part of the urethra being rendered prominent. When the membranous part is penetrated, the handle is depressed, and it becomes a straight staff, the curve being quite within the bladder. You can thus run the beaked knife along the groove in a straight line through the prostate.

Now, then, with respect to the straight staff.

1. It is introduced with much greater difficulty than the curved staff. The very appearance of it will tell you this; and, if that does not satisfy you, try them both upon the dead body.

2. The straight staff is a very imperfect sound. There is often difficulty in feeling the stone with it; and I have known several instances where the straight staff has had to be withdrawn, that the bladder might be sounded with the curved sound, and then reintroduced for the performance of the operation.

3. This is my greatest objection to it. It penetrates such a short distance beyond the prostate gland, that there is very great danger (during the struggles of the patient) of its slipping from the bladder in front of the prostate. I consider this danger so great that I have invariably, for more than twenty years, refused the responsibility of holding the straight staff in this operation.

4. The membranous part of the urethra is not rendered so prominent or so easy to find with the straight staff as it is with the curved; and the pointed scalpel is never so safe as the beaked one, for the reasons I have given you. Some years ago, at Weiss's establishment in the Strand, I made inquiry, and they informed me that they were now never asked for Key's straight staff; that they did not make them; and, so far as they knew, their use was exploded.

Mr. Fergusson, in his very excellent work on *Surgery*, concludes his observations on the lateral operation of lithotomy in these words: "The highest averages of success, one death in five, in six, seven or eight, have been obtained in this way, by Cheselden himself, and by many who have imitated his movements; among whom I may enumerate, as perhaps the most successful, Messrs. Martineau and Dalrymple of Norwich, Mr. Crichden of Dundee, and Mr. Liston, whose operations I often witnessed in former years with admiration."

I have now proved to you that my success in this, the great operation of surgery, has been equal to the best number mentioned by Mr. Fergusson; and that seven out of eight upon whom I have operated have been, by the infliction of a few minutes of pain, at once relieved from the most dreadful sufferings (perhaps endured for years previously), and saved from a certain and miserable death. Gentlemen, were this success the only result of the exertions of my long professional life, I should feel that I had not lived in vain, or failed on my part in rendering those great benefits that our profession glories in conferring on our fellow-creatures.

Reviews and Notices.

Observations on Diphtheritis. By Willoughby F. Wade, B.A., M.B. T.C.D., Physician to the General Dispensary; formerly Resident Physician to the General Hospital, Birmingham. Pp. 32. London: Churchill. 1858.

Dr. Wade puts forth these *Observations* for corroboration, modification, or correction, by the experience of other practitioners, before he attempts to make them the basis of a pathological and ultimately a therapeutical superstructure. He gives two chapters: the first of which is historical, and the second treats of the symptoms of diphtheritis.

In the first chapter, Dr. Wade expresses an opinion that diphtheritis is not by any means, as some suppose it to be, a new disease; but that it was probably known to Hippocrates and Aretæus; and that it has been described by Bretonneau, Chomel (*ante* 1742), etc., under a multitude of names.

The chapter on Symptomatology is most full and instructive. The author has found albuminuria indisputably common in the fatal cases of diphtheritis in Birmingham; and as, if this phenomenon and its apparent etiological connections, are verified by observations of the disease in other places, an important influence must be exercised both on the pathology and treatment, we extract Dr. Wade's remarks on the subject. During the second stage

"The urine presents no constant appearances, but it is most commonly described as being somewhat scanty and of a pale colour; sometimes, however, depositing lithates when cold, and these not often pink or high-coloured, but of a buff or fawn-colour, constituting the 'furfuraceous' or 'branny' deposit of the older writers; and these terms are as descriptive of the appearance of this kind of deposit as any with which I am acquainted. The occurrence of hæmaturia at a later stage has long been known; but it was supposed, and perhaps rightly, to indicate merely a purpuric condition of the blood, and to proceed probably from the mucous membrane of the urinary bladder. This opinion I held, in common I believe with everyone else, till an opportunity was afforded me of examining the body of one dead of diphtheritis. I then found changes in the kidney, which will be more particularly described when we come to consider the morbid anatomy and pathology of the complaint, in consequence of which I made a practice of more minutely examining the urine during life than I had previously done. This led to the discovery that albuminuria was not unfrequently present, when there was no reason to suspect its existence from simple inspection of the water. That this differs materially from the hæmaturia above alluded to, appears from the absence of any other evidence of purpura, from the absolute absence of blood-corpuscles as proved by microscopical examination, as well as by the colour of the urine, which may be neither red nor smoky. There are two circumstances which may lead us to suspect this complication, now that we are aware of its possibility; namely, a diminution in the quantity of the excretion, or the sudden disappearance of the lithate of ammonia. The ill-omened disappearance of deposits from the urine, in somewhat similar diseases, has not escaped the observation of old writers. Thus, Fracastorius, in a chapter, '*De verè pestiferis febribus*', speaks of the urine becoming apparently normal, and free from the deposits which had previously existed, a short time before death, in such as in some other fevers, 'quæ res inexpertos quosdam medicos sæpe fefellit, incipientes bene sperare ex eâ urinæ mutatione'. (*Op. cit.*, p. 340.) At present, however, I can suggest no substitute for the careful examination of the urine at each visit, for there may never have been any deposit;

and I am not sure that a slight increase in the *quantity* of the urine does not *sometimes* attend the earliest period of the kidney complication. It is oftentimes very difficult in children to estimate accurately the quantity of urine passed, and if diarrhœa be present, impossible; and diarrhœa, I am disposed to think, sometimes comes on at this epoch, and it is an important point for future observation to determine in what relation these two symptoms stand to each other.

"I had never met with any hint, either from authors on this subject, or from my professional friends, which indicated that they had discovered or suspected the existence of this most momentous complication; that it should have been so long overlooked is perhaps best accounted for by the apparently normal condition of the urine and the absence of dropsy, which I have *never* known to be present, nor have any authors, within my knowledge, alluded to dropsy as a symptom of diphtheritis. It is with great satisfaction that I am able to state that the correctness of my observation has been confirmed by many of my medical friends, since a fact of this kind depending upon the veracity or capability of one observer only is often received with much distrust. Albumen has been found in the urine of patients suffering from diphtheritis, by Dr. Evans, Messrs. Clayton, Jauncey, Moore, and Robins, and others, of this town, and also by Mr. C. P. James, of Leiston, in Suffolk; who has published (in the *Medical Times and Gazette*,) a most interesting account of an epidemic which occurred in that neighbourhood. An anonymous writer in the *Lancet* some little time ago, intimated that he was in possession of certain facts which indicated a connection between diphtheritis and acute desquamative nephritis, but he has not yet, as far as I know, communicated them to the profession, nor was this letter published till some time after I had made the *post mortem* examination above alluded to, the parts removed at which I exhibited to the Queen's College Medico-Chirurgical Society on the 15th of December 1857. Several corroborative cases were observed immediately after; one, indeed, by Mr. Robins the next day. The specific gravity of such urine varies, as might have been expected; but I think it may be laid down pretty certainly that there is a diminution in the total amount of solid excreta, or, in other words, that the special functions of the kidneys are interrupted. Although this urine is often perfectly pellucid and free from deposit, yet, in some instances, we find what I certainly should have been disposed to anticipate in all, viz., tube casts and renal epithelium. The tube-casts may be of three forms, so far as I have at present observed, viz.: firstly, what have been called 'small waxy casts;' secondly, casts of similar size, but granular, probably from commencing disintegration; and, thirdly, ordinary epithelial casts. Besides these objects, and perhaps even more common than them, are small masses of fibrine of irregular shape, not moulded in the renal tubes; we generally find, also, epithelium from the bladder and other portions of the urinary passages. The tube-casts and the glandular epithelium often contain fat, in a state of subdivision, more or less minute.

"Having discovered, then, the existence of albuminuria in a particular case, what do we learn from it? Is it a necessarily fatal sign? To this I am able to answer, certainly not. This is, so far, encouraging; but, on the other hand, since I have been acquainted with its existence, I have only been able to hear of one fatal case in which search had been made for it without success. We might formulate this assertion by saying, all fatal cases present albuminuria, but all cases presenting albuminuria are not fatal. One, or even several exceptional cases do not prove that fatal cases are not necessarily made so by kidney mischief; for we know that in chronic Bright's disease, the danger is by no means of necessity in proportion to the amount of albumen in the water, for in not a few instances the albuminuria is absent for a longer or shorter time before death. The danger is really proportionate to the incapability of the kidneys to discharge their function. The presence of albumen in the urine is a common physical sign of a condition of the kidneys which interferes with their functional activity. I admit that in the present disease the quantity of albumen in the urine is generally—but, I again repeat not necessarily—in direct proportion to the functional disability of the kidney, or, perhaps, even more accurately to the retention within the body of those matters which should be excreted by the kidney; for we must not overlook the possibility of the renal offices being supplemented by other organs. This disability is to be estimated more perfectly by ascertaining the quantity of solids in the urine, from a comparison of its quantity and specific gravity; a proceeding which, as I have before said, circumstances often render difficult. The best practical test is the vital one—the effects produced upon the other functions necessary to life, as learnt from the symptoms which ensue. Proceeding in this way, we find that this complication may come on insidiously, not at once, and, indeed, sometimes not for weeks, reaching an extent which seriously affects the renal offices. Under such circumstances, all we can say of the cases is, that they seem during its continuance to be at a stand still: the throat mischief may be but limited, but it does not diminish; the vital depression may not be extreme, but it is persistent. In the only two really chronic cases that I have seen—one of which died at the end of five weeks, and the other did not begin to amend till nearly eight weeks after the first invasion—albuminuria was present, and they answered in every respect to the description which has been given by many authors of cases protracted for several weeks. It is worthy of notice that in the fatal case, which was not under my immediate observation, the albumen disappeared a day or two before death; I am not able to state whether this disappearance was coincident with any other improvement, or the reverse, in the physical condition of the urine. In the other case, the disappearance of the albumen was concomitant with an increased excretion of urinary elements, and the first indications of returning health.

"When symptoms do arise contemporaneously with the kidney complication, they are those which have been universally described by writers as characteristic of this disease." (Pp. 22, 25.)

We heartily commend Dr. Wade's book to our readers. It is highly valuable, and gives promise of much good in future from its author.

New Views on the Causes, Symptoms, and Treatment (chiefly dietetic) of Irritative Congestion of the Windpipe, arising from Public Speaking, Colds, etc.; also occurring in certain Stages of Consumption. By C. B. Garrett, M.D., late Physician to the Kingston-upon-Thames Dispensary. Pp. 59. London: Churchill. 1858.

Dr. Garrett aims at shewing that the affection commonly described as "clergymen's sore-throat", "follicular laryngitis", etc., is secondary to and dependent on an imperfect performance of the duties of the digestive organs. The treatment is therefore to be directed to these last named parts, as well as to that which is apparently affected; and the author, in pointing out the indications as being dietetic, medical, and constitutional, insists on the preeminence of dietetic treatment. Those who may read the book will find in it valuable suggestions, which will repay them for their hour's employment.

The Microscope in its Application to Clinical Medicine. By Lionel Beale, M.B., F.R.S., Physician to King's College Hospital, Professor of Physiology and General and Morbid Anatomy in King's College, London; Honorary Fellow of King's College. Second Edition. With 270 Woodcuts and a Coloured Plate. Pp. 390. London: Churchill. 1858.

In the preface to the second edition, Dr. Beale informs us that—

"The author has endeavoured to increase the usefulness of the work, and render it as practical as possible. With this view, it has been revised throughout, and many of the articles have been entirely rewritten. Much that related merely to manipulation in the first edition will be found in *How to Work with the Microscope*, and has, therefore, been omitted in the present one. In place of this, much matter bearing more exclusively upon medicine has been introduced, and upwards of sixty new and original woodcuts have been inserted."

In noticing, a few years ago, the first edition of Dr. Beale's work on *The Microscope*, we characterised it as a kind of work without which none but the most routine empiric could be satisfied. In stronger terms, if possible, we would say the same of the present edition; excluding also, as we did before, those who know so much that they can learn nothing from the book. But such extraordinary specimens of scientific humanity must be very rare.

British Medical Journal.

SATURDAY, JANUARY 29th, 1859.

DIPHTHERIA.

We propose to publish a collection of cases of this disease in a tabular form, embracing the principal points in the experience of the London and country hospitals, and of our associates in general. We shall be greatly obliged if those members of the Association who have met with cases of diphtheria, and preserved notes of them, will forward abstracts to the office of the Journal.

The points to which we propose to direct principal attention, are the following:—

1. The *Age* and *Sex* of the Patient.
2. The *Hygienic Conditions* under which he had been living; *e.g.*, occupation, supply of food and clothing, purity or impurity of atmosphere, etc.
3. The *Meteorological Conditions* prevailing in connection with the spread of the disease, in its increase or decline.
4. Evidence of the presence or absence of *Contagion*.
5. Had the patient had *Scarlatina* or not? Was scarlatina prevalent in the neighbourhood?
6. *Appearances* and *Symptoms* when first seen.
7. Time at which the *Leathery Membrane* appeared; and its situation.
8. Presence or absence of *Fungus* in the membrane, as shewn by microscopic examination.
9. Presence or absence of *Affection of Internal Organs; e.g.*, of *Kidneys*, as denoted by albumen in the urine.
10. *Treatment* and *Progress* of the disease. Under the latter head, special attention to be directed to the state of the trachea; and, as a part of this subject—
11. The indications for and success of *Tracheotomy*.
12. *Duration* and *Event* of the case.
13. *Post Mortem Appearances* in the fatal cases.

THE PROPOSED NEW CHARTER OF THE COLLEGE OF PHYSICIANS.

The most important medical legislative measure after the Medical Reform Act, and the necessary corollary to it, will be the New Charter of the Royal College of Physicians. It was felt on all hands that the exclusive spirit of Pall Mall must give way, the moment that medicine became a power in the state; and the authorities there enthroned have wisely determined upon granting a liberal programme. In December last, we made our readers acquainted with the leading features of the Charter as far as they were then settled; and, for so doing, we received a grave admonition from our contemporary the *Medical Times and Gazette*, on the impropriety of prematurely divulging the plans of those entrusted with drawing up the rough draft of the Charter. It was very naughty of us, we admit, to attempt to step before the *Medical Times and Gazette*, and we meekly submitted to his lecture; but, behold! we are revenged. Our contemporary has been caught peeping at the naked Godiva of Pall Mall. Like Tom of Coventry, who "bored a little auger hole in fear," he is condemned to taste the rod of correction administered by his particular friend Sir John Forbes. We might fairly say,

> "'Tis the sport, to have the engineer
> Hoist with his own petar."

But we have no intention of doing so, for the reason that we think our contemporary was quite in the right to peep if he could, and equally right to let all the outside world know how much of the naked charms of this creature of Trafalgar Square he really did ogle.

We believe it will be for the benefit of the College of Physicians, to have their draft scheme discussed by the medical public ere they finally commit themselves to it; and therefore we reprint in our news columns the abstract of the draft as it appears in our cotemporary.

The first most important clause we come to is No. 7, which provides that

"Doctors of Medicine of any British University, and certain foreign graduates *not practising pharmacy*, shall, at any time within twelve months after the acceptance of the charter, be admitted members of the College without examination, on paying ten guineas, exclusive of stamp duty."

Now, as the stamp duty is £15, the whole payment will be £25 : 10—a sum which we do not consider will be thought too dear for the privileges of being a member of the College, which, after all, are not to be despised, seeing that nearly every hospital board in London and the provinces stipulates that their medical officers shall be members of this corporation. The enactment of this clause will go some way to clear the difficulty at present felt to be attendant upon filling up the titles column in Schedule D of the Medical Act; inasmuch as, under present circumstances, the persons who would feel most acutely its invidiousness would be British graduates. But if they become members of the College of Physicians, the stumbling-block is removed.

By Clause 11, it is proposed to admit within twelve months their most distinguished members at once to the rank of Fellows; and, by Clause 12, members of four years standing, after the expiration of twelve months, who may have distinguished themselves "in the practice of medicine, or in the pursuits of science and literature", may be proposed for election as Fellows. This is a wisely constructed loophole, by which many men, who have not gained strictly professional eminence, may yet be admitted to shed lustre on the College.

Clause 15 is, however, the one which promises to create the greatest change in the ranks of the general practitioners. It is nothing less, in short, than a proposal to abolish the powers of the Apothecaries' Company as a licensing body, and to place the College of Physicians in the same position towards the general practitioners, with regard to medicine, as the College of Surgeons stands towards them with respect to surgery. Under the wings of these two Colleges, in short, it is proposed to fledge the future tribe of "family doctors" throughout the country. Here is the clause.

"15. Any person who shall have satisfied the said Corporation, by examination, touching his proficiency in the science and practice of *medicine* and *midwifery*, and complied with such other regulations as are or shall be required by the bye-laws of the said Corporation, shall receive a license from the

College to that effect, and be entitled *Extra-Licentiates* in Medicine and Midwifery."

It will be perceived that the title of *extra*-licentiate is given to these members. Why not call them simply Licentiates? As it is proposed that the name of licentiate shall be changed to that of member, it is simply absurd to create *extra* licentiates. An examination in midwifery is also made compulsory, a step in advance of the College of Surgeons, where the examination in this branch is optional.

Clause 23 proposes that the Council shall be elected by the Fellows out of their own body. Here the old Tory spirit peeps out. We scarcely can believe that the framers of this draft charter can persuade themselves that they will be able to carry this highly objectionable clause, the very counterpart of the one in the charter of the Royal College of Surgeons of England, which has caused so loud an outcry. The whole College, consisting of fellows and members and "extra-licentiates," should most certainly return the Council, otherwise the whole affair will be as exclusive as ever. We earnestly entreat the framers of the new Charter to reconsider this clause in a more liberal spirit; otherwise we can promise them infinite trouble and vexation, and in all probability defeat, in the House of Commons. There is so much that is excellent in the proposed scheme, that we should deeply regret to see it tainted in its very essence by such a very objectionable proposal. We shall return to the question shortly.

THE TAUNTON AND SOMERSET HOSPITAL.

Our recent remarks on the expulsion of three of the medical officers of the Taunton and Somerset Hospital, have, we hear, been very distasteful to the peccant governors; and the report has also reached us, that they accept Mr. Alford's letter, which was published in last week's Journal, as a complete refutation of all that has been said, done, or written against them. It is doubtless very convenient to have such able support: but, unfortunately for the governors, Mr. Alford's arguments will not stand the test of a rigid examination. He says that—

"So far from considering it in any degree derogatory or offensive, I look on it as a desirable arrangement to have a record of the amount of my time and services devoted to a public charity."

And again:—

"Every man who takes an office, whether he receive a salary or not, is bound in honour to conform to all the rules, and perform all the duties of that office."

These propositions appear very plausible at first sight; but let us look a little more closely into their bearings. "Conform to all the rules, and perform all the duties." Very good! but what if the rules and duties *cannot* be conformed to and performed, consistently with the least sense of respect, on the part of the office-holder, for himself and for his profession? Suppose that the governors of the Taunton and Somerset, or any other hospital, should in their wisdom and liberality think proper to make a rule "that ten beds in the hospital be placed under the care of a practitioner of homœopathy" (or of Coffinism); "and that such practitioner be considered as one of the medical staff of the hospital, and enjoy all the privileges which are now enjoyed by the other members of the said staff." We cannot really bring ourselves to insult Mr. Alford, by supposing for a moment that he would feel it his duty to so far conform to this rule as to remain in office, the colleague of a charlatan. He would, we are confident, be the first to resent the gross affront; and to see plainly that cases may occur, in which men in office are *not* bound to "conform to all the rules" which it may be thought proper to make in respect to them. The assertion of Mr. Alford as to the duty of men holding office, is, then, too general to be correct.

But, it may be said, the signing one's name in a book is not so heinous a professional crime as allowing a homœopath to be joined with one as a colleague. Certainly not: there is no harm whatever in Mr. Alford, Dr. Burridge, or any one else, writing down their names every time they enter any certain place—if they choose of their own free will to do so. If any reasons occur to them, why they should keep a record of their attendance, well—let them do so. But we must repeat our conviction, that it is derogatory and offensive to members of a honourable profession to be *compelled* to write down their names, as if they were utterly unfit to be trusted. Mr. Alford himself surely acknowledges this, when he says—"I had much rather keep a record myself than be subject to any mode of espionage or inquiry." What on earth is the new rule of the Governors of the Taunton and Somerset Hospital but a "mode of espionage and inquiry"? so ingeniously framed, that the medical officers shall themselves work it against themselves; and withal so clumsily framed, that some of them—acting as the vast majority of their brethren in other hospitals of the United Kingdom would act—refuse to place themselves in that position which, vernacular proverb says, is declined by "old birds."

But a little more information has reached us, from which it would appear that for forty-one years the Governors of the Taunton and Somerset Hospital have been subject to occasional outbreaks against their medical officers. Our authority is Dr. Burridge, who, in a letter to the *Somerset County Gazette*, says that, in 1817, the Committee of Governors, by interfering unnecessarily, deprived the hospital and the town of the services of a kind and able surgeon; and that, in 1830, the Governors attempted to infringe their own rules and regulations, whereupon the medical officers resigned in a body. An imperfect staff, it is said, was then organised; and, after seven years of difficulty, Dr. Burridge and Mr. Welch—two of the men who have been turned out—volunteered their services, doubtless to the great relief of the Governors and benefit of the institution. One would have thought that the Governors of the Taunton and Somerset Hospital would have learned a lesson of wisdom on the last mentioned occasion. They do not seem to have done so, however; and have again committed an act of foolish despotism. Pity, great pity, that Mr. Alford and his colleagues who remain in office should have chosen their present course! If they had held by Drs. Burridge and Woodforde and Mr. Welch; if they had resisted, one and all, the unjust and impertinent interference of the Governors; these would have been taught the lesson that, in framing the rules of a hospital, as in other things,

"Sunt certi denique fines,
Quos ultrà citràque nequit consistere rectum."

THE LATE WILLIAM COLLINS ENGLEDUE, M.D.

SURGEON TO THE ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.

William Collins Engledue was a native of Portsea. He was articled to the late Dr. Porter, and afterwards proceeded to Edinburgh, where he graduated as M.D. of the University in 1835. In the same year he obtained his diploma as licentiate of the Royal College of Surgeons of Edinburgh; and acquired the license of the Society of Apothecaries in 1836, and L.R.C.S. in 1835, and became an L.A.C. in 1836. During his studentship in Edinburgh, he gained prizes for proficiency in surgery, practical anatomy, pathology and practice of physic, and physiology. He was elected President of the Royal Medical Society of Edinburgh, and engaged by Professor Lizars as Anatomical demonstrator. In the winter of 1835, he commenced practice in his native town.

He combined with a very extensive local general practice, a large share of the consultations both of the county, and also sometimes of the adjoining counties. He was distinguished by a remarkably acute perception of diagnosis. Having formed his opinion, he had great energy in acting on it: yet, though highly proficient in surgery, he invariably strove (sometimes it was thought with a doubtful daring) to *save* a limb rather than amputate it. Marked by great energy of character, he was, nevertheless, distinguished by such gentle bearing, that he was the object of the intense affection of his patients—their friend and counsellor in the most difficult and trying circumstances; and he sacrificed his time, when most pressed and worried, to relieve their personal anxieties and sorrows. His sense of professional etiquette, and his care for the interests of his brethren who were less gifted or less prosperous than himself, was delicate and acute.

One of the great features of his character was his loathing of sham or mystification in any shape. If a disease ever puzzled him, he openly avowed it, and waited for further development; but in most cases, his clear perception and perspicuous explanation gave his patients a clear comprehension of their case. This, perhaps, as much as his great talent, produced the unbounded confidence he acquired.

Before the establishment of the Hospital, he gave daily advice, gratuitously, in his own house; and the large class of patients who were too poor to pay, and yet above seeking eleemosynary aid, will specially deplore his loss. Within a year of his commencing public life, he projected an hospital for Portsmouth. At first, the project of the "sanguine young doctor" was regarded as a mere bit of amiable enthusiasm, only pardonable in one so energetic and so young in practical life. But he was not to be diverted from his purpose. He enlisted many adherents, and at length a meeting was effected between a deputation from his friends and the Committee of the old Dispensary, to see if a fusion could take place. But the attempt in that direction failed. Dr. Engledue subsequently revived the project, on the offer of a large subscription from T. E. Owen, Esq.; and in the year 1849, the Hospital was established, and the old Dispensary joined into it.

The fundamental condition on which Dr. Engledue had laboured to found the Hospital, was that the medical appointments should be thrown open; so as to avoid canvassing for public appointments, to make it a school of medicine for the benefit of the general practitioner, and to secure a sufficient medical attendance for the poor. Failing to carry this principle into operation, Dr. Engledue declined joining the institution. It was only in 1857 that he returned to it, when his principle was adopted—carrying with him a large infusion of new subscribers gained by his personal influence.

In the year 1850 he projected public baths and wash-houses, and drying rooms at Landport. Messrs. Curtis, the proprietors of some steam flour-mills, offered him 2,000 gallons of water per hour, at a temperature of 95 degrees, the product of the condensing engine of their steam flour mills, and also adjoining premises at a low rental; he obtained plans and specifications, and in conjunction with another friend prepared for the work. At this point the Town Council extended their protection to the subject. Dr. Engledue gave it up to them, and they dropped it.

When in 1857 he returned to the hospital, almost his first object was to provide baths for the entire institution. He felt, that a complete system of baths was as essential to the efficient working of the establishment as medicine or medical attention. Although it was the first year, for a long time, that the committee had been out of debt, yet they feared to face such an undertaking. In conjunction with one friend, Dr. Engledue undertook the responsibility, acquitting the committee of all liability. But the work was matured and carried out under his superintendence, at a cost of about £600, nearly all of which has been collected by his energy and influence. An entire system of baths has been established, with a constant and unlimited supply of hot and cold water, day and night. In addition there are fixed washing basins, with exit-pipe, and hot and cold water pipes to each. The supply comes from a cistern capable of yielding 1,000 gallons of hot water, 12 degrees below the boiling heat.

Dr. Engledue was an active and laborious worker in every sanitary improvement, even at a time when such things were deemed visionary and useless. He laboured largely for the education of the public mind, towards the improvement of the out-wards, and was one of the first Commissioners elected under the Act. A year afterwards, he received a deputation from seven hundred workmen, to give them lectures on sanitary improvement. This he did, and was subsequently urged to publish the lectures.

About two years since, he established at the Philosophical Institution an exhibition of pictures, to which all the gentry, through his personal influence, sent contributions, and to which artizans and their families were admitted at a nominal cost. He was an active supporter of, and a large shareholder in, the New Water Company; the success of which he always felt to be likely to promote the well-being of the poor. Nor was his bounty extended to public matters alone. Many a young tradesman has been started, and some old ones sustained, by his generous help.

In the winter of 1857-8 he undertook, at the request of the three literary Institutions of Portsmouth, to give a course of twelve lectures on Human Physiology, which were completed in March last, and in which he finely expressed the great object of the medical profession, to teach men how to avoid disease, rather than merely to cure it when contracted. The lectures were published *in extenso* in a Portsmouth paper, and afford evidences of a most comprehensive mind. Elegant and chastened as literary productions, they afford a copiousness of illustration, and a simplicity of explanation, rarely attained by a scientific lecturer.

This completed the muster-roll of his labours. Within a few weeks of the termination of the course, the opening of a small tumour, which had been unimportant in itself, led to his contracting erysipelas (which had been invading the hospital through its bad drainage), and which made him a fearful sufferer. For some weeks his life was despaired of. Yet he never murmured. Supplied constantly by the affection of friends, his one pervading remark was to commiserate those who had not such attentions and alleviations, and to devise plans for the further benefit of the poor. Through that illness he was spared. He speedily resumed his work, and threw himself with all his old energy and activity into plans for benefiting others. But the overstrained system gave way. For the last two months it was grief and fear to all his intimate

friends, that all his old energy was gone; his great powers of conversation seemed palsied, and subjects in which he had been engaged—visions of the fair and good for the future—had lost their interest and attraction. For a short time before his death, his illness had developed itself as an affection of the liver; this was a great relief to his friends, as seeming to account for his gloomy views of his health; and it was hoped that his melancholy would be effaced with the removal of the cause. For the last two days he had seemed more cheerful, and less alarm was entertained. The sad sequel has been already told—he put an end to his own life on December 31st, 1858.

His funeral took place at the New Portsmouth Parochial Cemetery, on Thursday, January 6th. The mourners were, J. R. Engledue, Esq., W. Engledue, Esq., and the Rev. E. Osborne; Dr. McWilliam, W. Case, Esq., J. Martin, Esq., and C. H. Binsteed, Esq. The pall-bearers were, Dr. Bullar, and Messrs. R. P. Sparrow, J. L. Vardy, W. H. Garrington, J. H. Haire, and S. Bentham, Esq., surgeons; all of whom had attended the deceased in his illness last year. Besides, he was followed to the grave by almost all the medical practitioners of Portsmouth and its neighbourhood, by many from distant places, and by a large body of the inhabitants of the borough.

Dr. Engledue died at the age of 45. But, just as a man's wealth consists not in the abundance of the things which he possesses, so neither does a man's age count by the years that have rolled idly over his head. A man's wealth is his large heart, and a man's age is his well-doing; regarded thus, William Collins Engledue lived to a grand old age.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Monday, January 3rd, 1859.

Present:—Dr. Smith, in the Chair; Drs. Stokes, Corrigan, Apjohn, Leet, and Williams; Dr. Maunsell, *Registrar*.

The minutes of last meeting were approved and signed.

Resolved—"That the best thanks of the Council be given to the President and Council of the Royal College of Surgeons, for their kind permission to use rooms in the College as a temporary office."

The following resolution was then adopted, and ordered to be transmitted to the Registrar for England. Resolved—

"That the Secretary be directed to write to the Executive Committee of the General Council, stating that this Committee entertain doubts respecting the legality of the orders made by the Executive Committee, on December 21st, in relation to the Registration of Foreign Diplomas, inasmuch as the power to decide such cases was not delegated to the Executive Committee, but was expressly reserved for the General Council by a resolution of that body, passed on the 25th of November last. The Irish Branch Council had similar applications before them, and have felt constrained to reserve them for the consideration of the General Council."

Some applications for Registration under the provisions of the Medical Charities Act, and the 46th section of the Medical Act, were considered, and it was resolved—

"That by Clause 33, all persons holding appointments as medical officers under an order of the Poor-Law Commissioners, are disqualified from continuing to hold office, unless they shall have registered within six months from the passing of this Act, which period will expire on 2nd February; and that it appears by resolution of General Council of 25th November, that such cases are reserved specially, under Clause 46, for adjudication of General Council; that it is absolutely necessary that, without delay, some means may be devised for meeting such cases, and the attention of the President is immediately and urgently requested to the matter, as several cases, such as referred to, are now before the Medical Branch Council of Ireland; and that the Secretary be directed to write accordingly."

On the motion of Dr. Apjohn, seconded by Dr. Williams, it was resolved—

"That Drs. Corrigan and Stokes be requested to apply to the Government for an office for the business of the Branch Council."

The Treasurer having reported that a sum of £1994 has been lodged to the credit of the Branch Council in the Bank of Ireland, up to the 1st of January, it was ordered—

"That the Registrar do transmit the Report to the Executive Committee, in accordance with the order of the General Council of 26th November, 1858." Aquilla Smith.

Wednesday, January 12th, 1859.

Present:—Dr. Smith, in the Chair; Dr. Williams, Dr. Corrigan, Dr. Leet, Dr. Apjohn, and Dr. Stokes; Dr. Maunsell, *Registrar*.

The minutes of last meeting were approved and signed.

The following letter was read:—

"18, Bolton Street, London, W., January 7th, 1859.

"Dear Sir,—I am directed by the Executive Committee of the General Council to request that you would call the attention of the Branch Council for Ireland, with as little delay as possible, to the urgent necessity which there is of some method of adjudicating concerning the cases of many persons applying for registration on foreign degrees obtained after examination; and of surgeons in the army, navy, etc.; and of poor-law medical officers. The plan which the Committee would suggest is, that each Branch Council should agree to give to the Executive Committee authority to consider and adjudicate on such cases, the committee being under an impression that it was the intention of the General Council to delegate to them such power and duty, which, by the 9th Section of the Medical Act, the Council is empowered to do; and that it was only through an oversight that this was not done on the 27th of November, before the General Council separated. They have reason, at least, to believe that it was the intention of the Committee on Colonial Practitioners, to propose this delegation of duty. I am, dear sir, yours very faithfully,

"Francis Hawkins, Registrar.

"Dr. Maunsell, Registrar for Ireland."

It was then resolved: That it is the opinion of this Branch Council, that the plan suggested by the Executive Committee to effect the registration of the several classes of persons referred to in their letter of the 7th instant, would not enable those persons to be legally registered, because the Branch Councils have no authority, either under the Medical Act or by delegation from the General Council, to confer on or delegate to the Executive Committee any such power, or any power whatever; and further, that the Irish Branch Council, after a most careful consideration of the resolution of the General Council of the 25th of November, cannot concur in the opinion expressed in the communication of the Executive Committee of the 7th inst., that it was the intention to delegate to the Executive Committee any other powers than those specially mentioned in the resolutions of the General Council of November 26th and 27th.

Resolved: That, in future, proofs of the Minutes of the Branch Council be forwarded, confidentially, to all the members of the Council, as soon as possible after each meeting.

James Apjohn.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Feb. 10th, 6 P.M.

SOUTH-EASTERN BRANCH: FORMATION OF MEDICAL REGISTRATION COMMITTEES.

In pursuance of the recommendation made by the Council of the South-Eastern Branch, at a special meeting held on December 3rd, 1858, the following meetings have been held for the purpose of forming Medical Registration Committees.

East Surrey Medical Registration Committee.

A meeting of the members of the medical profession residing in East Surrey, convened by circular, addressed to all in the district whose names appeared in the *Medical Directory* of 1859, was held at Croydon, January 6th, 1859. There were present: Edward Berney, Esq. (Croydon); Thomas Bodkin, Esq. (Croydon); George Bottomley, Esq. (Croydon); Alfred Carpenter, Esq., M.B. (Croydon); John Crouch, Esq. (Mitcham); C. Holman, M.D. (Reigate); Philip Hubbert, Esq. (Croydon); J. S. Johnson, Esq. (Croydon); F. Martin, M.D. (Croydon); J. H. Shorthouse, M.D. (Carshalton); F. A. Tipple, Esq. (Mitcham); Edward Westall, Esq. (Croydon).

From an irregularity in the date of the notice calling the meeting, the following gentlemen attended by mistake on the previous day, viz.—Henry Cleaver, Esq. (Croydon); Sudlow Roots, Esq. (Kingston); Spencer Weston Esq. (Carshalton).

On the motion of Mr. Westall, G. Bottomley, Esq. (Croydon) was called to the chair.

Mr. Carpenter read the letter of the Secretary of the South-Eastern Branch of the British Medical Association, with the report and resolutions of the meeting of the members of the Branch held at Brighton on the 3rd of December, in fulfilment of which he had issued the circulars convening the present meeting. He had received letters of apology from many gentlemen who were unable to attend, all of whom agreed with the object for which the meeting was called, and most of them agreed to join the Association.

The following resolutions were passed unanimously:—

1. Proposed by Mr. E. Westall, seconded by Mr. J. S. Johnson—

"That an East Surrey Medical Registration Association be now formed."

2. Proposed by Mr. Berney, seconded by Mr. Tipple—

"That this Association adopts the recommendations of the meeting of the South-Eastern Branch of the British Medical Association, held at Brighton, December 3rd, 1858, as far as relates to the formation of a Registration Committee for the district of East Surrey."

3. Proposed by Dr. Holman, seconded by Mr. Berney—

"That the Registration Committee for East Surrey meet at Croydon, and that Mr. Alfred Carpenter be requested to accept the office of District Secretary."

4. Proposed by Dr. Shorthouse, seconded by Mr. Carpenter—

"That the District Secretary be at liberty to call a meeting of the Registration Committee whenever necessary."

5. Proposed by Mr. Johnson, seconded by Mr. Tipple—

"That, on the requisition of five members to the Secretary, a meeting of the Committee may be convened, reasonable time being allowed in the notice calling the meeting."

6. Proposed by Mr. Hubbert, seconded by Dr. Martin—

"That the District Committee choose a sub-committee annually, and report such choice to the annual meeting of the South-Eastern Branch."

7. Proposed by Dr. Holman, seconded by Mr. Crouch—

"That the expenses of the Committee be defrayed by the Treasurer of the South-Eastern Branch, provided they do not exceed 1*s.* for each member of the British Medical Association; and that the subscription for all members of the Registration Association be 2*s.* 6*d.* per annum."

8. Proposed by Dr. Shorthouse, seconded by Mr. Westall—

"That the Secretary be appointed until the annual meeting in 1860, and afterwards yearly at each annual meeting."

9. Proposed by Mr. Tipple, seconded by Dr. Holman—

"That it shall be the office of the Committee to communicate with the Medical Registrar with regard to any improper or irregular registration; to consider and take any steps that may be necessary with regard to any contravention of the Medical Act; and to assist the Registrar in obtaining as perfect a registry as possible of the profession in the district of East Surrey."

10. Proposed by Mr. Westall, seconded by Dr. Shorthouse—

"That the gentlemen present at this meeting form the Committee for the Eastern Division of Surrey, with power to add to their number."

11. Proposed by Mr. Berney, seconded by Mr. Hubbert—

"That five shall form a quorum of the district committee."

12. Proposed by Mr. Tipple, seconded by Dr. Martin—

"That Messrs. Westall, Berney, Bottomley, Hubbert, and Alfred Carpenter (*Secretary*), form the sub-committee for Croydon; three to form a quorum; and that to them be entrusted the duty of forming working sub-committees in the distant towns of the district, who should report to the district committee at Croydon."

A vote of thanks was passed to the Chairman, and the meeting separated.

Alfred Carpenter, M.B., *District Secretary.*

West Surrey Medical Registration Committee.

A meeting of the medical practitioners of the western division of the county of Surrey was held at the Town Hall, Guildford, on Wednesday, January 12th, 1859. James Stedman, Esq., was called to the chair. There were also present: C. E. Bacon, M.D. (Guildford); R. Balchin, Esq. (Godalming); H. Boxall, Esq. (Wisborough Green); W. H. Buller, Esq. (Guildford); E. Capron, M.D. (Guildford); A. T. Chandler, Esq. (Godalming); B. Fishley, Esq. (Guildford); J. T. Fletcher, Esq. (Woking); A. Napper, Esq. (Cranley); F. Owen, Esq. (Leatherhead); W. Parson, Esq. (Godalming); F. D. Ross, Esq. (Guildford); J. R. Stedman, M.D. (Guildford).

Letters were received from the following gentlemen expressive of their desire to cooperate with, and become members of, a Committee for the purpose of aiding the effective registration of the profession:—C. W. Izod, Esq. (Esher); George Harcourt, M.D. (Chertsey); S. Barrett, Esq. (Ewell); William G. Cory, M.D. (Banstead); Richard H. Hotham, Esq. (Thames Ditton); Francis Maury, Esq. (Leatherhead); M. Shurlock, Esq. (Chertsey); W. L. Nash, Esq. (Leatherhead).

The following resolutions were then passed:—

1. Proposed by Dr. Bacon, seconded by Mr. Chandler—

"That Dr. J. Remington Stedman be appointed Secretary."

2. Proposed by Mr. Napper, seconded by Mr. J. T. Fletcher—

"That a Registration Society be formed at Guildford, in connexion with the South-Eastern Branch of the British Medical Association, to be called the West Surrey Medical Registration Society. That the object of the Society be to promote the Registration of all qualified Medical Practitioners."

3. Proposed by Mr. Chandler, seconded by Mr. Parson—

"That the Thirty-ninth and Fortieth Clauses of the Medical Act can be more conveniently carried into effect by an Association than by individual members of the profession. It is therefore proposed, that all communications having reference to non-qualified practitioners of medicine be made to the Secretary, and that he do communicate with the Secretary and Committee of the South-Eastern Branch of the British Medical Association, for the information of the General Registrar and the Medical Council.

4. Proposed by Mr. F. D. Ross, seconded by Mr. F. Owen—

"That those gentlemen present form themselves members of a Committee of the West Surrey Medical Registration Association; and that the names of those gentlemen who have expressed by letter a wish to join them, be added to their number; and that a report of the proceedings be forwarded for publication to the Medical Journals."

J. Remington Stedman, *Hon. Sec.*

Tunbridge Wells Medical Registration Committee.

A meeting of the South-Eastern Branch of the British Medical Association, and other members of the medical profession, was held on Saturday, January 15th, 1859, at the Royal Sussex Hotel, Tunbridge Wells, for the purpose of forming a Registration Association for that place and neighbourhood. R. Righton Gream, Esq., was called to the chair.

The Minute of the General Meeting lately held at Brighton (*vide* Journal, December 18th, 1858), appointing Mr. Trustram as secretary, and prescribing the limits of the district, were read; and the chairman explained the objects of the meeting, and read several letters from gentlemen wishing to become members.

The Secretary observed, that as the time had now arrived when the public would have the advantage of distinguishing the legitimate practitioners of the healing art from those pretenders who had at all times infested the ranks of the profes-

sion; and as they themselves would have the opportunity of knowing the source from which all and every one of its members derived their qualifications, declared under a penalty sufficiently great to prevent fraud, it would have been surprising if that opportunity had been treated with indifference. Some of those gentlemen who had consented to join them, had expressed fears lest their proceedings might be considered more than superfluous—even obtrusive. But they certainly need no longer entertain such fears; for the registrar himself had acknowledged their usefulness, and even courted their assistance. Some associations, he saw, were assisting the members in their localities; but this appeared unnecessary in so small a district as their own, and where everybody was within reach of a post-office order. The important feature of the Association would be, that it offered to its members the opportunity of bringing under its notice any instances of unqualified practice, and thereby preventing personal altercation or responsibility. In that neighbourhood they had been freer from quackery than most others had; there was no telling how soon their turn might come; but there was no question that the existence of an Association, which undertook to bring all such matters before the notice of the registrar, would act as a terror to evil doers.

The following resolutions were then passed:—

1. "That, in the opinion of this meeting, it is desirable to form a Registration Association for this place and neighbourhood, as nearly as possible as prescribed by the resolutions of the General Meeting."

2. "That this meeting adopts the resolutions of the General Meeting, reserving to the committee now appointed the power to modify them so as to meet any particular requirements of the district."

3. "That Messrs. Thompson, Starling, Eccles, Hemming, Gorham, Parker, Colebrooke, Worship, Wallis, Dr. Milner Barry, with the Chairman and Secretary, be the committee, with power to add. Three to be a quorum."

4. "That the committee do assist in the registration of any of its members if required.

5. "That it shall be the duty of the committee to attend to any information that may be forwarded to it by any of the members of this Association, bearing on the Sixth Resolution of the General Meeting, in order to prevent the necessity of any personal feeling in the operation of the Act."

6. "That it shall be the duty of all members of this Association to forward to the committee any facts bearing on any fraudulent qualification, and any instances of practice by unqualified persons."

A vote of thanks to the chairman and secretary terminated the meeting.

YORKSHIRE BRANCH: SPECIAL GENERAL MEETING.

A Special General Meeting of the Yorkshire Branch was held at the Medical School, Leeds, on January 19th, 1859: J. P. Garlick, Esq., President, in the Chair. There were also present: Jas. Allen, Esq. (York); G. E. Bearpark, Esq. (Leeds); John H. Bywater, Esq. (Knottingley); C. Chadwick, M.D. (Leeds); S. Hey, Esq. (Leeds); J. D. Heaton, M.D. (Leeds); R. N. Halliwell, Esq. (Dewsbury); C. A. Hemingway, Esq. (Dewsbury); H. Hemingway, Esq. (Dewsbury); J. I. Ikin, Esq. (Leeds); G. Kennion, M.D. (Harrogate); W. R. Milner, Esq. (Wakefield); W. W. Morris, Esq. (Gildersome); J. B. Pritchett, Esq. (York); W. Price, Esq. (Leeds); S. Smith, Esq. (Leeds); G. P. Smith, M.D. (Leeds); E. Waddington, Esq. (Wakefield); W. Wilson, Esq. (Horsforth); etc.

The President, in a few introductory remarks, explained the object of the meeting. He mentioned that the general feeling of the Council of the Yorkshire Branch was in favour of adopting some simple measures of self-defence in preventing unqualified persons from placing their names on the medical register, and not by any means to interfere with the duties of the Registrar.

The President then proposed, and it was seconded by Mr. H. Hemingway, and unanimously resolved—

"That this meeting considers it desirable to take some steps for the purpose of securing efficient registration."

Mr. S. Smith proposed, Dr. Kennion seconded, and it was unanimously resolved—

"That this meeting, not considering it necessary to form a separate Association for the purpose mentioned in the foregoing resolution, empowers the Honorary Secretary to communicate with the Registrar, on receiving from any member of the Branch, or other regular practitioner, information of individuals practising illegally."

Mr. S. Hey, proposed, Dr. Heaton seconded, and it was unanimously resolved—

"That this meeting would strongly urge such members of the Yorkshire Branch, or other regular practitioners, as may have any knowledge of persons at present practising illegally, to put themselves in communication with Mr. Hornby of York, the Honorary Secretary of the Branch."

Dr. Chadwick proposed, Dr. Kennion seconded, and it unanimously resolved—

"That a circular be addressed by the Honorary Secretary to every professional man residing in the district of the Yorkshire Branch of the British Medical Association, being a member of the Association, or eligible for membership, inviting his cooperation in the objects contemplated in the foregoing resolutions."

Dr. Chadwick, in proposing this resolution, wished it particularly to be understood that the members of the Yorkshire Branch would only hold communion with, or take notice of, those members of the profession eligible to become members of the British Medical Association, thereby keeping themselves free from the possibility of coming into contact with homœopathic quackery, or heresy of any form."

Mr. Ikin proposed, Mr. H. Hemingway seconded, and it was unanimously resolved—

"That, for the purpose of defraying expenses, a half-crown subscription be requested from each member of the Branch."

A vote of thanks to the Chairman was proposed by Dr. Heaton, and carried by acclamation; after which the meeting separated.

Geo. Hornby, *Hon. Sec.*

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, January 17th, 1859.

W. H. Willshire, M.D., President, in the Chair.

DIPHTHERIA. BY W. R. ROGERS, M.D.

Dr. Rogers traced back the history of diphtheria, and named the various writers who appear to have seen epidemics of throat diseases of the same nature as the present. In addition to those mentioned by Bretonneau, he added Hecker, who relates, in his work on *Epidemics*, that it occurred in 1517 and 1551 in Holland, and spread to Basle. It had appeared subsequently in Germany, Italy, Spain, and France, where it was confounded with ulcerous and gangrenous epidemics, until Bretonneau threw brilliant light upon its nature. In America it had also appeared, where it was fatal to Washington. Dr. Samuel Bond, who wrote in 1771, recognised its true nature. From the writings of Cullen and F. Home, it must have been known to them; the latter says that there was such a disease in Cornwall and elsewhere, called *morbus strangulatorius*. Dr. Rogers separated diphtheria from croup by the different part attacked, its mode of invasion, and specific character; from scarlatinal, erysipelatous, and all other ulcerous and sloughing diseases of the throat, by its peculiar membraneous exudation. He believed it to be a true blood-disease. He opposed Dr. Laycock's theory of its necessary connection with, or causation by, the *oïdium albicans*, as in above twelve cases he had examined, this fungus was but once found, and then only fifty-six hours after death; yet twenty-four hours before, a careful examination failed to discover it. This fungus might be developed on any acid thickened mucus of the mouth and throat, and was seen in many chronic diseases. This was well known in France, where it was called *pseudo-diphthérite*, or *muguet*, the microscope being an immediate test. The *leptothrix buccalis* was found in almost every mouth, if any decomposing food remains about the teeth. The writings of various authors were referred to, Hecker especially, who favoured the belief that great terrestrial disturbances, such as earthquakes, volcanic eruptions, magnetic action, might have some connexion with the spread of epidemics. The present epidemic was of an asthenic type, poisoning some very speedily, with rapid sinking of the pulse, and death by syncope; in others, by invasion of the larynx, and death by apnœa, or slow asphyxia. Dr. Rogers believed in no one specific remedy. He combated the asthenic tendency by wine and nourishment of every kind, and by stimulants, such as chlorate of soda, carbonate of am-

monia, and chloric ether, every two hours, alternating these with chlorate of soda, quinine, and dilute hydrochloric acid; and where the larynx was invaded, he had used, in his last three cases, two of which were successful, calomel every two hours alternately with the former medicine, and had used mercury endermically. He placed great reliance on caustics of hydrochloric acid, with glycerine, or strong solution of nitrate of silver, which he injected into the larynx by an ingeniously perforated silver curved tube, with India-rubber bottle. He cautioned against using solid caustic, which itself caused a pellicle, necessarily producing uncertainty as to the state of the parts. The hydrochlorate of iron he considered of great use, especially to combat the sequelæ; as sometimes a frightful anæmic state was induced, and paralysis of various kinds, both local and general, often supervened. He advised tracheotomy in certain cases, as it might give time for the effectual use of medicine; and the success of Bretonneau, Trousseau, Isambert, and others, was sufficiently encouraging. Dr. Rogers believed diphtheria might occur as a secondary, as well as a primary disease; thus complicating and greatly adding to the danger of the patient; and as scarlatina might be developed during small-pox, or even measles, these latter occurring during scarlatina, so he believed diphtheria might occur during any one of these diseases, and, of course, simultaneously in any district; thus accounting for the confusion and uncertainty exhibited regarding the real nature of this disorder. He then entered into the microscopic nature of the exudation, after reading the history and *post mortem* appearances of some cases.

Dr. Harley was neither inclined to look upon diphtheria as a new disease, nor to regard it as one which, until the present century, had always been confounded with other complaints. In a paper published by Dr. Saunders in 1778, an epidemic of sore-throat which raged in this country during the previous year, was so clearly described as to leave no room for doubt in the mind of the reader as to its being an epidemic of true diphtheria. The manner of distinguishing the disease from scarlet fever, malignant sore throat, etc., was given, and even the very characters of the exudation pointed out. Regarding the nature of the false membrane affecting the throat in diphtheria, Dr. Harley said that various and inappropriate names had been given to it, such as fibrinous, plastic, and fibro-plastic, all of which terms were very apt to mislead the mind as to its true nature. He had examined it in twelve cases, and found it to consist neither of fibrine nor fibro-plastic cells, but simply of the epithelium, mucus, and mucous cells proper to the part of the throat from which it came. When blood-corpuscles were found in the exudation, their presence was due to some accidental abrasion of the mucous membrane. Pus-cells were also occasionally present, especially in those cases where ulcers had formed after the application of caustic. The false membrane, Dr. Harley believed, was composed of a hypersecretion of the ordinary mucus, and the presence of fungi on it was due to some accidental circumstance. In the twelve cases he had examined, the *oïdium albicans* was absent in all except one; and even in that case the fungus did not grow upon the membrane until fifty-six hours after its removal from the patient. While speaking of the *leptothrix buccalis*, he related a very interesting case of diphtheria that occurred in University College Hospital. Several yellowish-coloured masses taken from the pharynx, œsophagus, and stomach, after death, when examined with the microscope, were thought by some experienced microscopic observers to contain numerous algæ. Dr. Harley pointed out to the Society, however, how he had been able to demonstrate that the supposed algæ were, in reality, crystals of fatty acids. But he did not mean to deny that algæ were sometimes found on the diphtheritic membrane; for, as they constantly occur upon the tongue and between the teeth of the most cleanly individuals, it is reasonable to suppose that they may occasionally attach themselves to the false membrane. What Dr. Harley wished to be understood to mean was, that neither fungi nor algæ were essentially components of the exudation, far less could they be regarded as constituting the disease. Diphtheria was, in his opinion, as much a blood-disease as either small-pox or typhus, and the exudation on the throat was merely one of its characters.

Dr. Fuller, with reference to the recommendation of hygienic means for the prevention of the disease, mentioned that he had been requested to see a gentleman at a village in Hertfordshire, where the disease was very prevalent. The village contained four hundred inhabitants. There had been fifty cases of diphtheria, and fifteen deaths. About one-half of the village consisted of ill drained, ill-ventilated, badly situated, and wretched hovels; the other half, of healthily situated model-houses, excellently drained and ventilated. The disease was confined entirely to the latter dwellings. He did not attempt to explain this; he merely mentioned the fact. He agreed with Dr. Harley as to the nature of the secretion, and that there was no abrasion of the surface beneath, in most instances; but he had, in two cases, seen ulceration of the tonsils and velum. In the village to which he had referred, the disease came and disappeared entirely in the course of six weeks. It attacked persons of all ages, from infants at the breast to adults. Pigs also died of the complaint. It could not be called an inflammatory disease, for although at first there was slight febrile excitement, the tongue soon became clean and the skin moist. The best treatment he had found to be large quantities of stimulants. The young gentleman whom he had been called to see, though unaccustomed to stimulus, bore well, and, indeed, with advantage, three bottles of port wine a day. Under this treatment the secretion quickly stopped, and recovery took place. With respect to tracheotomy, he thought it should be employed when there was no reasonable hope of arresting the disease by other remedies.

Dr. Druitt considered that it was now settled that the disease was a blood-disease, that the early febrile symptoms disappeared very soon, and that these were followed by extreme calmness and feebleness. Dr. Druitt showed, by the statistics of the parish of St. George, Hanover Square, that, during the past year, cases of diphtheria had formed a serious item in the mortality. With respect to the cause of the disease attacking one habitation in preference to another, he could not tell; but he would remark, that in every house where it had attacked persons in his district, there was sufficient cause for it.

Dr. Semple said, that the distinctive mark between diphtheria and putrid sore throat and kindred diseases, was the presence, in diphtheria, of adventitious tissue, which could be separated from the subjacent membrane, the surface of which was intact. It was of great importance to detect the real nature of the disease, in order that its extent and prevalence might be accurately determined. He was in favour of Dr. Harley's view respecting the thickened mucous membrane. Bretonneau had, indeed, described it as consisting of a concretion, or a distinct number of laminæ.

HARVEIAN SOCIETY OF LONDON.

Thursday, January 6th, 1859.

G. Hamilton Roe, M.D., President, in the Chair.

A NEW THEORY OF THE CAUSE OF SOME OF THE DISEASES OF INFANTS AND THE PUERPERAL STATE.

BY THOMAS BALLARD, ESQ.

The proposition which Mr. Ballard endeavoured to prove was—That the instinctive act of sucking under circumstances unfavourable to the infant obtaining the food for which its system craves, is a fruitful source of disease to infants and puerperal women.

As regarded infants, the exercise of fruitless and consequently prolonged and forcible sucking, is attended by an excessive reflex secretion of gastric juice, which acts upon the mucous coat of the intestinal canal, causing various degrees of injury thereto. The frequent loose and green stools of infants are the evidence of this process being in operation. A persistence of this morbid state causes many of those ailments which are usually attributed to teething; viz., erythema, eczema, convulsions, cerebral congestion, and hydrocephalus. And should the little sufferer escape death during infancy, it will afterwards be found to exhibit various forms of delicacy of constitution, attended frequently with defective appetite, as well as the imperfect development of some of the tissues of the body.

Thrush or muguet, with its attendant diarrhœa and erythema, was stated to depend entirely upon this cause. The parasitic fungus discovered by Dr. Berg is only an innocent accompaniment; thereby agreeing with Rokitansky, who says, "it is assuredly not the morbific agent."

The ill consequences of the vain but persevering attempts to obtain its food are not limited to the infant, but are propagated to the mother, as evidenced in the excoriated nipple, the inflamed or suppurating mammæ, after-pains, feverishness, milk fever, and probably some of the worst kinds of puerperal fever. In the latter case, they act as the proximate or exciting cause; the constitutional or epidemic influences being the remote or predisposing causes only.

The basis of the argument was the physiological fact announced by Dr. Brown-Séquard, in his tenth published lecture, viz., "The excitation of the nerves of taste produces an abundant reflex secretion of gastric juice, and also a flow of bile and pancreatic juice in the bowels."

The act of sucking being *par excellence* the mode of exciting the nerves of taste, it was only reasonable to conclude that if this is exercised excessively, that the secretions will be poured out in great abundance; and practical observation corroborates this, inasmuch as the frequent stools of infants, together with thrush, etc., are immediately cured by arresting the unnecessary sucking.

It was suggested that the pathological condition called *infantile lientery*, which was lately referred to by Dr. Wade, of Birmingham, in the British Medical Journal of November 20th last, might be accounted for on this principle. Dr. Wade speaks of the word lientery as being derived from the Greek λειος, *lævis*, smooth; and says: "Taken in connection with the derivation, it is a curious fact that in the only *post mortem* examinations which I have been able to perform on the subjects of this disorder, the small intestines were thin, pale, and the mucous membrane smooth and attenuated, the valvulæ conniventes almost entirely obliterated."

It was suggested also that in the same manner may be explained the deaths of those infants who are found dead in bed, and supposed to be overlaid. In February 1855, some remarks in the *Lancet* on this subject, stated that it was clearly proved that not more than one out of several hundred instances of cases of this kind, could be attributed to the pressure of the person in the same bed; also, that these deaths always occur at about three o'clock in the morning, the period when the stomach is most likely to be empty of food, and thus exposed to the action of the gastric juice. The stomachs of two sucking infants were shown, one of whom had died under these circumstances; the history of the case proving that the infant had been a constant sufferer with green stool diarrhœa; the other having been similarly affected, not dying in the night, but after suffering for four days with invagination of the intestine. Each stomach had a large perforation through the posterior wall of the larger curvature. The lower animals afforded some illustrations of the principle. Calves and sucking pigs are liable to diarrhœa, and frequently die of it. An instance was related, the particulars of which had been obtained. The calf died when ten days old; four gallons of milk having been taken each day from the cow, for the use of the dairy, in consequence, it was said, of the udder being so much distended.

The facts adduced in proof of the proposition were notes of cases occurring in Mr. Ballard's own practice, carefully kept for several years, and many observations made by himself in reference to the subject, resulting in the following deductions.

1. There is usually little or no milk secreted by the breast until after the third day after delivery; and that the common practice of putting the child to the breast before this period, and thus inducing several actions on its bowels, has led to the erroneous doctrine, that the colostrum, or first milk secreted, is purgative.

2. The enlargement of the breast after delivery is of the nature of an erection or hyperæmia, and is not evidence of the breast having secreted milk. Repeated attempts to obtain milk under these circumstances generally resulting in some illness, either to mother or child, or both.

3. No case of fever had occurred where the breasts had not been over-excited in the attempt either to obtain or get rid of the milk.

4. That the imperfect manner in which the act of sucking is necessarily performed by infants fed from a bottle fitted only with the skin of the calf's teat or a piece of wash-leather, thereby affording them no *point d'appui* by which they can fix the jaws and tongue in such a manner as to establish a vacuum in the mouth communicating with the cavity of the bottle, necessarily establishes that over-excitation which results in frequent stools.

5. Any other kind of fruitless sucking is attended with the same results.

6. The particular kind of farinaceous substance mixed with the milk is of little importance, the mode of its administration being the key to the food appearing to agree.

7. The solid cork-teat, fitted with a very small vent hole to a bottle otherwise air tight, seems to be the best apparatus at present in use; such is the "Bibaron Darbo", the invention of an ingenious French mechanic.

8. The index to the health of the mother and child is the state of the child's bowels; if frequent and loose, one or other is, or will be, ill; if only one or two stools a day, both are pretty sure to be well and thriving.

Editor's Letter Box.

THE TAUNTON AND SOMERSET HOSPITAL.

Letter from F. H. Woodforde, M.D.

Sir,—I shall be obliged by the insertion of the subjoined letter. I am, etc., F. H. Woodforde.

"To the Medical and Surgical Officers of the Provincial Hospitals of England.

"Gentlemen,—We beg to offer you our most sincere thanks for your prompt, generous, and decisive replies to our appeal. Had it been possible to place your letters, or the substance of them, in the hands of the whole body of Governors of the Taunton and Somerset Hospital, some three hundred in number, previous to the day of meeting, when, by a narrow majority, we were so unjustly expelled from office,—a very different result would certainly have ensued. That there was so small an attendance of Governors, and a majority of those so hostile, was owing to the division in our own camp, on the causes of which we hope more light will be thrown hereafter.

"We are, gentlemen, yours very faithfully and obliged,

"Reginald Burridge, M.D.
Francis Henry Woodforde, M.D.
Francis Welch, F.R.C.S.

"Taunton, January 24th, 1859."

POOR-LAW MEDICAL REFORM.

Letter from A. Wynn Williams, M.D.

Sir,—I shall feel obliged by your publishing in the next Journal the subjoined letter, addressed by myself to Mr. Griffin, and a copy of which has been also forwarded to Mr. Estcourt, the President of the Poor-Law Board.

I am, etc., A. Wynn Williams.

Tan y Graig, Carnarvon, Jan. 25th, 1859.

"Tan y Graig, Carnarvon, Jan. 25th, 1859.

"My dear Sir,—Believing that the schemes for medical relief, proposed by Mr. Estcourt and yourself, are too complicated ever to be confirmed, I forward to you a sketch of what appears to me, and all to whom I have spoken on the subject, a simple method of equalising the salaries of the different unions on an equitable basis. Pray excuse my saying, that I do not consider the mileage charge, as proposed by yourself, at all a fair one. It is perfectly optional with medical officers whether they live in their several districts or out of them. The guardians would prefer their residing in them, consequently as they live out to please themselves, the parishes should not be put to any extra-charge on that account.

"What I would propose is, that each medical officer should be paid a fixed salary (of not less than 5*s.* per case) on an average of the number of cases attended during the last three years. Whenever a patient's name appears in two or more successive quarters, it should count as two or more cases. This should be the fixed salary for every Union in England and Wales, when the district does not exceed in extent 1,000 acres; and should be paid out of the Consolidated Fund. Whenever the population is spread over more than 1,000 acres, and less than 2,000, an additional sum should be paid (not less than 2*d.* per case) on each patient in the district. When the extent is more than 2,000 acres, and less than 3,000, a further sum (2*d.*) should be paid; and so on for every additional 1,000 acres up to 15,000. Beyond this, only half the sum (1*d.* per case) should be paid for each further additional 1,000 acres. This latter charge will apply more particularly to Unions situated in mountainous districts, or where, from other causes, the population is spread over a very large extent of country, and yet chiefly collected together in small hamlets.

The average charge should be paid out of the funds of the different Unions; in fact, it should be an Union charge. For instance, the salary should be, for attending 100 patients residing

On 1,000 acres	.	.	£25 0 0
On 5,000 acres	.	.	28 6 8

On 10,000 acres	32	10	0
On 15,000 acres	36	13	4
On 30,000 acres	42	17	4

"As a matter of course, if there were 200 patients instead of 100, the salary would be doubled.

"A salary fixed on the above basis, with additional "extras", would, I feel convinced, be satisfactory to all parties. As regards workhouses, I think the salaries should be fixed on a somewhat similar basis, without any mileage charge. Turnpike gates to and from the workhouse and the different points of the district should be free to the medical officer of such workhouse or district.

"All present and future appointments should be permanent. "Yours very truly,

"A. Wynn Williams, M.D.,

"Medical Officer to the Llanrug district of the Carnarvon Union and Workhouse.

"To Richard Griffin, Esq."

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Bubb. On January 14th, at Welwyn, Herts, the wife of H. W. Bubb, Esq., Surgeon, of a son.

Frere. On January 12th, at 9, Queen Street, Mayfair, the wife of R. Temple Frere, M.A., F.R.C.P., of a son.

Hodson. On January 21st, at Bishop's Stortford, the wife of *Charles F. Hodson, Esq., Surgeon, of a son.

Newington. On January 17th, at Ridgway, Ticehurst, the wife of S. Newington, M.D., of a daughter.

Salter. On January 19th, at Southampton, the widow of the late *T. Bell Salter, M.D., F.L.S., of Ryde, of a son.

Winter. On January 22nd, at Hampstead, the wife of James Winter, M.D., of a son.

MARRIAGES.

Allen—Risk. Allen, R. Austen, M.D., to Mary Franklin, eldest daughter of the late Andrew Risk, Esq., of Dublin, at St. Marylebone Church, on January 18th.

Andrews—Lord. Andrews, Henry Charles, M.D., to Louisa Augusta, youngest daughter of the late John Lord, Esq., of Calcutta, at Hampstead, on January 19th.

Green—Taylor. Green, the Rev. Charles S., rector of St. Ann's, Lewes, to Sarah, widow of George Taylor, M.D, late of Maidstone, at All Souls', Langham Place, on Jan. 18th.

Nixon—Griffith. Nixon, Frederick, Esq., to Anna Marguèrite, widow of John Griffith, M.D., at Llewen, Brecknockshire, on January 12th.

Sharpe—Crofts. Sharpe, Richard, M.D., of Bermondsey, to Jane Susannah, eldest daughter of the late Rev. John Drake Crofts, M.D., of Houghton-in-the-Dale, Norfolk, at Guestling, on January 20th.

Silvester—Goode. Silvester, Henry R., M.D., of Crescent Lodge, Clapham Common, youngest son of *T. H. Silvester, M.D., to Caroline Frances, only child of the late Rev. Francis Goode, at Clapham, on January 21st.

DEATHS.

Alexander, Henry, Esq., Surgeon, at 6, Cork Street, Burlington Gardens, on January 20th.

Bishop. On January 19th, at Monk Sherborne, Hants, Maria Ethelreda, wife of John Green Bishop, M.D., aged 67.

Booth, John Kaye, M.D., late Principal of Queen's College, Birmingham, at Brush House, Sheffield, aged 80, on January 14th.

Bury, John, Esq., Surgeon, late of Coventry, at Wandsworth, aged 68, on January 10th.

Colebourn. On January 12th, at Harleyford Place, Kennington Park, the widow of the late Henry Colebourn, Esq., Surgeon, aged 78.

Freeman. On January 21st, at Plymouth, Mary Brougham, wife of Richard Freeman, M.D.

Frere. On January 20th, at 9, Queen Street, Mayfair, the wife of R. Temple Frere, M.D., aged 38.

Gunn. On January 15th, at Swansea, from the effect of scarlet fever, aged 7, Eleanor Susan Kennedy, only surviving daughter of William Gunn, M.D., R.N., Her Majesty's Dockyard, Sheerness.

Holt. On January 17th, at Hammersmith, Jane, wife of Astley Holt, M.D.

Inman. On January 18th, in Liverpool, of scarlatina, aged 3 years and 11 months, Frederick William, youngest son of *Thomas Inman, M.D.

Nunn, William, Esq., Surgeon, of Royston, Cambridgeshire, aged 65, on January 21st.

Roxburgh. On January 18th, at 38, Gloucester Place, Portman Square, aged 84, Mary, widow of the late William Roxburgh, M.D., H.E.I.C.S.

Scatliff, Arthur, M.D., late of Brixton, at St. Helier's, Jersey, aged 30, on January 20th.

Sterling. On January 22nd, at Weymouth, Annie, wife of John Sterling, M.D., R.N.

Times. On January 26th, at 4, Thayer Street, Manchester Square, aged 1 year and 5 months, Stella, youngest daughter of Henry G. Times, Esq., Surgeon.

APPOINTMENTS.

Black, James, M.D., appointed Surgeon to the West Norfolk and Lynn Hospital, in the room of the late *Charles Cotton, M.D.

*Martin, James Ranald, Esq., F.R.S., appointed Examining Physician to the Secretary of State for India in Council, in the room of the late *John Scott, M.D.

Spratly, —, Esq., appointed Senior Resident Surgeon to the Birmingham General Dispensary.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, January 21st, 1859:—

Clarke, John, Sutherlandshire
Evans, Caleb, Haverfordwest
Kerbey, William Holman, Bath
Noble, Samuel Clarke, Kendal
Ralfs, Samuel, Brentford
Rogers, Henry Philip, Mauritius
Vilry, Joseph Hippolyte Donatien, Mauritius
Young, Henry James, Bath

Apothecaries' Hall. Members admitted on Thursday, January 13th, 1859:—

Arthur, Charles, co. Clare, Ireland
Gasquet, Joseph Raymond, Westbourne Grove North
Hickman, William
Jones, William, Dolgelly, Wales
Ledward, Ralph Worthington, Manchester
Parry, Henry Hitchcock, Allington, Devizes
Shea, John
Smith, William Edward, Bristol
Sykes, George

Thursday, January 20th:—

Crocker, Jonathan, Launceston
Johnstone, James Woodruff, Rotherfield, Sussex
Millen, Stephen Richard, Deal, Kent
Soulby, Henry, Toynton, All Saints

As an Assistant:—

Innes, Alexander, Birkenhead

The following gentlemen also, on the same day, passed their first examination:—

Drake, Charles Henry, St. Thomas's Hospital
Sherwin, Henry Chrippes, Petworth, Sussex
Thompson, Samuel, Bedford Place, Commercial Road

HEALTH OF LONDON:—WEEK ENDING JANUARY 22ND, 1859.

[*From the Registrar-General's Report.*]

The deaths in the metropolitan districts were in the week ending last Saturday again numerous, though they were not equal to the number produced by the high rate of mortality of the previous week. The present return contains 1380 deaths. In the ten years 1849-58, the average number in the weeks corresponding with last week was 1202; but, as the deaths returned for last week occurred in a population which has increased, they can only be compared with the average raised in proportion to the increase, namely, 1322. The comparison shows that the actual number of last week exceeds the estimated number by 58.

The rate of mortality for the first quarter of the year in certain districts of England, selected as healthy, has been ascertained; and it can be shown that, if the mortality in London last week had been according to the same rate, the deaths would have been 874. The excess which the true number exhibits is equal to 506, and must be referred chiefly to the still defective arrangements of all our populous cities.

The deaths from scarlatina and diphtheria are 111, and exhibit a slight increase on those of the previous week, when they were 102. Six of the 111 occurred in the subdistrict of Regent's Park, 5 in Bow, and 5 in St. Paul, Deptford. Diphtheria is returned as the cause of death in 22 cases, and 13 of these occurred on the south side of the river. Four deaths from scarlatina occurred within eighteen days in a family in Round-tree Cottage, Bow. The Registrar states that "the disease is attributed by the father to a black ditch flowing at the back of the house. He called the attention of the Poplar District Board of Works to the nuisance last summer, but the only answer that he received was, that probably the Metropolitan Board of Works would at some future period bring a sewer near the premises." It may well be doubted whether this intimation of good intentions and of their *probable* fulfilment will supply balm to the wounds of the afflicted family.

The number of deaths placed to the *order* of pulmonary diseases is 302, the corrected average of corresponding weeks being 290. Of those, bronchitis was fatal in 190 cases, the average being 151; while pneumonia (inflammation of the lungs) was fatal in only 76, the average being 94. Besides these, phthisis, which stands in the tubercular *order*, carried off 176 persons, the average being 150. Fifteen women died from diseases incidental to childbearing. Three persons died of intemperance as the direct cause of illness; one of delirium tremens. Small-pox is manifestly increasing, and it was fatal in 20 cases, half of which occurred in the East districts. Of five persons who had attained the age of 90 years and upwards, the respective ages were, 90, 91, 93, 96, and 100 years.

Last week the births of 928 boys and 923 girls, in all 1851 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1613.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·882 in. The instrument fell from 30·14 in. to 29·62 in. The mean temperature of the week was 43·3°, which is 6·8° above the average of the same week in forty-three years (as determined by Mr. Glaisher). On Tuesday, the mean temperature was 50·5, which is 14·2° above the average of the same day. The range of that day was only 5·3°. The *highest* temperature in the week occurred on the same day, and was 53°; the *lowest* was 29·5°, on the Sunday preceding. The entire range of temperature in the week was therefore 23·5°. The mean daily range was 12·2°. The difference between the mean dew-point temperature and air temperature was 3°. The mean temperature of the water of the Thames was 41·6°. The mean degree of humidity of the air was 87. The wind blew constantly from the south-west. Rain fell to the amount of 0·13 in.

The King of Ava. Mr. Flower, the anatomical articulator to the Royal College of Surgeons, has just executed an elaborate model of the human skeleton of the natural size in sycamore wood for the above enlightened potentate, who, being desirous of obtaining a knowledge of the human frame without losing cast by handling the original bones, requested the late East India Company to aid him in his difficulty. On the recommendation of Mr. Owen, of the British Museum, Mr. Flower was consulted, and at an expense of about £115 this artist produced a most faithful representation of the human skeleton in wood, and exhibited the same a few days since at the College of Surgeons, when it elicited the highest commendation from the Court of Examiners.

Fossil Remains. There have recently been discovered in one of the limestone quarries at Oreston, near Plymouth, the teeth, bones, and other remains of lions, tigers, elephants, rhinoceroses, horses, hyenas, and other animals. The cavern from which the fossils were extracted is situate in the solid rock in the cliff of a quarry which is about 1,000 feet from the edge of the sea. The cavern was 70 feet above the level of high water, and thirty-five feet below the surface of the field above; it was 20 feet long, 10 feet high, and about 10 feet wide. There was no aperture or other indication of its locality. Among the contents is the jaw of an animal of the horse species in stalagmite, exceedingly perfect. The fossils are in the possession of Mr. Joseph, mineralogist, of Plymouth.

LONDON MEDICAL REGISTRATION ASSOCIATION.

On Friday evening, January 21st, the first of a series of metropolitan meetings of members of the medical profession, convened by this Association, was held in the Vestry Hall of St. Pancras. Dr. Tunaley was unanimously called to the chair. A large number of medical practitioners were present.

The Secretary, Dr. Ladd, having read a report, the following resolutions were passed:—

1. Proposed by Mr. Rawlins, seconded by Mr. Knaggs, and supported by Mr. W. Adams and Dr. Kirby—

"That this meeting, having heard the report of the progress hitherto made by the London Medical Registration Association, thoroughly acquiesces in the principles by which the course of that Association has been guided, and recognises the importance of its receiving the support of all qualified medical practitioners of the parish of St. Pancras, both for their own advantage and the interests of the profession."

2. Proposed by Dr. Routh, seconded by Dr. Hillier, and supported by Mr. Bottomley—

"That in the opinion of this meeting it is highly desirable to augment the numbers and influence of the members of the London Medical Registration Association, so as to enable it to effectually carry out its objects, and to give weight to its proceedings with the Medical Council, and this meeting pledges itself to use every exertion to secure that end."

3. Dr. Knaggs moved, and Mr. Mott seconded—

"That this meeting recognses the exceeding importance of obtaining and submitting to the London Medical Registration Association all possible information concerning persons practising medicine illegally in the parish of St. Pancras, both by the individual efforts of all present, and, if advisable, by the formation of an independent committee of practitioners in the neighbourhood."

Mr. Lavies commented on and supported the motion.

4. Dr. Kirby proposed, and Mr. W. Adams seconded—

"That, in the opinion of this meeting, the mode of registration, as at present conducted, is quite inefficient for the purposes contemplated by the Act, and does not afford sufficient protection against unqualified persons becoming enrolled upon the Medical Register."

Thanks to the Chairman, proposed by Mr. Lavies and seconded by Mr. Bottomley, terminated the proceedings.

At the conclusion of the meeting, numerous subscriptions were paid, and new members added to the Association.

POOR-LAW MEDICAL REFORM.

MEETING AT NORWICH.

At a meeting of the medical profession held at Norwich, January 19th, 1859—Dr. Ranking in the Chair—the following resolutions were carried unanimously:—

1. Proposed by Mr. Nichols, seconded by Mr. Cooper—

"That the subject of medical relief for the poor is one of interest to every member of the profession; and it is the duty of all to assist the Poor-law medical officers in obtaining a satisfactory result of this much vexed question."

2. Proposed by Mr. Firth, seconded by Dr. J. B. Pitt—

"That the thanks of the meeting be given to the Right Hon. the President of the Poor-law Board, for the opportunity afforded of expressing our opinions on his scheme."

3. Proposed by Dr. Copeman, seconded by Mr. Stafford—

"That all medical appointments should be permanent; and that to deprive the present officers of appointments to which most of them have been appointed for life, under the authority of a general order of the Poor-law Board, would be most unjust, especially at the moment when there is a prospect of better remuneration for their services."

4. Proposed by Mr. J. G. Johnson, seconded by Mr. D. Dalrymple—

"That the appointment of two medical officers to each parish would be unwise, as well as unjust to our profession, the poor, and the public:—to our profession, because it would subject us to a kind of pauper patronage, would in a majority of instances diminish the emoluments of the medical officer, and revive that unfair rivalry which recent enactments have so much diminished; to the poor, because it would give rise to incessant difficulties in procuring prompt medical attendance or medicine in cases of emergency, and lead to constant errors as to the commencement and termination of medical attendance; to the public, because it would fail to secure that efficient

medical aid which is their great object, and prove a frequent source of unfair and degrading practices for an increase of emoluments of the medical officer."

5. Proposed by Mr. Evans, seconded by Mr. Tunnaley—

"That this meeting does not approve of the system of salaries proposed in the scheme, but prefers the system of payment per case, with mileage for every distance beyond one mile from the residence of the medical officer; and are willing to leave the arrangement of the amount of the payment to the Poor-law Board on the part of the public, and to the Medical Council on the part of the profession."

6. Proposed by Mr. T. W. Crosse, seconded by Mr. J. G. Johnson—

"That it is the opinion of this meeting that the Poor-law Board should for the future contain one or more members of the medical profession."

7. Proposed by Mr. W. H. Day, seconded by Mr. Evans—

"That a copy of the resolutions be forwarded to the Right Hon. the President of the Poor-law Board, to the Medical Council, to the medical journals, and the local papers.

The thanks of the meeting to Dr. Ranking were carried by acclamation.

The following was the opinion of the meeting on the clauses of the scheme:—

1. Dissented from as unjust. 2. Agreed to; but residence not necessary. 3. Dissented from *in toto*. 4. Appointments should be permanent. 5 to 10 (inclusive). Agreed to. 11. Uniform salaries. 12. Payment per case, with mileage. 13. See No. 3. 14, 15, 16. Agreed to.

Society of Arts. The sum of £100 has been placed at the disposal of the Council of the Society of Arts by Sir Walter C. Trevelyan, as a prize to be awarded for the best essay on the applications of the marine algæ and their products as food or medicine for man and domestic animals, or for dyeing and other manufacturing purposes. Competitors must give the results of their original investigations on sea-weeds, and they must prepare a series of specimens illustrative of the best modes of collecting, preserving, and preparing the several species. Mere compilations will not be admitted to competition. The essays, with accompanying specimens, must be sent to the Society of Arts by the 31st of December, 1860. Each essay must be marked "Essay on Marine Algæ", and must have a motto or distinctive mark attached, which mark must also be written on a sealed letter, containing the name and address of the author. The letters containing the names and addresses of the authors will remain with the Society of Arts, and none will be opened except that bearing the motto or mark attached to the essay to which the adjudicators award the prize.

The Bradford Poisonings: Expenses of Witnesses. On Wednesday, January 11th, at the Bradford Borough Court, Mr. Rimmington, analytical chemist, of Bradford, appeared before the magistrates to make an application for payment of the charges he had made in conducting the analyses, and in attending before the magistrates prior to the committal to York, of Hodgson, Goddard, and Neal, in the case of poisoning. He stated that for this duty he had received at York an allowance of only £5, whereas his professional charges amounted to not less than £25. He was of opinion that if professional men were so inadequately remunerated, they would avoid attending either assizes or sessions, and this would tend to defeat the ends of justice. A note was also read from Mr. H. C. Taylor, surgeon, also a witness in the poisoning cases, complaining of only receiving £1:1*s.* for all attendances at the Bradford Borough Court, and nothing for a *post mortem* examination of a body, when he ought to have received £2:2*s.* He asked the Court to grant him remuneration in aid. Mr. Terry and Mr. Lee, solicitors, both took the opportunity of illustrating the fact advanced, that witnesses attending the assizes at York were very inadequately remunerated. The mayor stated that the magistrates would take the opportunity of making a representation to the government on the subject, in the hope that an alteration would be effected.

The Hunterian Oration. John Bishop, Esq., F.R.S., is appointed to deliver the Oration on Monday, February 14th, at the Royal College of Surgeons of England.

The Convict Wilhelm. The sentence of death passed on this man for causing death in an attempt to procure abortion, has been commuted into penal servitude for life—a commutation which seems to have struck him with dismay and apprehension.

THE NEW CHARTER OF THE ROYAL COLLEGE OF PHYSICIANS.

The following heads of the proposed New Charter of the Royal College of Physicians, appeared in the *Medical Times and Gazette* of January 15th.

1. The College shall henceforth be styled "The Royal College of Physicians of England".

2. It shall consist of Fellows and Members, including a President and Council, Vice-Presidents, Censors, a Treasurer, and a Registrar.

3. The government of the College shall be vested in the Fellows.

4. The Members shall have all the privileges of the Fellows, excepting that of attending the meetings at which elections are held, or any business of the College transacted.

5. The present Licentiates shall be Members.

6. The present Extra-Licentiates may be members, provided they do not practise Pharmacy, and pay five guineas, exclusive of stamp duty. This clause is postponed for discussion. It is felt that all Members should be Graduates in Medicine.

7. Doctors of Medicine of any British University, and certain foreign Graduates, not practising Pharmacy, shall, at any time within twelve months after the acceptance of the Charter, be admitted Members of the College without examination, on paying ten guineas, exclusive of stamp duty.

8. Any person who shall not be engaged in the practice of Pharmacy, and who, *by examination or otherwise*, shall have satisfied the said Corporation touching his knowledge of medical and general science and literature, and complied with such other regulations as are or shall be required by the bye-laws of the College, shall be entitled to receive a license to practise as a Physician, and to become a member of the College.

9. The present Fellows are to continue to be Fellows.

10. Members of four years standing may be admitted as Fellows *after examination* in medical and general science and literature before the Censors.

11. By this clause the Council have the power to nominate Members during twelve months after the acceptance of the Charter, "to be proposed to the Fellows for election as Fellows". This will enable the College to admit their more distinguished members at once to the rank of Fellow.

12. After the expiration of twelve months, Members of four years standing who "have distinguished themselves in the practice of medicine, or in the pursuit of science and literature", may be proposed by the Council to the Fellows for election as Fellows.

13. The Fellows to be annually elected by ballot at a meeting of Fellows.

14. Fellows or Members may forfeit their privileges by violation of a bye-law, rule, or regulation, on the vote of a majority of the Fellows present at a special meeting.

15. Any person who shall have satisfied the said Corporation, by examination, touching his proficiency in the science and practice of *medicine* and *midwifery*, and complied with such other regulations as are or shall be required by the bye-laws of the said Corporation, shall receive a license from the College to that effect, and be entitled *Extra-Licentiates* in Medicine and Midwifery.

16. The President to be elected *annually* by the *Fellows*.

17. This clause provides for the mode of electing the President by ballot of the Fellows, and that the President must be a Fellow of ten years standing.

18. In case of death or resignation of the President, a new President to be elected "with all convenient speed".

19. There are to be two Vice-Presidents, who must be Fellows of ten years standing, appointed by the President.

20. The term of office of the Vice-Presidents to expire with that of the President by whom they were nominated.

21. The Council to consist of *sixteen Fellows*, in addition to the President, Censors, and Treasurer.

22. Half the Council to retire annually, and not be re-eligible until they have been one year out of office.

23. The Council to be elected by the Fellows out of their own body.

24. The Council to meet at least one week before the quarterly meetings of the College, and when summoned by the President at other times.

25. Four Censors to be elected annually.

26. This clause, providing that the Censors shall be elected

by the Fellows on *nomination by the Council* has been postponed.

27. A new Censor to be elected to fill a vacancy caused by death or resignation.

28. The Treasurer to be elected annually by the Fellows on nomination by the Council.

29. On death or resignation of Treasurer, a new Treasurer to be appointed "with all convenient speed".

30. The Registrar to be elected annually by the Fellows on nomination by the President.

31. The usual rule as to election on death or resignation of the Registrar.

32. The College officers to remain in office during the "whole of the day on which their successors shall be elected".

33. All Fellows to have at least seven days notice of all meetings, elections, etc., the purpose of the meeting, and the names of Fellows nominated for offices.

34. Days of annual election may be altered by bye-law.

35. Proxies shall not be allowed at any election.

TO CORRESPONDENTS.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

ERRATA.—In the Report of DR. MACKINDER'S Paper read at the Epidemiological Society (JOURNAL, January 8, p. 32, col. 2), are the following errata:—Line 41, for "exacerbation", read "excavation". Line 42, for "pervade", read "precede". Line 46, omit "of the". Line 47, for "gastric", read "gastro-". Line 3 from bottom (in foot note), for "aspagyllus", read "aspergillus".

DELTA. The *Glasgow Medical Journal* is published quarterly, and the *Edinburgh Medical Journal* monthly. There is no weekly medical journal in Scotland.

Communications have been received from:—DR. C. H. JONES; MR. J. W. WEST; DR. J. M. BELL; DR. W. NEWMAN; MR. G. HORNBY; MR. P. MARTIN; QUID PRO QUO; DR. INMAN; DR. J. R. HUGHES; DR. W. B. MUSHET; MR. T. HOLMES; MR. SAMUEL SMITH; DR. W. T. GAIRDNER; DR. C. E. BEBNARD; MR. EDWARD GARRAWAY; DR. D. MACKINDER; MR. T. M. STONE; DR. KIRKMAN: MR. W. B. FRANCIS; HONESTAS; W. W.; MR. J. KEMPTHORNE; and MR. J. INGRAM.

ADVERTISEMENTS.

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Dublin Quarterly Journal of Medical Science for February.

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PART THIRD—MEDICAL MISCELLANY.

Transactions of the County and City of Cork Medical and Surgical Society, etc., etc.

Dublin: MCGLASHAN and GILL, 50, Upper Sackville Street.
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ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

Patron.—HER MOST GRACIOUS MAJESTY THE QUEEN.
President.—THE RIGHT HON. THE EARL MANVERS.
Visitor.—THE LORD BISHOP OF WINCHESTER. *Treasurer.*—JOHN PROPERT, ESQ.

The Council of the Royal Medical Benevolent College have the pleasure to inform the Governors and Friends of the Institution that the SEVENTH ANNUAL FESTIVAL will take place at the LONDON TAVERN, on Wednesday, the 6th of April next, when the Right Hon. the LORD STANLEY, M.P., has kindly consented to take the Chair. Gentlemen who are willing to act as Stewards on the occasion are requested to send their names to the Treasurer, or to the Secretary, at the Office in Soho Square. There is no liability attached to the office.

The following Noblemen and Gentlemen have already undertaken to officiate as Stewards. A further list will be published shortly.

The Most Noble the Marquis of Salisbury
The Right Hon. the Viscount Cranborne
The Right Hon. Sir John Pakington, Bart., M.P.
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Office, 37, Soho Square,
January 26th, 1859.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

I. CASE OF VARICOCELE TREATED BY SUBCUTANEOUS SECTION OF THE VEINS.

Under the care of HENRY LEE, Esq.

J. A., aged 22, single, was admitted into King's College Hospital December 3rd, 1858. He stated that, at about the age of fourteen, he began to experience inconvenience on the left side of the scrotum, and a sense of great weakness in the left testicle. More recently he has experienced pain in the same situations, and for two months past has, in consequence, been a patient at St. Thomas's Hospital. Upon examination, the spermatic veins on the left side were much enlarged and tender to the touch. The swelling completely disappeared when he was in the recumbent position.

On December 15th, two needles were introduced, three-quarters of an inch apart, beneath the enlarged veins; care being taken not to include the vas deferens. A sharp very thin knife was then introduced underneath the veins between the needles, and the whole cluster of veins divided towards the skin. Very little hæmorrhage followed. A piece of lint was applied to the little wound made by the knife, and the patient was sent to bed.

Mr. Henry Lee remarked, that the operation of dividing enlarged veins subcutaneously had now become established, and had been performed, where due precautions had been taken, a great number of times without any inconvenient results. The principle was that of simply dividing an enlarged vein, and allowing the cellular connexions on each side to form a vascular union across the divided vessel. This was a much less painful and tedious operation than that of introducing needles below the vein, and allowing them to ulcerate out. It was also less dangerous, inasmuch as all suppuration and ulceration was in ordinary cases avoided. The subcutaneous division of the vein, however, required the precaution of the introduction of a needle above and below the point to be divided, with a ligature tightly applied in the figure 8. The lower needle then prevented any hæmorrhage from the vein; while the upper, in case there should be any inflammation or morbid action in the part, would prevent the passage of the products of that action into the circulation. In one of the cases last operated upon, the patient, a sailor, had got up against orders, and walked about the day after the operation had been performed upon the saphena vein. In that instance, some local inflammation occurred in consequence; but there was no disturbance of the general system, such as would no doubt have followed, had any of the products of the inflammatory action found their way along the channel of the divided vein. In this last case, as also in that of another sailor operated upon shortly before, Mr. Lee had heard from the medical attendant at Tower Hill, that they had, upon leaving the Hospital, been received back into the Royal Navy, from which they had previously been discharged on account of the varicose veins in the legs and thighs. The success of the subcutaneous division of varicose veins had been shown by a large number of cases under the care of different surgeons. The principle was now adopted for varicocele, and the above was the second case only in which it had been employed. The first of these cases had been a patient of Mr. Lee's in the Lock Hospital, and the cure in that case was quite satisfactory. Thickening and consolidation of the parts would probably follow in this case also; and in a short time the patient would probably be well enough to leave the Hospital.

The following are the subsequent notes of the above case:—

December 18th. Considerable swelling of the scrotum had taken place. The needles were removed on the fourth day.

December 20th. He feels much better. The pulse is perfectly quiet; the swelling in a great degree subsided.

December 24th. He feels quite well. Pulse 60. Some thickening around the divided spermatic vessels.

December 31st. Some thickening remains in the line of the incision. The swelling above and below this has entirely subsided. He feels quite well, and entirely free from pain. To leave the Hospital to-morrow morning.

January 13th, 1859. He came to report himself feeling free from any inconvenience.

January 17th. He again presented himself, with a letter of thanks for his cure. The veins appeared quite consolidated in the line of incision.

II. CASE OF SORE-THROAT AND ALBUMINURIA.

Under the care of G. JOHNSON, M.D.

[*From Notes by* C. PARSONS, M.D., *House-Physician.*]

M. B., aged 30, was admitted as an in-patient of King's College Hospital, on October 30th, 1858, with renal dropsy, and was placed under the care of Dr. Johnson. She remained under treatment till November 22nd, when she was discharged convalescent.

November 25th. She was readmitted. She stated that on November 24th, two days after her discharge, she was suddenly seized with cold shiverings and severe headache; and towards evening, she felt pain in the throat on swallowing. This morning (Nov. 25th), she observed that her urine was very high coloured, and that it scalded her slightly in passing it. It was about the usual quantity. On admission, she complained of her throat being very sore and painful, especially when she attempted to swallow. She was unable to take any solid food; even arrowroot was swallowed with difficulty. Her speech was very thick. The fauces were red, and considerably swollen. The urine presented a dark smoky appearance; and, on testing it, there was a copious precipitate (about one-half) of albumen.

Twenty minims of the tincture of the sesquichloride of iron were ordered to be taken every second hour in an ounce and a half of water. Half an ounce of brandy was also ordered to be given every two hours.

10 P.M. She was ordered steam inhalations; and a mustard poultice to the throat.

November 27th. She continues much the same, except that now it is with very great difficulty she can swallow even fluids. The pulse 110, weak and intermittent. There are some irregular patches of superficial ulcers at the back of the throat, which were ordered to be touched with solid nitrate of silver.

November 30th. She feels much better, and can swallow with greater ease. The ulcers at the back of the throat have improved in appearance. The urine is very pale, and strongly acid; the albumen in it is diminishing, but there is still a very copious precipitate.

November 28th and 29th. She vomited several times, and experienced much relief from it.

December 2nd. The ulcers in the throat are nearly healed, and the swelling of the fauces has subsided. She complains of feeling sick at the stomach after eating, and very frequently vomits her meals. The albumen in the urine has considerably decreased, and there is now little more than a trace.

She was ordered four ounces of wine daily, instead of the brandy.

December 4th. The throat has much improved. The quantity of albumen in the urine has again increased. She complains of feeling very weak.

℞ Quinidini disulphatis gr. i; acidi sulphurici diluti ♏v; aquæ ℥iss. M. Fiat haustus ter die sumendus.

December 6th. She continues to improve. The albumen remains in the urine.

December 9th. She is progressing favourably. The albumen has diminished considerably.

Was ordered to take five grains of gallic acid in an ounce and a half of water three times a day.

December 11th. She is nearly well. The albumen has decreased to a mere trace in the urine.

December 15th. She is now convalescent. The albumen has entirely disappeared.

December 17th. She was discharged cured.

Remarks. The above case may be interesting at the present time, when so much attention is directed to affections of the throat in connexion with the many interesting questions in the pathology and treatment of diphtheria. The present was certainly not an example of that disease, at least if the presence of the leathery membrane is taken as its pathognomonic symptom; yet its onset was attended with very much the same symptoms as in diphtheria, and the constitutional condition was about the same. An interesting point also is the recurrence of albumen in the urine, which accompanied the attack of sore throat, and its subsidence as the affection receded. The kidneys have been observed to be affected very frequently in diphtheria,—a fact noticed in the review of Mr. Wade's book in our last number, and this fact among others has led to the belief in the intimate alliance between that disease and scarlatina. The same symptoms having been noticed here in a case, evidently not entitled to be classed as diphtheria, may strengthen the opinion that these affections of the throat are all intimately allied; and that the presence of the leathery membrane is a matter of subordinate importance compared to the general constitutional condition of the patient.

ST. THOMAS'S HOSPITAL.

FATAL CASE OF SARCINA VENTRICULI.

Under the care of T. A. Barker, M.D.

[*From Notes by* Dr. Stone, *Medical Registrar.*]

We are indebted to Dr. Stone for the following notes of an interesting case of sarcina, which proved fatal, without any other disease having been discovered on *post mortem* examination.

Jane T., aged sixty-four, the mother of ten children, was admitted on January 18th, 1859, under Dr. Barker's care. She was a woman of middle height, and of naturally florid complexion. She stated that she had been ill altogether for about three months; confined to bed for about nine weeks. The illness had begun with pain in the epigastrium, and dyspeptic symptoms, She had during her former life been remarkably free from such sufferings, and food had always been easily digested. The bowels had, however, been for a long time habitually costive, often requiring the use of violent purgatives.

Nine weeks before admission, constant vomiting commenced. No nourishment, however light, was retained on the stomach, and even water could not be borne. During this period there had been rapid emaciation, and hardly any action of the bowels. There had not been any cough or any febrile symptoms throughout.

On admission, she still bore the traces of having been a robust person. She was incessantly retching, and bringing up large quantities of bright green soupy and yeastlike fluid, amounting to about a pint in an hour or two. This, when allowed to stand for a time, separated into a lower stratum of clear fluid, and a scum about three-quarters of an inch thick of green, opaque, creamy substance. The latter, when examined under the microscope, was entirely composed of the characteristic forms of sarcina. She showed no feverish symptoms, but was in a state of great depression. The abdomen was tumid and puffy, very tender on pressure, and sore from continued retching. A hard, nodulated mass, of irregular form, could be felt protruding the lax parietes, most distinct an inch above and to the right of the umbilicus. Besides this, there was no morbid condition of the abdomen. There was no hernia or prolapsus uteri. The urine was scanty, but not albuminous.

During the three following days there was some improvement, but no material change in the symptoms. The stomach rejected everything, and the bowels continued costive.

On coming in, five grains of calomel and one of opium were ordered at bedtime, which failed to act until assisted by turpentine and senna enemata. The sulphite of soda was ordered in two scruple doses three times a day, and on the 21st, in consequence of the slight improvement in general condition, increased to a drachm every six hours. Wine, beef-tea, and brandy, were also exhibited.

On the morning of the 22nd the vomiting ceased, apparently from failure of the strength. In the middle of the day she lay on her back, constantly muttering indistinctly, only half-conscious, in a state of complete prostration. This extreme depression was so sudden in its access that, taken in conjunction with the acute tenderness of the abdomen, it was attributed to peritonitis, probably consequent on perforation of some hollow organ. She died at 6·45 p.m. of the same day.

On *post mortem* examination, all the viscera were found to be in a healthy condition. There was no peritoneal inflammation. The stomach contained some matter resembling that vomited during life. The tumour observed in the umbilical region proved to be a healthy pancreas, pushed forward more than usual by an abnormal projection of the vertebræ immediately behind it.

ST. GEORGE'S HOSPITAL.

FOREIGN BODY IN THE BLADDER: LITHOTOMY.

Under the care of E. Cutler, Esq.

H. E., a young man, aged 23, but appearing much younger, of a pale nervous aspect, was admitted on December 29th, asserting that he had a foreign body in the bladder which he had introduced down the urethra. Both his appearance, however, and the nature of his story, rendered his statement very doubtful. As to the former, he had a strange suspicious way of speaking, and a lymphatic morbid complexion which are often found in impostors and in those who are the victims of delusions. His story was that, having in his possession several glass tubes for holding pencil-leads (some of which he produced), he was seized with a desire to put one down the urethra, and that it had slipped back into the bladder and remained there ever since. This "accident" had occurred more than three years ago, since which time he had been almost free from symptoms, except on about three occasions, when he had had attacks of inflammation—probably of the bladder. As he persisted in this story, a sound was used, but nothing was detected. This, of course, increased the incredulity with which his statement had been at first received; but it was felt that it would not be safe to discharge him without further examination. Accordingly, he was directed to walk about for a few days, and then, on the next examination, a foreign body was at once felt either just before or just after the sound entered the bladder. On January 13th, the operation necessary for its extraction was performed. The principal part of the substance was in the bladder, but it appeared as if the anterior portion was lodged in the commencement of the urethra. The opening made into the neck of the bladder was but small. A little difficulty was experienced in getting the substance disentangled from the bladder. It proved to be what he had said, viz., one of the small thin tubes for holding leads, coated with a thick and very heavy deposit of phosphates. The end which had projected into the urethra was rather smaller in calibre.

The man made a very rapid recovery, his urine passing partly by the urethra on the following day. He is now (Jan. 25th) convalescent, and goes out every day.

Original Communications.

DESCENT OF A TESTIS IN A CHILD, SIMULATING HERNIA.

By R. P. Bell, Esq., Goole.

The following case shews the necessity of always being careful in our diagnosis.

On Sunday last, about 6 p.m., a fine healthy child, fifteen months old, was brought to my house by its mother, who supposed it to be suffering from a rupture, which had occurred a few minutes previously, whilst the child was standing on a sofa, when it suddenly screamed, and placed its hand on the body.

On examination, I saw a protrusion, of the size of a walnut, at the right external abdominal ring, and found that the scrotum contained only one testicle. I explained the nature of the case, and merely ordered fomentation.

On calling to see my little patient two hours afterwards, he was comfortably asleep, and the testis had completed its descent. The parents were not aware of the previous defect.

WAS HAHNEMANN A NOSTRUM-VENDOR? A QUESTION OF FACT.

By W. T. Gairdner, M.D., F.R.C.P., Edinburgh.

In a little book recently published by me on *Medicine and Medical Education*, I had occasion to treat of the career of the founder of homœopathy, and incidentally to open up one or two suspicious passages in it with regard to the sale of secret remedies. Those who have read my observations impartially, will, I believe, do me the justice to admit that I have neither exaggerated the charges, nor withheld the defence, so far as known to me. My object, indeed, was simply to get at the facts; and in performing this service to the cause of truth, I find myself powerfully, though unconsciously, aided by an article in the *British Journal of Homœopathy* for January 1859.

The homœopathic reviewer is, as usual, very bitter, very personal, and very unfair. He is, however, so far well-informed, as to make it certain that the best and the worst that can be said in Hahnemann's favour has now been spoken. Having long ceased to expect anything better at his hands than misrepresentation and detraction, I shall give his twenty-eight pages of controversial rhetoric the go-by, except in so far as they illustrate the question which I have asked at the head of this communication. It is very easy for the pen of a ready and unscrupulous writer to cover over a little morsel of unpleasant truth with multitudes of words; but abuse of me and praise of Hahnemann are not argument; and setting aside both of these, I shall take the liberty of doing what homœopathic reviewers so seldom do; viz., of coming to the point at once.

In my sketch of Hahnemann, I adverted to two alleged occurrences which justified the strong suspicion (if not the absolute certainty,) that he had more than once compromised his character as a physician by the sale, or attempted sale, of secret remedies. One of these occasions is ascertained to have been subsequent to the announcement of homœopathy; the other is of unknown date. To the latter I alluded as follows: "It has been stated, on the authority of Dr. Mühry, of Hanover, in a widely circulated medical journal, and as 'a fact undenied even by his own adherents,' that, previous to 1810, Hahnemann had, 'deceived the world by selling *at a high price*, under the name of pnœum, a nostrum which consisted of nothing but borax.' This is a stigma under which no innocent man should have been allowed to remain for a moment; for it involves the double charge of making gain by a secret remedy, and of concealing a known substance under a false name."

I did not give this charge against Hahnemann without giving, by the side of it, the only defence I had seen. The defence was quoted by me, *verbatim*, from Dr. Henderson, who gives it without authorities; and as it is substantially similar (except in one point to be afterwards noticed,) to the reviewer's attempted exculpation, I shall not repeat it here. The defence of the *Homœopathic Journal*, though extending over three pages, amounts simply to this: that a certain Dr. Rummel, "one of Hahnemann's oldest and most esteemed adherents," declared before a meeting of persons assembled to do honour to Hahnemann's statue at Leipsic, that he had "made a mistake" in this matter. Therefore, pleads the reviewer, as Dr. Rummel must have known "the exact facts," it is clear that the whole affair was "simply a chemical blunder," for which he made ample reparation by paying back the money he had received.

The reviewer must excuse me if I do not at once give in to this tremendous battery of homœopathic logic. Whether Dr. Rummel knew the exact facts or not, it is clear that he knew the charge of bad faith that had been laid at Hahnemann's door. How does he meet that charge? The question was twofold: Did Hahnemann actually sell borax under the name of pnœum? and, if so, did he know that borax and pnœum were the same?

Now Dr. Rummel not only admits that Hahnemann sold borax under the name of pnœum, but makes it a great point in his favour that he returned the money. Why did he return the money? If he had only made a mistake in names, and had, nevertheless, sold a useful article at a fair profit, without any concealment or false pretences, the money need not have burned his fingers, and could not have been demanded of him. The return of the money is conclusive proof that the purchasers of pnœum considered themselves to have a claim for restitution—in other words, they had been deceived by the name, and had (as Dr. Mühry states) paid too high a price for an unknown article. The nostrum-vending, therefore, is clearly apparent from Dr. Rummel's own admissions.

"Many a great chemist," writes Dr. Henderson, in allusion to this charge, "has made as great a blunder, and in more recent times, too." We have here an admirable specimen of that unhappy tendency to confound right and wrong, which seems almost inseparable from homœopathic controversy. Great chemists have made mistakes no doubt in all ages. But has it been the practice of really great chemists (and if so, is it a practice to be justified by great physicians,) to attempt to make a profit out of their own ignorance and the ignorance of others? Did Davy sell potassium at a high price, or did he not rather hasten to tell all the world how to make potassium? Did Priestley make any attempt to turn "dephlogisticated air" to account as an article of commerce by erroneous representations of its nature and properties? Did the discoverers of iodine, chlorine, bromine, of the whole host of new metals and of new organic compounds which modern chemistry has revealed, usually act in the spirit of hucksters or of men of science? Or (to put a hypothetical case,) if Dr. Simpson had advertised and sold chloroform as a new and unknown substance, and had afterwards "discovered his error," and returned the money, would Dr. Henderson have meted out to him, in "Homœopathy truly represented", the same judgment with which he has so charitably exonerated Hahnemann? Dr. Henderson knows very well, that even a manufacturing chemist or druggist would now-a-days think himself deeply disgraced if he had committed such an "error;" yet he excuses it in the case of one who is put forward as a leader among physicians!

As regards the charge of intentional deception, implied in the knowledge that pnœum was borax, and nothing more, I have said no more than that a fraud was charged against Hahnemann, and that the charge has not been rebutted. Neither Dr. Rummel, Dr. Henderson, nor the reviewer go beyond the simple assertion that the whole affair was "a mistake." None of them make any attempt to explain how the mistake occurred, or how it came about that Hahnemann so innocently discovered a new alkali, without being aware of what he was doing. Neither do they inform us distinctly how the error was discovered, whether by Hahnemann himself, or by those who were made to pay for his nostrum. Dr. Henderson, indeed, quietly assumes (without proof) that Hahnemann corrected his own blunder; but Dr. Rummel's words ("*it was afterwards found* that he had made a mistake,") point to the opposite conclusion as plainly as homœopathic words can be expected to do. And on this evidence we are to pronounce an acquittal of Hahnemann on the charge of fraud, and to believe that his over-sensitive conscience spontaneously prompted the restitution of the perfectly honourable gains which he had made out of the "new alkali"!

It is evident that unless Hahnemann himself, or some of his friends at the time, had made a clean breast of the whole matter, no more favourable judgment can be passed upon it than what is called in Scotland "not proven;" and that only as regards the question of deliberate fraud. The question will always recur—what inducements were held out by Hahnemann to the purchasers of pnœum? and were those inducements justified by the state of his own knowledge respecting it? Of all this we unfortunately know nothing; but Dr. Rummel and the homœopathic reviewer have placed it beyond a doubt:—

1. That Hahnemann did sell borax under the name of pnœum.
2. That the "mistake" was found out, and that not by Hahnemann (as Dr. Henderson would leave to be inferred), but by others.
3. That to save his credit he paid back the money.

And this is simply the best face that can be put upon an ugly transaction; of which all that can be said further is that Hahnemann and his friends have found it convenient to be very chary of giving information to the world.

The other occasion on which Hahnemann has been accused of putting forth a secret remedy, is that of the notorious *Hahnemannian preservative against scarlet-fever*. It is not denied by the reviewer (nor, so far as I know, by any one else), that this alleged prophylatic was announced to the world by advertisement *two years before its composition was revealed*; and that the revelation took place in consequence of a general outcry from the medical profession, which refused to sanction the secresy of the proceeding. The reviewer, indeed, expressly

says (what I avoided stating, although strongly suspecting it), that Hahnemann was accused "of trying to make money by false representations;" and Hahnemann's own account of the transaction is to the effect that he might have got "at least as much in the way of honorarium" by publishing a big book on scarlet fever, as by "subscribing" a secret remedy, with the promise of a little book in the future! The reviewer further discovers that the price "could not have been more than a shilling;" a statement for which he gives no authority, but which reminds me of the wet nurse's answer, when asked if her child was not illegitimate, "Yes, ma'am, but it's a very little one!"

Surely this is very lamentable, if it were not somewhat too ludicrous. A remedy is advertised, in regard to which the professed discoverer makes strong statements as to its efficacy in the then reigning epidemic. It is said to be a preventive remedy, as powerful against scarlet fever as vaccination is against small-pox (vaccination having just then come into fashion); trial is demanded on the double ground of humanity and science; professional opinion is formally invited; only, the disinterested discoverer must have your opinion (and your money) before he publishes the name of the remedy! Yes, says the reviewer, that is all true; but observe *how very small the sum*—"only a shilling"—"actually nothing"—"simple-minded confiding man"—"Alas! he little knew medical human nature!"—"child-like simplicity"—"much-abused and persecuted sage"—"open candid character"—"pure philanthropy and zeal, etc., etc.!" Such is homœopathic criticism.

The reviewer's commentary upon this most discreditable passage in Hahnemann's career, extends to no less than seven pages; but he does not even attempt to overthrow one of my statements as to matters of fact, while he embodies his own opinion in such vague euphuisms as I have quoted above. The very application of these terms to such a transaction, is a thing so shameful, that I will not venture to characterise it. The reviewer knows perfectly well what he is about, and betrays no small amount of controversial skill in mystifying and confusing the reader as to the merits of the case. But there is one answer to all his studiously distorted representations. *To have no secrets about remedies is a rule among physicians without any exception;* and in Hahnemann's case there was not even the shadow of an honourable reason for the breach of the rule. The reviewer's defence of Hahnemann, such as it is, resolves itself simply into a defence of nostrum-vending. "I do not give you the name of the substance," he makes Hahnemann say, "as that might prejudice your judgment, or you might prepare it improperly, so I prefer sending it to you in the form in which I have found it successful. The name will be, by and bye, published, etc., etc." No one can fail to see in what direction this defence tends. The whole army of advertising quacks may shelter themselves beneath it. To rail at the medical profession for not seeing the matter in this light, is simply to appeal from honest professional opinion to the most ignorant prejudices on the part of the public.

When I proposed to myself to write a notice of Hahnemann's career, in conjunction with that of Paracelsus and Brown, it was not for the purpose of accusing or reviling these men, but with the view of investigating their mental history in connection with the systems they professed, and the avowed attitude of opposition and contempt which they assumed towards professors of the medical art in general. While I did not shrink from exposing the lamentable errors of doctrine and of conduct into which "system-builders" (as I have called them) naturally fall, I refrained from attempting to deepen the impression by disingenuous sophistry and hysterical ecstacies of praise or blame. The reviewer is much too "smart" a person to take good advice, or I would give him the gentlest possible hint, that there are restraints in controversy which gentlemen and men of a liberal profession feel bound to impose on themselves, and which will prevent me from answering him after his own fashion. He will not, of course, accept my view of Hahnemann's character, and he pursues me with all manner of controversial Billingsgate for assailing it. Be it so. It is the way of his sect to please themselves, and depreciate better men, by surrounding Hahnemann with a halo of false glory. This spirit of reckless partizanship does not, however, in the least help the reviewer out of his difficulties. He has, on the contrary, only consummated the proof which I have endeavoured to adduce in the lives of Paracelsus, Brown, and Hahnemann, that from the confirmed system-builder or sectary in physic, nothing is to be expected in the interest of truth. Looking at everything from one point of view, he soon allows the sect to become all in all, and the eternal distinctions of right and wrong go for nothing. It is quite a natural, though a ludicrously small, consequence of such a state of mind, that a casual slip of the pen, made by me on a former occasion (but completely explained and carefully rectified so soon as it was pointed out), takes rank, with this reviewer as a graver offence than selling borax under the name of pnœum!

Take it all in all, no more striking evidence could possibly be given of the utter demoralisation of the Homœopathic ranks, than is contained in this review. That it should be possible to offer to men calling themselves physicians a defence of Hahnemann so completely at variance with the first principles of professional honour, clearly demonstrates the truth of the severe remark made in Paris the other day, that homœopathy is not a science nor an art (not even a creed nor a doctrine), but simply *a trade.*

CASES OF FISTULA IN ANO TREATED BY LIGATURE.

By Draper Mackinder, M.D., F.R.C.S., Gainsborough.

One of the most disagreeable companions a man can take about with him is a *fistula in ano*,—a painfully suggestive associate, that is constantly reminding the sufferer of the very probable existence of an occult and formidable underminer of his health. Even though this remorseless antagonist to comfortable locomotion and repose, instead of being the mere representative of a less conquerable foe, bore with it the tangible evidence of independent responsibility, the consciousness of having to undergo a painful and somewhat dangerous operation, which, in many cases, necessitates the recumbent position for weeks, is of itself sufficient to create anxiety in the strongest mind.

A few weeks incapacity for the performance of the ordinary duties of business-life would, to some people, be a matter of the most serious importance, involving a pecuniary sacrifice amounting almost to ruin. To a needy professional man a prolonged bedroom residence would be peculiarly unfortunate; to the Esculapian most depressing, seeing that it affected materially the welfare of more than the individual sufferer. Any effectual means, therefore, that can be adopted for the avoidance of the series of ill consequences alluded to, instead of being allowed to fall into desuetude, should be hailed as a boon to suffering humanity.

Mr. Luke, of the London Hospital, has revived the treatment of fistula *in ano* by ligature, an operation that possesses attractions not generally recognised, being without danger, and comparatively painless, creating no alarm, and neither requiring absolute rest nor in-door residence.

To make this proceeding as simple and painless as possible, I requested Mr. Ferguson to make me two very fine silver probes and a grooved director, the probes being seven, and the director five, inches long. One of the probes is blunt, and the other sharp pointed at one end, and both are perforated at the other. These may be easily carried in an ordinary pocket-case, and will be found useful on many occasions.

Method of Operating. Having, by previously administering an aperient, prepared my patient for the exploration, I introduce the blunt-pointed probe, armed with silk, into the external opening of the fistula, pass the index-finger into the rectum, search for the opening, seize the extremity of the probe (which is easily bent), draw it through the anus, and complete the operation before the sufferer is made aware of the nature of his ailment. In the event of there being no internal opening, or that aperture not being easily found, I pass the sharp-pointed probe, alone or aided by the director, along the sinus, and transfix the wall of the gut. The ordinary probes are too short and thick, and inflict much unnecessary pain.

The following three cases are from my note-book, briefly narrated, and tell their own tale.

Case I. Mrs. B., aged 45, mother of a small family, a stout, full-habited woman, of lymphatic temperament, and in comfortable circumstances, consulted me on the 6th of May, 1857, for pain at the pit of the stomach, intercostal spaces, and over the dorsal vertebræ, coming on at 3 A.M., and continuing until the erect position was assumed, there being almost complete inability to move. Pressure over one of the upper dorsal vertebræ elicited pain at the point pressed, at the pit of the stomach, and both sides. Rest, vesication, mercury with chalk, followed by quinine and iron and wine, afforded relief.

On the 20th July she again consulted me, complaining of left intercostal pain, numbness of left arm, difficulty of turn-

ing in bed, and tenderness over upper dorsal vertebræ, increased by pressure. The bowels were constipated. Calomel and colocynth pills, nitro-hydrochloric acid, good diet and rest, were successful in affording relief.

On the 21st of August, I was again sent for to examine an abscess by the side of the anus, which had a fine fringe of hæmorrhoids. Suspecting its true nature, and knowing the bowels had been well opened the previous day, I at once laid open the abscess, from which about half an ounce of offensive pus escaped. I introduced my armed blunt probe, tied the silk, and completed the operation before my patient knew what was the matter with her. The internal opening was about three inches up the rectum, and between it and the anus I could feel a large pulsating vessel. I kept her in bed, and under the influence of acetate of ammonia and opium for a few days. The ligature came away on September the 4th; no bad symptom was set up, and she has been in capital health ever since.

Case II. Mrs. S., a thin, exsanguine woman, who had foolishly been suckling her child for the protracted period of two years, sent for me on the 18th of December, 1857, in consequence of the bursting of an abscess about an inch and a half from the anus, and the discharge of some very stinking matter. Pus had escaped from the bowel for three weeks. Nine months previously she had had a fall against the edge of a stone step, which caused pain at the coccyx. The armed, blunt-pointed probe was passed up the sinus to the bowel, about three inches above the sphincter, but no opening could be found, though the probe traversed between the coats of the intestine. A sharp-pointed probe was then pushed through the bowel, brought down, and the ligature tied. She was kept in bed under the influence of acetate of ammonia and opium for a few days; but little disturbance of the natural functions supervened. The ligature came away on January the 8th, and good diet, with gentle exercise, soon established health.

Case III. Mr. Sharp, resident surgeon to our dispensary, requested me to operate on him for fistula *in ano* in August last. He had a fistula, the inferior opening of which was about an inch from the anus, and the superior opening two inches and a half up the gut. I passed the armed blunt-pointed probe in the manner previously described, and included in the ligature a large pile. The operation was performed in my surgery, and Mr. Sharp afterwards walked home, a distance of some five hundred yards. On the next day, he went to see some of his near patients, and continued to discharge the greater part of his duties without intermission. The ligature came away on the 6th of September, after which he got much stouter than he had been for some time. Mr. Sharp is a married man, and has passed his fortieth summer; his health has been deteriorating for a considerable time, and he is a martyr to gout and bronchitis; moreover, he is a cripple from early hip-disease, and has a tumour forming in the long head of the biceps of his right thigh. A more unfavourable case could not easily occur, and for such a patient few surgeons would have recommended the knife. As far as the fistula was concerned, the treatment by ligature in this case was all that could be desired.

Mr. Sharp expresses himself as being much pleased with my manner of proceeding, and has recommended his father to come under my care, the old gentleman having long tolerated a fundamental nuisance, the surgeon's knife abhorring.

PATHOLOGICAL CONTRIBUTIONS TO MEDICAL JURISPRUDENCE.

By William Boyd Mushet, M.B.Lond., late Resident Physician at St. Marylebone Infirmary.

III.—Sopor lapsing into Coma. Extensive Disease of Kidneys. (Ingestion of Opium?).

A. D., aged 64, a washerwoman, was admitted into the Marylebone Infirmary about 10 P.M. on January 19th, 1857. She was cold, pale, and haggard; and I was informed that she had had a fit a short time previously. There was sopor, but not actual coma, as she answered as to her name, when roused, but said nothing further. The pulse was 100, full, but weak and compressible. The respirations were 11—12, noisy, gasping, with loud *râles*. The pupils were contracted, and insensible to light. The arcus was very strongly marked. There was considerable œdema of the feet and legs. The mouth was drawn; but there was no paralysis or convulsion of the limbs. The rattle over the chest prevented the state of the thoracic organs from being accurately determined. The prognosis was evidently very unfavourable; as active measures could not be resorted to, on account of the prostration. She was ordered to be wrapped in blankets, to have hot bottles applied to the feet, and a blister to the nape; and to have a drop of croton oil and beef-tea.

On the following morning, she was completely comatose. The pupils were contracted; the surface warm; the mouth drawn to the left side. The face was somewhat livid. The heart's action was weak and rapid; the pulse almost imperceptible. The respirations were 18 in a minute. The bowels had not been opened. About a quart of urine was drawn off; which, contrary to my injunctions, was thrown away. She could not swallow, and was evidently sinking. She died in the evening about 8 P.M., twenty-two hours after admission.

Necropsy sixty-six hours after death. There were no external marks. Œdema of the legs and feet was present. *Rigor mortis* was tolerably well marked. The pupils were moderately dilated.

Head. The scalp and calvarium were natural. The dura mater was injected. There was some subarachnoid effusion, and two or three ounces of fluid at the base. The arachnoid was opaque at spots. The large veins of the pia mater were prominent. The brain-substance was healthy; but the vascular points were more marked and numerous than usual. About the central parts of the brain, the substance appeared a little softer than in health. There was no clot, nor injury to the skull. Serum was found in the lateral ventricles. The vessels at the base were extensively atheromatous.

Chest. The heart weighed sixteen ounces; it was surrounded by fat. There was hypertrophy of the left ventricle; and the aortic orifice was narrowed from binding down of one of the semilunar valves. The mitral aperture was also constricted, although the valve appeared healthy. It admitted but one finger well. The aorta was dilated above the valves. The valves on the right side were healthy. The right auricle contained a partially decolorised clot, extending into the ventricle, and interlacing with its fleshy projections. Very little blood was found on the left side of the heart. The coronary arteries were atheromatous. No fluid was found in the pericardium. The lungs were healthy. Tenacious yellow mucus was present in the trachea, bronchi, and their divisions. There was some serous effusion into the right pleura; no adhesions. The left lung was slightly adherent to the costal pleura by recent exudation; and there was effusion into the left side of the chest of some ounces of turbid serum, holding in suspension flocculi of lymph.

Abdomen. The liver was healthy, but pale. The spleen was small, firm. The stomach contained some ounces of greenish fluid, without peculiar smell, and much mucus. Its internal surface appeared healthy. The gall-bladder was distended with dark oily bile. The right kidney weighed three ounces; it was small, hard, shrunken, granular, lobulated, and pale. The capsule separated with difficulty. The left kidney weighed a little over two ounces; it presented the same characters to greater extent. There was much fat around the viscera. No fluid was found in the peritoneum. The other organs were natural.

Remarks. In the foregoing case, the pallor of the patient, the œdema of the lower extremities, the precession of a fit, with the lethargy, merging into coma, which succeeded, suggested the notion of uræmia from renal disease. The condition of the kidneys, secondary pleuritis, etc., disclosed on inspection, attested the correctness of the conclusion. But it was ascertained, at the investigation, that the woman had drunk, shortly before the fit, something from a bottle, which she afterwards threw away.

The fragment of a bottle was handed to me, and on testing the dried sediment at the bottom with distilled water and tincture of iron, a very evident red colour was produced (meconate of iron?). Distilled water *alone*, similarly treated, assumed merely a pale straw colour.

We are consequently compelled to inquire—Did this woman take poison? This is a grave consideration (although all suspicion of homicide was in this instance fortunately discarded), as it illustrates how individuals affected by more or less remotely mortal disease, may become the victims of criminal intent, and the effects of the poison administered be masked or modified by the preexistence of certain morbid states, and death therefore attributed to the agency of the former.

Admitting the ingestion of opium—was such a quantity taken as is usually sufficient to cause death; or was its action more

energetic, on account of the predisposition of the patient, from the associated toxæmia? The symptoms accorded equally with uræmic and narcotic poisoning; but, when no special treatment is adopted, the latter, I believe, seldom proves fatal after eighteen hours? Candour, however, demands the admission, that, whether the woman sank from disease alone, or the combined effects of disease and poison, must ever remain an equivocal question.

ON INHIBITORY INFLUENCE.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

In the *Proceedings of the Royal Society*, p. 367, No. 32, there is an highly interesting communication from Mr. Joseph Lister respecting "the functions of the visceral nerves, with special reference to the so called inhibitory system." He takes up Pflüger's view, "that there is a certain set of nerve fibres whose sole function is to arrest or diminish action," and examines it fully with repeated testing by experiment. The result to which he arrives, as given at the end of his paper, is, that it may be regarded "as a fundamental truth not yet explained, that one and the same afferent nerve may, according as it is operating mildly or energetically, either exalt or depress the functions of the nervous centre upon which it acts. It is, I believe, upon this that all inhibitory influence depends, and I suspect that the principle will be found to admit of a very general application in physiology." Mr. Lister also foresees the bearing of this principle on pathology, and notices its probable concernment in the excitement of inflammation through the medium of the nervous system at a distance from the irritated part.

I am strongly inclined to believe that these views will prove to be of first rate importance in pathology, and will be found applicable to a multitude of common instances. However, I cannot but think that the principle, as propounded by Mr. Lister, requires some modification. What this is I will presently state, but will first detail some experiments illustrative of inhibitory influence.

The transmission of an interrupted current of galvanism through the lower dorsal region of the spine, when of a certain strength, caused complete relaxation and quiescence of the small intestines which had previously been in active motion, while the muscles of the limbs were thrown into spasmodic action, but on the discontinuance of the galvanism, the previous intestinal movement returned. A weaker current being now passed, the result was, that the action of the intestines was markedly *increased*. Violent struggling of the animal had the same effect as the strong electric current in producing a quiescent state of the intestines. This, as Mr. Lister remarks, goes to prove "that the inhibitory influence is certainly sometimes exerted in the natural actions of the animal, and is not merely the result of artificial stimulation." The following quotation from Bernard's *Leçons, système nerveux*, tom. ii, p. 392, shows the production of analogous phenomena in the cardiac and respiratory actions. "In a hound, the two nervi vagi were exposed, raised on a loop of thread, and galvanised both at once without cutting them. During the galvanisation, the contraction of the heart and the respiration were arrested, and the eyes became prominent, showing that there is, at the same time, centripetal and centrifugal action in the vagus. In another dog, the vagus being divided in the middle of the neck, the upper end and the lower were successively galvanised. The galvanisation of the lower end stopped the heart, and allowed the respiration to go on. The galvanisation of the upper end stopped the respiration, and let the circulation go on."*

The experiment performed by Weber, several years ago, of slowing or arresting the action of the heart by passing a galvanic current through the medulla oblongata, is quite to the same effect as the preceding. From the circumstance that direct irritation of an intestine lying relaxed under inhibiting influence, produces local contraction not propagated to the adjacent parts, Mr. Lister concludes that "the inhibitory influence does not operate directly upon the muscular tissue, but upon the nervous apparatus by which its contractions are, under ordinary circumstances, elicited."

* Previous experiments, however, show that the arrest of the respiration in these cases occurred from the violent stimulus keeping the inspiratory muscles tonically contracted, so that *expiration* could not take place. This I had overlooked, until the proof came into my hands.

Taking now as our basis the above cited experiments, I proceed to refer to various pathological facts which seem to me to receive explanation from the above views, and to confirm and modify them in their turn.

1. It is known (*vide* Graves's *Lectures*, p. 695,) that exposure to a blast of cold wind for some time has produced amaurosis, which was cured not by depletion or mercury, but by stimulation of the skin of the face and temples.

2. Paralysis of the portio dura, from like exposure, is still more common. This has been attributed to effusion of lymph taking place around the facial nerve in the bony canal it traverses; but the supervention of the paralysis, as in some cases cited by Romberg from J. Frank (vol. ii, p. 282), is often too sudden to warrant our accepting this explanation as generally true. In a case alluded to by Dr. Graves, the two paralyses coexisted, vision and motor power were both impaired from exposure of one side of the face to cold.

3. Irritation of the bowels, as from worms, may cause amaurosis or deafness; or from enteritis, paralysis of the lower limbs.

4. M. Brown-Séquard cites several instances in which a neuralgia of a sensory nerve, to all appearance, produced paralysis of a motor.

5. Dr. Copland, article *Paralysis*, p. 21, mentions a case of "general palsy of the powers of voluntary motion immediately after prolonged exposure to cold and wet. The functions of the brain were unaffected, . . . and no evidence of inflammatory action, or of congestion in the spine could be detected." Sensibility of the surface was retained, and command over the sphincters. "He was treated at first on the supposition of either serous effusion or vascular congestion having taken place in the spinal canal, but without receiving any benefit. He ultimately quite recovered by having frequent recourse to warm baths containing stimulating substances."

6. Dr. Graves quotes a case from Dr. Hutton in his *Lecture on Paraplegia*, pp. 407, 408, in which a man had incomplete paraplegia after exposure to cold, wet, and fatigue, as well as a very close stricture. The latter was dilated, and "*a very remarkable amendment took place in his back and lower extremities in a very few days after the first introduction of the instrument, in fact, it was almost sudden.* Warm baths, friction to his limbs, etc., completed his cure." Dr. Graves comments thus: "you at once perceive the extreme importance of this case; it bears directly on the question before us, and proves that urethral irritation may, as well as inflammation of the kidneys, give rise to paraplegia." He had previously referred to Mr. Stanley's cases of paraplegia from renal disease which have evidently the same import.

7. The same eminent authority says (*vide* p. 407,), that he has recently met with a number of cases in which paraplegia was evidently brought on by exposure to cold and wet; and quotes a communication by Mr. Hunt to Mr. Stanley, to show that the same paralysis may result from uterine disease.

8. In his tenth Lecture, Dr. Brown-Séquard has the following remarks: "The sudden death which sometimes occurs when very cold water is drunk in a warm day, or in cases of a blow on the abdomen, of a sudden perforation of the stomach or intestine, of a wound of some abdominal viscus (without a notable hæmorrhage), etc., seems to be due to a reflex stopping of the heart's action. I have made a great many experiments which show positively that a sudden excitation of the abdominal sympathetic nerve kills, or diminishes the movements of the heart by a reflex action. The excitation goes up to the spinal cord chiefly along the great splanchnic nerve, and ascends the spinal cord until the place of origin of the par vagum, and through this pair of nerves it comes to the heart. This is proved by the fact, that a section of either the par vagum, or the spinal cord, or the splanchnic nerves, allows any kind of irritation to be made on the abdominal sympathetic without a stopping taking place in the heart. In some animals the influence of the irritation of the sympathetic in the abdomen is much more marked than in others; it is so, probably, in men. I have seen a gentleman drop down pulseless, in the most complete syncope, from a pain in the abdomen." In two experiments which I recently performed on cats, injecting half a drachm of citric acid dissolved in water into the peritoneum, death ensued very speedily, and the heart was found uncontracted, with its ventricular cavities full of dark blood on both sides. There was no other morbid appearance. I am, of course, aware of Dr. Gull's interesting observations of the state of the spinal cord in paralysis from renal disease, but I do not think his view is generally applicable. In one case of paralysis from exposure to cold and wet, where death oc-

curred, I examined parts of the spinal cord without finding any trace of exudation.

9. The depression, collapse, and visceral congestion resulting from burns, is known to be in relation to the extent of surface injured, rather than to the severity of the lesion. Mr. Erichsen says, "a person may have his foot completely charred and burnt off by a stream of melted iron running over it, with far less constitutional disturbance and danger than if the surface of the trunk and face be extensively scorched to the first and second degrees. The greater the extent of sensory surface injured, the greater will be the tendency to paralysis of the heart, and of the arteries of the viscera.

10. In cases of paraplegia occasioned by exposure to cold and wet, Dr. Graves observes, there is much less impairment of sensation than of motion, though the former may be sufficiently well marked. He attributes both phenomena "to the influence of cold acting on the nervous filaments of the cutaneous surface of the limbs, extending its morbid impression to the spine, and thence reacting on the nerves, so as to produce impairment of the power of motion and diminished sensation."

Now in all these instances, the one common thing that I observe is, that certain sensory or afferent nerves are affected by an *abnormal, injurious* impression, which being conveyed to the centre, spinal, or sympathetic, sets up a state there which is incompatible with the discharge of its function, whether that be connected with motion, or special, or common sensation. It can hardly, I think, be said that the causes of irritation and paralysis cited above induced *energetic* action of afferent nerves; they are almost all rather of a *depressing* kind, especially cold and wet, drinking cold water when heated, sudden perforation of a viscus, and burns. In fact a cure was obtained in some of the instances by appropriate stimulation of the originally affected sensory surface. Nor, indeed, do I think that in the experiments on animals before detailed it can quite safely be presumed that the stronger stimulus applied to the nerves, induced them to act more energetically. An interrupted galvanic current is not the normal stimulus to the nerves, and it is possible that the strong current may have been exhaustive and depressing. The case may perhaps be analogous to that of the moderate and excessive imbibition of a vinous stimulant. The former stimulates the brain and increases its vital activity; the latter depresses and disorders its action. It seems to me most probable that the same is true of galvanism as of heat and cold, respecting which agents Muller says, "heat and cold, when their action is not carried beyond a certain degree of intensity, nor continued beyond a certain time, are stimulants; but if their action be more violent and long continued, they have a contrary effect." It is only just to Mr. Lister to say that he has considered the question, as to the dependence of the inhibiting influence in his experiments on nervous exhaustion, and decides against that view, partly on account of "the very rapid recovery of the cardiac or intestinal actions when the inhibiting galvanic currents are discontinued."

I have cited the above mentioned actual occurrences as pathological experiments, so to speak, which as yet have hardly been interpreted, or their meaning been appreciated. They seem to me to afford tolerably conclusive evidence that impressions on afferent nerves may not only excite the nervous centres as in reflex action (the more common case), *but produce a directly opposite state of enfeeblement or depression.* It is a remarkable thing that this condition does not always, by any means, subside along with the cessation of the morbid impression, but continues more or less permanent, and is only removed by the excitement of a more healthy stimulus. This was the case in Dr. Graves's and Dr. Copland's patients. I now proceed to adduce some further instances, in which it appears to me eminently probable that the principle above enunciated is involved. The remarkable effect of hæmorrhage into one hemisphere of the cerebellum in producing paralysis of the opposite side of the body, seems to be explicable on this view, which, indeed, has been already proposed by Mr. Mayo for this particular case. The pons varolii contains much grey matter, through which the tract of motor fibres passes; if "a depressing influence or shock," using Mayo's words, be transmitted along the transverse fibres, it may so affect the dynamic matter, that motor impulses can no longer be transmitted along the channels of voluntary motion. In this view, the pons varolii is regarded as a centre connected by commissural fibres with those above.

The production of rheumatic pains by cold, and their cure by outward applications, may be better explained on this view than on any other. The morbid influence, let us say in a case of stiff neck, strikes the afferent cutaneous nerves, and through them affects the spinal and sympathetic centres, producing in them some abiding alteration in their molecular constitution. This state is reflected outward on the vaso-motor nerves of the same side, occasioning their paralysis, and therewith inducing hyperæmia and disordered nutrition of the parts which they ordinarily influence, in fact a condition not remote from inflammation. At the same time, the motor nerves may be so stimulated, that tonic contraction of the muscles takes place. A stimulant and sedative liniment (hartshorn and laudanum) well rubbed on the skin, not unfrequently does away with the morbid state, by inducing healthy excitation of the afferent nerves, and so of the nervous centres.

To take another very humble instance: the great comfort of a "strengthening plaster" to aching loins or weak backs, is notorious; but what is its rationale? Surely this, that the surface is protected from all depressing influences, and, at the same time, mildly stimulated, and so the cutaneous nerves propagate to the centre more healthy impressions, which enable it to convey more vigorous impulses to the weak dorsal or lumbar muscles. I can testify, from personal experience, to the great advantage of chamois leather, worn over the præcordia during cold weather, in warding off a state of depression of the heart's action (otherwise healthy), which once issued in syncope. The beneficial effect produced was almost immediate. I suppose no one will imagine that the cold could directly affect the heart through the thoracic parietes; the results can only be explained on the view, that the inhibitory influence of cold on the cutaneous nerves had been propagated to the cardiac ganglia and nerves, enfeebling their action, and that on this morbid impression being removed, they resumed their healthy play.

Dr. Graves observes, towards the close of his *Lecture on Paraplegia*, "With respect to treatment, I may observe that I have never seen any benefit derived from applications to the spine" (blisters or issue). "I am in the habit of applying my local remedies to the legs and thighs, selecting those parts in which the greatest cutaneous sensibility exists. What I generally do is to keep up a succession of blisters along the inside of the legs, and over the anterior and inner parts of the thighs. The practice of medicine furnishes many proofs of the utility of stimulant applications to the nervous branches, in case of disease affecting the larger trunks. Thus, in sciatica, a blister applied over the ham or calf of the leg, where many of the ultimate ramifications of that nerve are superficial, will frequently produce a much more decided effect, than when applied over the origin of the nerve itself. Liniments of a stimulating kind, and blisters repeatedly applied, are the local means on which I chiefly rely in the treatment of this form of paraplegia." The practical experience of this eminent physician is evidently quite in accordance with the views we are considering. Stimulating application to the parts most endowed with sensibility, will convey powerful impressions to the spinal centre, by means of which, the previously existing morbid condition may be abolished.

That the neuralgic state is, in many cases, more or less of the nature of paralysis, is, I think, apparent from the very common coexistence of numbness with the pain; or, which is, perhaps, more frequent, the persistence of a state of anæsthesia in the intervals of paroxysms of pain; as well as from the circumstance, that neuralgia is aggravated by all causes of debility. It is well known that pain in a part may depend on some distant irritation, ceasing only when the latter is removed; *vide* two cases in Sir B. Brodie's work on *Local Nervous Affections*, pp. 12-13. Here the pain was evidently produced through the intermedium of the nervous centre. If now pain can be excited in this way, it is, at least, conceivable that it may be stilled in the same, by means of impressions of a different kind conveyed to the centre. With regard to the good effect of all external applications in neuralgia, it seems to me impossible to give any rational explanation except such as I have above indicated. It is inconceivable that they exert any notable influence, except on the cutaneous nerves, and if so, they must operate beneficially through the nervous centres. Indeed, if the pain is quite superficial, we may believe that a sedative application, say tincture of aconite, operates directly upon the disordered organs, and allays the irritation; but if the pain be deep-seated, as in sciatica, it is wholly impossible that an application to the cutaneous surface should directly affect the subjacent nerve. Moreover, in neuralgia it seems extremely difficult to have any absolute certainty as to the real seat of the pain-causing action; one can-

not affirm that this may not be central, though it may appear to exist at some point of the peripheral course. Even if the pain-causing action be not centrally seated, it may be modified and stopped by impressions, altering the molecular condition of the centre. Of course, if there is any local cause of irritation, or neuritis, affecting the trunk of a nerve, the case is different. The experience of Duchenne, as quoted by Trousseau, in his work *On Therapeutics*, vol. i, p. 788, strongly corroborates the above remarks. He says, "there exists no special region of the cutaneous envelope, whose excitation enjoys the exclusive privilege of modifying sciatic neuralgia." He prefers, however, to operate "loco dolenti." "It is very necessary to dry the skin previously with an absorbing powder; for if the faradic excitation penetrates deeply, the neuralgia is aggravated instead of being calmed. How many facts I could bring forward in support of this opinion so opposed to M. Magendie's, who recommends, on the contrary, to conduct the electric excitant almost into the diseased nerve by the aid of electro-puncture." At p. 787 he states it as a capital fact, made out during a long discussion respecting the treatment of sciatica by cauterisation of the helix of the ear, that "a sharp and sudden pain produced at any part of the cutaneous surface, possesses the property of modifying effectually certain sciatic neuralgias." The columna nasi is a part of extreme sensibility, and electric excitation of this spot has caused the disappearance of sciatic neuralgia, after faradisation of the ear, had been tried in vain. It may be observed, that if a neuralgia be at all of old standing, it is much more difficult to remove it by surface applications. The morbid action in the centre becomes too firmly established to be easily superseded by the impressions subsequently excited. Although in the foregoing observations I have recognised the usually accepted law of eccentric nervous action, I must add that I do not at all see how many phenomena of neuralgic suffering can be explained in accordance with it. The pain is often so specially located in the track of the nerve, seems to run up and down along it so distinctly, that it is almost impossible to avoid speaking of it in such a way as to imply, that nerve fibres may have sensations referred to other points of their course besides the peripheral extremities.

The development of catarrh from the action of cold, appears to me most reasonably to be explained according to the theory of inhibition. The morbid impression made on some part of the cutaneous surface, is transmitted to the nervous centres, and there produces changes in the dynamic matter, which conditionate paralysis or paresis of the vaso-motor nerves of some mucous surface. This state, under predisposing circumstances, readily passes into actual inflammation. That the above view is not far from the truth, seems certainly probable, as well from the general nervous depression, pain in the limbs, and shivering felt when a person has taken cold; as from the instinctive practice adopted by all nations of protecting those regions which are liable to be affected by a chill. One can hardly help entertaining the idea, that certain parts of the cutaneous surface are more especially correlated with certain internal organs. In England, where bronchial catarrh is common, we are partial to chest protectors, bosom friends, etc. In India, where the abdominal viscera are especially prone to suffer, the khummerbund is indispensable. Not only catarrhal inflammation, but also parenchymatous, *e.g.*, hepatitis, may be, and often is, produced by exposure of the surface to cold. Here I think we can be sure that the morbid action must be set up through the intermedium of the nervous system. The heat of the climate increases the activity of the liver, and renders it predisposed to disorder. A "coup" of cold, a chill, strikes the surface of the abdomen, the cutaneous nerves transmit the morbid impression to the spinal cord, whence it travels to the solar plexus, and so to the hepatic, paralysing the nerves in the way of inhibition. This produces a state of active hyperæmia, which readily passes into inflammation. This view of the production of inflammation in one large class of cases, is identical with Henle's neuropathological theory, at least, in some chief particulars, but it rests on a basis which that theory wanted. This basis is supplied on the one hand by the demonstrated effects of vaso-motor nerve paralysis, which actually produces severe inflammation in states of debility; and on the other, by the facts on which the conception of inhibitory action is founded. It appears, indeed, that the impression of cold upon afferent nerves, may give rise to two forms of paralysis; viz., one of the musculo-motor nerves, which is comparatively rare; the other, of the vaso-motor nerves, which is common. It is exceedingly clear, from the frequency of inflammatory disease in the tropical, as compared with the arctic regions, that the mere action of cold on the surface is, by no means, the most important cause in producing the result. The preexisting state of the nerves, nervous centres, and tissues, their invisible vital qualities, are the truly efficient causes; without their action the operation of cold would be ineffectual.

The foregoing views respecting the production of inflammation, are strongly corroborated by the phenomena observed in cases of burns, especially as they have been elucidated by the experiments of Brown-Séquard. He quotes Mr. Long and Mr. Erichsen, to show the frequency of internal inflammations in such accidents. According to the latter, "the cerebral organs were diseased in thirty-three out of thirty-seven cases, the thoracic viscera in thirty out of forty, the abdominal viscera in thirty-one out of forty-two. Mr. Long concludes from his experience: "1st. That in almost every burn, indeed, in every burn, lesions of one or more of the viscera contained in the three great cavities exist, being, according to their frequency, as follows: abdomen, chest, head. 2nd. (Omitted.) 3rd. That the seat of internal inflammation corresponds sufficiently often with the external position of the burn; but that in a precisely equal number of instances, no such correspondence can be traced." Brown-Séquard himself (*vide Lecture* x, p. 546, *Lancet*,) refers to his own experiments as proving, that division of the spinal cord about the third lumbar vertebra, prevents the development of inflammations in the abdomen, such as are found when an animal, not so treated, is killed two days after one of the legs has been scalded with boiling water. Division of the sciatic and crural nerves as high up as possible, had the same effect. He therefore believes "that it is, in a great measure, by a reflex action on the spinal cord, that burns produce their deadly influence on the viscera." It is quite clear that the impressions propagated to the spinal cord in such cases must be of a depressing kind, and that we cannot consider the afferent nerves as acting energetically.

The syncope which is produced by an over dose of digitalis, and the slowing of the heart's action from smaller quantities, have not hitherto been satisfactorily reconciled with its stimulant and tonic action upon the weak and flabby heart, its contracting influence upon the uterine fibre in menorrhagia, and its diuretic effect. The popular idea of digitalis is, that it reduces vascular action, which must mean, I suppose, that it quiets the excited movement of the heart. But it also has, as just shown, properties of a very different kind. Now, with our knowledge of the effect of excessive and abnormal stimulus on nerves, we can reconcile this discrepancy. Digitalis, when it lowers and arrests the heart's action, does so by overstimulus; its primary action is always stimulant, as on the uterus and kidneys.

Syncope senilis, from irritation of the stomach by masses of undigested food, of which two instances are recorded by Mr. Higginbottom in the *Lancet*, 1856, p. 453, seems to be a good example of inhibitory influence. The usual effect would be vomiting, *i.e.*, a reflex contraction of muscles, but owing to debility, the impressions conveyed to the centres, produce such a state there, that the action of the heart is paralysed, of course, through the medium of its nerves. It is particularly interesting to note, that the administration of a more powerful and suitable stimulant; viz., ipecacuanha, produced vomiting, which the morbid material did not.

It is clear that this whole subject is of a highly practical nature, linking itself intimately with the etiology and treatment of disease. I cannot but return my sincere thanks to Mr. Lister, for having drawn the attention of observers to this novel and interesting conception.

Testimonial to R. S. Fowler, Esq. The presentation of a testimonial from the working men of Bath to Mr. R. S. Fowler, Physician's Assistant at the United Hospital, took place on the evening of January 18th, at the Guildhall of the above-named city. It was intended as a recognition of the eminent services rendered by Mr. Fowler during the prevalence of small-pox in that city. The testimonial consisted of a clock, silver inkstand, purse of twenty sovereigns, and a brass-bound oak chest. The clock and inkstand bore the following inscription: "This clock, with a silver inkstand and purse of gold, was presented at a public meeting at the Guildhall, by the working classes of the city of Bath, to Richard Sumner Fowler, Esq., M.R.C.S., of the United Hospital, for his skill and kind attention to the sick generally, and particularly during the epidemic of small-pox in the year 1858. January 18, 1859." The chest contained a statement of the origin of the testimonial, as well as other particulars respecting it, beautifully inscribed on vellum.

British Medical Journal.

SATURDAY, FEBRUARY 5th, 1859.

CHARGES FOR MEDICINE.

The letter of Mr. Garraway, published in this day's Journal, opens up a question which not a little concerns both the fair fame of the members of the medical profession, and the advancement of their art and science. The question is this—Ought the system which has been ordinarily followed by general practitioners, of making distinct charges for medicines supplied to their patients, to be continued, or not? We answer at once—Decidedly not. But it is generally expected of those who attack a time-honoured custom, that they shall, if possible, show its disadvantages—the positive, if such exist, but at least the comparative. In regard to the subject now under consideration, we have no hesitation in broadly stating that the practice which we condemn is derogatory to the honour of the medical profession, injurious to the public, and retardative of the progress of medical knowledge.

Here is an instance of what must frequently occur in our country towns. The Æsculapius of the place is summoned to a patient ill with fever. He attends him assiduously for many days, and turns to the best account the knowledge he has gained by much labour of mind, so as to check any manifestation of an unfavourable course, and to restore the patient to health. When the disease is cured, what is his remuneration? If the patient live at a little distance, he may secure a trifling sum for each visit; but if the case occur in his immediate vicinity—within easy walking distance, we will say—the fee for the journey is ridiculously small, if not, as we have known it to be, absolutely *nil*. The only resource of the practitioner, then, is to charge for the medicines he has supplied—to recover by the sale of drugs that remuneration to which the care he has bestowed, and the learning and skill which he has brought to bear, justly entitle him. It cannot then be wondered at, that the supply to his patient of a sufficiently remunerative quantity of drugs—the mere instruments of his profession—should be a primary consideration. We do not for a moment suppose that he throws in mixtures, pills, and powders for the mere sake of gain; what is here asserted is, that the trading in medicine is forced on him by the existing necessities of the case. But in whatever light we view it, the practice is repugnant to an honourable mind; for it amounts to nothing more nor less than making the medical practitioner a trader in drugs, while the genuine exercise of his professional skill is allowed to pass as a thing of little or no value.

And the practice is no less injurious to the public. The inevitable dosing with drugs which it entails may be supposed to emanate from the mistaken idea of the people, that unless the doctor physics them well when they are sick, he is worth nothing. But it also reacts in the same direction, and keeps up an unbounded faith in the potency of medicines, to the neglect of those equally, if not more, important auxiliaries in medical treatment—the simple rules of hygiene of the sick. And for medicine as a science, who can fail to perceive the impediments thus thrown in its way? It is impossible, we hold, in many of our well-dosed cases, to distinguish between the results of the medicine and those of disease. Nature inevitably comes to be regarded as of minor importance—the battle to be fought is not between nature and disease, with physic as an auxiliary, but between disease and physic, with nature as a neutral, receiving all the stray shots on both sides.

We believe in the value of medicines rightly applied: and we do not intend to say that the misapplication of drugs, which we have condemned, implies any fault on the part of medical men beyond that which is forced on them. What we have endeavoured to point out is, that the excessive administration of drugs is an evil; and that the root—or, at any rate, a strong root—of this evil, lies in the ordinary practice by which the practitioner is obliged to seek remuneration for his skill through his medicines.

"But", says a general practitioner, "the public will not pay me for my time and talent and skill; and, therefore, I must charge them for drugs. If I give them merely as much medicine as is really necessary, and send in a bill for medicine and attendance, at the rate of a fixed sum for each visit, I am liable to be denounced as little better than a downright rogue, and I lose my patients. They will neither hear nor understand that the charge is for my attendance and advice."

This argument is valid to a certain extent, but to a certain extent only. The reform we advocate will not be effected suddenly; but it must be unswervingly followed up until it is completed. For years past, a number of our general practitioners, disgusted with the charging for drugs system, have followed the plan of charging for medicine and attendance; but even they, so far as they have come within our notice, have been obliged to shape their course in each case according to circumstances. It is not to be expected that the reform will be perfect until the people shall have learned to rate the labour of the medical man at its proper worth; to perceive that his duty lies not in dosing them with pills, powders, and potions, but in judiciously aiding Nature in her resistance to disease, and guiding and directing the patients and those about them in the course in which recovery is likely to be soonest reached.

We wish the public press would take up the matter *con amore*, and do its best to aid the medical profession in freeing itself from the trammels of a disgraceful trading system. Already some of the papers have spoken out; and among them the *Morning Post*, in an article of January 7, advocates the plan of charging, not for medicine, but for attendance.

"The old physicians and surgeons are both represented in the one new order which has arisen obedient to the requirements of the public—the general practitioners, who look upon the human body and its diseases as a unity in study and practice. We think that these gentlemen, being now well established in public favour, ought to be able to state the fees they expect to receive, apart from drugs, with the sale of which many of them have neither direct nor indirect concern. The naming of five or ten shillings as the fee of the general practitioner would no more fix its limit than the recognition of the guinea as the fee of the physician precluded an exercise of generosity on either side. It would only be an approximative guide in some cases; but in the majority it would soon become a rule highly conducive to comfort, convenience, and equity. Protection against unpleasant disputes would not always be prevented by an appeal to an authorised scale of charges, but it would afford a useful help in the settlement of claims."

The College of Physicians proposes to take the general

practitioner under its wing. Will it not be rather an anomaly if the licentiates of the Pall Mall College retain the stamp of the apothecary, and make profit of their drugs? Of course, in many instances, the general practitioner must inevitably be his own dispenser of medicines. This admission, however, in no way affects our position—which, we repeat, is, that the present system of seeking remuneration for professional skill through the sale of medicines, is derogatory to the honour of the medical profession, injurious to the public, and opposed to the advancement of medical knowledge. Having once called the attention of our associates to this important subject, we leave the matter in their hands.

THE WEEK.

We have much pleasure in being able to announce, that a recent meeting of the members of the Liverpool Medical Institution, at which one hundred and sixteen were present, carried by a large majority the Resolution for the exclusion of homœopaths, which was unfortunately lost at the meeting in November last. Next week, we shall give a full report of the proceedings. In the mean time, we congratulate the members of the Liverpool Medical Institution on having determined that their society shall not be encumbered by the presence of men with whom they can have nothing professional in common.

A short course of lectures on the History of Medicine has been commenced by Dr. Alexander Henry, at the Grosvenor Place School of Medicine. Many of our associates will doubtless remember that, several years ago, the teaching of the past records of medical science was advocated in the pages of this Journal; and they will doubtless be glad to hear that a commencement has been made to introduce this important subject into a London school. Two of the lectures, which are given on Wednesday evenings, have been delivered. In the first, the Lecturer drew attention to the importance of the history of medicine to the student and the practitioner; and several of the valuable lessons to be derived therefrom were pointed out. In the second lecture, the principal subjects examined were, the probable origin of medicine; the practice of the ancient Egyptian priests; the notices of medical art in the mythology and ancient poetry of Greece; the myth of Asclepios or Æsculapius; and the practice followed in the Æsculapian temples. In subsequent lectures, the examination of the state of medicine among the Greeks will be continued.

The following letter, in reference to the Representation of the Medical Profession in Parliament, has been addressed to the Prime Minister by the President and Secretary of the Irish Medical Association.

"*To the Right Hon. the Earl of Derby, etc.*

"My Lord,—The expectation generally entertained that the electoral powers of the educated classes will be extended by a measure of parliamentary reform during the next Session, encourages the Medical Association of Ireland, respectfully to solicit your Lordship's attention to the strong claims of the medical profession, not only to exercise the electoral franchise, but also to be specially represented in Parliament, by empowering the Colleges of Physicians and Surgeons of the United Kingdom to return members to the House of Commons.

"The Register of Medical and Surgical Practitioners, under the authority of the Medical Act passed last Session, would supply legally registered constituencies, which, from their numbers, education, and special information on subjects intimately connected with the welfare of the public generally, and more peculiarly with the social and sanitary condition and wants of the industrial classes, might be properly and safely entrusted with the duty of selecting representatives.

"It is now universally acknowledged that the application of medical science to the preservation of the health of the community, by the prevention of disease, and the removal or diminution of causes tending to shorten the average duration of human life, is a matter of primary importance, which urgently demands the serious attention of the legislature. Possibly one reason why this obvious truth was not long since recognised is, that public men apprehended embarrassment from redundant more than from deficient population.

"The theory of the relation of the rate of the increase of population to that of the increase of food, adopted by an influential school of political economists, could scarcely have failed to divert attention from the importance of sanitary arrangements, calculated to increase the rate of population by improving the public health.

"But the drain for the last ten years famine, disease, emigration, and war, together with the increase of employment from the extention of agricultural and manufacturing industry, suggests apprehensions of a directly opposite tendency—deficiency of population—reminding us that man is essential to his fellow-man, that the welfare of every class of society is inseparably linked together, and that numbers constitute an essential element of national wealth, prosperity, and security. Hence increased attention has been given to the agencies that light up epidemic disease, and to the numerous influences which prejudice the public health, and too often propagate their baleful influence from one generation to another.

"But although the importance of judicious sanitary legislation has been for some time past generally acknowledged, little progress has hitherto been made in applying medical science to the preservation of the public health, nor can it be reasonably expected, that efficient measures for doing so will be adopted, until parliament is assisted in its deliberations by men fitted by education and experience to discuss questions of medical policy. For although many members of the legislature of high intellectual powers are deeply interested in such questions, yet from the want of technical and scientific knowledge, they are unable to deal with them efficiently.

"We would, therefore, most respectfully submit to your Lordship, in behalf of the Medical Association of Ireland, the great advantage that would result to the public by having members returned to parliament by the medical profession, to assist at the discussion of sanitary measures, which so gravely concern the public welfare.

"We have the honour to be your Lordship's most obedient and very humble servants,

"T. L. Mackesy, M.D., F.R.C.S.I.,
"*President of the Medical Association of Ireland.*
"E. J. Quinan, M.D., F.R.C.S.I.,
"*Hon. Secretary of Medical Association of Ireland.*
"Royal College of Surgeons, January 18th, 1859."

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Feb. 10th, 6 P.M.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

Social and scientific meetings of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on the undermentioned days:—

Friday, March 25th, 1859, at 3.30, at the Town Hall, Gravesend.

Friday, April 29th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

METROPOLITAN COUNTIES BRANCH: MEETING OF COUNCIL.

THE LATE PRESIDENT, G. J. SQUIBB, ESQ.

By request of Dr. Ward, one of the Secretaries of the Branch, we publish the following resolutions, unanimously passed at a meeting of the Council of the Branch, held on Tuesday last, at the house of the President-elect, Dr. Murphy, who took the chair.

"1. That the Council of the Metropolitan Counties Branch, deeply regretting the loss that the Branch and the profession have sustained by the lamented death of the President, G. J. Squibb, Esq., embrace the earliest opportunity to express their sentiments of the courteous and impartial manner in which he discharged the duties of his office, and, by his generous hospitality at the various meetings held at his own house, endeavoured to carry out one great object of the Association—the promotion of social intercourse and kindly feelings among its members.

"2. That the President-elect and Secretaries be requested to send a copy of this resolution to Mrs. Squibb, with the expression of the sympathy of the Council in her bereavement; and also to the Journal of the Association, for insertion."

T. Ogier Ward, *Hon. Sec.*

I cannot but add, that Mr. Squibb on all occasions took a great interest in the welfare of the Branch and the Association at large, which he considered the best bond of union for our divided profession.

T. O. W.

THE MEDICAL COUNCIL.

MEETING OF TUESDAY, JANUARY 25th, 1859.

32, Soho Square, London, W.

Present:—Sir Benjamin C. Brodie, Bart., *President*, in the Chair; Dr. Watson, Dr. Alexander Wood, Sir Chas. Hastings, Dr. Bond, Dr. Andrew Wood, Dr. Leet, Dr. Embleton, Mr. Green, Dr. Williams, Dr. Smith, Dr. Storrar, Mr. Lawrence, Mr. Syme, and Mr. Nussey; Dr. Francis Hawkins, *Registrar and Secretary.*

The following resolution, passed by the Executive Committee, on the 19th January, 1859, in consequence of which this meeting of the General Council had been summoned, was read:—

"That the President be requested to summon a meeting of the General Council, to consider in what manner Registration should be effected, under the 11th section of Schedule (A), and the 46th Clause of the Act; and for any other business which may be deemed urgent."

The following resolutions of the Irish Branch Council were also read:—

"Dublin, 22nd January, 1859.

"Resolved—

"1. That this Council approves of the course taken by the President, in summoning an early meeting of the General Medical Council, for the purpose of considering the difficulties which have arisen on the subject of Registration; and that as a full meeting of the General Council cannot, under existing circumstances, be expected, it is the opinion of this Council that the General Council should limit its attention to the interpretation of the 11th section of Schedule (A), and the 46th Clause of the Medical Act.

"2. That the Irish Branch Council are of opinion that on any question of Registration, not already provided for by the resolutions of the General Council, which may arise in the interval between this time and the meeting of the General Council in August, the powers of the General Council should be delegated to the respective Branch Councils of that part of the United Kingdom in which such question may arise."

1. It was moved by Dr. Storrar, seconded by Mr. Syme, and agreed to—

"That in every instance in which application shall be made to register a Foreign or Colonial Degree, the Registrar of the General Council shall inquire, by letter addressed to the University or College which is represented to have conferred it, whether the name of the person making the application be really on its list, and if the degree or diploma have been conferred after examination by, and at the seat of, the University or College, and the date thereof. Also, that the Registrar, when communicating with Foreign or Colonial Universities and Colleges, shall endeavour to ascertain, in the case of each University or College, what examinations and conditions have been held by it to be indispensable for the admission of persons to degrees or diplomas in medicine; and how far such examinations or conditions have been at any time, or under any circumstances, dispensed with or modified in favour of persons who have not studied in the University or College in question."

2. Moved by Dr. Alexander Wood, seconded by Sir Chas. Hastings, and agreed to—

"That the General Registrar be instructed to forward to each Branch Registrar the returns received from the Foreign and Colonial Universities and Colleges, in answer to the circulars regarding applicants residing in his district; and that the Branch Registrars, under direction of the Branch Councils, be instructed to enter on the register the names of those Foreign and Colonial Graduates who appear from the returns to have taken their degree after regular examination."

3. Moved by Dr. Williams, seconded by Dr. Embleton, and agreed to—

"That the Branch Councils of England, Scotland, and Ireland, respectively, be empowered, under Section 46 of the Medical Act, to direct the registration, under Section 46 of the Act, of any persons who have held appointments as surgeons or assistant-surgeons in the army, navy, or militia, or in the service of the East India Company, or who were acting as surgeons in the public service, or in the service of any charitable institution, on or previous to the 1st of October, 1858, after the production of evidence satisfactory to the Branch Council to which such applications may be made, that there is sufficient ground for directing such Registration to be made."

4. Moved by Dr. Andrew Wood, seconded by Dr. Bond, and agreed to—

"That in regard to those persons who have applied for Registration, with no other claim than a Foreign Degree, obtained without examination, the Council delay consideration of their case till a future meeting of the Medical Council."

5. Moved by Dr. Alexander Wood, and seconded by Mr. Green—

"That any medical practitioner who is entitled to be entered on the register, by virtue of his connection with any of the Bodies comprehended in Schedule (A), who holds besides a Foreign Diploma, granted before October 1st, 1858, shall be entitled to have these Foreign Diplomas entered on the register."

Amendment moved by Dr. Smith, and seconded by Dr. Andrew Wood—

"That the consideration of Dr. Alexander Wood's motion be postponed until a future meeting of the General Council."

The amendment was carried.

BRANCH COUNCIL FOR IRELAND.

Monday, January 19th, 1859.

Present:—Dr. Apjohn, in the Chair; Drs. Smith, Leet, Williams, Corrigan, and Stokes; Dr. Maunsell, *Registrar.*

The minutes of the last meeting were approved and signed.

Letters of guarantee from Judge Keogh, on behalf of Mr. Thomas Roney, read and accepted.

Clerk's salary for one month to this date, amount £6:13:4, ordered to be paid, and cheque drawn.

Memorial from the Governors of the Lying-in Hospital, praying that the General Council may be pleased to make a special order that the Certificate of that Hospital may entitle the persons to whom the same has been duly granted previous to the passing of the Medical Act, to be registered as duly qualified in Midwifery.

It was then resolved—

"That as no communication has been received from the Executive Committee relative to the resolution adopted by this Council on the 12th of January, in reference to the Registration of Poor-Law Medical Officers, and others, not duly qualified under Schedule (A) of the Medical Act, the further consideration of the case of those persons be postponed."

The Council then adjourned.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 11th, 1858.

Sir Charles Locock, Bart., M.D., President, in the Chair.

ENCEPHALOID CANCER AFFECTING A TESTICLE WHICH HAD BEEN RETAINED WITHIN THE ABDOMEN.

BY G. JOHNSON, M.D., F.R.C.P.

The subject of this history, C.D., aged 27, was a well-developed, muscular man, of active habits, residing at Cambridge as a private tutor. The disease which ultimately caused death appears to have commenced about the month of September 1857. At that time, while he was out shooting, an uneasiness low down on the right side of the belly, which had been felt for a short time before, grew into such intolerable agony that he had "to knock up" for two hours. The pain then went off, and he finished the day's sport. From that time the pain was more or less constant and severe, and on several occasions greatly aggravated by active exercise. Dr. Johnson was first consulted by letter in April 1858. The description of the pain, and its situation in the course of the right ureter, suggested the notion that a calculus might be impacted in the ureter. Some questions relating to the effect of the pain upon the testicle elicited the fact that the right testicle had not descended from the abdomen. A careful examination on the 17th of April failed to discover any tumour in the right inguinal or iliac region. The patient's general health and nutrition were at this time but little affected. The urine was of high density, and deposited lithates and oxalates, but contained no other abnormal products. The pain continued, and the patient began to lose flesh and strength. It now occurred to Dr. Johnson, as a probable explanation of the symptoms, that the retained right testicle had become the seat of malignant disease. The patient's mother had died of cancer of the stomach. On June 12th, there was a consultation with Dr. Bright. At that time there was decided evidence of a tumour or deposit in the abdomen, above Poupart's ligament, on the right side. The tumour rapidly increased, until it extended much beyond the median line of the abdomen, above the umbilicus, and even to the epigastrium. The patient meanwhile became much emaciated, and died exhausted on July 7th. On *post mortem* examination, the right testicle, situated in the abdomen, was found to be the seat of medullary disease, forming a tumour weighing sixteen pounds, even after the escape of about four pints of grumous fluid from some large cysts which had become developed in it. The lymphatic glands in the abdomen were free from disease.

Mr. Curling said that, in ordinary cases of medullary disease of the testicle, there was no pain; and he could not account for its presence in Dr. Johnson's case. When the testicle was situated in the inguinal canal, or outside the abdomen, pain might ensue from pressure upon the nerves from the surrounding tendinous structures. As a case of carcinomatous disease of the testicle within the abdomen, Dr. Johnson's case, he believed, was unique.

Dr. Johnson had, on the first occasion of his seeing the patient, instituted a very careful examination of the abdomen, but could detect no trace whatever of a tumour. There was no sign of it in the inguinal canal. Afterwards, in the month of May, the tumour was clearly to be detected above Poupart's ligament. The pain was very severe in the early stages of the disease, but got comparatively slight as the complaint progressed. He explained this by considering the severe pain to be dependent on the pressure of the diseased mass on the external unyielding tunics of the testicle; when the tunics gave way, the pain was less. There was no enlargement of the glands of the groin or lumbar region.

Mr. Partridge detailed a case of medullary disease of the testicle, which was preceded by symptoms of obstruction of the circulation in the inguinal or femoral regions, evidencing itself by œdema in the legs, occurring first in one and then in the other.

Mr. Skey thought that in the present state of our knowledge we could offer no explanation of the cause of the severe pain which accompanied the disease in Dr. Johnson's case. We knew, however, that in some persons a form of disease was accompanied by pain, which in other persons was absent. In cases where the testicle was *in situ*, there was usually absence of pain in medullary disease. The pain in Dr. Johnson's case was not continuous, such as would arise from the pressure of fibrous tissues, but was of a spasmodic kind, with intervals of complete relief. He had invariably found the disease on the right side, and in cases in which the testicle had been detained in the inguinal canal it was generally on the right side also. The worst two cases of orchitis which he had ever seen, resulted from gonorrhœa in patients in whom the testicle was in the inguinal canal, the pain no doubt being aggravated by the pressure of the surrounding fibrous tissues on the swelling.

Mr. Coulson had recently under his care, at St. Mary's Hospital, a case of malignant disease of the testicle in an infant, in which the glands of the groin were considerably enlarged. As far as could be judged, this patient experienced little or no pain. Several cases of malignant disease of the testicle had come under his observation, and most of them were unattended with pain. Allusion had been made to the distress which the patient suffered in his mind from the non-descent of one of the testicles; and he thought that the minds of the public should be disabused on this point, for not only was the non-descent of one testicle of little importance, but even the non-descent of both testicles was no impediment to marriage. He had been consulted in a case in which neither testicle had descended into the scrotum; one was in the inguinal canal, and the other in the abdomen. This gentleman married, and was able to perform his marital duties.

Mr. Holmes Coote thought that we should be cautious in asserting that the testicle, when retained in the inguinal canal or in the abdomen, was perfect in function. In a case of hernia in which he had operated, and in which the testicle had not properly descended, he had found that body small and very imperfectly developed. When the testicle was retained in the abdomen, it resulted, as a rule, from arrest of development in the person, an arrest which extended to the whole of the same side of the body.

Mr. Arnott had seen no case in which both testicles were retained within the abdomen, but many in which one testicle was retained. In one of these instances, the man was married, and the father of twelve children. He thought that in Dr. Taylor's work on *Jurisprudence*, two cases were related of men in whom both testicles were retained, and both were the fathers of children.

Mr. Curling remarked that one of these cases was quoted from his book, and was that of a publican, who seduced the barmaid, and made love to the landlady. There was no want of sexual power in this instance. There could be no doubt that the absence of one testicle was no impediment to marriage or the procreative power; but it had been affirmed by M. Godard, that, when both testicles were absent from the scrotum, there might be the power of sexual connexion, but not of procreation, as there were no spermatozoa in the seminal fluid. He (Mr. Curling) had not investigated the subject, but it was one of interest.

Mr. Hulke mentioned the case of the father of a large family, one of whose testicles was retained in the abdomen. In this case the retained testicle was found to have no epididymis and no vas deferens.

CASES OF RE-FRACTURE OF BONE, WITH OBSERVATIONS.

BY F. C. SKEY, F.R.S.

The author brought before the Society the subject of re-fracture of bone, as a curative process. He referred the necessity for re-fracture to the occasional occurrence of cases of remarkable difficulty in the treatment, arising from complications of obliquity of fracture of the shaft of a long bone, coupled with large muscular power, and unusual irritability of the nervous system. To such inherent difficulties were added a peculiar irritability of the integuments, and moral wilfulness of disposition. Such were the causes of defective union of long bones, however assiduous might be the surgeon in attendance. They were not, however, selected by the author with a view to re-fracture, but were rather referred to as beacons to point to their rejection, such cases only being appropriate to the proposed treatment as were founded on causes incidental to the first fracture, but avoidable on the second. The operation of re-fracture was deemed warrantable in cases of bones of the lower extremity so united as to abridge the length of the affected limb to the extent of considerably impairing the locomotive powers; and, in the case of the upper extremity, of restricting the movements of the forearm in rotation, or the fingers in flexion or extension; or, in either case, of local pain, caused by the entanglement of muscular fibre or nerve in the

uniting medium of the fractured bones. Re-fracture of bones, contrary to the authority of M. Dupuytren, might be effected without difficulty or danger, and at a term considerably beyond that prescribed as the ultimate limit at which re-fracture of bones is justifiable. This period was fixed by M. Dupuytren at sixty days. The author believed bones which had united to any length by lateral apposition of the entire diameter of the shaft, and in which the spaces formed by the contact of the two cylinders were filled with fibro-osseous matter possessing firmness sufficient to support the superincumbent weight of the body, were for a lengthened subsequent period susceptible of disintegration by a judiciously-applied force, to the advantage of their replacement to their natural relations prior to fracture, and without injury to the soft structures around them. The warrant for the appeal to the apparently violent proceeding of re-fracture was founded on (1) its practicability at a term of many weeks after the limb had been restored to exercise; (2) its safety as an operative proceeding; and (3) its indispensableness to the perfect utility of the limb involved. 1. As regarded the practicability: if the uniting material of bone were examined at the term of four or five months, it would be found to be composed of fibrous tissue, in which the deposit of bone was comparatively slight; while the perfect process of union was greatly protracted in cases of imperfect adaptation of surfaces, and we could not calculate on any exact rate of progress towards recovery in cases presenting various and dissimilar conditions. In the upright position, the resistance was made by the whole length of the uniting medium. By bending the limb at the line of union, we had the resistance only of the transverse diameter. The practicability of re-fracture of a bone in any given case could only be brought to the test of experiment. It was obtainable on different conditions in different cases, depending on age, on sex, on the extent of surface involved, on the duration of the healing process, and, finally, on the tact, as well as the force of hand, employed in the operation; but that on ordinary conditions it might be effected many weeks or even months after the restoration of the limb to careful exercise, there appeared no good reason to doubt. 2. With respect to safety, the reasonable probability was considered to be that the bone would break at the site of the original fracture, and at no other part; and that the fracture might be effected without injury to the soft parts around. The author asserted the impossibility of breaking the dried radius by a powerful man; and, *à fortiori*, there could be no fear of injury done to any other cylindrical bone containing a larger quantity of osseous matter. A case was quoted in which the attempt was made to re-fracture a femur united for nine months, and no injury was sustained by the soft structures of the limb. 3. The question of interference could only be determined by the requirements of any given example. It was a question rather for the patient than for the surgeon. If fracture of the upper arm or forearm were followed by impaired utility of a character not likely to be benefited by time, —supposing the union of the two bones of the forearm to be lateral, and not terminal,—no evil could result from the attempt to re-fracture at any period, although the probability of success would necessarily diminish as time advanced. In the case of the femur united by lateral contact, the necessity of an operation would be gauged by the imperfection of the gait in walking. The author had re-fractured the thigh-bone of a young healthy man at the period of seventy-seven days from the date of the original fracture; and he believed the bone to have been susceptible of separation at a yet later period. The act of disuniting a bone was effected by slow laceration, rather than by a snap or fracture; it was not an immediate, but a gradual process, requiring persistent rather than sudden force —the act of tearing rather than breaking. For the necessary elongation of the limb when the bone was disunited, the careful application of pulley force was recommended. The author related the particulars of six cases: two of re-fracture of the thigh, at the respective periods of seventy-seven and seventy-five days from the date of the original fracture; two of re-fracture of both bones of the leg, at the respective dates of the seventy-seventh and forty-fifth days, the latter operation being required in the case of a child six years of age; and one of re-fracture of both bones of the forearm, at the expiration of one hundred and twenty days from the date of the original fracture. The sixth case was that of a fractured thigh, in which the attempt to re-fracture the bone at the end of nine months was unsuccessful.

Mr. Charles Hawkins mentioned a case of fracture of the thigh which he had not seen until seven weeks after the accident, and when then examined it was difficult to detect any sign of fracture having existed; it was again put up in starch bandages, but the patient again met with an accident, and the bone was again fractured at the original seat of injury. This proved beyond question that fracture had existed, of which he himself had had no doubt, though some surgeons who saw the case had found difficulty in believing it. The parts had been so well adjusted that scarcely any callus had been thrown out, and hence the great difficulty of determining whether a fracture had really existed.

Mr. Coulson considered the cases related by Mr. Skey as very interesting, but they referred to re-fracture of the shafts of bone. Most surgeons must be aware that accidents frequently happened to boys at school, from climbing and falling on their hands and the inner parts of their elbows. He (Mr. Coulson) was consulted, a fortnight after the occurrence, in the case of a boy who had fractured the internal condyle of the humerus, in which the arm could neither be flexed nor extended. At the end of six weeks from the accident, the late Mr. Key saw the patient, and considered that the coronoid process of the ulna had got behind the internal condyle, thus impeding the proper use of the joint. Mr. Key re-fractured the part, and kept the arm strongly flexed for six weeks; at the end of which time the boy quite recovered the use of the joint. He remarked to Mr. Key, that neither Sir Astley Cooper nor Dupuytren had mentioned it. He replied that they had not; but he had had two cases under his care in which he had found it necessary to re-fracture the limb and place it in a proper position. He (Mr. Coulson) believed that had Mr. Key's life been spared he would have given the profession some observations on the cause of deformity in cases of accident at the elbow-joint. He had seen a great many cases of fracture of the inner condyle, and he thought they were almost always attended with deformity.

Mr. Spencer Wells did not believe that deformity requiring re-fracture would be often met with in cases where the immoveable apparatus was used instead of the old-fashioned splints. Even in the most unruly patients he thought the broken ends of bone might be kept at rest and in perfect apposition by the employment of the starch-bandage, or even better by the plaster-of-Paris bandage. There was great difficulty in detecting the point at which there had been fracture in cases where these bandages were well applied. He had seen a case of fracture of the ulna in a young lady last year, which was put up temporarily by Dr. Stewart, of Greenwich Hospital. Mr. Wells put it up a few days afterwards in the plaster of Paris bandage; and after six weeks it was quite impossible to detect the site of fracture. This case, like that narrated by Mr. Hawkins, confirmed the doctrine that if a fracture were well set, there might be so little callus formed, that it was ultimately impossible to determine by examination that any fracture had existed.

Mr. Arnott said that cases of badly united fractures would occur, in spite of all the skill and attention of the surgeon. He considered Mr. Skey's paper valuable as showing how long after the first injury re-fracture might be effected; that its seat was the same as that of the first fracture, and that no injury to the soft parts resulted from the means employed to divide the bone. It was important to have the apparatus necessary to place the bone in position, so as at once to reduce it to the same condition as when originally fractured.

Mr. Curling also spoke of the value of the paper. He related a case in which he applied a violence equal to re-fracture, to a bone united at an angle after having been broken; this was six or seven weeks afterwards. Sir William Blizard had forty years ago suggested re-fracture in the case of a sea-captain, whose thigh had been broken and very badly united. It must be remembered that the union of a broken bone was not always very firm, even when the patient could walk about, and that it was often re-fractured from small causes. As to the immoveable apparatus in fractures, it must be remembered that it was not applicable to all cases in the early stages; there might be swelling and other obstacles to its use. Even when applied it would not always prevent deformity. He mentioned an instance in point in which a lady from the country had consulted him with deformity of the thigh, occurring some weeks after a fracture, which had been treated with care and skill, and by the immoveable apparatus.

Mr. Holmes Coote said that the immoveable bandages were not applicable in all cases. When the bone was united at an angle, steady and persevering extension of the limb was more useful than re-fracture. When the bones had united with the divided ends overlapping each other, extension was not so applicable.

Editor's Letter Box.

THE PARASITIC (?) NATURE OF DIPHTHERIA.

Letter from Thomas Laycock, M.D.

Sir,—The Journal of this day contains a series of important points for investigation by the profession when turning their attention to the pathology of diphtheria, and the eighth runs thus: "Presence or absence of *fungus* in the membrane as shown by microscopic examination." Having been the first to call the attention of the profession to the hypothesis (for it pretends to be nothing more) that the exudation in that and other epidemic diseases is due to a parasitic fungus—a microscopic mould acting in or upon the tissues—and as hypotheses are the guides to investigation, I have watched with some interest the researches that have been made in this direction, and have observed a tendency to come to conclusions about the matter on data wholly insufficient. The excellent paper of Dr. Rogers, as reported in your Journal of to-day, and the interesting remarks made by Dr. Harley when that paper was discussed at the meeting of the Medical Society of London, contain illustrations of this tendency; I therefore transmit to you some remarks on this point. Dr. Rogers and Dr. Harley took similar objections to my views. 1. It is concluded by them that a fungus cannot be the cause of the disease or the exudation, because they have not found it in twelve cases they had examined microscopically. 2. That my views could only apply to *muguet*, which is wholly different from diphtheria, and therefore termed by the French writers, "*pseudo-diphthérite*." 3. That being a blood-disease (a probable theory enough), diphtheria cannot, *as such*, be due to the action of a parasitic organism on the blood and tissues.

These are the grounds of the principal objections which have been raised against the hypothesis, but I think it is not difficult to show that they are limited and inconclusive. I will take the third objection first, namely, that as a blood-disease, diphtheria cannot be due to the action of a microscopic mould or fungus. Comparative pathology teaches that this conclusion is, at least, doubtful. The muscardine (an epizootic disease of the silkworm) is due to a species of fungus like that which infests the potato, called, after its discoverer, the *Botrytis Bassiana*, and the sporules are described as being *reproduced in the blood* of the insect *when it becomes acid;* while the filaments and mycelium appear on the respiratory surfaces—that is, at the outlets of the tracheal tubes. (Compare the engraving of the blood-appearances in M. Ch. Robin's valuable *Histoire Naturelle des Végétaux Parasites*, etc.) Again, the fungus of the common house-fly, named *mycophyton Cohnii* by Lebert, after Dr. Cohn, its first investigator, is a mould, or oïdium found in the blood, abdomen, and sometimes in the intestines of the insect at the beginning of autumn. (Lebert, Virchow's *Archiv.*, etc., vol. xii, 1857.) Its first symptom observed is a milky appearance of the blood. It is found in the blood in all stages of development, from the simple minute spore, or cell, to the full-grown mycelium. It is found in like manner in the fluids of the intestines, and appears externally as a mould. Flies thus affected may be often seen sticking, with outstretched wings, to the window-panes, at the end of summer and beginning of autumn. These are by no means solitary instances of parasitic blood-disease. Indeed, hæmatophyta, as Lebert terms these microscopic blood-parasites, infest the blood of several classes of insects. References are given by Lebert (*loco citato*). The same fact also holds good as to the vegetable parasites. The common wheat bunt attacks the wheat, and makes it *look*, and be, sickly, when not the slightest trace of fungal threads can be found; yet it is quite certain that something capable of reproducing the species is present at the time, either in the intercellular passages, or protoplasm. This I state on the authority of Mr. Berkeley. (*Introduction to Cryptogamic Botany*, 1857, p. 65.) That eminent observer is also of opinion, that the Botrytis infestans is the fungus which is the cause of the potato disease. He says a crop may be seen to grow in a few hours from the cut surface of a diseased potato, even although the foliage exhibited no traces of the parasite; and that the walls of the cavities of the carpels of the tomatoes are often covered with the fungus, though there is no communication with the external air. These are facts which ought to make us hesitate, at least in coming to the conclusion, in the absence of all inquiry, that a parasitic disease cannot be a blood-disease in man. The same kind of objection applies to the conclusions drawn from microscopic investigations by Dr. Rogers and Dr. Harley. A hundred examples of wheat affected with the *tilletia caries* (the bunt) might be examined in succession, or even a thousand, and no fungus detected; but that would obviously be no proof that the diseased condition of the grain was not due to the parasite. It would simply signify that the diseased grain had not been examined at the proper stage of development of the fungus. And I think the fact stated by Dr. Harley and Dr. Rogers, as to one of the twelve cases they examined, that the *oïdium albicans*, was developed twenty-four hours after no trace of it could be found, is significant of what may be, and I think is, the rule in the living body—namely, that certain conditions are necessary as to development, food, temperature, and habitat, for the complete evolution of these organisms. There is no doubt that an acid condition *accompanies* the production and growth of the *oïdium* in muguet, and of vegetable parasites on the skin in skin-diseases; but it is not so clear that the acid is the *cause* thereof. On the contrary, we know that the production of acid is itself due to fungi, as is the acetous fermentation. Dr. Lowe, of King's Lynn, differs from Gubler and others, as to this acid theory, and I would particularly call Dr. Harley's attention to the account of Dr. Lowe's interesting experimental researches on these parasitic fungi, published last year in the *Transactions of the Botanical Society of Edinburgh*. The title of Dr. Lowe's paper is significant of the caution with which microscopic researches should be made. It runs thus: "On the Identity of *Achorion Schönleinii* and other Parasites with *Aspergillus Glaucus*." Dr. Lowe believes he "raised" *aspergillus glaucus* from the parasitic fungus (the achorion) of a case of porrigo lupinosa treated in the Royal Infirmary here, and he got good yeast (*torula cerevisiæ*) from both the *aspergillus* and *penecilium*, which might, therefore, be got from the favus-fungus. Dr. Lowe infers, in fact, from his experiments, that all the fungi which produce skin diseases are referrible to these two genera which produce yeast; and conversely, that yeast may, under favourable circumstances, produce skin disease. The *leptothrix*, so common on the foul tongue, is probably to be classed with these variable forms. These statements show, at least, how much is yet to be done in natural history before the true morbific action of these parasitic fungi can be determined. One thing, however, is certain, that the parasites of the potato, vine, apple, and silk-worm—all prevailing simultaneously—are almost identical with the *oïdium albicans;* and considering how readily a slight difference in the form of these minute organisms may be induced by differences in the food or habitat, it is probable that they are really identical in origin; and this coincidence of spread cannot but awaken a strong suspicion as to the relationship of the cause of diphtheria to that of the epidemics of the silkworm, vine, potato, etc.

That these parasites are sometimes powerful irritants of the living tissues is, I think, fully established, both from the history of *muguet*, and other circumstances. And although French writers speak of *pseudo*-diphthérite, the accuracy of the term may be questioned, for the exudation appears externally on ulcerated or exposed surfaces, as well as internally in both muguet and diphtheria alike. An interesting case of vaginal blennorrhœa, due probably to *oïdium albicans* introduced from without, may be found in Virchow's *Archiv für Physiologie*, vol. ix, p. 466. The case is communicated by Dr. E. Martin, of Jena. The labia were swollen; the vagina of a bright red, studded with enlarged papillæ, and covered with star-like patches of membrane, like those of the mouth in muguet, which were found to contain the *O. albicans*. A patient in the next bed (both were puerperal patients in hospital) had subsequently active fever, abdominal tenderness, and *O. albicans* of the mouth, with *muguet*. Dr. Jos. Ebert, of Wurzburg, found the *O. albicans* in the crop, stomach, and intestinal canal of a hen. The upper portion of the latter was intensely red.

It is usual to speak of the characteristic pellicle as if it were peculiar to diphtheria; but this is by no means the case. It is not unfrequently seen in cases of typhus and relapsing fever, sometimes in yellow fever, and, I believe, in all fevers. A series of carefully conducted experiments made with a thorough knowledge of cryptogamic botany, on lower animals, so as to show the real pathological origin and effects of these parasitic fungi would be very valuable. It would be absolutely necessary, however, that the animals experimented on be first brought as nearly as possible under, and into, the same conditions as persons are in who are attacked by the disease. I am inclined to think that it would probably be shown that these parasites may act either through the blood or locally only.

I may observe, in conclusion, that antiseptics and parasiti-

cides appear to be the most efficient remedies in diphtheria. I can speak very favourably of the value of the tincture of the sesquichloride of iron (an antiseptic) and hydrochlorate of potass. The latter, taken alone, will sweep away the pellicle in a few hours. Hydrochloric acid is also useful. Borax, which is so efficient in muguet, would probably be serviceable in diphtheria. And, I may say, that I have found a concentrated solution of borax as useful a local application in favus as any that I have tried. It is also serviceable in certain forms of lepra, applied externally, and, I believe, from its action as a destructive parasiticide. There are other remedies of this class, as the linimentum æruginis, the chloride of zinc, chloride of lime, etc. Early blood-medication is by far the best treatment, inasmuch as local applications, like the nitrate of silver, cannot have any effect on the air-passages, where the greatest mischief is done. Calomel and blisters seem wholly contra-indicated; indeed, the latter must be considered far more likely to be hurtful than beneficial. Wine, in moderation, is likely to be useful, and makes an excellent gargle diluted one half. I am, etc. T. Laycock, M.D.

4, Rutland Street, Edinburgh, Jan. 29, 1859.

MEDICAL CHARGES.

Letter from Edward Garraway, Esq.

Sir,—I have been a little chagrined that my letter in the Journal of December 18th, 1858, on the subject of medical charges, has elicited no single expression of opinion from any one of your widely spread and numerous readers. The natural inference to be drawn is, that, myself excepted, we are content with things as they are; content to go on charging for pills and potions; and every time we prescribe, to rack our invention for the most expensive form in which to send out our medicine. I am disgusted with the system, and have abandoned it, to the satisfaction of all those of my employers who possess a spark of intelligence; but, as might be expected, not without coming into collision with the prejudices of the pig-headed and the illiterate.

Here is a case in point, in which my "monstrous", not to say "dishonest", charges have lost me my patient. A well-to-do mechanic, living about five minutes walk from my house, sent for me to see his child; the case was one of mild scarlatina; I sent an emetic and laxative powders, and a two-ounce chlorine mixture. The following day, finding the child considerably better, I told the parents it was a pity to be forcing more medicine down, gave the necessary instructions as to the care requisite during convalescence for the prevention of sequelæ, and took my leave. At Christmas, the bill went in—four shillings! Down comes the mother, and with suppressed wrath, inquires if I have made a mistake? I refer to my books, and tell her "No". "Then, sir, I'll pay you; but I'll never come to you again. Those powders could not have been more than a shilling; and a little bottle like that you sent, I've only paid eighteenpence for before." My efforts at explanation were futile; she would neither hear nor understand that the charge was for my attendance and advice, that I might have insisted upon the child taking three or four bottles, for which she would have been willing to pay me twice the amount; that it was a greater comfort to a patient to get well upon one bottle than upon half a dozen, etc. My arguments were unavailing; the woman departed in high dudgeon, and doubtless denounced me among her neighbours and friends as utterly rapacious and devoid of principle. And this is not a singular case.

Now, such instances could not occur if medical practitioners were unanimous in repudiating the false and pernicious system of obtaining remuneration by a fabulous profit upon the sale of their drugs, and letting the public know that it is for their time, their talent, and their skill, they seek a fitting recompense and a just reward.

Apologising for again intruding on your space,

I am, etc., Edward Garraway.

Faversham, January 22nd, 1859.

GRATUITOUS MEDICAL SERVICE.

Sir,—In connection with the *misunderstanding* at one of our Western Provincial Hospitals, you remark (Journal, January 15th, p. 50), "this unjust move should lead medical men to consider whether in justice to themselves they should continue to give their services *gratuitously*." This passage has been strongly impressed upon my mind ever since; and, on reflection, I am persuaded that not only is this the time, but the very nick of time, at which to consider such a question. I trust your remarks will not be thrown away, but that they will lead to a thorough ventilation of the question.

After years of labour, and at great cost, the profession has just obtained its first instalment of medical reform, to give full force to which registration societies have sprung up, and are now fully organised and in working order. Why not, then, having the machinery at work, undertake, simultaneously with registration, the two vital questions,—Poor-law Medical Reform, and Gratuitous Medical Attendance?

It might be argued in favour of gratuitous attendance, that a man has a right to "do as he likes with his own." I deny that right. In many cases the *qualified* practitioner becomes such through great sacrifices somewhere; at all events, he sinks a large portion, frequently all, of his patrimony, in his education and subsequent qualification. On starting in life, if with any hope or prospect of success, he marries. "His profession," on entering into this contract, represents so much capital to begin the world with. Then comes a family, with nothing to look to but that capital. The duration of medical life is short of the average duration of life; and early provision becomes, therefore, imperative. How then can a man say that such capital is his own to do with as he pleases? The Medical Benevolent College will contradict him.

There can be little doubt that the rate of Poor-law remuneration was fixed upon calculations made in connection with gratuitous medical service. The two must be reformed *pari passu*. Medical attendance is of the *first* importance, certainly without it no hospital could exist; yet every other requisite is contracted for and paid for at a *fair* price. All advertisements tell that, for supplies, etc., the lowest tender will not necessarily be accepted. I doubt if even the lawyer who invests the surplus funds, if any, works gratuitously. But then, the governors give their money. True, but out of their abundance and out of their income, not out of their capital. The medical officer often sacrifices life itself; and again, most medical officers are money subscribers as well, and therefore, in that respect, on an equality with governors, who would attempt to dictate to them. But it is argued again, that gratuitous service leads to practice in the end. So does throwing the dice, but generally to a bad practice. The days of indirect remuneration are passing away. Steam and rail make us a more practical people. The public will no longer consent to swallow pills, draughts, juleps, and mixtures, simply for the sake of paying the doctor. They prefer paying down on the nail, except those who will not pay at all. They begin to see that it is possible to get value for their money without its necessarily being crammed down the throat.

I do not seek to enforce my opinions, but to obtain a reperusal of *your own proposition*. With regard to the particular move which led to its promulgation, I might observe that, if a man tacitly submits to a reproof manifestly aimed at another, it is something like subscribing to the inference, "ex uno disce omnes." We do not, however, all see through the same spectacles. When the vacancies are filled up, we shall see whether all works harmoniously for general good.

I am, etc., Quid pro Quo.

January 26th, 1859.

P.S. I append "a specific" for the prevailing poor-law medical epidemic:—Double the salary of every union surgeon, if not effectual in twelve months, double again. The result will be: 1. More unanimity between guardians and doctor. 2. Diminished mortality. 3. A higher standard of public health. 4. A saving in the revenue. If higher authorities doubt, let them try it.

POOR-LAW MEDICAL REFORM.

Letter from H. Dayman, Esq.

Sir,—It was said of old, that "whom the gods would destroy, they first deprive of reason"; upon this maxim the Poor-law Board appear to have acted in their dealings with Mr. Griffin's movement.

It has been abundantly proved, by the general disapprobation already expressed, that the proposed "new scheme" is exactly the thing the union medical men do *not* want, and as it certainly will be found the very opposite in effect of the model for which the well meaning but mistaken reformers have agitated, the whole policy looks as if it aimed at silencing the petition of the disaffected, by eliminating all that is acceptable in it.

Englishmen are tenacious of an established principle. They look with distrust upon any attempt to shift a ground of action already existing, more especially if such an institution has been seen, on the whole, to work well; it is no wonder, therefore, that this design of the Poor-law Board, in which a *new* principle is involved, finds no favour in the eyes of those to whom it is offered as a boon. For my own part, I am content with things as they are, and have throughout refused to join the band of Mr. Griffin's supporters, simply because I felt he was pressing for a change which appeared to me unconstitutional in its tendencies; a change, in fact, which had more the character of a revolution than a reform.

At this juncture, I strongly urge upon my brethren to stand out for the existing plan of medical relief and remuneration, which we all know may be extended and modified to meet the requirements of particular cases of hardship. If there is one thing more than another that recommends the old method to the sympathy both of medical men and paupers, it is the independence of action which a *permanent* appointment gives to the former; it is, in short, the attachment to a system which makes sure provision for the sick poor man, and protects him, in well-regulated unions, from stern relieving officers, factious boards and inefficient doctors, by the issue of liberal orders for medical relief, and by liberal pay for its performance. I am far from saying that such wisdom is to found in all unions; but I can bear personal testimony to the fact, that the present principle upon which relief and remuneration are based, is susceptible of such enlargement.

Lastly, with regard to a salary founded on the unsteady and precarious contribution of individual cases, my belief is, that it would leave us for ever fluctuating with, or floundering in, the Euripus of the pauper's, relieving officer's, or guardian's caprice. I am, etc.,

Henry Dayman.

Milbrook, Southampton, Jan. 25th, 1859.

POOR-LAW MEDICAL REFORM.

Letter from J. H. Crisp, Esq.

Sir,—At this juncture it is a matter for regret, that there is not unanimity on the part of the profession to support Mr. Griffin's *amended* scheme which that of Mr. Estcourt has called forth, and which really appears to comprise more of what is practical and equitable than anything hitherto suggested. Your numerous correspondents appear somewhat to "differ to agree;" and while some discountenance Mr. Griffin's plan, they yet coincide with the views of Mr. West, notwithstanding this gentleman, by his letter of the 1st inst., appears in the main to hold the same opinion of the former by objecting to the very clauses of Mr. Estcourt, with but an exception (the 10th), to which Mr. Griffin himself objects and proposes to amend.

It is one thing to discover a defect, but another to rectify it. Now, Mr. Griffin aims to do both, and with what success may be judged by the fact of so large a majority of union medical officers responding to his efforts. A more adequate remuneration for professional services to the poor is what Mr. Griffin particularly insists upon, but which would never be obtained without an arrangement as to the number, distance, and nature of cases coming under medical charge. A "uniformity of system," which one of your week-before-last correspondents considers as "impracticable," is indeed the only one which would remunerate him for the *length* of his journey, the *number* of patients, and the *excess* of time, trouble, or expense any particular case may occasion. If we are not paid upon such a scale, under what other could we be? Boards of guardians profess to regulate salaries according to the extent of duties, but their mode of doing so is most arbitrary and unequal. Mr. Griffin proposes a *fixed standard* from which they cannot deviate, to the end that all may be proportionally remunerated.

The present is not a time to be polemic in "splitting straws", when Mr. Estcourt's scheme, generally acknowledged to be objectionable, is to be answered. Let us, then, accept that of Mr. Griffin; though it be capable of improvement, it approximates more nearly the requirements of union medical officers; and be reminded, that each will never get all he wants in the way of Poor-law medical reform, and that it may lay the foundation for a more honourable recognition of the services of a medical man, as well as the pecuniary one.

I am, etc., J. H. Crisp.

January 29th, 1859.

POOR-LAW MEDICAL REFORM.

Letter from R. Griffin, Esq.

Sir,—I shall be obliged by the insertion of the inclosed correspondence in the Journal. I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, February 3rd, 1859.

I. *Mr. Griffin to the Poor-law Medical Officers.*

"12, Royal Terrace, Weymouth, January 26th, 1859.

"Dear Sirs,—I have much pleasure in laying before you the annexed letter from the President of the Poor-law Board. From the numerous communications I daily receive, very many of which contain remittances, I am convinced that the medical officers, as a body, are satisfied with the efforts the Association is now making; and I hope you will send in your returns as quickly as possible. I have already forwarded a large number to the Poor-law Board.

"I am, dear sirs, etc., "Richard Griffin.

"To the Poor-law Medical Officers."

II. *The President of the Poor-law Board to Mr. Griffin.*

"St. Leonard's, January 21st, 1859.

"Dear Sir,—I have to thank you for sending to me a copy of the resolutions adopted at the meeting at the Freemasons' Tavern on the 14th of this month.

"I am much satisfied and pleased with the business-like manner in which my scheme has been considered at that meeting, so far as I can judge by your printed report. I shall give a dispassionate attention to the remarks and suggestions contained in that paper, with a sincere desire to arrive at such a practical conclusion as shall effect a reasonable adjustment of the question before us. I have received other and different proposals, in great variety, from numerous quarters. I cannot enter upon any attempt at reconciling these until a sufficient period shall have elapsed to allow me to conclude that those who desire to offer an opinion have had a full opportunity of doing so; but I reckon that, at any time after the middle of February, the Board will be ready to attend to any application for an interview with your Association.

"I am, dear sir, yours truly,

"T. Sotheron-Estcourt.

"R. Griffin, Esq."

III. *Mr. Griffin to the Poor-law Medical Officers.*

"12, Royal Terrace, Weymouth, February 1st, 1859.

"Dear Sirs,—I have much pleasure in laying before you the accompanying letter from the Private Secretary of the President of the Poor-law Board. The interview therein promised had its origin in a request I made prior to the issue of my letter of January 20th, but which was then declined. It is my intention to send round another circular letter as soon as possible after I have time thoroughly to examine the return moved for by Lord Elcho, the heads for which I furnished to his lordship.

"During the month of January, some of the officers of twenty Unions which had not before joined the Association have been added to our ranks, and, in addition to these, very many new subscribers. The total number of the subscriptions received during the month is 488. Notwithstanding these accessions, I regret to say that, from the number of our associates who have retired from the Poor-law service, in consequence of insufficient remuneration and other causes, we still have only a few more than fifteen hundred names on our books. I had hoped that nearly all would have joined by this time, and still trust that a large increase of our numbers will take place prior to our interview with the President; and thus, by unity of action, give weight to our claims for redress of the grievances which have so long oppressed us.

"The Poor-law Board have arranged the Unions of England and Wales under eleven heads. In one of these divisions, the salaries average six shillings and fourpence halfpenny per head for each pauper, whilst in another they are only two shillings and three farthings; the salaries of the other divisions ranging between these two extremes. I have already prepared a table shewing these variations, but some of the columns cannot be filled up until I receive the return moved for by Lord Elcho; and therefore the publication of the table must be deferred until I again address you. My great desire is, that each of the eleven divisions should be fairly represented at the forthcoming interview with the President, and that the meeting should not be either entirely metropolitan or provincial.

"The divisions are as follows:—1. The Metropolis, com-

prising parts of Middlesex, Surrey, Kent. 2. South-Eastern Counties—Surrey (extra-metropolitan), Kent (extra-metropolitan), Sussex, Southampton, Berkshire. 3. South-Midland—Middlesex (extra-metropolitan), Hertford, Buckingham, Oxford, Northampton, Huntingdon, Bedford, Cambridge. 4. Eastern—Essex, Suffolk, Norfolk. 5. South-Western—Wilts, Dorset, Devon, Cornwall, Somerset. 8. West Midland—Gloucester, Hereford, Salop, Stafford, Worcester, Warwick. 7. North Midland—Leicester, Rutland, Lincoln, Nottingham, Derby. 8. North-Western—Chester, Lancaster. 9. Yorkshire—West Riding, East Riding, North Riding. 10. Northern—Durham, Northumberland, Cumberland, Westmorland. 11. Welsh—Monmouth, South Wales, North Wales.

"I hope meetings will be held in each of the divisions, to discuss the plan which I am now preparing to lay before you; and that you will then appoint deputies to represent you at the interview. I shall be happy to receive communications from gentlemen who will undertake to call these meetings. The President has clearly defined with whom the interview is to be held; consequently, those who wish to join have only to forward to me their subscriptions, and thus become members of the Association.

"The time having expired for the presentation of the returns to the President of the Poor-law Board, I will not trouble you to send me any more.

"I am, dear Sirs, etc., etc.,

"Richard Griffin.

"If members of Parliament could again be induced to attend at the Poor-law Board at the interview, it would add much to the importance of the deputation in the opinion of the public.

"To the Poor-law Medical Officers."

iv. *The Secretary of the Poor-law Board to Mr. Griffin.*

"Poor-law Board, Whitehall, S.W., January 31st, 1859.

"Dear Sir,—I am desired by Mr. Estcourt to inform you that the return to Lord Elcho's motion is made out and printed, and that he will lay it on the table as soon as the House meets. He will send you a copy of it; and he desires me to add, that you, or any one, can get copies from the office for the sale of papers at the House of Commons, at any time after Thursday next.

"In reply to your letter of the 29th, he directs me to say that he proposes Thursday, the 24th February, at one o'clock, for the interview which you desire him to appoint with yourself and the other medical gentlemen with whom you act.

"I am, dear sir, yours very truly,

"George F. Buller.

"R. Griffin, Esq."

TAUNTON AND SOMERSET HOSPITAL.

Letter from F. H. Woodforde, M.D.

Sir,—In the discussions which have taken place at the Board-room of the Hospital, and in the letters which I and my fellow-victims have since written on the subject of our most unjust and injurious expulsion, we have studiously avoided (although, as I shall now shew, the provocation was very great) saying anything reproachful against our late colleagues.

Since, however, Mr. Alford has had the temerity to vindicate publicly his desertion of us, notwithstanding the decisive voice of the honorary officers of the English hospitals, as proclaimed in their replies to our appeal (whose opinions one would have expected Mr. Alford to respect, though he utterly disregarded those of his own colleagues), it is necessary that we should, though still with great reluctance, lay aside our forbearance, and shew what the conduct of our late colleagues has been, and to what weight their opinions on this question are entitled; the more so, since some of the governors are inclined to lay great stress on them, and since to their desertion is in a great measure due our defeat and expulsion.

In 1830, when the whole staff of the hospital resigned, rather than submit to a gross act of injustice on the part of the governors (the history of this hospital is but a series of such acts), Mr. Alford commenced his career here by bidding defiance to the opinions and feelings of the profession, and offering himself for one of the vacant places. His offer was, of course, accepted by the governors, who from that time forward have treated their honorary officers and the profession with less courtesy and respect even than before, believing that, treat them as they would, they could always find unscrupulous men to fill their places when vacated in disgust. It was for this reason that I and my fellow-victims resolved to push our resistance to the "obnoxious order" to expulsion, rather than resign. But, to pursue the narrative, Mr. Alford was, as a matter of course, "sent to Coventry" by the indignant members of the profession here. As years passed on, his unscrupulousness was forgiven, if not forgotten; and when, after years of peace, the "offensive order" was first proposed, *he at first joined us in resisting it, and then, without the slightest warning, deserted us.*

Mr. Cornish, to whom we are indebted for the obnoxious order, in consequence of a direct charge of neglect against him, at once consented to the governors' proposal to sign the book on each visit, without for a moment consulting his colleagues on the question! Thenceforth he used all his influence to compel us to the same course; as, after his desertion, did Mr. Alford.

Mr. Cornish was originally the house-apothecary, and on resigning that office was appointed, by the partiality of a small party of friends, and by a breach of the hospital rules, a *supernumerary* surgeon to the hospital, at the imminent risk of another general resignation, which was only prevented by the personal solicitation of the leading governors of the time.

Dr. Kinglake has declared himself, even up to the eleventh hour, an "unwilling convert" to the "obnoxious order;" and therefore, though he has weakly yielded his own opinions, we give him the merit of siding with us at heart.

With this exposure of Mr. Alford's antecedents, the profession will be enabled to understand, and give its due value to, his statement as contained in his letter published in this Journal of January 15th, "that the recording in a book the fact of visits to the hospital is or can be in any sense injurious or derogatory to our professional character, is so far from true that I believe the refusal is much more likely to injure our status with the *public*," and this, after having appeared to join us cordially in opposing the obnoxious order for a year. So that he has the approval of the *public* in his concessions, the profession may go the dogs! Such is his *esprit du corps!*

Is it not this total disregard among each other of professional honour and etiquette which, more than any other cause, prevents our taking our proper position as an enlightened and noble profession, and induces both the legislature and the public to trample on and degrade us?

I am, etc., F. H. Woodforde, M.D.

Taunton, February 1st, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Bird. On January 31st, at 1, Norfolk Square, Hyde Park, the wife of Peter Hinckes Bird, Esq., Surgeon, of a son.

Christie. On January 29th, at Pembroke House, Hackney, the wife of T. B. Christie, M.D., of a son.

MARRIAGES.

Crocker—Thompson. Crocker, Henry, M.D., Madras Army, to Agnes, second daughter of the late Major-General P. Thompson, Madras Army, at Edinburgh, on January 13th.

Day—Todd. Day, Frederick A. E., Esq., Surgeon, of Bristol, to Jessie Janet, second daughter of James Todd, Esq., of Frenchay, Bristol, on January 20th.

DEATHS.

Daniell, John Bampfylde, M.D., formerly of Bath, at Bonn, Prussia, on January 25th.

Ridge. On February 1st, Benjamin Knevit, youngest child of John James Ridge, M.D., aged 9.

APPOINTMENTS.

Coote, Charles, M.D., appointed Assistant-Physician to the Middlesex Hospital.

Craven, R., Esq., appointed Surgeon to the Southport Local Dispensary.

Thompson, Henry, M.D., appointed Physician to the Middlesex Hospital.

HEALTH OF LONDON:—WEEK ENDING JANUARY 29TH, 1859.

[From the Registrar-General's Report.]

The deaths in London, which rose in the second week of January to 1429, and in the next week were 1380, show a further decline for the week that ended last Saturday, when they were 1329. In the ten years 1849-58 the average number of deaths in the weeks corresponding with last week was 1162; but as the deaths now returned occurred in a population which has increased, they should be compared with the average raised in proportion to the increase, namely 1278. Hence it appears that the number of persons who died last week was greater by 51 than the number which would have died if the average rate of mortality for the last week of January had prevailed.

The rate of mortality for the first quarter of the year in certain districts of England, selected as healthy, has been ascertained; and it can be shown that if the mortality in London last week had been according to the same rate, the deaths would have been 874. The excess which the true number exhibits is equal to 455, and must be referred chiefly to defective sanitary arrangements that are still found in all our populous cities.

The mortality from scarlatina and diphtheria is still high, and it has not recently exhibited a decrease, the deaths from it in the last three weeks having been 102, 111, and 113. The average number in the weeks corresponding with last week, corrected for increase of population, is 44. Of the 113 deaths 5 occurred in the subdistrict of Islington West, 5 in Kennington (1st part), 5 in St. Paul, Deptford. Thirty cases are recorded in which the fatal disease is described as *diphtheria*, 4 of which occurred in the West districts, 8 in the North, 5 in the Central, 4 in the East, and 9 on the South side of the river. Sixty-two children died of whooping-cough; 15 persons, chiefly children, of small-pox, 18 of diarrhœa, 7 of rheumatism and rheumatic fever. Eight infants died from syphilitic disease. The deaths from pulmonary diseases (exclusive of phthisis) amount to 271 (the corrected average being 287), of which 136 are referred to bronchitis, and 95 to pneumonia. The three oldest persons whose deaths are in the returns are two men, aged respectively 90 and 91 years, and a woman 99 years.

Last week the births of 1013 boys and 967 girls, in all 1980 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1651.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·609 in. The barometrical readings varied from 29·14 in. to 29·86 in. The mean temperature of the week was 43·7°, which is 5·7° above the average of the same week in 43 years (as determined by Mr. Glaisher). On Tuesday, the mean temperature was 10° above the average of the same day. On Monday the thermometer in the shade fell to 33·9°, the *lowest* point in the week, and rose to its *highest* 51·7° on Thursday. The range of temperature in the week was therefore 17.8°. The mean daily range was 10·9°. The difference between the mean dew-point temperature and air temperature was 4·3°. The mean degree of humidity of the air was 85. The mean temperature of the water of the Thames was 42·7°. The wind blew almost constantly from the south-west. There were gales on several days. Rain fell to the amount of 0·21 in. chiefly on Sunday.

POOR-LAW MEDICAL REFORM.

MEETING AT BROMSGROVE.

At a meeting of the medical officers of the Bromsgrove Union, held January 28th, 1859, the following resolutions, in reference to the suggested Medical Relief Scheme, were unanimously adopted.

1. That it would be unjust to the present medical officers to determine, without their individual consent, the contracts at present existing.

2. That it is most undesirable to appoint two medical officers for the same district or parish, as it would lead to rivalry of an unpleasant character, and tend to the increase of pauperism.

3. That grave objections exist to the giving of orders for medical relief by each guardian. By virtue of his office as a member of the board, each guardian has judicial duties to perform; with others, that of allowing or disallowing the medical or other relief given by the relieving officer.

It would follow, that the medical orders given by the guardians would be brought in comparison with those of the officer, and, as a consequence, the authority and control of the board over such officer be thereby weakened, while the board collectively would have to sit in judgment on the individual acts of such of its members as chose to exercise the proposed power, a proceeding which would scarcely fail to be the cause of great diversity of opinion, and lead to frequent dispute; and lastly on this head, because it is desirable that the medical officer should attend on urgent cases on his own responsibility, without the intervention of a third party.

4. That a fixed salary be adopted instead of payment per case, the amount of such salary to be determined by the number of cases annually attended during the previous three years, and the area and population of the district.

5. That a dietary be introduced into each district, similar to the one already in use in the workhouse of the union. This would render it unnecessary for the medical officers to specify the amount of nourishment required.

6. That the following be added to the list of extras:—That fees should be allowed in the following cases,—

a. Attendance on severe burns and scalds.

b. For cases requiring the frequent use of the catheter.

c. Extra for mileage in midwifery cases.

THE LAW OF LUNACY.

On Tuesday evening, a public meeting was held at Exeter Hall, for the purpose of taking into consideration the treatment of the insane, both in public and in private asylums, and the existing state of the law with respect to lunacy generally. Mr. Benjamin Bond Cabbell occupied the chair.

The Chairman, in opening the proceedings of the meeting, said that as recent events had called public attention to the treatment of the insane, it had been thought advisable by the Alleged Lunatics' Protection Society to convene the present meeting, that they might give greater notoriety to the facts disclosed in the reports of the Lunacy Commissioners. The law with regard to those unfortunately afflicted with insanity had recently been twice altered, first in 1845, and subsequently in 1853, but those who studied its working saw in it many and gross defects which gave rise to the most scandalous abuses, especially in private asylums, for they found that proportionally a greater number were each year discharged cured from the public institutions than from them. It was not for him to say what might be the causes of such a state of things. He would only ask them to listen to the statement founded on the report of the Lunacy Commissioners which Mr. Goulding would read to them, and then they might form their own opinion upon the subject.

Mr. Goulding then read a statement founded on the report of the Commissioners, from which it appeared that there were in June last in public lunatic asylums 15,163 inmates; in Bethlehem and other hospitals, 1,751; and in private institutions, 5,270. Independently of these, there were in public asylums, 17,572 pauper lunatics; and of the same class of patients in private institutions, 4,612. Of the total number, there were 295 Chancery lunatics, declared insane by inquisition, and 633 criminal lunatics, the majority of whom were in Bethlehem. Observing recent admissions, it was found that last year there had been admitted to public asylums 4,780, or 31 per cent. upon the whole number; whereas the admissions to private establishments had been within the same time 2,324, or 44 per cent. upon the whole number. There had been discharged within the year from public institutions 1,854, or 38 per cent. cured, whereas the discharges of recovered patients from the private establishments for the same period had been only 672, or 28 per cent. With regard to the discharge of incurables, the proportions were still more strikingly in favour of the public establishments. The incurables sent out of the public asylums numbered only 634, or four and a half per cent. on the number confined. The private asylums discharged 1,032 as incurable, or 19 per cent. on the number confined. The mortality in public asylums was summed up in twelve cases of disease, or less than one in a thousand. The deaths in private asylums had been 9, being more than two in the thousand. These were the general facts of the statement, which also entered into details, comparing the efficient working of Cheadle, Hanwell, and other public institutions, with that of certain notorious private asylums.

Admiral Saumarez, in moving the first resolution, to the effect that, under the existing law, persons may be confined as lunatics without any previous inquiry, and subjected to acts of

cruelty, and that females were treated with violence and indelicacy, said that the principal reason why lunatics were treated cruelly was, because the care of them was committed to a class of persons unfit for the trust reposed in them. It was a painful fact that pauper lunatics were on the increase; and therefore, if it were only to save the rates, the public should bestir themselves and see if it were not possible to arrest the progress of insanity. After detailing several acts of cruelty which he knew had occurred in private asylums and workhouses, he proceeded to say that the whole trick of their treatment was to make them mad, and then keep them so. With regard to the Chancery lunatics, of whom there were 551, they had between them an income of £300,000 per annum; but as the Masters in Chancery, in default of the next of kin being able to give the enormous security required by law, namely, two sureties in double the amount of the lunatic's annual income (and he would here remark, that few of them could obtain such security), generally gave the committee of the property to a solicitor, the whole of the man's estate soon passed away from him and his family in law expenses. The treatment of criminal lunatics, too, was a matter which required to be strictly investigated, especially in regard to women guilty of homicide during the period of puerperal insanity.

The resolution was seconded by the Rev. H. Ward, and unanimously adopted.

The meeting was also addressed by Mr. G. Bolder, Mr. R. Selby, Mr. J. Percival, Dr. Pearce (of Northampton), and other gentlemen, after which two resolutions were adopted, one declaring that the supervision of lunatic asylums was insufficient, and the other agreeing to a petition, praying for inquiry by a select committee of the House of Commons, to be presented by Mr. Tite, M.P.

The proceedings then terminated.

Allopathy: Allopathists. What is there in a name? Much, very much, if, with some philosophers, we believe that names are things. In no case can a name, intended to indicate a quality or property of matter, or of a particular creed in science, ethics, religion, or politics, be regarded with indifference. A term introduced to cover a proposition in any of these departments, must, if it falls short of the intention, mislead; and, by conveying wrong ideas of the question involved, it serves to propagate and extend errors, both on the part of those who support and those who oppose its tendency and results. Sometimes a word is used which answers the purpose of showing what thing it is we are talking about, but not of telling the nature or qualities of the thing itself. Methodist, for example, is now well understood to designate a member of a sect of Christians; but the word conveys no idea either of the disciplines or of the doctrines of that sect; and in these matters it would be just as applicable to Episcopalians or to Roman Catholics as to the followers of John Wesley. This very negative character of the word, like the name of an individual, has its recommendation in its not conveying imperfect or erroneous notions on the great cardinal points of doctrine. Sometimes a name is given to a body of men, with an avowed purpose of ridicule or reproach; and, as such, it may be mischievous to the parties thus named; but if they are successful in carrying out their plans, they themselves may adopt the obnoxious term, and, by giving it vogue, deprive it of its sting. Such was the case with the *Sans-culottes* of the French Revolution, who, although guilty of enormous excesses, and figuring as robbers and cutthroats in Paris, showed themselves to be brave soldiers and patriotic citizens when sent to the frontiers to repel the invasion of France by the Prussians and Austrians. The title of "beggars", applied, in ridicule, by one of the members of the Council of Regency governing in the name of Philip II of Spain, to the confederate nobles of Holland and the Low Countries, who had petitioned for a redress of grievances, was promptly adopted by them to designate their league; and a wallet, such as that worn by pilgrims and beggars, was emblazoned on their banners as the emblem of their party. All this misled nobody: it neither indicated a political creed, nor gave promise of the intentions of the party adopting the title and the emblem. Among the "Fallacies of Confusion" laid down by logicians, stands at the head "that multitudinous body of fallacious reasonings in which the source of error is the ambiguity of terms; when something which is true, if a word be used in a particular sense, is reasoned upon as if it were true in another sense." Allopathy is one of those ambiguous terms, on the abuse of which we propose to offer some strictures. It is sufficiently distinctive, when it is used to designate a system of therapeutics, or a method of medical practice in direct contrast with and opposition to homœopathy; but it is misleading and false when it is intended to indicate the therapeutical doctrine and practice of regular physicians. We can conceive that there might be such persons as allopathists, but we have never known of men who were exclusively so as practitioners of medicine. The absurdity of homœopathy as an extreme and exclusive doctrine, which in theory takes but a partial and necessarily imperfect view of the premises, and which, in practice, carries out its consequences in a lame and contradictory manner, cannot be rectified by the adoption of allopathy as its opposite, and which would consist in another extreme and exclusive creed. Neither the dogma of the former *similia similibus*, nor that of the latter *contraria contrariis*, can furnish safe indications for the employment of the various curative means with which experience has made us acquainted. A quaker would think it very illogical, if, because he objected to wearing black, he were to be told that he was, therefore, pledged to robe himself all in white. A hater of monarchical despotism is not, on this account, pledged in support of democracy; nor is he who abhors assassination to be classed among the supporters of tyranny. As to the theory of homœopathy—like removed by like—the replacing of a series of symptoms indicative of disease by another series of symptoms of an analogous character induced by remedies, it is carried out by the regular practitioner in many cases; but he does so by the administration of medicines which are appreciable by weight and measure, and which produce, in their immediate operation, sensible effects; in this respect differing essentially from the exclusive homœopathist, who gives infinitesimal doses, the minuteness of which goes beyond the power of imagination. There are cases in which we sometimes prescribe like against like, as when we remove the pain of pleurisy by inducing the pain from a blister, and stop diarrhœa by a purgative, and vomiting by an emetic; while, on the other hand, we prescribe, allopathically, for other stages of these diseases, venesection and sedatives in pleurisy, and astringents and opiates in diarrhœa. Mere allopathy, as meant to embody a system of the practice of medicine, is not less absurd than mere homœopathy. Fortunately for the sake of common sense and logic, and the health of the people, only one of these absurdities, the latter, has taken possession of many minds, as the fundamental doctrine of their medical creed. It would doubtless suit well the views of the homœopathists to see the regular members of the profession take up a directly antagonistic, though necessarily a false position, as exclusively allopathists, so that the public, only seeing two theories, or rather dogmas, is left to choose at random between them; with, however, a natural leaning in favour of the one which promises a cure by the easiest and most pleasant means. In the name of the regular profession of medicine and of medical philosophy, and bearing in mind the experience of the past and observation of the present, we protest against receiving from an inimical, a prejudiced, and an incompetent party, a title which professes, but fails by its ambiguity, to designate our medical creed, and to shape our practice under it. We can no more admit the right of homœopathists to assign us the false position of allopathists, than we can that of the vegetarians, from whom we may differ, to assume that we belong exclusively to the *carnivora*. We would entreat our professional brethren everywhere, if they value sound medical philosophy and entire freedom of therapeutical selection, to resist on all occasions this insidious attempt of their enemies, and never to allow themselves to be misnamed or nicknamed allopathists. (*North American Medico-Chirurgical Review*, November 1858.)

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Dr. Oke's contribution has been received.

Communications have been received from:—Mr. G. M. Humphry; Mr. W. Bastick; Mr. Holland; Dr. L. S. Beale; Dr. W. S. Oke; Dr. Woodforde; Mr. A. T. H. Waters; Mr. W. Weston; Dr. A. Wynn Williams; Mr. T. Holmes; Dr. Mackinder; Dr. W. B. Mushet; Mr. Richard Griffin; Mr. J. H. Crisp; Dr. C. Handfield Jones; Mr. W. Newman; Dr. W. T. Gairdner; Dr. T. Laycock; Mr. R. P. Bell; Dr. Sloane; Mr. Wm. Smith; Mr. Dayman; Dr. Cameron; and Mr. T. M. Stone.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXI.] LONDON: SATURDAY, FEBRUARY 12, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

LEICESTER INFIRMARY.

CASES OF INCONTINENCE OF URINE.

By JOHN SLOANE, M.D., etc., House-Surgeon to the Infirmary.

[*Read before the Leicester Medical Society, January 25th*, 1859.]

THE following ten cases of enuresis, I believe, comprise all that have been treated at the Leicester Infirmary for the last three years.

CASE I. *Incontinence of Urine cured by a Blister upon the Sacral Region, and by Tincture of the Muriate of Iron.* Amy Tillson, aged 18, a framework-knitter, residing at Stoney Stanton, a strong well developed girl, in perfect health, save that she had been suffering from incontinence of urine for nine weeks, was admitted into the Infirmary, under the care of Mr. Benfield, January 1st, 1856. She was ordered twenty minims of the tincture of the muriate of iron, to be taken three times a day. On the next day she was no better, and was ordered a large blister, to be applied over the sacrum. She passed no urine involuntarily afterwards, and was discharged cured January 15th.

CASE II. *Incontinence of Urine not relieved by Treatment.* David Hume, aged 65, was admitted an in-patient, under the care of Mr. Benfield, January 13th, 1857. He had suffered from his urine dribbling away involuntarily for the previous nine months. By percussion, his bladder was found not to be distended. He was treated with nitric acid in infusion of pareira; and afterwards with tincture of the muriate of iron in infusion of quassia. He received no decided benefit from treatment.

CASE III. *Incontinence of Urine relieved by Belladonna.* J. Johnson, aged 7, Church Gate, was admitted an out-patient, under Mr. Benfield's care, on August 12th, 1857. He had always been troubled with incontinence of urine, both during the day and night; in other respects, he was healthy. He was ordered a quarter of a grain of extract of belladonna, in water, every night: this he continued to take till October 14th, when he began to take this dose twice, and, two weeks later, three times a day. He ceased to attend after November 25th. I saw his mother last week, and she informed me that he was very much improved by the treatment; but that, after he left it off, he gradually became worse, and in two months was as bad as ever.

CASE IV. *Incontinence of Urine and Fæces, with involuntary Movements in Hands, not relieved by Treatment.* Reuben Noon, aged 20, residing in Cumberland Place, a carrier, strong and healthy looking, was admitted an out-patient, under the care of Dr. Crane, September 2nd, 1857. He had suffered from incontinence of urine and fæces since birth. He evacuated these excretions involuntarily, both night and day. During the day, when he felt the inclination to go to stool, unless he hastened to the closet, the fæces passed before he arrived. He frequently evacuated his bladder voluntarily. For the previous three years, he had suffered from a shaking of the hands when he attempted to use them; when at rest, they did not move involuntarily. This affection gradually came on, and had not got worse during the preceding two years. He was treated with tincture of muriate of iron; afterwards with an astringent mixture; next with acetate of lead and opium; and, from the second week after admission, with opium suppositories night and morning.

November 4th. He was ordered to take the twelfth of a grain of extract of belladonna, in water, every four hours; to have a blister applied over the sacrum, and to omit all other remedies. At his next visit, a week afterwards, the belladonna was ordered to be taken three times a day. He continued the medicine till December 1st, after which date he did not come to the Infirmary.

January 23rd, 1859. He derived no marked benefit from the treatment. He has since gradually improved without medicines. The shaking of his hands has not altered since the previous report.

CASE V. *Incontinence of Urine very much relieved by Belladonna.* Wm. Howard, aged 16, was admitted as an out-patient, under the care of Mr. Macaulay, on September 11th, 1857. He was suffering from incontinence of urine, of several years duration; and, with the exception of this ailment, was perfectly healthy. He was ordered the twelfth of a grain of extract of belladonna, in water, twice a day; a month afterwards, it was increased to the eighth of a grain three times a day; but, at his next visit the following week, he was directed to continue the remedy twice a day, in the doses first prescribed. On October 30th, he was discharged cured.

I saw the woman with whom this patient lodged on the 18th inst., and she informed me that he was not perfectly cured, but that, previously to treatment, he "wetted his bed" three or four times a week, whereas afterwards he did not do this oftener than once a month. For the last ten months, he has been a soldier in a "crack" regiment.

CASE VI. *Incontinence of Urine not cured by Belladonna, Tincture of the Muriate of Iron, nor by Blistering over the Sacrum.* Wm. Perkins, aged 12, a healthy looking lad, was admitted as an out-patient, under the care of Mr. Paget, October 11th, 1858, with incontinence of urine at night, and frequent micturition during the day. He was ordered the sixth of a grain of extract of belladonna, with two grains of manna, in pill, three times a day, and an aperient powder every third morning. Two weeks afterwards, the dose of belladonna was increased to one-fourth of a grain, and, two weeks later, to a quarter of a grain; and the aperient powder was omitted. In three days, the belladonna was omitted, and he was ordered an opiate at night.

November 15th. He began to take tincture of the muriate of iron, which was omitted on the 22nd. A blister was now ordered to be applied over the sacrum. He derived no benefit from the treatment, and was advised to become an in-patient, which he has not yet done.

This boy has suffered from incontinence of urine ever since he can remember, but only at night; he passes urine as often as twenty times during the day. He has no pain when the bladder is full, nor at any other time. He took the belladonna till his vision was affected. He is a healthy boy, with the exception of the enuresis. His father was in the Infirmary two years ago, with diabetes insipidus. The boy's urine was examined January 21st, 1859, and was found to be healthy; specific gravity 1020; reaction acid. No sugar was indicated by Moore's test. There was no albumen. Chlorides were abundant.

CASE VII. *Incontinence of Urine cured by Citrate of Iron and Sesquicarbonate of Ammonia.* Drusilla Burkitt, aged 19, was admitted an out-patient, under the care of Dr. Shaw, on October 12th, 1857. Incontinence of urine began sixteen months previously, after her confinement, and had troubled her at night only ever since. With the exception of this ailment, she enjoyed good health. No lesion was detected on a careful examination in the os uteri, in the vagina, or at the meatus urinarius. She was ordered to take one-sixth of a grain of extract of belladonna, in water, three times a day. She continued this medicine for a fortnight without benefit. She was next ordered an aperient saline mixture, which she took for two weeks without relief. She was now given five grains of citrate of iron and five grains of sesquicarbonate of ammonia, in water, three times a day; and, at her visit on the following week, she was discharged cured, and has remained quite well ever since.

CASE VIII. *Incontinence of Urine not relieved by Liquor Po-*

tassæ, Belladonna, Quinine, Tincture of Cantharides, a Blister over the Sacrum, Strychnine, nor Tincture of the Muriate of Iron: Injection of the Bladder with Carbonic Acid Gas of service. Sarah Stutley, aged 11, became an out-patient, under Mr. Benfield's care, May 5th, 1858. She had always been delicate, but seemed healthy and well developed. She had suffered from incontinence of urine for the previous two months. The mother was unable to account for her illness, which came on gradually. This patient passed urine some fifty times daily. She was treated first with liquor potassæ; next with belladonna, till it caused giddiness and faintness, and such defective vision for a fortnight before it was omitted, that she was unable to sew or read. It was noted by Mr. Benfield, on the day on which she was ordered to desist from taking this medicine, that the irides acted well; the pupils were not dilated. She was next treated with quinine and tincture of cantharides; the latter was given in doses of three minims three times a day. A blister was afterwards applied over the sacrum. Strychnine was given till its physiological effects were produced; and, lastly, tincture of the muriate of iron was tried. From all this treatment she derived no benefit. The bladder was injected with carbonic acid gas; but the girl resisted so much, that it was necessary to put her under the influence of chloroform before it could be accomplished. I afterwards learned that she was much improved for the ensuing twenty-four hours. During the night she did not "wet her bed", and had not to get up to micturate once. She ceased to attend. I saw the child yesterday, and she was gradually improving without treatment.

Case ix. *Incontinence of Urine cured by Belladonna.* Sarah Hunt, aged 16, a servant, residing at Ravenstone, was admitted an in-patient, under Mr. Paget's care, October 12th, 1858. Six months previously to admission, she began to be affected with incontinence of urine, which she ascribed to "bad living", and drinking large quantities of water. She had never suffered from any previous illness, and seemed strong and healthy. She gradually got worse till she was admitted, when she passed all her urine involuntarily. She was ordered the sixth of a grain of extract of belladonna, in water, three times a day. She gradually improved, and in ten days had ceased to pass urine involuntarily. The medicine was omitted on November 4th; and she continued well till November 9th, when she was discharged cured.

Case x. *Incontinence of Urine relieved by Belladonna, still under Treatment.* Ellen Rodwell, aged 14, was admitted as an out-patient, under the care of Dr. Shaw, for sore-throat and slight febrile symptoms. On January 10th, 1859, she first complained that she had suffered from incontinence of urine since she was four or five years of age, "wetting her bed" most nights. She is a pallid girl, of rather stunted growth, and has a converging squint in the left eye, which came on about the same period as the enuresis. She was ordered to take half a grain of extract of belladonna, in water, twice a day; to have a supper with as little fluid as possible; and to be raised, an hour after she went to bed, to pass urine. At her visit on January 17th, it was noted that she "wetted the bed" the first night after she began the treatment—never since. Since she began to take the medicine, vision became indistinct; she had an itching all over her; the skin had a roughened appearance in indistinct patches, which were very slightly redder than parts in the vicinity. The face only was examined. The pupils were slightly dilated; they acted a little under the influence of light. She was ordered to take the belladonna in doses of one-twelfth of a grain twice a day.

January 24th. She passed urine involuntarily in bed four times during last week. The itching was quite gone; the skin had a normal appearance; the pupils were still dilated; vision was indistinct. She was ordered to take the extract of belladonna, in doses of a quarter of a grain three times a day.

Remarks. During the last three years, there have been 13,007 patients treated at the Leicester Infirmary, and only ten of these have been suffering from incontinence of urine. Many of our patients during this period have been more than once under treatment; and, making liberal allowance for this and other sources of error, I may safely say that not more than two in every thousand of the patients at this Infirmary suffer from incontinence of urine. Of the ten cases, eight were under twenty years of age, one was twenty, and another was sixty years old. In three cases only had the enuresis been congenital.

My chief object in relating these cases is to direct your attention to the treatment. In the *Journal de Médecine et de Chirurgie*, in September 1856, M. Trousseau relates a case which was much relieved by belladonna, which has since been extensively tried, with favourable results, in this country and abroad. Mr. Brooke, I believe, was the first in England to use belladonna in this ailment. In four of the cases mentioned in my report, belladonna effected decided benefit; in four, it seemed to do no good; and in two cases it was not tried. In two of the four cases in which belladonna failed, no benefit was derived from any treatment; in one of the other two, marked relief followed the injection of the bladder with carbonic acid gas; and the remaining one was cured by a mixture containing citrate of iron and sesquicarbonate of ammonia. One of the two cases, in which belladonna was not given, was cured by the application of a blister over the sacrum while she was taking the tincture of the muriate of iron; and the other received no benefit from the treatment adopted. Four of the ten cases were cured, or received much benefit from treatment; three, one of which is still under treatment, obtained temporary relief; and three derived no benefit. These results do not seem so satisfactory as those obtained and lately published by Dr. Hewson, an American. He treated sixty-three cases of incontinence of urine in a public institution. He first tried bromide of potassium, in doses of three grains three times a day, on account of the anaphrodisiac effect of this medicine, as many of the cases seemed connected with masturbation; in one-seventh of the cases, a complete cure was effected within a week; and, in one-half nearly of these cases, there was no reason to suspect masturbation. In four cases, benefit only resulted from this salt. Chloride of iron, together with the cold douche to the back, was tried, but in vain; and cantharides were resorted to with as little success. Tincture of belladonna was given in fifty cases, with much success. Each child was made to rise and pass urine an hour after going to bed; a dry supper of bread alone was allowed; and the cold douche was applied. Under this plan, the number of cases diminished with astonishing rapidity.

In incontinence of urine, injection of the bladder with carbonic acid gas has been found highly efficacious, and has been strongly recommended by Professor Simpson, Dr. Skinner of Liverpool, and others; and this plan promised to be of much service to Stutley, but the mother foolishly was frightened at the remedy. The blistering of the sacral region, recommended, I believe, by Dr. Marshall Hall, and the remaining plans of treatment mentioned in this report, are doubtless perfectly familiar to you all, and require no comment from me.

KING'S COLLEGE HOSPITAL.

I. RADICAL CURE OF HERNIA.

Under the care of Henry Lee, Esq.

The following is the first case for which an operation for the radical cure of hernia, where there was no strangulation, was performed in King's College Hospital.

Thomas H., aged 40, was admitted into King's College Hospital in the beginning of December 1858. He had had an oblique inguinal hernia on the left side for two years. Whenever he stood up, it appeared as an oval swelling, the size of a large walnut, in the left groin. The swelling could easily be reduced; and one finger, but not two, could be introduced without difficulty into the inguinal canal. He had never worn a truss.

On December 11th, the patient having been placed in a recumbent position, Mr. Henry Lee invaginated a portion of the skin of the scrotum, pushing it as far as possible into the inguinal canal. One of Wützer's instruments was then introduced upon the invaginated skin, and fixed, by means of the long needle, in the ordinary way. The shield was then screwed upon the cylinder of the instrument with a moderate degree of force. The operation, which occupies very little time, was attended with scarcely any pain; but, about half an hour afterwards, some burning heat was experienced in the part; this soon amounted to actual pain, which continued for five hours. There was also some amount of general feverishness.

December 13th. There was still slight pain caused by the pressure of the instrument, but no fever. Pulse 76.

December 15th. Pain much the same. No fever.

December 17th. The shield of the instrument was removed, and it was found that indentation of its extremity had caused a little slough of the skin immediately underneath. The shield was reapplied, the pressure of the extremity being relieved by a pad placed at a short distance from it. A thin serous discharge now appeared from the invaginated portion of skin.

The skin was tender, but there was no fever or disturbance in any other part.

December 20th. A small circular slough of the skin, quite defined, had formed opposite the extremity of the instrument. Pulse 76. He had no tenderness nor pain in the abdomen.

December 21st. He got up of his own accord, the bandage being loosely applied; and he experienced some pain in the inguinal canal.

December 24th. The small slough had separated. A light bandage was applied, and he was allowed to get up.

December 30th. The thickening around the inguinal canal had in great measure subsided. There was no pain or inconvenience of any kind.

January 15th, 1859. He left the Hospital for Poole, having been quite well since the last report, and the parts been apparently quite consolidated.

[Erratum. In last week's Journal, in the Case of Varicocele, page 99, twenty-four lines from bottom, it is stated that the figure of 8 bandage should be *tightly* applied. It should be *lightly*.]

II. ENORMOUS HYDATID TUMOUR OF THE OMENTUM ATTACHED TO THE LIVER, PROVING FATAL: INTERESTING AUTOPSY.

Under the care of G. Budd, M.D.

[*From Notes by* C. Parsons, Esq., *House-Physician.*]

E. R., aged 30, a lithographic printer, of temperate habits, residing in London, applied as an out-patient at King's College Hospital on October 23rd, 1858, with an immense tumour in the right hypochondrium. He was placed under the care of Dr. Budd. Four years ago, he first noticed a small round swelling under the right false ribs; and, three years before that time, he had observed a small moveable tumour within an inch of the ninth dorsal vertebra on the right side of the back. About seven months ago, he first felt pain in the right hypochondrium, and until that time the tumour had made but little progress. (During the last two years, he had had occasional attacks of yellowness of the face and eyes, lasting usually for a week, and recurring about once in three months.) The pain was referred to a point on a level with the umbilicus, and about five inches to the right of it, and was accompanied by fever and diarrhœa, with great tormina. He had also pain between the shoulders. This attack, having lasted eight or nine days, was scarcely over before a fresh one came on in the region of the ensiform cartilage, with a sensation like a heavy weight resting on his stomach, and accompanied by tenderness and pain after food, but no vomiting. For the past four weeks he had had severe pain in the right infrascapular region. During the last ten weeks, the hypochondriac tumour had grown much more rapidly, and his side and back had bulged considerably. He had lost flesh since the first access of pain. He never had any swelling of the feet. During the last seven months, he had been an out-patient at the Middlesex Hospital.

October 28th. There was a large globular tumour in the right hypochondrium, reaching over into the left, and divided, by a faint vertical constriction along the median line, into two unequal portions. The right back was very prominent; the lower five ribs were widely separated; and the general projection was somewhat globular. The line of hepatic dulness began in the right loin, about two inches and a half above the crest of the ilium, ran with little unevenness forwards to within an inch of the umbilicus, and then ascended obliquely upwards and outwards till it was lost beneath the left ribs, about four inches from the ensiform cartilage. The upper margin of dulness reached to the right nipple. Change of position did not alter the relations of the points of maximum prominence of the tumour, neither did the skin seem to move over them. The measurements were as follows: circumference at ensiform cartilage, 36½ inches; semicircle, left side, 17 inches; right side, 19½ inches; at umbilicus, right and left sides, 17 inches each; midway between the two lines on either side, 19 inches; vertical, from ensiform cartilage to umbilicus, 10 inches. There was no evidence of fluid in the peritoneum. The apex of the heart pulsated one inch outside and below the nipple. Percussion over the rest of the thorax was very resonant and everywhere equal. The skin of the abdomen was much marked with tortuous veins. He was very pallid and emaciated; complained of severe constant pain in the right back, and slighter pain to the right of the umbilicus and in the præcordia. The tumour was recognised as hydatid, and was supposed to be situated in the liver.

The patient declining to come into the hospital to have the tumour tapped, a galvanic current was ordered to be passed through it three times a week. The application of the galvanism seemed to give relief, apparently by causing the expulsion of wind from the stomach.

Early in November he caught cold, and the night following rigors came on, and violent pains across the abdomen, which lasted without intermission for two days. He did not eat anything; he became jaundiced for four or five days, and the swelling increased considerably and became more painful.

November 26th. He was admitted an in-patient. He had permanent and considerable dyspnœa; the tongue was brown; pulse 112; the abdomen was very tender, maximum circumference thirty-five inches; he had constant eructations of wind.

December 1st. Considerable fever, intense abdominal pain, slight delirium, much dyspnœa, and palpitation, were present.

December 2nd. Maximum circumference thirty-seven inches and a half. The tumour being ordered to be tapped, Mr. Fergusson punctured the most prominent part with a grooved needle, and a few drops of pus oozed out from the puncture. A fine trocar being next introduced, a small amount of whitish, gelatinous material passed down the cannula, but no liquid came through it. The cannula was cleared by a probe, but still no liquid flowed. After several vain attempts of this kind had been made, the cannula was withdrawn, and the wound covered with plaster. Under the microscope, the gelatinous matter noticed above proved to be of homogenous structure, containing a few ill-defined cells.

December 3rd. He passed a tolerable night; suffered from great dyspnœa, and could not lie on his back at all without respiration being nearly suspended.

December 4th. He was much worse; respiration was more and more difficult. Towards night the breathing became more laboured, and he died in a state of apnœa at three A.M., on December 5th.

Post Mortem Examination twelve hours after death. The body was emaciated, and the abdomen distended. The entire left side of the abdomen was occupied by the liver, the left end of which was under the costal cartilages, and the right margin was turned downward towards the pubes. It was of natural colour and weight, but somewhat flattened. An immense fluctuating tumour was connected with its right lateral margin, but did not arise from its substance. The tumour was loosely adherent by fibrous bands to the abdominal walls, from which it was separated with much difficulty. Its walls were about one-third of an inch in thickness, and composed of a dense and tolerably vascular fibrous tissue, of a dark grey colour, and firm consistence. It was more closely adherent to the diaphragm than to the abdominal walls; and at one spot near the centre of the right lobe of the trefoil tendon, was a small orifice with ulcerated margins, about the size of a shirt stud. This communicated with a large, almost gangrenous opening through the wall of the cyst, through which a pint or more of fluid had passed into the right pleural cavity. On pressure, a small jet of greenish puriform fluid issued forth, and two hundred and ninety ounces of it, mixed with the gelatinous skins of hydatids, were removed. All of these cysts, except a few small ones, were found to be broken. They were all semitransparent and delicate in texture. The specific gravity of the fluid was 1·023. It contained no bile. Between the liver and stomach was a small cyst, of the size of a walnut, connected with both viscera. In the great omentum were five or six similar ones, varying in size from a large orange to that of a filbert; and three others were attached to the left colic omentum. The other organs were healthy. The skins of the hydatids, when strained off from the purulent liquid in which they floated, were more than could be contained in a quart measure. The preparation was shewn at the Pathological Society by Dr. Budd.

WESTERN GENERAL DISPENSARY.

ABSCESS NEAR THE RECTUM, FROM THE LODGMENT OF A FISH-BONE.

Under the care of E. Barker, Esq.

The following case is an example of one of the causes of fistula *in ano* which is very frequently mentioned in books, but very rarely verified in practice; viz., the lodgment of a fish-bone near the anus, which passes through the coats of the rectum, and causes abscess beneath the skin. In the instance before us, indeed, the opening into the rectum fortunately healed either before or at the same time as the external inci-

sion, so that no fistulous channel was left. In the only other case that we remember to have seen, which occurred some years ago in the practice of Mr. Cæsar Hawkins, a fistula was left; and the cause of it was only recognised at the operation. In that case, the patient was quite unaware of the accident which had led to his complaint.

An elderly woman, aged 68, of intemperate habits, was admitted under Mr. Barker's care, on account of suppuration in the right nates, near the rectum. On inquiry, it was found that she had been eating a sole for dinner, when a bone stuck in her throat, and would neither go up nor down for some time. Finally it went down, and she thought no more about it, only that she felt an occasional uneasy sensation about the epigastrium. This occurred more than a fortnight before admission. When admitted, she was low and feeble, and erysipelas was extending over the surface of the skin in the neighbourhood of the diseased parts. No distinct fluctuation could be felt, but the presence of deep seated matter was indicated by the doughy sensation presented. A deep incision was accordingly made by the side in the rectum; and, in doing so, a foreign body was found, which grated against the knife. Pressure was made to evacuate the matter; and a fish-bone, two inches in length, protruded from the wound. On this being extracted, the patient related the foregoing history. The wound healed very quickly, and no fistulous communication was left. The patient was soon in perfect health.

ST. MARY'S HOSPITAL.

POISONING BY ACONITE-ROOT.

[From the Hospital Post-Mortem and Case-Book.]

The following case is reported in order to put on record the *post mortem* appearances which follow the operation of this poison, and of which few, if any, perfectly full accounts appear to have been yet published. The case is otherwise of no particular interest, as the patient (who was nominally under Dr. Alderson's care) was seen far too late for any good to be expected from any kind of treatment.

James D., aged 58, was admitted, under the care of Dr. Alderson, on July 11th, at five minutes before one in the morning. He was a gardener, and acquainted with the properties of plants; and, being in great distress, had dug up a quantity of aconite-root, and dried it, with the intention of committing suicide. This intention he carried into effect on the night of admission, about eight o'clock, by eating a quantity of it. At eleven, being in very severe pain, he called some of his neighbours, and told them what he had done. The person who was with him said that he had most severe pain in the stomach, with vomiting and purging; occasionally he seemed very dizzy, and lost consciousness for a few seconds, but at other times was quite sensible. When admitted, about five hours after taking the poison, he was in a state of collapse, very pale; the skin was cold and perspiring; pulse slow, intermittent, and scarcely perceptible; the bowels were relaxed. He was quite conscious. Stimuli and animal charcoal were administered, but he died twenty minutes after admission.

On *post mortem* examination, thirty-seven hours after death, the following appearances were noted. The body was that of a muscular man, of middle height. The head was much thrown back; the muscles of the neck were prominent and rigid. There was no rigor mortis of the upper extremities, slight of the lower. The face and skin of the body were pallid. The vessels of the brain did not contain much blood; its substance was pale, but firm and healthy.

On removing the sternum, dark fluid blood flowed from the divided vessels. The pericardium was nearly concealed by the lungs; it contained about half an ounce of serum. The heart was rather large, weighing fifteen ounces. There was a good deal of fat on its surface. The cavities on the right side were quite flaccid, and nearly empty; they contained about an ounce of fluid blood, and a small black coagulum was removed from the auricle. This was the only trace of clot which was found, the blood throughout the body being very black and fluid. The left ventricle was firmly contracted, and, with the auricle, contained about three ounces of blood. All the valves were natural. The lungs did not collapse when the thorax was opened; they were emphysematous everywhere, and inflated; the left most so. Both lower lobes were slightly congested. There was an old cretaceous tubercle, of the size of a bean, on the anterior surface of the left upper lobe.

The liver was healthy; the gall-bladder perfectly empty and collapsed. The spleen was dark and congested, but otherwise natural. The kidneys were congested—rather softer than usual; the capsules peeled off easily. Both contained several small cysts. The bladder was firmly contracted, and contained about half an ounce of urine, milky from lithates. The stomach contained about three ounces of thick grumous fluid, which had a reddish tinge: it was highly congested on its inner surface, having a bright scarlet hue. There were four or five ridges of mucous membrane, passing longitudinally, which were more intensely reddened: here and there were minute patches of extravasated blood, from the rupture of small vessels. The natural rugæ of the stomach were less distinct than usual. This bright colour extended past the pylorus, which was rather firmly contracted, into the first portion of the duodenum, and gradually assumed a dark colour, becoming nearly brown before it ceased, which it did at the upper part of the jejunum. The rest of the small intestine was natural, paler even than usual, which was the case with the large intestine, except a small patch in the transverse colon, where it was slightly congested. The solitary glands were very distinct. The large intestines were distended with flatus; they contained fluid, but natural, fæces. The duodenum contained several ounces of thick reddish fluid, mixed with small solid pieces; the jejunum contained similar matter, but not so red; in the ileum it was stained with bile. The œsophagus was injected, and tinged with a most beautiful violet colour, which extended upwards to the pharynx and fauces. The tongue was black from charcoal.

Original Communications.

LUMBAGO.

By W. Newman, M.B.Lond., Fulbeck, Grantham.

In the ordinary routine of medical practice in an agricultural district, I have met with numerous cases of lumbago; and may plead the frequency of its occurrence, with the attendant suffering, as sufficient reason for noticing it in the pages of the British Medical Journal. The disorder is far from being uncommon; and the placards at railway stations exhibiting some pitiable figure, worn and bent with pain, with hand on hip and contracted brow, only serve to tell how much the public and the quacks are interested in the malady.

The cases of painful affection of the lumbar muscles (excluding, of course, those due to organic disease or chronic derangement of health) range themselves in two tolerably well marked groups.

1. *Rheumatic Lumbago.* By this term, I would refer to that series of cases where the symptoms come on more or less slowly, and take some time to develope themselves; where the pain is described as dull and aching, not relieved by pressure, and not of necessity by posture, and accompanied by more or less of general constitutional disturbance, by rheumatic pains in the limbs, or by effusion into some of the joints. It occurs frequently in persons who have hereditary tendency to rheumatism, well nursed by their occupation and mode of life. As a rule, it owns exposure to cold as the immediate cause of its onset.

Microscopic examination of the urine, which is high coloured, of high specific gravity, and scanty, will show the existence of large and abundant crystals of uric acid, with accompanying amorphous urates.

The treatment is that of rheumatism—alkalies and sedatives, with colchicum, warm and opiate applications, etc.

2. *Neuralgic or Myalgic Lumbago.* The pain comes on in this kind more suddenly than in the other form. It may show itself first after some sudden exertion or rapid movement; or it may occur without apparent cause. It is of more acute character than ordinary rheumatic pain. Stooping is difficult; but the exertion of rising after stooping is almost intolerable. Shooting pain is complained of in the course of the spinal column. There is no accompanying rheumatic affection. The pain is relieved by pressure, by lying down, or by resting in an arm-chair. It generally occurs in those who are debilitated by some prior ailment, or depressed by mental or physical over-work. Instances of this form are much more common than those of the first division.

Microscopic examination of the urine shows crystals of oxalate of lime, singly, or co-existent with triple phosphate crystals and amorphous urates.

A few doses of quinine, with or without steel, will act almost magically. Rest and good diet should be added, if possible. Several instances, where the quasi-heroic plasters and liniments of croton oil and tartarised antimony (though, be it understood, from no want of apparent potency) have failed to relieve the patient, I have found to yield at once to the above named remedies. Internal antirheumatic alkaline or depressing agents do not, so far as I have tried them, exert any favourable influence whatever.

The characters of the urine might almost be spoken of as diagnostic in each instance. Repeated examinations of urine from patients of each class have made me believe that their respective characters are very fairly constant; and that from this circumstance alone, the appropriate treatment might be deduced.

I do not think that the distinction of the two classes with the widely different treatment is sufficiently recognised or acted on. Poor as this modicum of contribution is, I yet believe that it has some trace of correctness for its basis; and I shall be interested to know how far those members of the Association, who have worked out muscular affections much more thoroughly, are inclined to agree with the division suggested.

PATHOLOGICAL CONTRIBUTIONS TO MEDICAL JURISPRUDENCE.

By William Boyd Mushet, M.B.Lond., late Resident Physician at St. Marylebone Infirmary.

IV.—Fracture of Ribs and Sternum from Direct, and of Vertebra Dentata from Indirect Violence; Rupture of Liver; Disease of Ovaries.

S. T., aged 24, was brought to the Marylebone Infirmary at 11 P.M., on December 21st, 1856. She was dead, but warm. The face was pale and collapsed; the pupils were dilated. There was considerable ecchymosis over the chest; and a fracture of the sternum and ribs of the right side was palpable through integuments. There was some emphysema of the cellular tissue in the neighbourhood. The injury resulted from the deceased, whilst sitting in a Hansom cab, being driven violently against the pole of an omnibus.

Post Mortem Examination thirty hours after death. The body was well formed and fat. Rigor mortis was well marked. There was a scalp wound, about two inches long, over the vertex extending to the bone, with corresponding detachment of the pericranium to some extent. No fracture of skull. The brain was healthy; but there was slight extravasation into the meshes of the pia mater over the posterior left lobe of the hemisphere, and over the superior median line of the cerebellum. The head was very mobile; and, on passing the finger through the foramen magnum into the spinal canal, irregularity could be detected; and, on opening the nucha from behind, and removing a portion of spinal column, a fracture of the axis was discovered—the body, odontoid and transverse processes (or anterior half of the bone) being broken off from the laminæ (or posterior half). The head, with the atlas and anterior segment, was consequently thrown forwards, and the spinal column and posterior fragment backwards. There was some extravasation into the muscles around the seat of injury, but no clot effused.

Chest. There was extravasation into the right pectoralis major. The sternum was fractured obliquely upwards from left to right, about an inch from the *incisura semilunaris*, between the second and third ribs. The third, fourth, and fifth ribs, on the right side, were broken irregularly midway between the sternum and spine, the pleura being perforated, and the fractured extremities lacerating the anterior lobe of right lung. About eight ounces of fluid blood were found in the right pleura, and two or three ounces in the left. The lungs were collapsed, especially on the left side, so that the anterior surface of the pericardium was quite uncovered. There was effusion into the areolar tissue of the posterior mediastinum. The heart weighed ten ounces; it was firmly contracted and empty, apparently healthy.

Abdomen. The right lobe of the liver was torn through its whole substance nearly from the superior border to its lower margin. The torn surface was granular, rugged, uneven, and much darker than sections made elsewhere. There was no injury of the vena cava or of the aorta. Between forty and fifty ounces of fluid blood were found in the peritoneum. The uterus was virgin, and healthy. The ovaries were in a cystic state (multilocular), especially the left; each was of about the size of a walnut; the left rather the larger. Limpid fluid escaped on section. Other organs were healthy. The state of the catamenial functions could not be ascertained.

Remarks. The foregoing case is detailed, as it offers one or two points worthy of comment. 1. As an example of fracture of the axis from indirect violence. 2. From the disease of the ovaries, which were almost symmetrically affected, and would, I presume, have precluded impregnation. This young woman was remarkably comely and well proportioned, and seemed, as regarded her physical appearance, unexceptionably fitted for the conjugal state. Nevertheless, the morbid alterations in the sexual system, unusual at her early age, would doubtless have entailed permanent sterility. To medical jurists this is interesting, as, if diagnosticable during life, it might furnish grounds for release a *vinculo matrimonii*.

CASE OF ANEURISM OF THE INNOMINATA.

By John Watson, M.D., Southampton.

On October 12th, 1858, I was asked to visit John K—tt, a gardener, aged 84. I found him complaining of pain in the lower part of the abdomen, which he attributed to having eaten an apple the night before. He has never entirely kept his bed, though for some months past his strength and spirits have been failing, and for two or three years he has had a swelling in the right side of his neck, to which my attention was now directed.

Its *history* was, that some four years ago he suffered a severe shock from the sudden death of a nephew, which brought on a violent tremor; and that shortly afterwards he began to complain of pain at the lower part of the throat, and difficulty of swallowing. No cause for these symptoms could be discovered; but a blister was applied across the throat, with partial relief. Subsequently, the pain extended to the right side and back of the neck, and was then called rheumatism. A swelling now (two years and a half ago) gradually presented itself in the situation in which I found it; but for many months its growth, if any, had been very slow. Its *present condition* was that of a hard globular tumour, the size of an orange, extending upwards and backwards, from beneath the clavicle, and occupying the clavicular part of the posterior triangular space of the neck. Its pressure caused considerable turgescence of the veins of the neck and sternum. It pulsated synchronously with the systole of the heart, and this pulsation was attended with a loud *bruit*. The action of the heart was irregular, with great impulse, and its first sound accompanied with a distinct *bruit de scie*. A sense of constriction at the upper part of the chest was complained of, and much shooting pain was felt at intervals in the back parts of the head and neck. The breathing was stridulous; he required to be propped up in bed; and there was a pretty copious expectoration of frothy mucus. His voice was clear; swallowing was difficult, and described as if the food or drink passed from the left to the opposite side. No difference was noticed between the pulse in the two wrists.

The old man died on October 17th, apparently from debility, the state of the heart and arteries having only an indirect influence on the cause of death. I was disappointed at being refused permission to make any *post mortem* examination; but though the case is thus left imperfect, it is not, I think, altogether without interest—illustrating, as it does, the mechanical effects of a somewhat infrequent form of disease; and shewing also, what is of more frequent observation, the power of retarding morbid changes which the system acquires in advancing life, so that long-standing disease of a vital organ is perfectly compatible with death from other causes.

Testimonial to T. H. Barker, M.D. The meteorological contributors to the Registrar-General's Quarterly Returns, and others, have presented a handsome striking skeleton clock to Dr. Barker of Bedford. The subscriptions were limited to five shillings each, and the following inscription sufficiently indicates the occasion of the testimonial:—"Presented to Thomas Herbert Barker, M.D., F.R.C.S., by the officers and members of the British Meteorological Society, and others, as a memorial of their esteem, and a recognition of his successful exertions in obtaining for them the re-circulation of the Reports of the Registrar-General, which had been withdrawn by a Treasury minute."

Reviews and Notices.

Demonstrations of Diseases in the Chest, and their Physical Diagnosis. By Horace Dobell, M.D., Licentiate of the Royal College of Physicians, etc. With Ten Plates. Pp. 115. London: Churchill. 1858.

Dr. Dobell's object is to connect the physical signs of diseases of the lungs with the structural changes in these organs, as seen in *post mortem* examinations. As a preliminary to this, he gives several chapters on the principles of acoustics in general, and on those of the chest in particular; and points out to the student, in a clear and simple manner, the best mode of obtaining a knowledge of physical diagnosis. He advises to educate the ear by experiments on inanimate bodies, with reference both to the production and the conveyance of sound; and there is no doubt that advantage would be derived from practising the instruction which he gives to produce imitation of the chest-sounds—the caution being always borne in mind which the author lays down.

"It would be a great mistake to suppose that these sounds, produced by experiments on inanimate objects, are exactly like those audible in the chest; that is not intended for a moment, although many of them are extremely similar, and convey an impression much more correct than any verbal definition. The special advantage to be gained from the practice of these experiments consists in the education thus given to the ear; the acoustic conditions are in each case plainly seen; the sound can be listened to with ease, as often as requisite, free from the disturbances of the bedside; and hence, with a little perseverance, the susceptibility of the ear to distinguish and identify sounds and their causes will become so acute that the learner will be able to assign most sounds to their essential acoustic condition, and will readily understand what he hears when he auscults or percusses the human chest.

"We must not forget to guard against the danger of concentrating the attention on the special senses, to the exclusion of that *common sense* without which no learning, talents, or skill, and no accumulation of evidence, will ensure wisdom in our judgments." (P. 66.)

The ten coloured plates contained in the work mostly each consist of three or four figures, representing portions of lung in various stages of disease; and appended to them are outline descriptions of the physical signs produced in each case. The plates represent the following diseased states:—

Plates I—III. *Consolidations.* 1. Isolated (Miliary) Tuberculous Granulations; 2. Conglomerated Interstitial Tuberculous Granulations; 3. Infiltrated Tubercle; 4. Apoplexy of the Lung, after Coagulation; 5. Healed Cavities: Fibro-cellular Cicatrices and Chalky Concretions; 6. First Stage of Pneumonia; 7. Second Stage of Pneumonia; 8. Second Stage of Pneumonia passing into the Third; 9. Medullary Cancer; 10. Hard Cancer; 11. Melanoid Cancer; 12. Indurated Lung, the Effect of Pneumonia.

Plates IV and V. *Liquefactions.* 13. Second Stage of Acute Bronchitis; 14. Chronic Bronchitis; 15. Third Stage of Pneumonia; 16. Second Stage of Tuberculous Disease; 17. Apoplectic Coagula in the Lungs, softening; 18. Apoplexy of the Lung before Coagulation, with and without Laceration.

Plates VI—VIII. *Excavations.* 19. A large empty Tuberculous Cavity, with Reflecting Walls, free Bronchial Communications, and surrounding Lung consolidated; 20. A similar Cavity containing Secretion; 21. A very Superficial Cavity full of Air; 22. Small Tuberculous Cavities beneath a Stratum of normal Lung; 23. A large Tuberculous Cavity beneath a thick Stratum of densely consolidated Lung; 24. Emphysema (vesicular); 25. Bronchiectasis; 26. A Gangrenous Cavity; 27. A Pneumonic Abscess, partly emptied.

Plate IX. *Pleurisy, etc.* 28. Normal Lung, shewing the Interior of the Bronchial Tubes; 29. First Stage of Acute Bronchitis; 30. First Stage of Acute Pleurisy; 31. Second Stage of Acute Pleurisy; 32. Third Stage of Acute Pleurisy; compressed and displaced Lung.

Plate X. *Pneumothorax, etc.* 33. Pneumothorax; 34. The Pathological Causes and Effects of Pneumothorax; 35. Empyema with Pneumothorax.

We advise the student to examine well these plates, and read carefully the corollaries which accompany them. They will probably refresh his memory of what he has seen in necropsies, in the same way as anatomical plates call to his mind what he has seen in the dissecting-room. The practitioner, too, may by their means from time to time refresh his knowledge of the pathological appearances of the lungs. And both will be materially aided in their appreciation of the connexion between physical signs and structural changes.

A Clinical Memoir on Strangulated Hernia, with the Author's Practice; to which are added, Remarks on Obstruction of the Bowels from other Causes; and a Postscript. By George Macilwain. Pp. 120. London; Henry Renshaw. 1858.

Mr. Macilwain is one of the most persevering opponents of the use of purgatives in hernia—perhaps *the* most persevering. The present volume is chiefly intended for the purpose of reiterating his views on this subject; and it contains, moreover, much practical instruction in regard to other points in the treatment of hernia. We believe that the practice against which the author directs his energetic pen is losing favour with all sensible surgeons; and, whenever it becomes extinct, much credit will be due to Mr. Macilwain for the hearty push which he has given it towards annihilation.

Inventions and Appliances
IN
MEDICINE AND SURGERY.

NEWBERY'S COD-LIVER-OIL GINGERBREAD.

The man who deprives medicine of its terrors to children is a "real blessing to mothers"; and in this light we must look upon Messrs. Newbery, of St. Paul's Churchyard, who have just brought out a medicated gingerbread, in which cod-liver oil is so artfully mixed that it is not discernible by the taste. Each square of about two inches is warranted to contain a teaspoonful of the oil. We may henceforth, therefore, administer it with pleasure to children, and, indeed, to grown-up persons, instead of with the loathing which it often produces in its undisguised and neat condition.

Association Intelligence.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

Social and scientific meetings of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on the undermentioned days:—

Friday, March 25th, 1859, at 3.30, at the Town Hall, Gravesend.

Friday, April 29th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

British Medical Journal.

SATURDAY, FEBRUARY 12th, 1859.

HOMŒOPATHY AT THE LIVERPOOL MEDICAL INSTITUTION.

There has been another grand field day at the Liverpool Medical Institution; and this time, we are glad to say, the victory has been on the side of common sense and common honesty, and one of the most important centres of medicine in the kingdom has been relieved from the stigma of having aided and abetted "a delusion and a snare". Henceforth no homœopath will be enabled to brag that he is a member of the Medical Institution—a species of dishonesty some of these gentlemen are quite capable of, as this Association has already experienced in the conduct of Dr. Horner, who, long after he had become an apostate from legitimate medicine, insisted upon styling himself a Vice-President of the British Medical Association.

The speeches, delivered both for and against the resolutions passed at this meeting, to be found in our news columns, are pretty nearly identical with those used on the last occasion. Those who voted in support of what they considered to be medical liberty, did so on the plea that we have no right to persecute a man for his opinions; and those who voted for the exclusion of the homœoquacks, did so on the simple, and, as we believe, unassailable ground, that this is no question of opinion at all, but a question of common honesty. We are told, indeed, by Mr. Moore, that this movement against homœopathy may be likened to that which took place against Galileo; but, fortunately, we know full well that every false prophet is in the habit of justifying himself by Christ. Dr. Drysdale, his fellow homœopathic member of the Institution, stated, at the last discussion, that he did not feel himself forced at all to confine himself to infinitesimal doses; he killed an intestinal worm with an ordinary dose of kousso. Mr. Moore is equally explicit and ingenuous in his explanation as to practice. "In matters of dose, I give just as much as I believe is necessary—often a grain or two grains, or a drop or two drops of tincture, as the case may be. . . . In very many cases, I have prescribed to patients the same medicines which they have had from a former physician."

Really we think it a very great pity that the speaker was interrupted in this charming revelation of the art and mystery of homœopathic practice. It is but rarely that we get a chance of a self-painted portrait, at once so accurate and so astounding. We place, then, before the medical public these confessions of faith by two homœopaths, and we fairly ask, what can be thought of them? Homœopathy is paraded in the cheap Liverpool papers as the new and liberal method of treating disease. Its founder dogmatically asserts that it is the only true or possible method of treating disease; yet these two disciples are not ashamed to stand up in the midst of a crowd of honourable and scientific men, and to declare that their allegiance to homœopathy is a farce, and that they shall and do give just whatever doses to their patients they see fit! Will they have the goodness to make the statement in public? Will they have the common honesty to tell the Liverpool papers that they have been all along leading the public to believe that which is not—to put faith in billionths of a grain, whilst they have been prescribing ordinary doses—to believe in the light of a new faith, whilst they have been actually fudged off with some old prescription of a regular physician! Mr. Galileo Moore has, of course, a perfect right to liken the persecutions he and his fellows labour under, to those of the great philosophers who struggled for the truth amid the ignorance of a benighted world; but perhaps the public will take a different view of his martyrdom, and of the motives which prompted it.

But surely those gentlemen who, in their earnestness for freedom of medical science, sided with homœopathy for the nonce, cannot any longer believe that, in throwing their shield over practitioners who thus play at hide-and-seek with truth and with the public, they are standing up for the freedom of thought in matters medical!

Here are no new ideas to be fostered—no new lights to be cherished, but simple double dealing, which it is the duty of every man to expose. Here we have the thirtieth dilution hiding itself behind the back of the six-ounce phial, and *vice versâ;* it is of no possible consequence. As the showman tells the children in the fair, "You pays your money and has your choice." But away with this miserable shuffling—this disastrous subterfuge in matters of life and death. Let the professors of homœopathy stand aloof from us, or frankly admit their error. Rational medicine can make no terms with them as long as they retain such India-rubber consciences, and practise in a manner equally elastic.

We rejoice to find that the profession in Liverpool has rallied round the defenders of legitimate medicine, and that the late discussion in the Medical Institution has resulted in a majority of 76 in favour of purging the Institution of all homœopaths for the past, present, or the future. Possibly the result of this discussion will not be trumpeted so loudly in the public papers as the last one; but ample reports of this deeply interesting meeting will be found in our columns, and in those of our contemporaries—the only proper columns, in our opinion, for the reports of such proceedings.

THE WEEK.

A deputation of the Medical Officers of the London Unions, accompanied by several members of Parliament, had an interview on Wednesday last with the Right Honourable T. Sotheron-Estcourt, M.P., President of the Poor-Law Board, for the purpose of laying before him a memorial and series of resolutions agreed to at a recent meeting of medical officers, with reference to his scheme for a new arrangement of medical relief. The deputation were introduced by Lord John Russell, M.P.; and the objects thereof were explained by Dr. Sparke, of the City of London Union, and Mr. Ross, of the West London Union. Mr. Estcourt took occasion to explain, in reference to a passage in the circular letter of his private secretary, that, in speaking of improving the present system by conducing to a more careful attendance on the sick, he had not desired to cast reflections on the members of the medical profession, who, he knew, performed their duties faithfully. In reply to the state-

ments and remarks of these and other members of the deputation, he said that he felt the preponderence of feeling was in opposition to his scheme. He therefore wished the deputation to understand, that he would not think of proposing for legislative adoption any plan on which he had not obtained a full and correct opinion out of doors, his desire being not to bring forward any scheme on the subject which did not have the concurrence of the medical profession, the ratepayers, and the poor themselves.

At the Westminster County Court, on Wednesday last, an action was brought by a lady, Miss Mary Scattergood, to recover the sum of five guineas from a person named John Gibson Bennett, otherwise calling himself Dr. Coulston. The plaintiff stated that, being troubled with deafness, she applied about two years ago to the defendant, at 6 Leicester Place, Leicester Square. He informed her that he could cure her in ten minutes for ten guineas; but, on her representing that she could not afford that sum, he agreed to effect the cure for five guineas, which would include the cost of an apparatus. Instead, however, of curing her at once, he gave her a mixture to be applied. This made her head and ears so sore that she had afterwards to use fomentations, and she became worse. As she was to be supplied with an apparatus for her five guineas, she went to the defendent's again, but she was told by a young man who opened the door, and whom she believed to be the defendant's brother, although he passed as his assistant, that she could not see Dr. Coulston, and that he would be away for several days. She called several times afterwards, but could not see the defendant, and at length she was told he had gone abroad, to Madeira. She saw no more of the defendant until lately, when she happened to go with a friend, Miss Thomas, to 32, Spring Gardens, where Miss Thomas was going to obtain medical advice from a person calling himself Dr. Matton. As they entered the house, she (plaintiff) saw a gentleman sitting in the parlour, apparently passing himself off as Dr. Matton, and in this gentleman she recognised Dr. Coulston. Miss Thomas afterwards sued Dr. Matton in that court, and when Dr. Matton appeared on that occasion, she (witness) identified him as the Dr. Coulston who had obtained five guineas from her. The defendant denied entirely ever having seen the plaintiff before that day, or received any money from her. He never resided at 6, Leicester Place, or practised as Dr. Coulston, but he believed his brother had been connected with Mr. Coulston, surgeon, who resided and practised there. The defendant's brother, William Bennett, spoke of the existence of a Mr. Coulston, to whom he (witness) acted as assistant; and he stated that the plaintiff was a patient of Mr. Coulston's, but she was a gratis patient, and never paid a halfpenny. He expressed his surprise that Mr. Coulston was not present, as he had been subpœnaed. The name of "Samuel Coulston" and "Dr. Samuel Coulston" was then ordered to be called out in court; but there was no response. Some further evidence had been given, and his Honour said there could be no doubt but that there had been a conspiracy and fraud committed, and he should give a verdict for the plaintiff, the defendant in the meantime to be taken into custody for perjury, grounds for this proceeding having been given in the evidence. The defendant was then taken into custody by the officers of the court. The court was attended by the Secretary of the London Medical Registration Committee, and by a number of members of the medical profession.

We appear likely to have a valuable addition made to our articles of animal food, in the flesh of the eland—the *Antilope Orcas* of Pallas. The animal is an inhabitant of the country on the east coast of the Cape colony, and seems capable of being naturalised in England. At the age of six years, the eland has the size of a full-grown ox; the meat is said to be exceedingly tender, like beef, but with a game flavour. Professor Owen states, in a letter to the *Times*, that he and two brother naturalists had, as a "committee of taste," made a practical examination of a roasted portion of eland, answering to the "short ribs" of beef. The result was, that the "committee rose with the conviction that a new and superior kind of animal food had been added to the restricted choice from the mammalian class at present available in Europe."

Mr. J. H. Smith, the homœopathic poor-law medical officer, has had a letter addressed to him by the Poor-Law Board, of which the following is a portion:—

"The Board desire me to remind you, that in the letter which they addressed to the guardians on the 24th November last, they stated that, having regard to the assurance contained in your letter of the 6th October, they were not prepared to require your resignation, provided that the guardians were fully satisfied with the manner in which you discharged the duties of your office, and the general treatment of the sick poor under your care. It now appears, however, that from your having adopted a system of medical treatment which is not recognised by any of the constituted medical authorities of the country, the guardians have no longer confidence in your proceedings as medical officer. It is to be borne in mind, too, that the guardians are primarily responsible for the medical attendance on the sick poor; and the Board therefore think that, as you were appointed by them on the understanding that you would practise in accordance with the system generally recognised, the guardians are entitled to demand either that you should adhere to that system or resign your office of medical officer.

"Under these circumstances, the Board are not prepared to assume, themselves, the responsibility of allowing you to retain the office, unless they are informed that you will relinquish the practice of homœopathy in the treatment of the poor under your care as medical officer; and I am accordingly to inquire whether you are willing to give such an assurance."

Dr. B. W. Richardson, who is well known as one of our most assiduous and successful physiological experimenters, has for some time been occupied in an investigation of the real merits of the voltaic current as an agent in producing local anæsthesia. He finds, as we sometime ago mentioned, that the value of the current, *per se*, in producing insensibility to pain is not at all what its advocates have vaunted it to be. But, in the course of his experiments, he has ascertained that the continuous current may be used with advantage in favouring the local action of narcotic substances. In an experiment which we witnessed some days ago, the ear of a dog was enclosed between two metal plates, the one lined with sponge impregnated with a solution of aconite, the other with a piece of the same material wetted in vinegar. In about three-quarters of an hour, the ear was found, on being pricked, to be in some parts slightly sensible of pain, while in others anæsthesia was perfect. Since that time, we learn that Dr. Richardson has produced nearly complete anæsthesia by similar means in the leg of a dog, previously to amputation. The apparatus used in the experiment has been a Pulvermacher's chain. We shall anxiously expect further news concerning this interesting subject. Dr. Richardson has evidently hit on the right path; and if he follows it up, will no doubt furnish that which has been long desired by many surgeons.

Editor's Letter Box.

TAUNTON AND SOMERSET HOSPITAL.

Letter from H. Alford, Esq.

Sir,—I am very unwillingly dragged into a public controversy on the subject of my own antecedents. I might, indeed, leave my professional and private character to the good opinion of those who know me, whether in or out of the profession; and I should in my own neighbourhood disregard and pass over in silence Dr. Woodforde's most unprovoked attack upon my professional character, published in the Journal of to-day. But as I have been publicly held up to odium before the whole profession, I have sufficient *esprit du corps* to wish to set myself right with it. This I shall best accomplish by a simple and truthful narrative of the facts referred to. In doing this, I hope I shall avoid the bitter and vindictive animus so evident in the whole of Dr. Woodforde's letter, and which is the more marked as we have been on terms of close intimacy, and have been for many years in the habit of attending each other's families professionally, and all this, notwithstanding my "unscrupulous and unprofessional conduct," which was as well known to Dr. Woodforde on our first acquaintance as now.

Dr. Woodforde's attack upon me consists of two parts: my conduct on first becoming connected with the hospital in 1830; and my conduct in the matter of the recent dispute. I will refer to them in order, and narrate the facts of each case in as concise a form as I can consistently with my own justification.

In the year 1830, on the occasion of a vacancy in the medical staff, the governors of the hospital determined to elect both the two candidates who applied, and increase the number of physicians, for the time being, from three to four. The alleged reason for this step was to avoid the supposed injury to the hospital from the contest, in which party feeling ran very high; and it was justified on the ground that there were never more than four practising physicians in this town, and rarely more than three, and that it would be for the interest of the hospital to have them all attached to it. On the passing of this resolution, the majority (not all) of the medical staff resigned, and one of the physician-candidates retired with them. Two of the staff remained: Mr. Billett, who was then medical steward, and who is still connected with the hospital as consulting-surgeon; and Mr. C. Welch, father of the present Mr. F. Welch, and who had previously been consulting-surgeon. He continued his connexion with the hospital, and was appointed senior surgeon, which office he held until his son (an elder brother of Mr. F. Welch, then a student in London) was qualified to take his place. The present Mr. Welch succeeded his brother a few years later, on his brother's resigning his office at the hospital and leaving the town.

The governors of the hospital, on receiving these resignations, advertised for successors. I was then practising in a neighbouring town. Before coming forward, I wrote to several highly honourable men, of high standing in the profession, to ask their opinion as to the propriety and etiquette of applying for the vacant offices. Amongst others, I wrote to two gentlemen with whom I had principally studied the profession,—Mr. Richard Smith, late senior surgeon to the Bristol Royal Infirmary; and Mr. Tyrrell, late surgeon to St. Thomas's Hospital, both men well known in the profession, and above reproach. They both fully sanctioned my coming forward, and sent me strong testimonials to lay before the governors. Several highly respectable general practitioners in this neighbourhood, to whom I also applied, agreed in the same opinion. I believe the letters are still in existence, although I have not seen them these eight-and-twenty years. Supported by this high sanction, I applied for one of the vacant offices of surgeon, and was elected; another surgeon from a distance, coming under the same circumstances, was elected at the same time, and, with Mr. C. Welch, the surgical staff was at once complete. There was at first but one physician; but about a year and a half after, the rival candidate who had retired, Dr. Woodforde (a cousin of the present Dr. Woodforde), came forward and was elected; and, some years later, Dr. Burridge, who had just come to Taunton as a young man to practise as a physician, called upon the governors to elect him to the remaining vacant office of physician. So much for the affair of 1830.

It is true that the ex-officers and their immediate friends looked upon the new comers with an evil eye, and attempted to "send us to Coventry" (one of these surgeons is now using every effort to get his son elected to the present vacancy), but it was entirely confined to them, and even with them limited to a short time. Within a year or two of my coming to Taunton, I was on friendly terms with all my professional brethren in the town and neighbourhood; and I am happy to say, I have never had a serious or lasting misunderstanding with any medical man for the more than twenty-eight years I have been in practice in this town until now; and this with Dr. Woodforde is most assuredly not of my seeking, as I purposely avoided all personal allusion in my former letter to the Journal, and strictly confined myself to self-justification.

This seems the place to say a few words in explanation of Mr. Cornish's appointment as surgeon to the hospital.

Mr. Cornish had been for many years connected with the hospital, first as an honorary officer, as medical steward, and afterwards, with a salary, as house-apothecary, but not residing in the house, and having private practice. Up to this time there had been no resident medical officer. The medical and surgical staff, as well as the governors, were most anxious to have one, as the hospital had been much enlarged, and the duties devolving on the honorary officers were very burdensome. But in order to effect this object, it was necessary to get rid of the previous office of house-apothecary, and to get his salary for the resident officer; it was, however, invidious to dismiss an old and faithful officer without some compensation, and it was proposed that Mr. Cornish should be made a fourth and supernumerary surgeon. The proposition, I believe, emanated from the surgical staff; at all events it had their full and hearty concurrence, and was adopted unanimously by the medical and surgical staff and the governors. I never before heard of any "risk of a general resignation," or any "personal solicitation of leading governors." The next surgical vacancy after this appointment was not filled up, and the number of surgeons was again reduced to three. So much for the correctness of Dr. Woodforde's statements as to these two occurrences.

With regard to the late event, the request to the medical and surgical staff came first from the committee, under the circumstances I mentioned in my last letter. It was submitted to the whole staff at a general meeting, and strongly objected to by a majority. As the proposed rule had not the sanction of the governors at large, nor the force of a law, I felt myself bound by the opinion of the majority of my colleagues, although I could not see its injurious and insulting character, nor join in their fierce tirades against it. But when it was unanimously adopted at the subsequent annual meeting of the governors, and although still worded as a request (having, in fact, the force of a law), I felt that I had but the alternative of complying with the request or resigning my office. If I had taken the same view of it as Dr. Woodforde and his colleagues have done, I should certainly have resigned at once, which would have been the proper and dignified course; but considering the request both reasonable and perfectly compatible with my position and professional status, I at once complied with it; nor can I now consent to give up my own judgment and common sense on the matter, although a majority of the medical men of the kingdom should think me wrong, which, however, I very much doubt. It is not true that Mr. Cornish and myself used any influence beyond our example to compel those who differed from us to comply with the rule. Dr. Woodforde very well knows that I was the first who proposed, and that I used all my influence to carry, a compromise, by which the new rule should be made prospective, and the observance of it left optional with the present officers. This plan was adopted at the general meeting by the recusant officers themselves, and would have been carried but for the effect of Dr. Woodforde's own letter previously sent to the governors. I very much wish this arrangement had been adopted, and still think it would have been the best settlement of the difficulty.

I believe neither the legislature nor the public are inclined to trample on or degrade us; and that we are generally pretty much estimated as we estimate ourselves, and as we conduct ourselves to the public and to each other as Christian gentlemen. What does and must lower us with the public is a fretful and irritable sensitiveness about matters of no real importance; and more especially that unfortunate disposition to abuse and vilify each other by garbled or false statements, and which must not only injure the person making them, but, by reflection, the profession to which he belongs.

In conclusion, I think I have some right to complain of your having inserted so virulent an attack upon an old Associate (one who has been a member of the Association from its first formation), without having first ascertained whether the assertions upon which it was based were true or false. My commu-

nication has extended to a greater length than I intended; but I could not fully explain the circumstances in less space, and I think you owe me some reparation for the manner in which you have held me up to the odium of the profession.

Confidently leaving Dr. Woodforde's attack and my justification to the judgment of the profession,

I am, etc., Henry Alford.

The Mount, Taunton, February 5th, 1859.

CHARGES FOR MEDICINES.

Sir,—As Mr. Garraway in his letter to you last week wishes to have the opinions of some of his brother practitioners on the subject of charges for medicine, perhaps you will allow me to offer a few remarks. It was my intention to do so before, but my time has been too much occupied.

In my practice, I charge simply for medical attendance, etc., and never send items unless obliged. I have only once been asked. I do not see how any regular fee or charge could be established, because customs and practices differ so much. I make it a rule to charge 2*s.* 6*d.* a visit in the town, when no medicine is sent, and journeys according to distance; and when I send in an account, I always take into consideration the means of the patient, and the trouble and time expended. Amongst a certain class, who cannot afford to pay much, and yet are above paupers, a man and his wife pay one shilling per month, and a single person sixpence; a respectable person in this family club collects every two months. With regard to the case of the well-to-do mechanic, I find it much more satisfactory to charge for the medicine at the time, or send in the account soon after convalescence.

I quite agree with Mr. Garraway that we ought all to pursue the same system in charging. Of course there will be here and there cases where ignorance will not appreciate or understand it; but they are patients not worth having. The chief opposition to the system I find amongst our own class. In nearly all the small provincial towns you will find the old practitioner, with either no qualification at all, or simply as an apothecary. To keep his standing, and to make up for this deficiency, his charges must be very low and his attention very great, and he will not alter his system, of either charging or drugging, for fear of offending, so that a well qualified man is not on a par to compete with him; and therefore it must be a matter of time only, and left to the good sense of the public.

There have been several articles in one of our daily papers lately on Medical Reform, on some points good; in others, showing an inexperience of the routine of a general practitioner; but all having a tendency to do away with the apothecary and make us all physicians and surgeons, and proposing that medical practitioners should not dispense their own medicine. If the Apothecaries' Company is done away with, and in future a license is given from the College of Physicians to practise medicine, it—the Apothecaries' Company—ought to be made an examining body for the chemists and druggists, and all assistants should be made to undergo an examination, and then, and not till then, will either the public or medical men have trust in them. I am, etc.,

A Country Practitioner.

Downham, February 5th, 1859.

GRATUITOUS MEDICAL SERVICES.

Sir,—Most of the letters in medical journals are complaints against the *results* of medical men's own acts; to wit, hospital and union appointments, and registration. In these cases, they are themselves to blame. If they will hunt, seek, and canvass, with the deepest interest, these nuggets of wealth, they must not complain of the conditions imposed upon them. The whole system of hospital service is a puff. If a man possesses such a vast amount of talent above his neighbours, it will ooze out, without the assistance of a hospital to help him. Why should we, in contradistinction to the legal and clerical professions, give our time, talent, and energy, away for nothing? Who ever heard of an inn or a hall, established by voluntary contributions, for the benefit of those who could not afford to bury their relatives, to find gratuitously marriage licenses, probates, stamps for testamentary purposes, etc.? Chaplains, solicitors, and counsel, attached to any benevolent institution, are well paid; as are also the domestic officers: and by what reason should not our profession enjoy the same lucrative position?

Let the *purissimi* of our profession take the lead in this matter; they have the least to lose: and let them demand a fair remuneration for their skill, etc. There are plenty of funds to do it: if not, let the governors' old servants and dependents be well sifted out from amongst the gratuitous applicants, to make up the loss. In rural districts, let the wealthy contribute to the parish sick-club, to enable the industrious labourer to receive proper attendance for himself and family, without the necessity of his seeking the parish. The hard worked practitioner would have a little recompense for his daily toil, where now he reaps but little money and plenty of abuse.

With reference to the Medical Act, it has simply extracted forty shillings and fourpence out of my pocket, with no corresponding benefit, as, in my neighbourhood, a quack has borrowed the name and title of a *black sheep*, and thus sets the Bill at defiance. Nothing will ever stop quackery; it is inherent in nature.

The postscript of "Quid pro Quo's" letter is a very trite *specific;* its cure would be certain, if once adopted. I had not seen his excellent letter when I began this; and I hope that his most able remarks will be reciprocated by the profession generally, through the leaves of your Journal.

I hope, by steady perseverance, Mr. Garraway's principle of charging by visit-fee will become general. It requires much patience and forbearance in its adoption, as the illiterate cannot see *skill* but through a mixture, etc. I am, etc.

Fair Pay.

February 7th, 1859.

MEDICAL CHARGES: POOR-LAW REFORM.

Sir,—Your letter-box of February 5th contains several matters of interest; without further preface, I proceed to notice them briefly.

Many thanks to Mr. Garraway for his letter, and to yourself for the leading article on Medical Charges. Do not, however, carry out your threat of *now* leaving it in the hands of the Association, but remind us ever and anon of our duties in this particular. There are, doubtless, difficulties in the way of charging for the visit in country practice: they may be overcome. They would disappear instantly were not the profession the "sandy rope" it is at present; but while senior practitioners can tell a new comer their scale of charges and then deliberately charge less, of course losing the fresh comer his patient, I fear we cannot hope for much unanimity of feeling on a subject which concerns us all most deeply.

As to gratuitous services at hospitals, etc., I heartily wish the staff throughout the kingdom would resign. Why should our profession form the example, and I believe the solitary example, of work without pay? Our just position in life will not be obtained until this is at an end. Naturally the governors suppose that services which can be easily found for thanks, coupled with occasional kicks, as at Taunton, are not worth payment. Deeply do I individually deplore the position of Mr. Alford and his remaining colleagues. Far more honourable, far more consistent with professional high principle, is that of the retiring staff. None can envy Mr. Alford, as this is his second offence against his professional brethren, towards whom he ought to be drawn far more closely than to any other set of persons; but the feelings of his brother professionals in this instance he recklessly wounds. As a brother, I urge him yet to pause. There is yet time; let it pass, and a stigma, deep and unforgotten, must cling to his name in the minds of many of us.

Gratuitous services lead me to advice of like character. I believe this equally to be a great error. Some hospital physicians and surgeons, not content with advice at the hospital, give it also at their own houses. Thus they injure neighbouring country practitioners, labouring hard for their daily bread, and in many cases perform an act of supposed charity to persons very well able to afford fair payment,—farmers, for instance. The injury here is twofold: first, the country practitioner; secondly, the hospital physician or surgeon, as many of these patients could well afford the fee.

Rapidly I must pass on to Poor-law Reform. I am speaking only of the letters *you* have received, which speak disparagingly of Mr. Griffin and his unwearied labours. They talk with the greatest satisfaction and comfort of "the existing plan of medical relief and remuneration, which we all know may be extended," etc., etc. The answer to this is, that a great number of us know that *if it can be*, it is not. Several of those who have written to you state they have never joined Mr. Griffin and his supporters. It is too true; and why? "Aye, there's

the rub." Why, indeed, if any change is made, these gentlemen will have, most probably, a reduction rather than otherwise. With one exception, they are all "liberally" paid, as times go. My district is moderately paid; but they very nearly double me. I have had the curiosity to examine the returns in the medical directory, and I find that, with very rare exceptions, those who have not supported Mr. Griffin belong to two classes: those very poorly paid; and those who are, as payment now goes, *liberally paid*. These again prefer the benefit of their own pockets to the benefit of the great mass of their fellow-officers. Mr. Estcourt's scheme is crude; and if he had attempted at once to make us bolt it, there could not have been more uproar; while he has generously, and with, as I believe, a true honest desire to befriend, given it us for consideration, and asked our opinions on it. Yet if the rate of payment proposed had been carried out, small as it is, I believe the great mass of my fellow-officers would have been better paid, and if so, I for one would willingly part with some portion of my hard earnings; for, save ties of blood, I hold none dearer than that of my profession, and its general welfare I have most sincerely at heart. In conclusion, I hope these gentlemen may see their error. Meanwhile, I shall add my tribute of praise to Mr. Griffin, whom I do not know, save in his public capacity, if I may call it so; and my best thanks to him for his constant efforts to ameliorate the position of the great mass of union officers.

I am, etc. Hopeful.

February 7th, 1859.

POOR-LAW MEDICAL REFORM.

Letter from J. W. West, Esq.

Sir,—I am highly pleased to observe in this week's Journal several letters on the all-absorbing subject of Poor-law Medical Reform, and that the profession are beginning to be awakened to their own interest. The new scheme, taken as a whole, is decidedly most objectionable; but I beg to correct one mistake, which I inadvertently made in my former letter, by stating that I dissented from Clause 2. I intended Clause 3, which, I think, if carried into effect, would prove in every way so very prejudicial to the profession, that any benefit which might accrue from the new system would be entirely defeated by that one clause. Indeed, in my opinion we should be infinitely in a worse position than at present, both as to emolument and our relation to the poor. It would open the door to every kind of bad feeling, both as regards ourselves and the poorer classes. I am quite positive the poor-law medical officers will fully concur with me in that sentiment. The poor, generally speaking, are much better attended than the rich, as they request our services in the most trivial cases, without the least consideration as to distance or the time which it takes to attend them.

I trust Mr. Griffin, to whom the profession are much indebted for his indefatigable exertions on their behalf, will so remodel the new scheme that, instead of being a mighty injury to us hard-worked medical officers, it may prove a benefit.

I must recapitulate the clauses which I consider require alteration; they are, the 1st, the 3rd *in toto*, the 4th, and the 10th. I am, etc., John Wickens West.

Poole, January 16th, 1859.

[Mr. West's letter ought to have appeared before, but it was mislaid.—Editor.]

POOR-LAW MEDICAL REFORM.

Letter from T. L. Pridham, Esq.

Sir,—I shall feel obliged if you will give these few lines on the subject of Poor-law Medical Reform a place in your next publication, in reply to a letter which appears in your Journal of this week from Mr. Dayman, wherein he states, with respect to his remuneration for medical services rendered to the poor of his district, that "he is content with things as they are," and for this reason "he declines to join the band of Mr. Griffin's supporters." It would have been a satisfaction to medical officers if Mr. Dayman had stated the amount which he receives for the labours performed by him. We must conclude, in ignorance of this fact, that he has little to do and is well paid; or that he has much to do, and has good reason to be satisfied with the liberality of his board of guardians. Should either be the case, I think I may state with truth, that Mr. Dayman is a rare exception to the medical officers under the poor-law. As this statement of one of Fortune's favourites may possibly mislead those who are inclined to serve us, perhaps a few words may be admitted from one who has laboured for thirty years, and devoted much time in relieving the necessities and wants of the poor, hoping year by year that a better time would come in a reformation of the evils so justly complained of.

It is to Mr. Griffin that we are indebted for his unceasing exertions to let our voice be heard, and justice demanded from that quarter where alone it can be obtained. It is true that the proposed new bill, which has emanated from the Poor-law Board, is in many respects highly exceptionable; but still it gives us an opportunity of being heard, and I think it will be our fault if we do not materially better our position as to remuneration for our services. The subject is now open for discussion, and inquiries are being made into our wants by means of an official circular sent to each medical officer; and I cannot for a moment doubt that any but an honest intention is sought for from the hands of Mr. Estcourt, whose courtesy towards the medical officers is so marked.

Few are aware, who are not connected with the responsible position of a medical officer, of his labours and his anxieties, particularly during unhealthy seasons, and the prevalence of cholera, scarlet fever, diphtheria, or other epidemics; nor need I say how anxiously and closely medical officers are watched at these times of peril; that they faithfully discharge their duties, as upon their exertions and success the health of the whole community greatly depends. Have we not, then, just claims on that community for our faithful discharge of such important duties? more particularly as epidemics of a severe and fatal character, unknown in this country till late years, and which will, in all human probability, at no very distant intervals, visit every district, falling most heavily on the poorer classes, consequently increasing the labours of the medical officers considerably; and most assuredly it is the duty of a wise Government not only to provide efficient medical officers to meet these emergencies, but to pay them liberally for the faithful discharge of their duties.

I will now give some statement of my labours, with the amount of remuneration for them, and I have no doubt too many others are circumstanced as I am. I think I cannot do better than quote from a letter I had the honour to address, at the request of the medical officers of this district, to our highly respected Member for North Devon (Mr. Buller), on the occasion of his presenting a petition to the House last year on behalf of the medical officers of this district; and I will also annex his reply, which reply comes with the greater force as Mr. Buller is chairman of the Board of Guardians in his district.

"I trust you will excuse the liberty I take in stating to you my individual opinion as to the great injustice done to our profession by the miserable manner in which our time and services are remunerated. For instance, during the last few months, severe and fatal epidemics have visited this district, and I have attended upwards of four hundred cases of fever amongst the poor, have visited such cases just four thousand times, and supplied medicines to each case; and my remuneration for such amount of labour was but twenty-two pounds ten shillings—a little more than a penny farthing a visit, including medicines. This injustice I am sure you will consider should not exist, when, in addition to the time and medicine supplied, so great a responsibility rests on the medical officer. It is to be hoped, not only on account of the medical officer employed, but on account also of the poor, who have a right to expect that their necessities in the hour of sickness should be attended to, that the prayer of the petition will be listened to by the House; and, if you will give it the weight of your valued opinion, you will greatly increase the obligation which will be felt by the petitioners."

Mr. Buller's reply was:—"There can be no doubt that the present remuneration is most inadequate for the important professional services rendered by the medical officers, both by their attendance and medicines, to the sick poor; and I shall be very glad if the House should take the steps which you point out to remedy the grievance of which you complain."

These being the sentiments of one of great influence in the House, I trust there will not be found wanting many to advocate our cause when our claims are brought before Parliament. For my own part, I doubt not the important and hitherto ill requited services of medical officers will be redressed ere long; but our efforts must not cease to inform influential members of the House of the true state of our position. I am etc., T. L. Pridham, J.P.,

Medical Officer of the Bideford District and Union Workhouse.

Hyefield, February 8th, 1859.

THE WELLINGTON COLLEGE.

Sir,—Public attention having been so recently drawn to the opening of the above important institution, just completed (as the address to Her Majesty informs us), within "little more than six years after the first subscriptions were asked", and for which the nation has munificently subscribed, in round numbers, nearly £160,000, it may not be uninteresting to compare what has been actually achieved for the sons and orphans of our country's "heroes" with what has been done at a somewhat analogous institution, also under the gracious patronage of the Queen, and opened three years and a half ago, by his Royal Highness Prince Albert, assisted by the Prince of Wales. Like the "Wellington", the college to which I allude is devoted to the especial benefit of a "profession"—a profession equally honourable with those of the military and naval services, although its members are less brilliantly rewarded—a profession, whose members, while equally devoted to their country's good, in contending daily and hourly with an almost universal and public enemy, not unfrequently fall a sacrifice to its malignant and deadly power. Deprive a nation of its "medical staff", and how many a home would become desolate! how many a child an orphan! how many a happy wife a widow!

In 1851, it first occurred to one of the most eminent men in that profession, to see what could be done in behalf of the less fortunate, but not less deserving, of his professional brethren, and, in his large hearted and benevolent scheme, the widow and the orphan were not forgotten. With an energy and zeal peculiarly suited to such an occasion, he soon found associates with hearts as warm and feelings as generous as his own; and on the 25th of June, 1855, John Propert had the inexpressible satisfaction of seeing the Royal Medical Benevolent College opened by the illustrious consort of his queen, accompanied by the heir apparent to the British throne.

A few words by way of comparison. In the Wellington College, *no* boy is admitted under a payment of £10 a year; in the Royal Medical Benevolent there are thirty-five, and in May next there will be forty boys, receiving an education equal to that of either Eton, Rugby, or Harrow, inclusive of books and maintenance, free of any expense whatever. In the Wellington, there are forty-one boys at £10 each per annum, twenty at £15, and nineteen at £40; while at the Medical, there are those already mentioned free, and, leaving out intermediate prices, a certain number of exhibitioners, the sons of medical men in comparatively easy circumstances, who pay £40 each per annum for the same advantages. Besides these, there are twenty pensioners, of the less successful members of the profession, or their widows, who are provided gratuitously with rooms and other accommodations, including an allowance of £15 per annum in money, with coals and gas. The above figures speak for themselves, and offer an instructive contrast as to what may be, or rather has been, done in a good cause by individual exertions, as compared with the achievements of a more public and more richly endowed institution.

Let it not be supposed that the above remarks are written in disparagement of the Wellington College, or as an advertisement for the Medical, which has at this moment upwards of *one hundred* candidates, who cannot be admitted for want of room; they are written rather in the hope that, by showing the amount of good effected in this particular instance by individual exertions, others may be incited to go and do likewise.

I am, etc., A. Z., not a Medical man.

VACCINATION.

Letter from G. May, jun., Esq,

Sir,—The prevalence of small-pox has directed attention to the omission, in the compulsory Vaccination Act, to provide for the expenses of prosecuting parents who neglect to have their children vaccinated.

It is not, however, generally known, that the Public Health Act of last session gives power to the registrar, public vaccinator, or any officer authorised by the Board of Guardians or the overseers, to proceed for the recovery of penalties, and to defray the expenses, out of the common fund of the Union.

It would render great assistance in enforcing vaccination, if medical men would make a practice of punctually transmitting to the Registrar the duplicate certificates of vaccination; for wherever this duty has been neglected, the parents are rendered liable to prosecution; and in some towns, efficient steps have already been taken to carry out the law.

I am, etc., George May, jun.

Reading, February 5, 1859.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Monday, February 7th, 1859.

LUNATIC POOR (IRELAND).

Lord Naas asked for leave to bring in a Bill to amend the law relating to the lunatic poor of Ireland. In 1856, a commission issued to inquire into the state of lunatic asylums, both public and private, in that country. They visited all those institutions, and examined a great number of the persons connected with them. Although he did not propose to incorporate all the recommendations of the commissioners in the Bill he desired to introduce, he had, he thought, left none of an important character out of consideration. Neither did he intend to deal with any other description of lunatic than the poor, for that class was quite large enough, and the considerations involved were of a character sufficiently important to be made the subject of a special Bill. Nor did he propose to deal with criminal lunatics. But the main feature of the Bill was the substitution of local authority for that central governmental authority which had previously existed. Among other provisions, the Bill gave the power to fix the salaries of all the officers to the visitors, a portion of whom would be appointed by the grand jury, with the approval of the Lord Lieutenant. The mode of admission of patients to the asylum would also be altered. Upon information being received, either by an elder of the dispensary, or by a relieving officer, that a poor man was a fit recipient, the relieving officer should either bring the lunatic to the justice, or see that the justice was duly informed, so that he might visit the lunatic at his house, and the justice should have power to call in the assistance of the medical officer of the dispensary, and upon a certificate being given by him that the person was insane, he should make an order for the admission, and the relieving officer would undertake the conveyance of the lunatic to the asylum. The Bill also proposed to give power to the Lord Lieutenant to remove all lunatic persons who might be found in the gaols and workhouses. No places could be more unfit for lunatics, and no persons less fitted to take care of them than the officials of such places. [*Hear, hear.*] Of course, these arrangements would necessitate a considerable alteration in the accommodation at present afforded, as would be seen by a consideration of the statistics furnished by the commissioners in 1857, according to whose report it appeared that there were in the district asylums 3,824; in the workhouses, 1,700; in the gaols, 156; and it was supposed that in the various private asylums there were about 3,030 more. Of course, as the commissioners said, it would not be necessary to provide anything like the amount of accommodation that would be required by such numbers; but it was quite clear that a very large addition would have to be made. Power was also proposed to be given to the visitors to admit, under certain restrictions, patients who were able to pay a small sum for their maintenance. This was not now permitted; and the justices would have power, in case it was found that any inmate of an asylum was either himself, or through his friends, the possessor of property, to proceed against them, and recover such sum as might be proper in aid of his maintenance. The Bill would repeal all other statutes relating to lunatic asylums in Ireland; and as a whole, it was as analogous to the English Act relating to the same subject, which had been found to work well, as the state of things in Ireland permitted.

Leave was given to bring in the Bill, and it was subsequently read a first time.

Tuesday, February 8th, 1859.

SALE OF POISONS.

Mr. Walpole moved for leave to bring in a bill to regulate the sale of poisons. At the end of last session a bill on this subject came down from the House of Lords, founded on the report of the late commission; but objections were taken to certain clauses interfering with the druggists' business, and at that late period of the session it was thought better to let it stand over for further consideration. All the reasons, however, which were then urged in favour of such a measure, had since been increased by the fearful accident which occurred last autumn at Bradford. The present bill was founded partly on the Arsenic Act, passed fifteen years ago. It was the opinion

of eminent chemists, that the Arsenic Act had to a great extent diminished the number of poisonings by arsenic, and Dr. Taylor said that, during the last year, only two cases were brought to Guy's Hospital. The Registrar-General's report showed that the number of cases of arsenic poisoning during the year 1857 was reduced to twenty-seven, whereas in the two years 1837 and 1838, there were 185 cases of poisoning by arsenic, or 94 in a year. If the law regulating the sale of arsenic had so far succeeded, it was desirable to extend similar provisions to the sale of other poisons. But the late sad occurrence at Bradford resulted from a mistake; instead of selling the article which the purchaser demanded, and which was one supposed to be innocent, the dealer sold another article, which, in fact, was arsenic. The existing provisions, merely as to the sale of the poisonous article, were not sufficient to prevent such a mistake, and it was necessary there should be some legal regulations as to the keeping of poisons, as well as the sale of them. The Bill of last year, in order to supply this defect, provided, that in the dealer's premises there should be a poison closet, where all his poisons should be kept together, separate from other medicines or drugs; but it was objected, that the business of a chemist and druggist could hardly be carried on under such a condition. There was another method suggested by the Committee of the House of Lords, which he thought might very reasonably be adopted. It was, that the person who sold certain poisons should be required to keep each article in a box or vessel labelled, in a conspicuous manner, with the word "Poison," and that the article should be sold in a wrapper or cover also labelled "Poison." All the evidence showed that this would tend to prevent mistakes, and the Bill which he now asked leave to introduce, therefore, contained such a provision. Certain penalties were imposed for breaking this law, and power was given to the justices in session to order any constable to go into shops where such articles were sold, and to see that the law was duly observed. He believed this would have a good effect, though, no doubt, the Committee were right in saying, that the best security would be to raise the standard of education among chemists and druggists, and to take care that they were well qualified to compound and dispense the medicines in which they dealt. It appeared from the Registrar-General's report for 1857, that 401 persons died by poison in the course of a year; in 113 cases the poison was not specified; 34 persons died by opium, besides 89 by laudanum, and two by morphine; 34 by prussic acid, including 15 by essential oil of almonds; 27 only by arsenic; 23 by sugar of lead; 13 by oxalic acid; and 15 by sulphuric acid. The deaths by poison might be divided into murders or manslaughters, suicides, and accidental deaths. Of deaths from the use of quack or improper medicines, the number was stated at 183 in four years. It was not to be expected that any legislation could materially diminish the number of suicides, or of deaths caused by poison deliberately given for the purpose of taking away human life; though in cases of murder, such regulations as he proposed would, no doubt, give a clue to the detection of the guilty persons. As he had before said, it was a mistake to suppose that any regulation with respect to the sale of poisons would stop self-destruction. The registrar's report showed that eight-tenths of these cases arose from the halter, drowning, or the razor, and only two-tenths were ascribed to poison or other causes. The object of the Bill was chiefly to regulate the keeping and sale of poisons, so as to prevent the fearful number of accidents which had arisen from the sale of these articles. The other point which he had to bring before the House was the articles which should be included in the schedule as poisonous articles. The committee of the House of Lords had placed twenty-three articles in one schedule, and he did not know how many on the other. Now, it was impossible to expect that the business of chemists and druggists could be carried on with such regulations; and he had cut down the number of articles from twenty-three to thirteen, and should be glad to find that the number could be still further diminished. The only articles with respect to which he felt any great difficulty were laudanum and opium, because they were continually asked for by the poorer classes in small quantities, and by placing difficulties in the way obtaining small quantities the trade might be unduly interfered with. He hoped he had overcome the difficulty by including the poisons of opium and laudanum in the schedule, but providing that where any poisonous article was required by medical prescription, the enactments of the Bill should not apply; and also, that where laudanum and opium were asked for in small quantities, the strict regulations of the Bill should not be observed. He invited the attention of the House to the Bill on its passage through committee, and would take care to fix such a day for its consideration as would suit the convenience of those parties who were interested in the matter.

The motion was then agreed to, and leave was given to bring in the Bill.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Gill. On January 27th, at 5, York Place, Islington, the wife of T. B. Gill, Esq., Surgeon, of a son.

Way. On February 1st, at St. Austle, Cornwall, the wife of *John Way, M.B., of a son.

MARRIAGES.

Denis—Speer. Denis, John A., Esq., of Fairbrook House, Rathfarnham, to Catherine Pauline, only daughter of Thos. Charlton Speer, M.D., late 5th Dragoon Guards, at St. Ann's Church, Dublin, on January 27th.

Jalland—Haward. Jalland, Robert, Esq., Surgeon, of Horncastle, to Emily, younger daughter of W. Haward, Esq., of Little Blakenham Hall, Suffolk, on January 26th.

Woodward—Daukes. Woodward, John Hawkes, Esq., to Bridget, only child of *F. Davies, Esq., Surgeon, of Pershore, and widow of the late Clendon T. Daukes, Esq., at Pershore, on February 3rd.

DEATHS.

Way. On February 4th, at St. Austle, Caroline Handley, wife of *John Way, M.B., aged 34.

Whitecombe. On February 8th, at Notting Hill, Helen, wife of J. R. Whitecombe, M.D., Surgeon in Her Majesty's Indian Forces.

APPOINTMENTS.

Hewitt, Graily, M.D., appointed Physician to the British Lying-in Hospital, in the room of Robert Lee, M.D., resigned.

Tate, W. B., M.D., appointed Medical Superintendent of the General Lunatic Hospital for the County and Town of Nottingham.

PASS LISTS.

Royal College of Surgeons. At a meeting of the Court of Examiners, on February 2nd, the following gentlemen, examined on January 25th and three following days, were declared to have passed their first or anatomical and physiological examinations, viz.:—

Adams, Matthew Algernon, Guy's Hospital
Anderson, Alfred, Manchester
Andrew, James, St. Bartholomew's Hospital
Armstrong, John Christopher, St. Thomas's Hospital
Ash, William, St. George's Hospital
Atwell, George Haines, Guy's Hospital
Bamfield, Samuel, University College
Barnes, William Edgar Grose, Guy's Hospital
Batho, Robert, King's College
Blaker, Edgar Shaw, St. Bartholomew's Hospital
Blennerhassett, Richard Henry, Westminster Hospital
Board, Edmund Corner, Bristol
Bowen, David, Guy's Hospital
Bowstead, Rowland Mounsey, Queen's Coll., Birmingham
Bromley, Charles Henry, Middlesex Hospital
Brunton, Linton Bennett, London Hospital
Buck, Henry John, St. Bartholomew's Hospital
Bucknill, Ebenezer, Grosvenor Place
Callan, William Joseph, Liverpool
Candy, John, Guy's Hospital
Colbeck, Thomas William, King's College
Comley, John Muspratt, Guy's Hospital

Cooper, George Frederick, St. George's Hospital
Copp, Henry Burton Peard, University College
Davies, Thomas Edward, St. Bartholomew's Hospital
Drury, John Thomas, St. Thomas's Hospital
Emanuel, Leonard, University College
Farr, George Frederick, Guy's Hospital
Faulkes, Frederick, Manchester
Felce, Stamford, St. Mary's Hospital
Fennell, Charles, Charing Cross Hospital
Fox, Charles Henry, St. George's Hospital
Galton, John Henry, Guy's Hospital
Gooding, John Callender, Guy's Hospital
Griffiths, Alfred Leete, St. Thomas's Hospital
Hadwen, A. St. John, Westminster Hospital
Harris, John Charles, Westminster Hospital
Harrison, George, St. George's Hospital
Herbert, Benjamin Heywood, Queen's Coll., Birmingham
Hewlett, Richard Whitfield, King's College
Hide, John, London Hospital
Horsley, Henry, Guy's Hospital
Hunt, Thomas, Middlesex Hospital
Jones, Robert, Manchester
Kirby, Thomas Charles, University College
Kitchener, Thomas, Guy's Hospital
Lee, Leonard John, St. Thomas's Hospital
Litchfield, Henry Robert Campbell, Westminster Hospital
Lloyd, David, St. Bartholomew's Hospital
Lowish, William, King's College
Marsh, Henry Thomas, Queen's College, Birmingham
Martin, Timothy Henry, St. Thomas's Hospital
Maskelyne, George Henry, King's College
Matthews, Charles Samuel, King's College
May, John Henry Square, St. Bartholomew's Hospital
McMorris, Robert James, Middlesex Hospital
Meredith, Spencer, Middlesex Hospital
Miles, Rees, University College
Miller, Thomas, Guy's Hospital
Mitchinson, Charles Calthrop, St. Bartholomew's Hospital
Ormerod, William, Bristol
Parker, Charles Robert Geo., St. Bartholomew's Hospital
Parkes, Thomas, King's College
Pell, Walton Nethercoat, King's College
Pollock, Julius Arthur, King's College
Powell, William, Manchester
Rigby, James Morris, Manchester
Roberts, Charles, St. George's Hospital
Ryall, William Frederick, Charing Cross Hospital
Simmons, Benjamin, Guy's Hospital
Staddon, John Hach, St. Thomas's Hospital
Starke, Anthony Geo. Hayden, St. Bartholomew's Hospital
Stedman, James Henry, Charing Cross Hospital
Thompson, Abraham, King's College
Thompson, Herbert, St. Bartholomew's Hospital
Turner, Charles, King's College
Turton, Frederick, Birmingham
Ubsdell, Henry, St. Mary's Hospital
Utterson, Edward Vernon, St. Thomas's Hospital
Walker, George Charles, Liverpool
Wallis, Richard Stevens, Queen's College, Birmingham
Warner, John, St. Bartholomew's Hospital
Watts, Frederick Hase, Middlesex Hospital
Wither, Francis Orde Bigg, St. Bartholomew's Hospital
Wickham, William, King's College
Woods, Francis Hollis, St. Bartholomew's Hospital

Members admitted at a meeting of the Court of Examiners on Friday, February 4th, 1859:—

Hepworth, William, Ginsley, near Leeds
Jordan, Robert Jacob, Bedford Square
Keene, Frederick, Bow Road
Sanders, Charles, Chigwell, Essex
Stokes, Henry, Brixton
Weber, Adolph, Lima, South America

Monday, February 7th:—

Barker, Daniel, Macclesfield
Barkway, Robert Edgar Edward, Bungay, Suffolk
Cameron, Charles, Calcutta
Cayley, William, Stamford, Lincolnshire
Cotton, Robert, Leeds
Hughes, Adolphus James, Dartford, Kent
Jones, Pryce, Llanrwst, North Wales
Kay, John William, Huddersfield
Melburn, John Thomas, Ryton, near Newcastle-on-Tyne
Pope, Richard Tyrrel, Bristol
Provis, William Alexander, Holyhead
Sutton, William, Smethwick, near Birmingham

HEALTH OF LONDON:—WEEK ENDING FEBRUARY 5th, 1859.

[*From the Registrar-General's Report.*]

The London returns furnish satisfactory indications of improvement of the public health. The deaths in the metropolitan districts, which were 1429 in the second week of January, have shown a constant decrease during the three subsequent weeks. In the week that ended last Saturday they were 1243. In the ten years 1849-58 the average number of deaths in the weeks corresponding with last week was 1195; but as those in the present return occurred in a population which has increased, they can only be compared with the average raised in proportion to that increase, namely 1314. The comparison shows that the deaths of last week were less by 71 than the number which would have been returned under the average rate of mortality.

The deaths from scarlatina fell last week below 100, after having ranged above that point, and for the most part to a considerable extent above it, since the end of August. The number referred to this head in the table for last week is 92, which includes 16 from diphtheria. The deaths from diphtheria occurred in the following sub-districts: one in Belgrave, 3 in Gray's inn-lane, one in Somers Town, 3 in Islington West, one in St. George, Bloomsbury, one in St. James, Clerkenwell, one in Kent Road, one in St. Peter, Walworth, one in Battersea, one in Streatham, one in Peckham, and one in Woolwich Dockyard. Besides these, a death occurred from "measles and diphtheria" in Kentish Town. Six deaths occurred from scarlatina in the district of Poplar, and 5 from the same disease in the sub-district of St. Paul, Deptford. Small-pox was fatal in 11 cases. Seven infants and an adult died from syphilis; one person from intemperance, besides 3 from delirium tremens. Eleven women died from diseases incidental to childbearing. Two persons died from carbuncle. Thirty-four persons died from injuries accidental or otherwise, and amongst these are 3 infants who had been murdered, and two persons who had committed suicide. The deaths of two persons resulted from want. A man and a woman died at the advanced age of 90 years, and a widow at the age of 96 years.

Last week the births of 939 boys and 983 girls, in all 1922 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1646.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·585 in. The readings of the instrument varied from 29·25 in. on Wednesday to 30·08 in. on the next day. The mean temperature of the week was 39·6°, which is 2·1° above the average of the same week in 43 years (as determined by Mr. Glaisher). Both the *highest* and *lowest* temperatures in the week occurred on Saturday, the former having been 52.2°, and the latter 30·5°. The extreme range of temperature both in the day and the week was therefore 21·7° The mean daily range was 12.3°. The difference between the mean dew-point temperature and air temperature was 5·8°. The mean degree of humidity of the air was 80. The mean temperature of the water of the Thames was 42°. The wind blew generally from the south-west. On Thursday it blew from the north. Rain fell to the amount of 0.40. in.

Mr. I. B. Brown. This gentleman having lately resigned his post of Surgeon-Accoucheur to St. Mary's Hospital, the following resolution, on the motion of Captain Packe, seconded by Mr. A. Ure, passed at the weekly board of Governors held on January 21st:—"That this Board, gratefully acknowledging the zealous services of Mr. Baker Brown in advancing the interests of this hospital from its commencement, as well as the great professional ability and kindness to his patients with which he has performed his duties as Surgeon-Accoucheur of the institution, tenders to him its thanks, and accepts his resignation with regret."

The Swiney Prize. At a joint meeting of the Royal College of Physicians and the Society of Arts, held at the house of the Society in the Adelphi, a silver cup, value £100, and containing £100 in gold, was awarded, under the will of the late Dr. George Swiney, to Dr. Alfred Swaine Taylor, F.R.S., for his work on *Medical Jurisprudence*.

LIVERPOOL MEDICAL INSTITUTION: REPUDIATION OF HOMŒOPATHY.

A special general meeting of the members of the Liverpool Medical Institution was held on Friday evening, January 28th, Dr. Vose in the chair. One hundred and eighteen members were present. The Secretary stated that the meeting was called in consequence of the following requisition which he had received:—

"*To* A. T. H. Waters, Esq., *Honorary Secretary to the Liverpool Medical Institution.*

"Dear Sir,—We, the undersigned members of the Council, hereby request that you will, in accordance with Law 14, convene a special general meeting of the members of the Institution, for the purpose of having proposed thereat, the following additions to and alterations in the laws, or such other alterations or additions bearing upon the subject, as may be at the time agreed upon.

"Law 2. To be added after the word 'practitioners,' 'but no one practising homœopathy shall be eligible either as a member of the Institution or as a subscriber to the library, and any member or subscriber who may become a practitioner of homœopathy shall cease to belong to the Institution.'

"And also the following as a new law:—

"That no minutes or proceedings of any meeting of the Institution, shall be reported or published without the consent of the majority present at such meeting: and any member who shall violate this law, shall *ipso facto* be subject to immediate expulsion; provided always that this law shall not be so interpreted, as to deprive any member of the power to 'reserve his right of publication' in reference to any paper which he may read before the medical society.

"We are, dear Sir, yours truly,

"J. Vose.	L. E. Desmond.
"E. Batty.	Joseph Dickinson.
"James Turnbull.	A. B. Steele.
"Ellis Jones.	Alex. Stookes.
"Henry Stubbs.	

"January 19th, 1859."

The Chairman requested that no new member who had not paid his entrance fee and subscription would take part in the proceedings until he had done so. The Chairman also requested that any members who had not signed the obligation book, would do so before the proceedings of the meeting began. Several gentlemen came down to the table and entered their names.

It was moved by Dr. Stookes, and seconded by Mr. K. Ellison—

"That the Secretary be instructed to take a correct report of the proceedings, and for that purpose be allowed the assistance of short-hand writers."

It was then moved as an amendment by Mr. Millett-Davis, and seconded by Mr. Parke—

"That the Secretary forward a brief abstract of the proceedings to the medical periodicals in the usual way."

The amendment was put and lost, and the original motion carried.

It was then proposed by Mr. Steele, and seconded by Mr. Burrowes—

"That a full report of the proceedings of this meeting be forwarded to the British Medical Journal, the *Lancet*, the *Medical Times*, the *Dublin Medical Press*, and the *Edinburgh Medical and Surgical Journal*."

The resolution was put and carried.

A resolution moved by Mr. Hakes, and seconded by Dr. Nevins—

"That the report of this meeting be printed, and a copy sent to every member of the Institution",—was then put and lost.

The Chairman: Gentlemen, we will now proceed without farther delay to the more immediate business of the evening; and if you will allow me, I will read the first of the two resolutions which this meeting has been convened to consider:—

"Law 2. To be added after the word 'practitioners,' 'but no one practising homœopathy shall be eligible either as a member of the Institution or as a subscriber to the library; and any member or subscriber who may become a practitioner of homœopathy shall cease to belong to the Institution."

Is any gentleman prepared to move the adoption of that resolution?

Dr. Turnbull: Mr. Chairman and gentlemen, I rise to propose the first resolution, of which notice has been given in the Circular. I feel the duty a difficult and responsible one, inasmuch as the eyes of the profession, not only here but throughout the kingdom, are upon us, and we have also the eyes of the public directed to us. It has been rendered also an unpopular duty by the opposite party, who have endeavoured to make this a question of liberality or illiberality [*hear, hear*], whereas, in truth, it is a matter of principle and a question of right or wrong. [*Cheers.*] If it is an unpopular duty, however, it is one from which I have not shrunk; and I cannot think that any right-minded medical man, who had the respectability and honour of the profession and his own honour and respectability at heart, would shrink from coming forward and taking the post assigned to him to the best of his ability. There is one thing only that I regret, that the duty should not have fallen into the hands of some one of the many gentlemen here who might have performed it in a much more powerful and efficient manner. I desire to bring this resolution before you, gentlemen, in a firm but temperate manner. I am sure that I am not actuated by any personal feeling, for I have always kept homœopathists at a distance from me. I have looked upon them as men who were outside the pale of the profession: I have held no intercourse in common with them. I come forward, therefore, on purely professional grounds, because I believe that homœopathy is wrong; because I believe that its practice is injurious; and because I look upon the mixed practice of homœopathy and legitimate medicine as subversive of every principle of honesty and fair dealing. [*Loud cheers.*] In short, I look upon it as an unprincipled species of quackery [*hear, hear*] that should receive no countenance or support or sanction from the medical profession. [*Cheers.*] I wish also to state at the outset, that it is not my intention to discuss the doctrines and principles of homœopathy; I take it that every gentleman who comes here has made himself more or less acquainted with what homœopathy is, and that he comes here not to form his opinions, but to act upon them. For myself, I may state that several years ago I examined carefully the principles and doctrines of the pseudo-science, hoping that I might be able to extract a few grains from the chaff; but I found nothing but the wildest absurdity combined with a great deal of misrepresentation and abuse of the regular system of medicine which we practise. [*Cheers*] And, gentlemen, I hold in my hand here a treatise by Dr. Simpson, in which the fundamental principles of homœopathy have been fully examined, and its absurdity, sophistry, and delusions fully pointed out. He has completely analysed the subject, and so entirely sifted it, that I should say it would be almost impossible for any one who came after him to do anything in this way. I make these remarks, because at the last meeting the homœopathic gentlemen who spoke on the other side made the discovery in a somewhat triumphant manner, that we had not examined the merits of homœopathy at all. It was not our intention then, nor is it mine now, to go into the doctrines of homœopathy; I wish to bring the matter before you simply as a question of law,—a matter of government amongst ourselves at this institution. I shall proceed now to read the resolution which I bring forward, and in giving you my reasons for bringing it forward, I shall read what I have to say, in order that I may do it in an exact manner. I did not know how far this meeting might resolve to give the matter publicity, and to have had it fully and properly reported. I have done this, therefore, for my own protection, as well as for the protection of the cause which I came here to advocate. The addition is proposed to Law 2. Law 2 is, "That the Liverpool Medical Institution shall consist of physicians, surgeons, and other legally qualified practitioners;" and the addition which I propose to this law is after the word "practitioners" to be added—

"But no one practising homœopathy shall be eligible either as a member to the Institution or as a subscriber to the library; and any member or subscriber who may become a practitioner of homœopathy shall cease to belong to the Institution."

The rational or legitimate system which we have been taught and practise, is based upon every species of knowledge which can be brought to bear upon the prevention, the treatment, and the cure of disease. No false system can therefore overturn it, as it will incorporate any real improvement, even if it came from those practising a system of quackery. Medical men are, however, peculiarly liable to have deception practised upon them, and therefore they are necessarily somewhat jealous in admitting novelties; but I maintain that they

readily admit any novelty which can really be proved to be a useful improvement. I would instance the rapid manner in which they adopted the use of chloroform. I would here profess my firm, unshaken confidence in the rational system which we practise; my belief that it is making progressive improvement like other sciences, and that it has conferred inestimable benefits on mankind. I maintain therefore that the legitimate system of medicine is, in the truest sense, a liberal as well as a comprehensive system; and it is so especially in contradistinction to other systems of quackery, which are of an exclusive nature, and which always arrogate superiority and profess antagonism to the regular system. Exclusive systems of this sort are continually springing up; such, for example, as the Morisonian, which is based on the exclusive dogma that a certain pill, discovered by a certain individual who took the name of hygeist, is the only proper remedy for every disease. Such, again, as the Coffinite system, which is based upon the somewhat less exclusive dogma that there are certain herbs, discovered by a certain man named Coffin, which are the only proper remedies for all diseases.

Again, there is the homœopathic system, which differs from these exclusive systems of quackery only in this respect, that it is a more subtle and refined species. That it is an exclusive system I shall now prove to you by an extract from the *Organon* of Hahnemann, the founder of it:—"It is impossible (he observes) that there can be another true best method of curing dynamic diseases (*i. e.* all diseases not strictly surgical) besides homœopathy, just as it is impossible to draw more than one straight line between the two given points."

Dr. Macintyre said, that he protested against Dr. Turnbull introducing a discussion on the practice of homœopathy.

The Chairman thought that the mover of the resolution must be allowed some latitude.

Dr. Turnbull, in resuming, affirmed that he was not discussing the doctrines of homœopathy; he was merely showing the exclusiveness of the system. [*Hear, hear.*] "He who imagines (he continued) that there are other modes of curing diseases besides it, could not have appreciated the fundamental character of homœopathy, nor practised it with sufficient care, nor could he ever have seen or read cases of properly performed homœopathic cures; nor, on the other hand, could he have discerned the baselessness of all allopathic modes of treating diseases, and their bad or even dreadful effects, if with such lax indifference he places *the only true* healing art on an equality with those hurtful methods of treatment, or alleges them to be auxiliaries to homœopathy which it could not dispense with. My true conscientious followers, the pure homœopathists, with their successful, almost never-failing treatment, might teach these persons better." Now, I would ask, what are we to think when we compare this honest profession of exclusive doctrines,—illiberal if you choose to call them such, but unmistakably exclusive,—with the observation made with respect to the homœopathic theory, by the leading homœopathic practitioner who, at the last special meeting, said, that "its exact place in medicine could be determined by experience alone, not only the past but future experience; and homœopapathy not being held as a dogma, he admitted that that place might be modified by future experiences."

I would exclude from this institution all who profess any exclusive system of quackery; and this law proposes to deal with the homœopathic only because it is the sole one that has made the attempt to thrust itself upon us. It has been urged, on the other hand, that we should admit homœopathic practitioners into this institution because they have the same diplomas and qualifications that we have, and ought not therefore to be treated as *unlicensed quacks*. In reply to this I would state, that there is no college or examining body in the kingdom that would admit a candidate professing homœopathic doctrines; and that they must all either have concealed their opinions at the time of their examination, or changed them since. Now, I would ask, is it honourable, seeing that this is the case, that they should retain and make use of these diplomas and qualifications, that they should thus sail, as it were, under false colours? If their system be as true as they tell us that their practice is flourishing, why have they not their own colleges, diplomas, and societies? We leave the field of practice open to them; but why persecute us by clinging to us, and endeavouring to rob us of our respectability? I contend, however, that the possession of a diploma is not the *only proper test* of a gentleman's eligibility of admission into this institution, and that the *law* requires to be amended. I maintain that a homœopathic practitioner ceases to be a medical man when he embraces homœopathy, and that he forfeits his claim to be considered as such. Would any one call a Mormon, who had abandoned his belief in the bible, and embraced the new light, with its polygamous doctrines, a Christian? The cases are strictly parallel; and the Mormon has the same right to be considered and treated as a Christian, that the homœopathist has to be treated as a medical man. It has been said, however, by some of the so-called "liberal doctors," that we should admit them into our society in order to discuss medical matters with them. I reply, that it is of no use, and beneath the dignity of a scientific society to discuss with men who have abandoned the standard of common sense, to which we, the practitioners of rational medicine, appeal. Of what use would it be to discuss with them the potency which a grain of sulphur, or chalk, or of charcoal acquires when triturated so that a millionth or billionth part may be exhibited as a suitable dose in a severe or active disease?

It has been urged, however, that we should not persecute or make martyrs of them, and that persecution only increased the Mormon perverts; but surely no one would affirm that the Mormons should not have been driven away from civilised society. After reviling and traducing the rational system in every way, they now turn round, however, and wish it to be thought that homœopathy is only a sort of improvement upon, and an addition to the regular system. This leads me to observe, that I have now placed homœopathy before you as a delusion which may be honestly practised by a few deluded individuals; but that I have still to place it before you in a worse light as a mixed system. If we would exclude those professing and practising pure homœopathy, it is infinitely more necessary and right that we should separate ourselves from those who profess the doctrines of homœopathy, and yet, under the name of it, give the very medicines that we do, and in the same doses.

I may be told, however, that they are coming round, and that we should, therefore, deal gently with them. If it were so, why did they not come boldly forward and recant, and then I, for one, would not refuse to hold out the right hand, instead of telling us that the exact place of homœopathy in medicine (to which I have shown you, by an extract from the founder, it is diametrically opposed,) is yet to be determined by experience, past, present and future?

I need not tell you, gentlemen, that we have many opportunities of seeing the practical failure of homœopathy when it is tested in the treatment of severe actual disease; but what I wish to point out is, that it is impossible for either medical men or the public to know when it is practised purely and honestly.

As an illustration, I would take the homœopathic treatment of worms, given us by the homœopathic physician who spoke at the former meeting. He told us that such parasites were to be expelled by the means that are principally used in common practice, though for any disorder accompanying their presence, the specific (homœopathic) medicine was still to be used as before. Here, you observe, that globule comes in just in time to rob the old system of what is due to it. [*Laughter and applause.*] If we saw a heavily laden wagon drawn up a hill by a powerful horse, and a feeble boy pushing behind, and he was to imagine that the horse and wagon went up by his physical power, would it be as ridiculous as this?

We have a double duty to perform, in separating from those who practise the two systems, a duty to the public, in showing them that the difference between us and homœopathists is not trifling, but fundamental; and a duty to ourselves, that we may not be contaminated and sink to the level of such men. Will you cover yourselves with "indelible disgrace" if you draw a line of distinction betwixt youselves and such men? Will you not rather, by passing this law, remove a stain which now rests upon the institution? [*Great applause.*]

I shall trespass only a very few minutes longer on your time, in order to show you the opinion of some of the medical colleges and bodies throughout the Kingdom, none of which have countenanced homœopathy in any degree.

The Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons at Glasgow, the Medical Society of London, and the Provincial, now the British Medical Association, have all passed resolutions prohibiting their fellows and members from meeting professionally with homœopathists. The Examiners of the Society of Apothecaries have stated, that they would refuse their certificate to any candidate professing homœopathic principles.

The Royal College of Physicians of London was applied to

for their license by a homœopathist, and the following was the reply of the College through the president at the time:

"Sir,—The foundation of the Royal College of Physicians was for the purpose of guaranteeing to the public skilful and safe practitioners.

"The College of Physicians regard the so-called homœopathists as neither skilful nor safe practitioners.

"Therefore the College cannot, without betraying a sacred trust, give its license to persons whom they regard as wholly unworthy of their confidence, and with whom it is not possible that they can hold any communion. I remain, etc.,

"John Ayrton Paris."

Since the first meeting, expression has also been given to the opinion of the profession in an article in the *Medical Times and Gazette*, from which I read the following extract:—

"Homœoquackery, unless medicine be a living falsehood, is a practical injury to suffering humanity. It heals with diseases, to the positive detriment of those who are the subjects of them. So far, then, from being persecutors, we are bound, especially bound as medical men, to discourage by every means in our power the spread of this malignant delusion. But in our view, they manifestly neglect to perform this duty who consort, as medical men, with those who are its practitioners. What are the public—the victims of it—to think when they see medical men accepting it as a matter deserving of their discussion, and admitting into their body, as worthy sons and practitioners of medicine, those who are spreading what medicine knows for certain to be a bane and injury to humanity. Let the heads of our profession shake hands with a homœopathist over the bed of a patient, and farewell to honour and honesty in the practice of medicine, it becomes nothing more than a dishonest trade, in exercising which men get money at any price."

These remarks have been written with special reference to the meeting which was held here. Let me hope, gentlemen, that you also this evening will show, by an overwhelming majority, that you have no sympathy with the spurious latitudinarian liberality of those who would associate with or countenance homœopathy, and I now sit down summing up my reasons for proposing this addition to our laws:—

1. Because homœopathic practitioners profess to treat diseases on a system diametrically opposed in all its essential principles to the rational system, and have, therefore, forfeited the title to be regarded as medical men.

2. Because homœopathy, being a negative system, which renders no assistance in cases where it is needed, and can be rendered by medical men, is, in numberless instances, the cause of positive injury.

3. Because, therefore, it is right that a clear line of demarcation should be drawn between homœopathic practitioners and medical men.

4. Becaase although homœopathic practitioners profess to practise consistently a system which is diametrically opposed to medical treatment, they very frequently give the same medicines that medical men give, and in the same doses.

5. Because it is proper to discountenance the delusions of homœopathy itself, and, above all, the imposture practised by those who give ordinary doses of ordinary medicines, and yet lead the public to believe that this is homœopathic treatment. [*Loud cheers.*]

Mr. K. Ellison had great pleasure in seconding the resolution.

Dr. Macintyre. I beg leave to move an amendment to this resolution; and in my doing so, you, Mr. Chairman, and the meeting, will excuse me if I am not sufficiently loud to be heard by those at a distance. I was not present at your former meeting on this subject, but I read the reports—the various reports—and sorry was I to see and to read them. I regret exceedingly, sir, that upon the former occasion, a similar course to the one now adopted should have prevailed. I thought it quite unnecessary that at the present day, in any meeting of respectable medical men in England, it would be necessary to detail to them the absurdities or the humbug of homœopathy, or to enter into the question of the merits of that system. I thought it was perfectly well understood by every member of the profession in England who cared for himself, or cared for the character of his profession. But, sir, it seems a different matter when it comes before us upon the simple proposition of altering a few words in any of our laws. It seems to have been thought necessary, by the gentlemen who brought forward this motion upon the former occasion and the present, by throwing dust in our eyes by way of attacking homœopathy, and by making it seem to be supposed that they were the only persons who did not like homœopathy. Is it not perfectly well known, that every one of us dislikes homœopathy, and that every one holds the same opinion that Dr. Turnbull professes? [*Cries of "No, no," and question.*] Well, for my part, I have long entertained the sentiments which Dr. Turnbull professes. I know every word of what he has told us just now, but as it may be quite necessary that some of the gentlemen present should be enlightened as to the merits of homœopathy, I am perfectly satisfied to let Dr. Turnbull give a lecture upon homœopathy and its abuses. But, sir, the real question is, not what homœopathy was either as to its merits or defects, but the reasons to be brought forward by the gentlemen moving this resolution, for the necessity to change the law. To that point I wish to direct the attention of the meeting. It has neither been brought forward by Dr. Turnbull now, nor was it given at the former meeting, nor have I ever found a single tittle of evidence to show the necessity for altering this law; and I beg, sir, of you and this meeting to reflect that, although we may be pretty much of one opinion upon homœopathy, we may very fairly and very honourably be of two opinions with regard to the necessity for the change of this little law. [*Cheers.*] We have had no evidence of the necessity of the change. I have been a member of this institution for twenty-two years, and this law has stood as it was from the beginning. Eight years ago there was a revision of the laws, in the usual form for such a revision at the Institution's Annual Meeting: and this leads me for one moment to suggest, that the gentlemen who have got up this and the former meeting, went a little out of their way to have the meeting at a time of the year when they should not have been held. Changes in the laws of this institution have been usually made at the annual meetings, after proper notice of each change has been given; but it seemed to seize some gentlemen, during the latter part of last year, with a sudden panic, that something was going to happen with regard to homœopathy, that rendered it absolutely necessary, for some time before the annual meeting, to call a special general meeting to blow up homœopathy. Now I want to know for what purpose the law is to be changed; I have considered, and those who were the founders of this Institution considered, that to name homœopathy, or any similar quackery, in our laws, was a degradation. I consider it such to the present hour. That being the case, I want to know how this law has acted for the last twenty-two years. Eight years ago those laws were revised, and this law was then amply and fully discussed upon this very question, as to the pointing out of homœopathy, hydropathy, mesmerism, and such other things. They did not go to Coffinism, not thinking that necessary. [*Laughter.*] It was then agreed by a large majority of the members of the institution, that it would be better to leave the law as it stood, because it was also supported by the laws for electing members by ballot, and, in other ways, that would protect this institution from the admission of homœopaths or Coffinists, or any body else. Well, sir, has the law been deficient up to this hour, and I ask if one tittle of evidence has been brought forward to show the necessity of the proposed change? I believe it is well known that we don't meet the homœopaths, any of us. Is there here a man who does? [*Cheers, and cries of "Question, question."*] About eighteen years ago, I believe one gentleman, who professed himself a homœopath, was admitted; and, if I am not mistaken, sir, you yourself plead guilty to the soft impeachment, that you voted for that gentleman.

The Chairman stated that it was possible, but that there was no evidence to show that he had done so. [*Hear, hear, and laughter.*]

Dr. Macintyre. If you or I had to do it again, we should not do so; that is quite clear. Since that period, this Institution has been perfectly clear from homœopathists. There has not been one introduced to the Council of this Institution since that day, nor, I believe, has there been one for many years past proposed. Then upon what ground has this been done? Upon the well known fact, that the majority, at any rate, if not every member of this Institution, has been opposed to the admission of these people. Now, sir, under these circumstances, I maintain that there is no necessity yet shown for the alteration of the law. The very introduction of the name would single it from all other quackeries or errors, and would, I consider, be a degradation to our Institution itself. These gentlemen, as I said before, were suddenly seized with a panic about homœopathy, a few weeks before the annual meeting. They told us a great deal about what homœopathy was and was not at the former meeting; but they did not say

one word as to how these homœopaths were to besiege and take possession of this place. Now I know the public journals have got their cue from that meeting, and I suppose, therefore, that we are to have a regular siege. The editor of the British Medical Journal says, "How fond they must be of us. They are attempting to thrust themselves into every place where respectable medical men meet." Now I think it would be quite a pity for us to let these gentlemen thrust themselves in; but they have not done it. Not a single man has been proposed for many years at this Institution who professes homœopathy. [*Cries of "Oh, oh."*]

Mr. Jones. We have had two.

Dr. Macintyre. Well, I believe I am wrong. Some eight or ten years ago, a young gentleman was proposed to the Council as a half member. He was, I believe, an assistant at the Homœopathic Dispensary.

A Member. Five or six years ago.

Dr. Macintyre. Well, that young man was proposed as a member, but before his name came to the ballot, those who proposed him, finding that there was not the slightest chance of his election, withdrew him, and he was not balloted for.

Mr. Steele. He was balloted for. I was a member of the Council.

Dr. Macintyre. At any rate he was rejected. Now I maintain that these gentlemen have not shown any necessity for the change in the law. For twenty-two years, excepting the gentleman I have just mentioned, and one who, I understand, has become a homœopath since, they have been excluded entirely by the laws. I did think, at one time, of making some remarks upon what Dr. Turnbull said, but as I think it was altogether beside the question, and took place only for the purpose of teaching the young gentlemen, who are not aware of what homœopathy is. [*Cries of "No, no," and "Question, question."*]

Dr. Turnbull. Teaching twenty-nine gentlemen, perhaps.

Dr. Macintyre. We really all know what it is quite enough.

Mr. Fitzpatrick. Will you kindly give us a reason for our not changing the law.

Dr. Macintyre. It has worked exceedingly well for twenty-two years, and there is no necessity for the change just now. I did now expect that the gentlemen moving this resolution, would come forward and show us that a grand attack was to be made upon our Institution.

Mr. Desmond. If any members become homœopaths after being admitted, how are we to get rid of them without changing the law?

Dr. Macintyre. I am much obliged to Mr. Desmond for putting me in mind of the second part of the rule which you propose to alter. "That any member or subscriber who may become a practitioner of homœopathy, shall cease to belong to the Institution." I was inquiring of some of these gentlemen a few days ago, why they did not go boldly to the mark at once, and get rid of the taint upon the Institution, by excluding those homœopaths who are now members. "Oh!" I was told, "we cannot do that, the law will not permit us. These gentlemen have paid for a great number of years; they have helped to purchase our books, and keep this building in repair, and the law of the land will not allow us to exclude them. Well, now, we are going to make a nice bit of a law here, which says, that any member or subscriber who may become a practitioner of homœopathy, shall cease to be a member of this Institution." Shall cease! that is very likely. How are they to cease to become members? Are we to turn them out? [*Cries of "Yes, yes," and "Of course."*] Very well, then, if we turn them out, what becomes of the law of the land? [*Cheers and laughter.*]

The Chairman. They will enter hereafter upon this understanding, supposing the motion to be carried.

Dr. Macintyre. But supposing you, sir,—or perhaps that is very unlikely—or supposing I myself (which is quite as unlikely, I believe) were to become a homœopath. Why, sir, I was one of the founders of the institution, and have paid my subscription regularly for twenty-two years, and if I should unhappily lose my reason and become a homœopath [*laughter*], I must be turned out. [*Cries of "Yes, yes".*) Well, really now, I might become so demented that I would apply to the laws of the land to preserve my interests in this institution. Do you think that an alteration in our laws will cause an alteration in the laws of the land? [*Cries of "Oh! oh!"*] However, that is merely in answer to what Mr. Desmond has said. I will just allude now for one moment to the former meeting. The gentlemen who brought forward this same motion were then beaten; fairly and constitutionally beaten, according to the laws of the Association. They did not like to be beaten, and they were determined not to be beaten. They did not wait, however, for eight or ten years more, until a regular revision of the laws should take place, but they must have a change in the law immediately. Well, they very assiduously beat up for recruits, and I must say, that very much to their credit they have produced a regiment—

Mr. Hugh Neill. Of "stunners". [*Laughter.*]

Dr. Macintyre. A regiment well drilled—

Mr. Neill. Of old soldiers, who kept the institution right thirty years ago.

Dr. Macintyre. Old soldiers, well drilled to fight; but there are also those who are new in the campaign. As I said before, those who were amongst the founders of the Institution, are rather apt to speak of it as "our Institution"; I have helped to carry on the business, and to do as much good as I could; but, sir, these gentlemen, so many of them that have come in, some three score gentlemen.

Mr. Neill protested against such remarks. He was a member of the Committee of the Institution when they assembled in the Old Weighing House in Lime Street, and also when they went into York Street; and he protested against Dr. Macintyre or any other person making a charge against the old members who came forward on that occasion to support the honour and dignity of the profession. He was born a medical man; his father, brother, uncles, and all his relations, were medical men; and again, he protested against such a charge. [*Loud cheers.*]

Mr. Fenton, on the part of the new members, also protested against Dr. Macintyre's remarks.

Dr. Macintyre said that he had not the slightest personal feeling with regard to these gentlemen, to all of whom he should be glad to give the right hand of fellowship as members of the Institution. He did not mean to say one single word against them; and certainly his old friend Mr. Neill should not be the first man to take offence. He did think that the gentlemen who wanted to carry this resolution, had acted with an immense deal of energy, and had done more good to the Institution in a pecuniary point of view than almost any others. [*Cheers.*]

The Chairman. I quite took your remarks in a complimentary sense.

Dr. Macintyre. I intended them as such; and I have only to say in conclusion, that I wish all these gentlemen who have come in—for some of them are only full-fledged members of a fortnight old, though my friend Neill has been so long a member—I wish to compliment the gentlemen who bring forward these new men, or this regiment of old soldiers, upon the clever way in which they have managed to bring them in, and to carry the question which they have at heart. And now, sir, I will read my amendment: it is—

"That this meeting, while expressing its disbelief in homœopathy as a system of medical practice, and considering that the present laws of the Medical Institution are sufficient to exclude any objectionable candidate for membership, deem it unnecessary and undesirable to make the proposed alteration in the existing laws."

Dr. Gee seconded the amendment. He said: It contains a profession of disbelief in homœopathy, and asserts what no one can deny, that the present laws are sufficient to exclude any objectionable practitioner. Why, therefore, introduce the name of homœopathy into the laws of this Institution? Why should there be a reference made to it? I freely confess that I do not see how any individual entertaining the views of those who have indulged in such scurrilous remarks, as appear in the newspapers of this town upon the medical practice of the members of this Institution, can have the least desire to join us. We should therefore, I think, pass by those remarks in silence. Let us show that we have been unscathed and unharmed by their calumnies. I should urge the members of this Institution to go on harmoniously as before, and conduct our affairs without reference to any persons beyond our pale. But, whatever may be the result of this amendment, I sincerely hope that every particle of bitterness which may have been engendered in the course of this controversy, may be obliterated and forgotten; and that we, as brethren, will proceed more energetically than ever to cultivate medical science, and by a calm and dignified discussion of its principles and practice, increase our own medical knowledge. [*Cheers.*]

Mr. Moore. Mr. Chairman, very late at the last meeting, I waived my right of addressing the meeting—a right which I have now of twenty-three years standing. I was a member of this Institution before the present building was erected; and

in the building in Suffolk Street I spent many happy, pleasant, and profitable hours. I have continued to pay my subscription regularly year by year, and it has never lapsed up to the present month. I think, therefore, that I have at least a right to be heard, and heard with patience, though I may have lost my reason, as my friend Dr. Macintyre would say—if he will permit me still to call him my friend—and though I may be one of those arrant quacks, or given to that horrid system of quackery, which Dr. Turnbull has so clearly and beautifully described. Suppose I am in your estimation a very little person, at any rate, I am not so in my own, and that is a great matter. [*Laughter.*] This is not the first time in the world's history that truth has stood in the minority; not the first time that medical councils and associations have persecuted truth—new truth; and therefore, when I look around me, and see men from north, south, east, and west, putting down homœopathy, as what they call a system of delusion, a fraud, and a snare; when I consider that this is the subject that has brought you together, to adopt a law which certainly has the aspect of persecution, and is regarded by the public in the light of persecution; I say, it would not at all surprise me to have met with such a thing in the days of Galileo, though it certainly does surprise me to meet with it now [*interruption, during which Mr. Moore claimed the protection of the Chair*]; to find in this century a class of men meeting together for the purpose of putting down truth, or what I believe to be the truth—or putting down an error, which you conceive to be an error, is to me remarkably sad and humiliating, as coming from that profession to which I have ever been attached. I say, the present is to me a remarkable and humiliating sight; for if homœopathy be as true as I believe it to be, it is a sad thing to see men opposed to it; and if it is an error, it ought to be borne with. [*Oh! Oh!*] I entered this Institution about thirty-six years ago, and everything "went pleasant as a marriage bell", till this horrid thief, homœopathy, came across my track. That was in 1847. It met me—or rather, I met it—through Dr. Chapman, who had recently embraced it himself. I ridiculed it then, as much as you possibly can do now. Dr. Chapman, however, said that if I tested the medicines, I should alter my opinion. I tested them steadily and regularly for twelve months in my own house. I afterwards joined the Homœopathic Dispensary, and attended there for some time, before I announced my views to the world; and in 1850, I published a pamphlet, in which I distinctly stated my changed views, and I have never yet seen any reason to change the opinions which I then published, or to deviate one iota from the principles of Hahnemann. In the matter of dose, I give just as much as I believe is necessary—often a grain or two grains, or a drop or two drops of tincture, as the case may be. Dr. Turnbull has said that we give the same medicines that they do. You all practise on the homœopathic principle sometimes; and I believe that all diseases, when cured at all, are cured upon that principle. In very many cases, I have prescribed to patients the same medicines which they have had from a former physician.

A Voice. I have no doubt of it. [*Laughter.*]

Mr. Moore. But I prescribed them always on the homœopathic principle. If homœopathy is a delusion, it is a very troublesome one—one which has cost me much labour, much pains, and self denial, and many a cold shoulder from my old friends in the profession. But I really think that at any rate it must be something more than a delusion to have stood the test, as it has with me, of upwards of ten years, daily and hourly practising upon that principle, and upon no other, except in incurable cases, where I adopt palliatives.

Dr. Parr and Dr. Ferguson rose to order; the latter observing that, however interesting the private history of Mr. Moore might be, it was not exactly to the point.

Dr. Drysdale. Mr. Moore has a perfect right to give a full reply to Dr. Turnbull.

Mr. Moore, on resuming his speech, stated that in 1837, he himself listened in Liverpool to Dr. Lardner, when that gentleman, with far more clearness than had been manifested by Dr. Turnbull on the present occasion, proved the impossibility of crossing the Atlantic by steam. In 1838 three steamers crossed the Atlantic. So much, therefore, for reasoning, demonstration, and argument upon principles of scientific truth. Patient experimental research was the only mode of deciding this great question. It was not to be put down by persecution or tyranny. The change of the law was unseasonable, because they did not meet the truth if it was a truth, or the error, if it was an error, in the way they ought to do. Dr. Abercrombie had pointed out the responsibility resting on medical men in regard to every great truth; namely, that there was guilt in ignorance, if knowledge was within their reach; and that there was guilt in that hardness of heart which hindered them from the reception of truth. The change in the law was also un-English. He held the Medical Act before him; and the spirit of their constitution was a toleration of error; and not only the spirit but the letter of the constitution, for the Medical Act stated, that no particular theory of medical or surgical practice should exclude from the lists. The change was also very unwise, and tremendously injurious to the profession. [*Laughter.*] They might laugh; but he assured them that the public regarded it as anything but creditable to the profession. Whatever Dr. Turnbull might say about homœopathic quackery, he (Mr. Moore) should not have continued in that institution during the last ten years, if he had no attachment to his profession. Those charges were unjust and untrue. Lastly, he contended that the charge was un-Christian, as it violated that beautiful and golden rule upon which they all professed to act; of doing unto others as they would have others do unto them. It was un-Christian, too, because it interfered with the right of private judgment, and trampled upon the sacred precincts of conscience. The members were told, "You must think as we think, judge as we judge, or you will be turned out"; realising, in fact, the story of the Scotchwoman, who, when she tried to maintain her privilege of thinking, was told by her husband that she had no right to think except at the backdoor. [*Laughter.*]

Mr. Stubbs. Mr. Chairman, that is not the object of the law.

The Chairman. The law is not retrospective.

Mr. Moore. No doubt, but the spirit of it is against us, and I am speaking of it as it may effect others in the future. With regard to the publication of the last report, Mr. Moore contended, that a great question like this did not come within the ordinary category of medical subjects, and that when an attempt was made by a majority to tyrannise over liberty of conscience, and break down the spirit of toleration, the minority had no right to be guided by such a majority, but were perfectly justified in publishing the proceedings under such circumstances as those in question, and when a galling wrong and injustice was attempted to be imposed.

After Dr. Parr and other members had risen to order, Mr. Moore concluded by saying, that a consciousness of his own rectitude upheld him in the course which he and his friends were pursuing.

> "One self-approving hour whole years outweighs,
> Of stupid starers and of loud huzzas;
> And more true joy Marcellus exiled feels,
> Than Cæsar with a senate at his heels."

Mr. Steele said that they were told that there was nothing new under the sun, but he had certainly seen nothing so strange as that it should be necessary to bring together so large a number of medical men to give practical effect to the self evident proposition, that the followers of the delusions of Hahnemann, in common with all other empirics, could have no *locus standi* in a medical institution. They did not exclude all who did not think as they did, they allowed their members to think as they pleased, the institution was the arena in which medical truth and error were freely and fully discussed. But this had nothing to do with homœopathy, which was neither medical truth nor medical error. With regard to medical science, homœopathy was neither flesh, fowl, nor good red herring. [*Laughter.*] There could be no more community of feeling, action, or opinion between homœopathists and medical practitioners upon medical matters, than there could be upon religious matters between the Archbishop of Canterbury and the Pope of Rome. The large meeting that evening showed that the orginators of the movement had the sympathy, support, and sanction of the vast majority, if not the entire bulk of the profession of the neighbourhood. This surely was a sufficient answer to Dr. Macintyre, as to the reason which existed for a change in the law. It is perfectly true that a homœopathic practitioner had been proposed, and was very nearly been elected a member of this Institution, and, therefore, it was quite evident that their constitution was not, under all circumstances, sufficient to guard them from contamination. But what, perhaps, was even stranger than this was, that some twenty or thirty medical men, all or most of whom declared themselves to be disbelievers in the system, should come there and stand up as apologists for the followers of this delusion. [*Cries of "No, no," and "Nothing of the kind."*] Mr. Steele could only explain it upon one principle, that "evil communications corrupt good manners." Pope said that—

"Vice is a monster of such hideous mien,
That to be hated needs but to be seen;
But seen too oft, familiar with her face,
We first endure, then pity, then embrace."

When homœopathy was admitted, nobody thought much about it. By degrees some of their members came to endure her. They had already began to pity her, and it would not surprise him, if, in due time, some of them were to embrace her. In conclusion, Mr. Steele said, that they had nothing whatever to do with the opinion of the public; that they were members of a free institution in a free country, that they had a perfect right to make their own laws, and it would be an evil day for the medical profession, when the community allowed itself to be swayed by popular feeling and popular clamour. [*Loud applause.*]

Mr. Fletcher thought that though they had been accused of latitudinarianism, there was another danger almost as formidable—longitudinarianism. [*Hear, hear.*] Mr. Fletcher denied the truth of the analogy that, as a church would exclude a heretic, so a medical heretic ought to be excluded from a medical body. The basis of every church was the inspired writings of apostles and prophets; whereas in the case of a medical society, the standard was not an absolute one fixed for them, but fixed by them, and which varied in accordance with the progress made in the discovery of medical truth. With regard to the stain which it was said rested on the institution by the presence of homœopathic practitioners, he was rather surprised that at so late a period of the institution's history this should have been objected to for the first time. He objected to the new law proposed by Dr. Turnbull; first, because those who voted for it, voted for that which was absurd. They were absurd; therefore they were not medical men. Next, it was said that their practice was negative and injurious. He fully admitted this; but were they to exclude everything that was practically negative and absurd in medical matters? Thirdly, it was said that there should be a broad line of demarcation between themselves and homœopathy. Now, for unity of action, unity of opinion was absolutely necessary to secure promptitude and efficiency of action; but where they met for scientific inquiry, perfect freedom and no limitation whatever was absolutely necessary. What would they think if the Royal Society were to exclude a man for expressing his belief in the existence of matter? and yet Bishop Berkeley doubted even the existence of matter. With what roars of laughter would a chemical society now receive any one who doubted the atomic theory of Dalton. Here were men who held what he believed to be a fundamental error, and they were asked to exclude them in consequence. It was said that they mixed practice, which had been avowed and was dishonest; but however absurd a thing might appear to them, they had no right to charge a man with dishonesty in that which he openly avowed [*hear, hear*], and the open avowal made at the former meeting by Dr. Drysdale, and at this by Mr. Moore, freed them entirely from that accusation. If these gentlemen had been dishonest or dishonourable, and the laws of the institution gave the right to expel any one whose practice could be considered dishonourable, they had been wanting in a great moral duty in not excluding them before. If for fifteen years these dishonourable practices had prevailed, those who came forward to advocate this law as absolutely necessary, had been guilty of a gross dereliction of duty. With regard again to the line of demarcation, he would ask where was the precedent for it? The only analogous case, and that even was not a strict analogy, was the British Medical Association. The *onus probandi* of precedent rested with the opposite party; let them prove whether, in the Medical Society of Edinburgh or the Medical and Chirurgical Society of London, any such precedent existed. The Edinburgh Society requested homœopathic members to withdraw; but there was a very wide distinction between that and making a law of the kind now proposed. Mr. Fletcher went on to argue, that if they adopted Dr. Turnbull's theory, that no college would admit a homœopath, and that no person holding these views could honestly obtain a license to practise; they gave such institutions the right of establishing in what way medical men should practise. It was logically impossible to escape from the dilemma; and therefore, if they wished freedom for one, they must have absolute freedom for all. [*Hear, hear, from Mr. Moore.*] He (Mr. F.) concurred with the opinion and action of the College of Physicians and College of Surgeons upon this matter. The College of Surgeons had always most strongly refused to take any action whatever in the matter. With regard to the proposed law, he was sure that it was virtually, and he believed legally, in distinct opposition to the trust-deed under which the institution property was held. The ground upon which the institution stood was granted in 1837, on a lease for seventy-five years, by the corporation, and a large sum of money was presented by the corporation towards the building. It was not only a professional, but also in part a public institution. And with regard to the legal right, the corporation reserved to themselves the right of recalling the lease under certain circumstances; and he contended that, under all the conditions of the case, they had no right to deal from an exclusively professional point of view with property thus held. They aimed at excluding quackery, but they could not do it by such a resolution. Quackery did not consist in any particular plan of treatment, however absurd, but in the way in which such a plan of treatment was pursued and adopted. It was quite possible to practise what they all termed legitimate medicine in a way absolutely quackish. Legally, the resolution left the question where they found it: for it was legally impossible to find the gentlemen to whom it was intended to apply. Apropos of this point, Mr. Fletcher quoted the recent decision of the Tribunal of Paris, before which the homœopathic trial for libel was heard. The judges there laid down, that where a libel was directed against a class of men who could be legally and distinctly defined, no one member of that body might bring an individual action for libel; but that where a libel was directed only against those known as a separate class, by adhesion to one scientific dogma, it was absolutely impossible so distinctly to define them as to make it possible for them to bring a specific action for libel. Reverse the case, and it exactly applied to the present case. What was a homœopath? In any court of law he would be dealt with according to the exact meaning of the word. It was quite possible to practise upon the theory of "like curing like," absurd as it might be, by using the ordinary therapeutic means, and *vice versâ*. It was quite possible for a gentleman giving himself out as a globulist to practise all those points which the public believed to be the distinctive points of homœopathy, and yet to deny that he was a homœopath because he gave infinitesimal doses which the public regarded as the principal part of the doctrine of *similia similibus curantur*. Therefore, in either way they could not legally exclude the homœopath. It was inexpedient, also, because it gave the Council the right of inquiry as to opinions, which was an improper power for a governing body to wield. It was also inexpedient because it implied that the society, as a whole, was responsible for the opinions of its members. Lastly, it was entirely unjust, because it fixed a penalty to the holding of a certain erroneous opinion; and he most strenuously maintained that it was un Christian, un-English, and unjust to brand a man with dishonesty because he professed views which he (the speaker) and others might believe to be erroneous. He claimed fair play for the wrong side as well as for the right, and he would say with Milton,—

"Let truth and error grapple, and have no fear
That truth will come out uppermost."

Dr. Turnbull had said, that they had nothing to fear from medical error. They had nothing to fear. Legitimate medicine must go on in its triumphant onward course; and nothing was more derogatory to the honour of their profession than taking notice of these things which they all viewed as absurd. [*Cheers.*]

Dr. Nevins said he felt imperatively called upon to make a few remarks, and they would be exceedingly few, in consequence of the observations which had been made by the mover of the resolution voting for the medical journals, and calling upon the meeting to separate itself from the spurious liberalism of those who countenanced the homœopathic quackery. The speakers in favour of the resolution had spoken of themselves as coming forward to protect the honour and dignity of the profession in making the change; and another gentleman had spoken of the twenty-nine as men who were the apologists of the followers of this error. Similar language had been used by the medical journals which addressed themselves to this subject. Therefore, as one of the twenty-nine, as he opposed the resolution on the last occasion, and intended to vote in favour of the amendment now, he thought it was due to themselves to say that they were as much concerned and had laboured as strenuously for the honour and dignity of their profession as those who were endeavouring to effect this change; and, so far from being the apologists of this or any other error, they were influenced by the same honourable desire for the truth as those who brought forward this change. He thought it was quite unnecessary in Liverpool to allude to the position of Dr. Duncan, or to ask whether he was likely to be the apologist of error: indeed, his name was almost suffi-

cient to settle the question. For the information of the many strangers who were not known in the society, he would mention what were the charges against the twenty-nine. They were accused of being the favourers of quackery, the apologists of error, regardless of the honour of the profession. Now their contributions to the medical knowledge of the day [*"Oh, oh," and cries of "Vote, vote."*] He claimed the indulgence of the meeting [*"Question," and "Vote, vote."*] Their contributions had been [*Cries of "Vote, vote," "Divide," and "Question."*]

Dr. Dickinson. If we bear in mind the quality as well as the quantity of the contributions, I think we may allow the gentleman to go on. [*Laughter.*]

Dr. Nevins (continuing). Their contributions have been [*"Question, question."*]

Dr. Chalmers called upon the chairman to consider the question before the meeting.

The Chairman could not interfere with the debate; but perhaps Dr. Nevins would consider the fatigue of the meeting, and kindly keep as near to the question as he could.

Dr. Nevins would do so. The contributions of the twenty-nine to the medical literature of the day [*"Question, question."*] —exclusively confined to the Medical Journal [*"Vote, vote."*] —within the last four years [*"Vote, vote."*] He demanded as patient and fair a hearing as had been accorded to the speakers on the other side.

Dr. Chalmers. What have contributions to literature to do with the question?

Dr. Nevins said he should not detain them five minutes, if he was not interrupted. He then proceeded to say that, during the time he had mentioned, while only seven contributions to medical science had been made by their opponents, twenty-eight had been made by the twenty-nine. So much with regard to the medical knowledge of the profession. [*Hisses, and cries of "Vote, vote."*] Having again repelled the charge that the twenty-nine, by their conduct in this matter, had favoured quackery and other dishonourable practices, Dr. Nevins said, if Dr. Turnbull, on behalf of the gentlemen who had made those charges, would withdraw the expressions, he would sit down. [*Cries of "No, no," and interruptions.*] He was proceeding to state the number of times that the twenty-nine had attended the Committee of the Institution, in contrast with the forty-one, when he was stopped by cries of "Question" and "Divide."

Dr. Chalmers thought a history of the Institution had nothing to do with the question before the meeting.

Mr. Fitzpatrick thought that perhaps a vote of thanks to Dr. Nevins, for his great exertions at the Institution, would meet his views. [*Laughter.*]

Dr. Nevins again insisted on the withdrawal of the charge that the twenty-nine were the apologists of error, etc. [*Cries of "Vote, vote," and "Question," in the midst of which Dr. Nevins resumed his seat.*]

Dr. Chalmers said, the reasons given for this measure, as stated at the last meeting were very clear and very plain. They had had two gentlemen as members of this society, who were homœopathic practitioners, for a very long time. It had been a source of great grief to himself, and, he dared say, to many others. The thing was, however, done; and they could do no more: they had been elected, and had not broken the laws of the Institution, and could not be excluded. Recently, however, a council was called together, and it was decided to invite sundry homœopathic practitioners to a public *soirée* of the profession—recognising them before the whole public as professional men in legitimate practice. And not only so, but a sort of address was delivered by Dr. Inman to the meeting, which he (Dr. Chalmers) held to be entirely infidel, on the resources of the profession. That address was published throughout the newspapers; and this, too, conjointly with their beautiful connexion with homœopathic practitioners. Was it not natural that they should feel strongly on the matter; and that they should look forward to the adoption of some course to prove to the public that they did not participate in this feeling—some step by which the public might recognise what was true and what was false—by which they might see that the great body of the medical profession in connexion with this Institution did not come forward through their Council as the inviters of these men? Under these circumstances, they thought themselves bound to enter upon this course; because they felt that the next thing, after inviting them to a *soirée*, would be an attempt to gain admission for them into the Association.

Dr. Inman was greatly astonished to have to answer then for an address delivered some time ago. His colleague Dr. Chalmers had completely misunderstood that address, the intention of which was to show the desirability of medical men extending their field of observation, and examining questions of medical science more closely than they were accustomed to do, in which case they would find greater results than were anticipated. He brought forward a number of illustrations proving that, by widening the field of inquiry and observation, an invention had been discovered which had entirely escaped other persons' knowledge. To say that, because he wished to extend the bounds of their knowledge, and to gain experience on a broader basis, therefore he was an infidel in medicine, was downright outrageous.

Dr. Cameron, as one of the members of the Council who had the arrangements of the *soirée* in their hands, stated that the names of gentlemen to whom invitations were sent were taken from the *Directory*, in which there happened to be the names of six homœopathic practitioners, only two of whom, besides the two who were members, were included in the invitation-list. As one of the Superintending Committee, he repudiated the idea that, by inviting any one, they had an intention to insult any of the profession in the town. The Superintending Committee included Dr. Macintyre, Mr. Waters, and Dr. Stookes; and both these latter were present when the invitations were issued. Now, it went to the world that, in consequence of the Council inviting two men of an objectionable character as practitioners, they did not vote a censure upon the Council or the Superintending Committee, but that they entered upon a crusade against the very guests that they invited. [*"Hear, hear," "Vote, vote."*]

Dr. Macintyre said he was a member of the sub-committee, but he was not present when the invitations were issued, nor should he have known, had he heard the names, who were homœopathic practitioners.

Mr. Waters said he had no recollection of being present when the list of invitations was prepared, and he believed he was not present. At the same time, he was a member of the Superintending Committee, and, he presumed, responsible; but he distinctly asserted that he did not know the names of the homœopathic practitioners of Liverpool, had they been called over in his presence, except the two members of the Institution. Had he been present, and known, when the names were read, that practitioners of homœopathy were invited, he should at once have entered his protest against such an invitation. Mr. Waters begged also to state that the question which was now before the meeting was not the result of what had occurred at the *soirée*, but had been mooted in the Council of the Institution as early as August last.

The amendment was then put to the vote, and lost by 20 to 95.

The original motion was then put, and carried by 96 against 20; the announcement being received with acclamation. The voting was as follows:—

For the motion:—Richard Y. Ackerley; John Arnold; Joseph Allen; Francis Ayrton, M.D.; Francis Bailey; James H. Barnes; Barnabas Barrett; Edward Batty; Robert Batty; John Bevan; Edward Robert Bickersteth; Thomas Bickerton; John M. Blizard, M.D.; Benjamin Blower; James Bruce, M.D.; John Burrows; William Callon; David Chalmers, M.D.; Thomas Dale; Thomas Dawson; George B. Denton; Lorenzo Edward Desmond; Joseph Dickinson, M.D.; King Ellison; Edward L. Falloon; John Fenton; James Ferguson, M.D.; William H. Fitzpatrick; John J. Flinn; Richard Formby, M.D.; Robert Fryer; George Gill; N. S. Glazebrook; J. R. Gray, M.D.; William J. Gruggen, M.D.; J. Prince Halton; William Hamilton, (Rock Ferry); John Stuart Hawthorne; James Henry, M.D.; Thomas Hensman; William Hewitt; Chas. Hill, M.D.; Sam. Hodgson; Cecil Hughes; J. Sheridan Hughes, M.D.; H. Hulme; J. Johnson; J. Johnstone; D. Jones; Ellis Jones; R. Kay; P. Kelly; Thomas Lewtas; Charles Lister; Edward Lister; Henry Lowndes; Andrew McCaul; William McCheane; John McNaught, M.D; William H. Manifold; Nicholas Marsh; John Marshall; Arthur P. May; George M. Millett-Davis; John L. Minshull; Hugh Neill; Thomas Norris; Geo. F. Ogle, M.D.; Edward Parke; Alfred Parr, M.D.; Thos. Pennington; Henry Pritchard; Wm. Rowe; T. Skinner, M.D.; Christopher N. Spinks; R. D. Statter; Arthur B. Steele; Alfred Stephens; Alexander Stookes, M.D.; Henry Stubbs; Henry Swift; Edward Swinden; Charles Taylor; John Taylor; J. Stopford Taylor, M.D.; William Taylor, M.D.; Thos. R. H. Thomson, M.D.; Benjamin Townson; James Turnbull, M.D.; James Vose, M.D.; Thomas S. Walker;

A. T. H. Waters; John W. Watling; Alfred Whittle; C. Wilson; F. Worthington.

Against the motion:—John Cameron, M.D.; Cuthbert Collingwood, M.D.; John Drysdale, M.D.; Thomas Eden; Frederick D. Fletcher; Robert Gee, M.D.; James Hakes; Alfred Higginson; Thomas Inman, M.D.; Peter Macintyre, M.D.; John Moore; J. Birkbeck Nevins, M.D.; David Paterson; John Pope; John Sinclair, M.D.; Henry Slack; James S. Smyth; Hibbert Taylor, M.D.; Ewing Whittle, M.D.; and John H. Wilson, M.D.

The same gentlemen who voted for the first motion, voted against the amendment, with the exception of Mr. T. Dawson, who was absent when the amendment was put.

The voters for the amendment were those who voted against the resolution, except Dr. Drysdale and Mr. Moore, and with the addition of Mr. Grimsdale and Mr. Harris, who were absent when the first resolution was put.

Dr. Cameron requested that a protest against the motion be entered on the proceedings, on behalf of himself and those who had voted for the amendment.

Mr. Glazebrook moved that the protest be not received.

Mr. Fitzpatrick seconded the motion.

Mr. Sinclair moved as an amendment, that the protest be received.

The amendment was seconded, and on being put to a show of hands, was lost, and the original motion, "that the protest be not received", was carried by an overwhelming majority.

The Chairman said the next business was to read the second resolution.

The resolution was read by Mr. Waters, as follows:—

"That no minutes or proceedings of any meeting of the Institution, shall be reported or published without the consent of the majority present at such meeting; and any member who shall violate this law shall *ipso facto* be subject to immediate expulsion; provided always, that this law shall not be so interpreted as to deprive any member of the power to 'reserve his right of publication' in reference to any paper which he may read before the Medical Society."

Mr. Callon, in moving the resolution, said:—I shall not detain the meeting at this advanced period of the night; but, in introducing the resolution, I may be allowed to premise a few observations as to the circumstances connected with a measure so strange as this may appear, and for the purpose of showing its necessity. It will be in the recollection of most of the gentlemen present, that in November last an extraordinary general meeting was held. After that meeting, the proceedings, contrary to the expressed wish of the majority, were reported in the daily local papers. At the annual general meeting, a vote of censure was passed on a proceeding so much in opposition to the sentiments and feelings of the majority. During the debate, a contumacious threat was held out that the proceedings of that meeting also would be published, notwithstanding such grave censure. A report of the proceedings was published, Mr. Chairman—false, garbled, and one-sided! I may, perhaps, be allowed to refer to some little documents which have appeared in the public press upon this subject, showing that such reports were false—glaringly false, and unfounded imputations and threats were contained in those papers, which were simply ridiculous. [*Hear, hear.*] In a paper (*Mercury*), of January 22nd, appeared an article, headed, "Another Great Battle of the Doctors"; and I will cull from it one or two of the *morceaux*, which were thus given to the public:—

"Public feeling was strongly expressed in opposition to the narrow-minded and bigoted section of the profession."

There's a compliment, gentlemen. [*Laughter.*] Here is another extract:—

"But this is not all, the bigoted section have been beating up for recruits; not one half of the medical men in Liverpool are members of the Medical Institution; but since the defeat in November last, a strong canvass has been going on. It is said—but surely this cannot be true—that in order to induce the profession to join the Institution, a subscription was entered into to pay the entrance fees of those gentlemen who were not inclined to spend three guineas for that object."

A Voice. The meeting is not likely to waste much time upon that.

Mr. Callon. Here is another extract:—

"The liberal members were not aware of the canvass which was going on until it was too late; and, consequently, at the last moment, the 'bigoted doctors' displayed a list of forty-six gentlemen, who are, no doubt, ready and willing to vote for the proposition of the party that induced them to enrol their names in connection with an Institution the existence of which they had virtually ignored. The forty-six new bigots added to the forty-one old bigots, will give a voting power of eighty-seven against the liberal members."

Very complimentary, gentlemen—very nice compliments to introduce into society. [*Laughter.*] Now, gentlemen, these are some of the assertions put forward. Here is a little bit of a threat in another article, which appeared on the 24th of January:—

"Doubtless the public, whether professional or otherwise, will look with no little curiosity for the names of the proposer and seconder of the last named law, and scan the arguments they adduce as they would the nether garments of the first savage who wore breeches." [*Great laughter.*]

Now, gentlemen, these are some of the specimens of the veracity of the publishers of the transactions of this Institution; and I will now give you a sugar-plum, the sweet rewards for such publication. This appears in to-day's paper. After a long rigmarole article, abusing the "bigots", one would have imagined that all the virus had been expended; but it concludes thus:—

"Of course, I would except that small but glorious band who have taken a more enlightened view of their duties and responsibilities as healers. All honour be to them."

There are the names of a few gentlemen who figure in this matter.

A Voice. Read them out. [*Hear, hear.*]

Mr. Callon. Out of a feeling of delicacy, the names of these gentlemen had better be omitted.

A Voice. Proceed with the extract.

Mr. Callon (continuing the extract). "All honour be to them." I will read the names. [*Cheers.*] "Drs. Inman, Cameron, and the rest." [*Tremendous hissing, mingled with cheers.*] "Few, perhaps, can appreciate the self-sacrifice that is required to stand up as the champions of justice and right in such an assembly as will meet in the Medical Institution to-night. If the public is wise, it will foster and protect these men." [*Derisive applause and laughter.*] "The names of the minority should be preserved in every house in Liverpool [*ironical cheers*], by great and small; and when the hour of sickness and peril comes [*laughter*], it will be well to bear in mind that there is far more chance of obtaining good advice from men who dare to think for themselves, and accord the same right to others, than from those who go howling and whining about, and bow down terror-stricken before a system which they profess to believe owes all its success to doing nothing."

There, gentlemen, are some of the specimens for you.

Mr. Hakes. A very clever article.

Dr. Cameron rose to make some observations; and the Chairman having secured him a hearing, he said;—I have a right to protest against my name being introduced in connection with that paragraph. I have no connection with it in any way. I have never yet advertised myself in a paper. I despise those who advertise themselves, directly or indirectly. [*Hear, hear.*]

Mr. Callon. I don't attribute the article to Dr. Cameron at all; it purports to give the sentiments of men outside the profession, which sentiments are given in consequence of garbled and false reports. [*Hear.*]

Dr. Cameron. You connected names with it.

Mr. Callon. I merely wished to show the fruits of such publication of one sided reports; I have shown the necessity that such garbled and false statements should not go forth to the public. The ordinary law appears inadequate to restrain such publications, and it is, therefore, necessary to adopt a more stringent regulation. This Institution has not hitherto deemed it necessary to blur the pages of its statute book by anything bearing the semblance of restrictiveness. Penal laws are generally ungracious; but there are times when even penal laws become necessary, and this is one of those occasions, gentlemen. [*Hear, hear.*] If gentlemen who pursue this system of advertising, contrary to the expressed opinion of the majority, cannot be restrained by the usual laws, we must have more stringent measures. [*Cheers.*] I believe there are members of this Institution who, in medical matters, seem to take a sort of glory in catering for the curiosity of the public, [*hear, hear,*] who pander to the cravings of hungry newspapers, who, in return, bespatter them with their laudation. [*Cheers.*] There are gentlemen, too, who appear to seek a sort of pseudo-reputation out of the pale of the profession, to which, by a more patient and dignified course their talents would entitle them in the profession; who hold up to the public sneer every-

thing which does not meet their sage approval; and who, in fine, would not scruple to sacrifice, at the shrine of popularity, the best interests of the profession. [*Cheers.*] It is gratifying to see this goodly accession to our members; it is a good proof of hearty vitality, notwithstanding the open apostasy of some, and the secret machinations of others. [*Hear, hear.*] The gentlemen who have now joined our ranks feel, that although they have hitherto been passive spectators of the movements of this Institution, they are called upon to rise from their supineness, feeling that our outposts have been assailed by the intrigues of those from within. Leaving any further observations to the seconder of this motion, I shall now conclude, carrying out the pledge that I would not detain you long. [*Cheers.*]

Mr. Batty, in seconding the resolution, said: My experience of the profession has been this: There have been various discussions in medical societies—and I have found it the same in all societies—where it has been advisable to maintain silence out of doors; keeping the discussion entirely within doors. I remember cases where gentlemen in the Royal Medical Society of Edinburgh have carried their discussions to such a pitch, that parties have left the room with the intention of publishing minutes of the proceedings, but they have fallen back directly, and not exposed themselves before the public. Therefore it becomes us as medical men, and it is due to our professional character, not to expose anything of a divided nature, but to maintain our honour before the world, and secure peace within the professional pale of the Society. I therefore second this motion, in order that we may have nothing further outside the building.

Dr. Macintyre said: I was just going to ask, Mr. Chairman, if it be possible that any gentleman shall be allowed to get up to speak upon this question without embroiling himself, and bringing himself under the ban of the mover of this resolution—a disgrace that would attach to his name, if he identified himself with a difference of opinion to that which has been laid down. I don't like, for myself, to say one word upon the matter, because I may suppose—I suppose it possible that a man may have an opinion against the introduction of this motion, without being suspected of being one of those dreadful members of our degraded profession, as it has been depicted; because I would not venture, I would not dare, to say a single word just now that would prolong this horrible discussion. It seems to me that our profession was never painted in such a form and such a way before this; I never heard such language applied to any member or number of members of our profession connected with the society I am a member of before; and I never will attempt to defend a position such as has been pointed out. I would not degrade myself by opposing this resolution. I do hope that the gentleman who gave notice of the motion, will, after thinking upon the question, withdraw it altogether from discussion here, because it is certainiy beyond what I expected.

Mr. Callon. My observations do not apply to any individual member or members; for I know not from whom the reports emanated. I merely take them as I find them in the public prints, and vindicate my right to say such things of them as I think; especially after those reports were published in defiance of the great majority. [*Hear, hear.*]

Dr. Inman. I wish to make some observations respecting the motion. I think the profession have behaved up to the present time very unworthily; and as I knew that I should have to speak to-night, in order that I might not allow my temper to get the better of my words, I have done as Dr. Turnbull did—written down what I intend to say. [Dr. Inman then proceeded to read as follows:] I object to the present motion, and I do so on the ground, that it is one calculated to bring the Institution into contempt with the public generally, and to damage the profession in this town more than any other proposition possibly can do. What is it but a declaration, that discussions take place in this building amongst medical men, of which they are positively ashamed? [*No, no,*] that speeches are uttered so full of hot hate and fiery intolerance, that they would damn not only the utterers but the hearers if they were to see the light? [*No, no.*] Do the supporters of the new law mean deliberately to affirm, that publicity is incompatible with their interests, and that they will visit, with the severest punishment in their power, any individual who ventures to believe that others, besides the members of the Institution, have an interest in medical matters? [*Interruption, and loud cries of "Vote, vote."* Dr. Inman, leaving his notes, proceeded as follows:] I say, gentlemen, that the meeting of this night is on a par with the "nidering" conduct—and for the word "nidering" you may look at Waverly, fifteenth chapter—is on a par with the nidering conduct of the profession at the last annual meeting, when a vote of censure was brought forward, as upon the present occasion, without due notice being given. I say that this motion is brought forward to-night in the same manner, and in the same spirit; and the same individuals who voted for it, will vote for this motion. Mr. Callon has referred to a number of articles in the newspapers; without attempting to prove that any of those articles were dictated by, or came from the pen of any single member of the Institution. We are requested to adopt a law which will for ever stamp infamy upon our proceedings. Suppose the law passed, and that a meeting has been reported, at which the majority were so extremely vexed that they were determined to turn the person out who published it. Let us hear the arguments adduced at the last meeting: they were, that homœopathy was a "cheat," a "humbug," and the like; that it was the "tall bully which lifted up its head and lied;" that it was an extremely dangerous quackery, against which the public ought to be guarded to the utmost extent; but as soon as the public are told the sentiments of those gentlemen, you are up in arms. [*Cheers, and counter cheers.*] You say at one time, that you are actuated entirely by a wish to benefit the public; and at another, you are equally determined that the public shall know nothing about it. But suppose that you do stultify yourselves, and put a law of that kind on the book; of what earthly value is it? Is it possible for the council, or for any member to bring home the report to a single individual? Has the council authority to ask a single individual whether he communicated that report? Does the law give any power whatever to members of a medical body to examine any person on oath? Certainly not—no law whatever can prevent any gentleman taking a note.

A Voice. A sense of honour would—a sense of honour would. [*Cheers.*]

Dr. Inman. A sense of honour!

The same Voice. Yes, a sense of honour would. [*Cheers.*]

Dr. Inman. I said, Mr. Chairman, that there is nothing whatever to prevent a person from taking notes of a meeting. In consequence of there being no notes of the last meeting taken, the proposer of this resolution has told you what is untrue. There was no vote whatever at the last meeting against its being reported. I ask Mr. Callon to what report he can refer as a contravention of any motion to the contrary. I say that there is nothing whatever to prevent any individual taking notes of any meeting, and still further, that there is nothing whatever to prevent him telling his friends what has taken place. [*Oh, oh.*]

Dr. Macnaught. There was a vote of censure at the last meeting passed by a large majority against the individual or individuals who published the first report contrary to the wishes of the great majority of the society.

Dr. Inman. Then I say, knowing nothing whatever of that—I am afraid to trust my lips to express terms sufficiently strong to designate what that was—I say it is a still further injustice (I will not use an adjective), first to pass a vote of censure on the reporter, and subsequently to bring forward a law to endeavour to expel him. [*Interruption, which lasted for a few seconds.*]

The Chairman. Dr. Inman had better continue.

Dr. Inman. I say that no law will prevent any member from taking notes of a meeting; there is nothing to prevent a gentleman from recollecting what took place; if he has a retentive memory, there is nothing to prevent his putting memoranda on paper; and if he has a medical friend, there is nothing to prevent his lending those memoranda to him. [*Oh, oh!*]

A Voice: And so get memoranda into the newspapers. [*Hear, hear, and hisses.*]

Dr. Inman: Suppose that his friend without his knowledge puts that into the public paper; I should like to know what law will reach him then? [*Hisses.*] I say the law is absolutely imperative; and that to put a law of that kind on our statute-book would be one of the most damning the institution has ever done, and would do more to put a far darker stain on the medical profession of Liverpool than it has ever yet got.

Dr. Macnaught: I have to say to Dr. Inman that he is in error when he says no resolution of censure was passed at the last meeting. I maintain there was a vote of censure, and I had the honour to occupy the chair.

Dr. Inman: Dr. Macnaught has misunderstood me. I said no resolution was passed at the meeting in November against reporting.

Dr. Macnaught: The sense of the meeting was taken.

Dr. Inman: It was taken as to the exclusion of professional reporters.

Dr. Macnaught: You said it would not prevent any gentleman from taking notes; there was a conversation upon that, and the sense of the meeting was against it.

Dr. Inman: I say the sense of the majority was never taken at all.

Mr. Ellis Jones: I protest against Dr. Inman's assertion, for I was the means of getting that majority on that occasion on the question, that no proceedings of that meeting should be published in the public prints: there was a very large majority who came to that decision.

Dr. Macnaught: Look at the effect of publishing the transactions of our society. Here we meet during the session, fortnight after fortnight, reading papers, bringing forward cases, and exhibiting pathological specimens. Allow any gentleman to publish the proceedings, and what would be the effect out of doors? Would it not create a large amount of anxious feeling on the part of sensitive people, who would suppose that some relation had been exhumed, and that we were examining a piece of his kidney. It would be an indecent detail before the public. We have hitherto given our details through a medical journal. Why should a local paper, read by everybody, take up the proceedings of our society when they have never reported them before? I again repeat, that the sense of the meeting was taken on the question, and that a large majority were against the publication in local papers.

Mr. Sinclair said, I am one of those who think that it would be well if the present movement had been postponed until the strong personal feeling has somewhat subsided, so that the question may be discussed with more calmness and judgment. My own impression is, that the more we keep our discussions from the local papers the better. [*Hear, hear.*] If our discussions are to be published, the proper place for them is the medical journals. But still I am sure that at other times the strongly expressed feeling, evidence of which we have heard to-night, especially against one individual, would not be listened to. He is a most honourable man, although I think his judgment has been a little at fault in giving to the town a report of our proceedings. [*Hear, hear.*] I trust that whatever difference of opinion there may be amongst us, and there is a large majority on the opposite side from the view which I entertain, yet still I hope that upon this subject of the second motion they will never consent to its being passed. Much as I am opposed to the publication of our proceedings in the local papers, the idea of expelling one of our members for such a matter is out of the question, and I hope the large majority will be found opposed to such a motion.

Mr. Glazebrook said: Dr. Inman has said that no man could prevent a member taking notes of proceedings. There can be no question whatever that there is hardly a medical man present who is afraid of publicity in any sense of the word; but it is not professional that we should have our proceedings published in the local papers in the way they have been; and if, sir, Dr. Inman can inform us by what principles of honour and government any society can regulate its meetings where there is such a breach of its rules, I for one shall be glad to know. If this law—which is about to be passed, and which would not have been requisite had it not been for the reports the nature of which has been described—if this law is of a damning nature, Dr. Inman has only himself to thank; for after contumaciously setting at defiance a positive resolution to prevent the issuing of these reports, Dr. Inman immediately got up and asked,—Who shall prevent its being done? It is only by a law of this nature, therefore, that we can meet the case. [*Cries of "Vote! Vote!" and "Go on!"*]

Mr. Fletcher said:—I wish simply to protest against one or two things that Mr. Callon has stated, but which I hope he did not mean. He said that those most scurrilous effusions which he read from the articles in the newspapers, were examples of the veracity of the publishers of the report. Now, there was not a tittle of evidence shewing that any member, particularly any one particular member, has had anything to do with these letters which Mr. Callon read. I beg this meeting to postpone the consideration of this subject, knowing perfectly well that in any conflict it is next to impossible for people to retain their temper and good judgment; and it is a serious question where feeling is exhibited upon both sides, and where those in the minority have reason to be aggrieved by slanders [*hisses and interruption*]; and I appeal to gentlemen here, whether they do not know, of their own knowledge, of the slanders which have been propagated with regard to one or more of the promoters of this amendment—charging us with being "rotten" individuals. That is the very word used. I can prove it, if necessary. I did disapprove, and disapprove still, of the publication of the original report; but I do say most strongly, that it was as fair a report as any report under the circumstances could be. [*No, no.*] I have also just to say this: this resolution, if carried, converts this into a secret society. [*No, no; yes, and confusion.*] It says that no member shall "report" or "publish"; these words have a different signification; and therefore this resolution literally forbids us to report or say anything about the proceedings of any meeting, unless permitted to do so by special consent. [*No, no.*] I don't mean to say that that is what you mean. [*Vote, vote.*] If gentlemen mean merely that they don't want these proceedings reported in the local papers, why don't they say so in that resolution. [*Cries of "Vote, vote".*]

Mr. Hakes wished to propose, as an amendment to the resolution, that the consideration of the subject be postponed to a future meeting. [*Cries of "Vote, vote".*]

Mr. Bailey seconded the amendment.

Mr. Parke thought that Dr. Inman had acknowledged himself to be the reporter on the last occasion. [*Laughter.*]

Dr. Inman. Excuse me; I never said anything of the sort.

Mr. Parke understood that Dr. Inman had acknowledged it; at all events, he had been informed so. If Dr. Inman would acknowledge his error [*laughter*], they would go on better. [*Vote, vote.*]

The amendment proposed by Mr. Hakes, was put to a show of hands, and lost by a large majority.

After a few words from Mr. Callon, who urged that, owing to the contumacious threat held out at a previous meeting, the time had arrived for such a change in their rules as that which he had proposed,

Mr. Hakes said, in this matter he should take his own course, and not vote; if, hereafter, he published anything, he should not act as a man wanting in honour, but wanting in respect to their opinions.

The motion was then put and carried, by 83 to 14.

For the motion:—R. Y. Ackerley; J. Arnold; J. Allen; F. Ayrton, M.D.; B. Barrett; Robert Batty; E. R. Bickersteth; T. Bickerton; John M. Blizard, M.D.; B. Blower; J. Bruce, M.D.; John Burrows; W. Callon; D. Chalmers, M.D.; Thomas Dawson; G. B. Denton; L. E. Desmond; J. Dickinson, M.D.; T. Eden; King Ellison; E. S. Falloon; John Fenton; James Ferguson, M.D.; W. H. Fitzpatrick; John J. Flinn; R. Formby, M.D.; Robert Fryer; G. Gill; N. S. Glazebrook; J. R. Gray, M.D.; W. J. Gruggen, M.D.; J. P. Halton; J. S. Hawthorne; J. Henry, M.D.; T. Hensman; William Hewitt; Cecil A. Hughes; J. S. Hughes, M.D.; H. Hulme; J. Johnson; J. Johnstone; D. Jones; Ellis Jones; R. Kay; P. Kelly; T. Lewtas; C. Lister; E. Lister; H. Lowndes; A. McCaul; W. McCheane; J. Macnaught, M.D.; W. H. Manifold; N. Marsh; John Marshall; A. P. May; George M. Millett Davis; J. L. Minshull; H. Neill; T. Norris; Geo. F. Ogle, M.D.; Edward Parke; T. Pennington; H. Pritchard; W. Rowe; T. Skinner, M.D.; C. N. Spinks; A. B. Steele; Alfred Stephens; Alexander Stookes, M.D.; Henry Stubbs; Henry Swift; E. Swinden; J. S. Taylor, M.D; W. Taylor, M.D.; T. R. H. Thomson; M.D.; B. Townson; J. Vose, M.D.; T. S. Walker; A. T. H. Waters; J. W. Watling; C. Wilson; F. Worthington.

Against the Motion:—J. H. Barnes; J. Cameron, M.D.; J. Drysdale, M.D.; F. D. Fletcher; J. P. Harris; A. Higginson; C. Hill, M.D.; T. Inman, M.D.; John Moore; D. Paterson; J. J. Pope; J. Sinclair, M.D.; J. S. Smyth; and J. H. Wilson, M.D.

The Chairman announced the result, amidst general acclamation.

On the proposition of Mr. Ferguson, seconded by Dr. Inman, a vote of thanks was accorded to Dr. Vose, for his impartial conduct in the chair.

The meeting then separated, after sitting four hours and a half.

The following is the protest referred to at p. 140.

In recording the following protest, those whose names are attached thereto beg to assert most emphatically that they disclaim all confidence in the doctrines of homœopathy—a system which they believe to be erroneous in theory and inefficient in practice. They recognise the impossibility of *acting* in concert with those to whom they are diametrically opposed on fundamental doctrines; but they do not consider that there is any

inconsistency in meeting them at a Society devoted to scientific inquiry, in which perfect freedom of opinion is equally essential to the discovery of truth and the refutation of error. They protest against the enactment of the new law on the following grounds:—

1. That it is *unnecessary*, the existing code being amply sufficient to exclude or to expel from the Institution those whose presence might compromise its professional character.

2. That it is *unconstitutional*, as being, in their opinion, opposed to the intentions of the founders of the Institution, and to the conditions of the trust-deed under which the property is held.

3. That it is *inexpedient*, since it confers on the Council a right of inquiry into the opinions and practice of members, which ought never to be granted to the governing body of any scientific association, and implies, on the part of the Institution, a responsibility for the opinions of individual members, which, by the nature of the Institution, does not and cannot exist.

4. That it is *unjust*, since it establishes a disability with regard to those whose practice is based upon a particular theory, and inflicts a penalty upon those who may hereafter adopt it, without there being, in either case, any proof of dishonourable conduct on the part of such individuals; thus punishing the adoption of a scientific error as though it were necessarily a breach of medical ethics.

J. Cameron, M.D.	Cuthbert Collingwood, M.B.
Thos. Inman, M.D.	H. W. Slack.
F. D. Fletcher.	David Paterson.
John Sinclair, M.D.	R. Hibbert Taylor, M.D.
Robert Gee, M.D.	Richard Hutchinson.
Robert Hamilton.	Ewing Whittle, M.D.
Alfred Higginson.	H. Imlach, M.D.
P. Macintyre, M.D.	Jos. John Pope.
J. H. Wilson, M.D.	Jas. Hakes.
W. L. Cocks, M.R.C.S.Eng.	J. P. Harris, F.R.C.S.Eng.
J. B. Nevins, M.D.	T. F. Grimsdale, M.R.C.S.Eng.
J. S. Smyth, F.R.C.S.Ed.	J. Newton, M.R.C.S.Eng.

POOR-LAW MEDICAL REMUNERATION.

We, the undersigned Union medical officers, and others, practitioners of the town and neighbourhood of Rotherham, after due deliberation on the subject, have come to the following conclusions:—

1. That the medical officer's appointment is one of the most important in the Poor-law Union.

2. That, in order that the appointment may be efficiently carried out, it is expedient that medical men be properly remunerated.

3. That a scheme has been promulgated by the Hon. Mr. Estcourt, intended to carry out the above object, which we, as medical men, with due respect, cannot exactly agree with.

4. That, all other officers in the Union being appointed on liberal terms, it is derogatory to medical men to suffer themselves to be appointed in any other manner.

5. That it would be more satisfactory, in all medical appointments, to contract on equitable terms for attendance on *permanent* paupers; and, in the case of *casual* paupers, to be paid for visits and medicine on a reasonable scale (*e. g.*, 1*s.* per mile for each visit, and 1*s.* for medicine), to be agreed on between the medical officers and the Poor-law Board.

6. That, in order to carry out the above resolutions, a weekly report shall be made by each medical officer of the visits and medicines supplied to paupers, both permanent and casual.

7. That workhouses shall be contracted for on equitable terms, with medicines supplied by the Union at the suggestion of the medical officer.

8. That extras for surgical operations and midwifery shall be determined by the Poor-law Board, with the assistance of the Medical Council under the new Medical Act.

(Signed)

Henry Wilkinson.	George Hopper.
Robert O. Blythman.	William Saville.
J. G. Wade.	Benjamin Robinson.
James Burman.	Edward Robinson.
Erasmus Stone, Jun.	James Crowther.
Charles Newton Foote.	Henry Darwin.

P.S. The above resolutions are intended to indicate a liberal principle of action; but we leave the details in other hands.

Rotherham, February 7th, 1859.

MEDICAL REGISTRATION.

The following memorial has been addressed to the President of the Medical Council by the Committees of the Northamptonshire and Bedfordshire Registration Association.

"*To* Sir Benjamin Brodie, Bart., Pres.R.S., D.C.L., *etc.*, *President of the Medical Council.*

"Sir,—We, the undersigned members of the Committees of the Northamptonshire and the Bedfordshire Medical Registration Associations, respectfully solicit your consideration of this memorial.

"By Section XV of the New Medical Act, three modes are prescribed for the Registration of members of the profession.

"i. By '*producing to the Registrar the document conferring or evidencing the qualification*' of the applicant.

"ii. By the applicant '*transmitting by post to such Registrar information of his name and address and evidence of the qualification, etc., etc., and of the time or times at which the same were obtained.*'

"iii. '*It is lawful for the Registrar* (upon receipt of the fee), provided the name, qualifications, and residences appear in the certified list of a licensing body, *to enter in the register such names, etc., etc., without other application.*'

"We beg most respectfully to express our opinion that the first and third modes of carrying out the registration are most insecure and unsatisfactory, for the following amongst other reasons, namely:—

"That the Registrar must be a stranger to the great majority of the applicants; that he cannot be acquainted with their age, their residences, or that they are the veritable individuals whose names appear in any produced documents, nor can he have any knowledge that such documents were 'lawfully obtained', or, in cases of suspicion, has he the time or opportunity to institute satisfactory inquiries.

"That the several Licensing Bodies can have little or no reminiscence of their members; for though the *Pass Lists* may contain the places of their education or birth, these are seldom the places in which those members commence or continue the practice of their profession; consequently the said bodies can have no exact knowledge of the residence, change of residence, deaths, or other circumstances connected with those members, or the identity of parties bearing names appearing on their lists.

"That there has been but an imperfect, if any, revocation of diplomas of deceased members, so that numbers of such diplomas must be in existence, bearing a high marketable value, and affording strong temptations to fraudulent impersonations.

"The very easy and lax mode adopted during the first few weeks of registering may entail many deplorable prosecutions in order to remove improper names from the register.

"Your memorialists beg to express their opinion that the second mode of registration is the more secure and efficient, and may be rendered satisfactorily so, by a rigid construction of the phrase '*evidence of qualification*'; that the Executive Council has the power not only to enjoin such a construction, but also to empower their Registrar forthwith in all cases to demand the same.

"Your memorialists beg to subjoin the system they have adopted in receiving (under the sanction of the Registrar) applications for registration; and, without presuming to dictate or recommend any one plan, they respectfully express the hope that the above objections will be taken under the serious consideration of the President and the Executive Council.

"We have the honour to remain, sir,

"Your very obedient servants,

"D. J. T. Francis, M.D. } *Physicians to the North-*
"John Henry Webster, M.D. } *ampton Infirmary.*
"H. Terry, F.R.C.S. } *Surgeons to the Northampton In-*
"J. Mash, F.R.C.S. } *firmary.*
"John M. Bryan, M.D., F.R.C.S., Northampton.
"Benjamin Dulley, F.R.C.S.Lond., Wellingborough.
"T. Foster Gray, M.R.C.S., Northampton.
"Robert S. Stedman, M.R.C.S., L.S.A., Sharnbrook, Beds.
"G. F. D. Evans, M.D., L.R.C.P, *Chairman of the Bedford*
"T. Herbert Barker, M.D. } [*Committee.*
"H. W. Sharpin. } Bedford.
"C. E. Prior, M.D. }

"January 31st, 1859."

LONDON MEDICAL REGISTRATION ASSOCIATION.

MEETING IN LAMBETH.

On Friday, February 4th, the second of a series of metropolitan meetings of the medical profession, convened by the Association, took place at the Vestry Hall, in Lambeth; Dr. Odling, Medical Officer of Health for that parish, and a member of the Committee of the Association, in the chair.

The Chairman, having opened the proceedings by stating the objects of the Association, called on Dr. Ladd, the Honorary Secretary, to read the report of its proceedings to the current date, which was accordingly done. At its conclusion, he read the following resolutions, carried unanimously at the last meeting of the Lambeth Medical Registration Association:—

"That the Lambeth Medical Registration Association, believing that there no longer exists any necessity for such an Association in Lambeth, as there is now a powerful and influential Association for *all London*, styled the London Medical Registration Association, and being convinced that the great object of these Associations will be better obtained by *one central Association*, do hereby accept the invitation of the London Medical Registration Association, and agree to join the same, and to pay the extra sum of 2*s*. 6*d*. per member, and that the balance in the hands of the Treasurer (if any) shall be handed over to the London Medical Registration Association."

"That the following gentlemen do represent the practitioners of Lambeth on the Committee of the London Medical Registration Association—viz., Dr. Pursell; David Taylor, Esq.; F. B. Garty, Esq."

[By a vote passed at the meeting of the General Committee of the London Medical Registration Association, on Wednesday, February 2nd, the Committee thankfully accepted the addition of the above-named gentlemen to their body.]

Dr. Pursell moved—

"That this meeting having heard the report of the progress hitherto made by the London Medical Registration Association, thoroughly acquiesces in the principles by which the course of that Association has been guided, and recognises the importance of its receiving the support of all qualified medical practitioners in the parish of Lambeth, both for their own advantage and the interests of the profession."

In his remarks, he stated that the great necessity there was for such an Association as the present, was proved by the case now pending in Dublin (Reg. *v.* Evans Reeves and Protheroe).

Dr. Bushell in seconding this resolution, expressed his opinion that the Medical Council had not treated the Association courteously in declining an interview with its Committee.

Mr. Bottomley eulogised the great efforts of Dr. Ladd in the very zealous performance of his duties as Honorary Secretary of the Association. He said it had been a great thing to get the new Medical Act passed, but it was an equally great thing to get the profession to bestir themselves to see its provisions fully carried out.

This resolution was carried unanimously.

Mr. Bullen proposed the second resolution, which was seconded by Mr. Jeffree—

"That in the opinion of this meeting, it is highly desirable to augment the number and influence of the members of the London Medical Registration Association, so as to enable it effectually to carry out its objects, and give weight to its proceedings with the Medical Council; and that this meeting pledges itself to use every exertion to secure that end."

Dr. Kirby remarked that the Act provided for three things—medical education, medical registration, and the means of preventing illegal practice. It was with the two latter objects only that this Association had to do. He did not wholly approve of the constitution of the General Council, but we were now on the right road to get a better, and the Government was prepared to listen to the representations of that Council. They were not, however, to be allowed to take £30,000 out of the pockets of the profession for doing nothing, and it would be the business of the Association to prevent that being the case.

The second resolution was unanimously carried.

Mr. W. B. Evans moved—

"That this meeting recognises the exceeding importance of obtaining, and submitting to the London Medical Registration Association, all possible information concerning persons practising medicine illegally in the parish of Lambeth."

This was seconded by Mr. Pocock, and supported by Mr. Lavies, who considered that the Association would prove very valuable in affording necessary information to the Registrar, and carried without a dissenting voice.

Mr. Miskin moved, and Mr. Dodd seconded—

"That, in the opinion of this meeting, the mode of registration as at present conducted is quite inefficient for the purposes contemplated by the Act, and does not afford sufficient protection against unqualified persons becoming enrolled upon the Medical Register."

Dr. Kirby stated that he feared the Registrar, Dr. Hawkins, was not at all aware of the amount of illegal and fraudulent medical practice that existed; and he trusted that the Association would be furnished officially with proof-sheets of the Register before it was finally printed.

Mr. Pocock, Mr. W. B. Evans, Mr. Bullen, and Mr. Bottomley made observations on the resolution, which was ultimately carried with one dissentient.

A vote of thanks to the chairman, proposed by Mr. Lavies and seconded by Mr. Pocock, terminated the proceedings.

The Case of Dr. Storrar. *Court of Queen's Bench*, Saturday, January 29th, 1859. (Before Lord Campbell, and Justices Wightman, Crompton, and Hill.) Regina *v.* Storrar. The Attorney-General stated that he had been instructed on behalf of the Senate of the University of London, to show cause against a rule which had been obtained, calling upon Dr. John Storrar to show cause why an information in the nature of a *quo warranto* should not be filed against him, on the ground that he had been unduly elected to the Medical General Council. He felt the question to be so important, as affecting the rights of a large body of influential persons, and their lordships would probably be of opinion that there was so much force in the arguments adduced by Mr. Edward James in moving for the rule, that he did not feel that he could make such a serious opposition as to induce their lordships to discharge the rule, and he should therefore not resist its being made absolute. The rule was therefore made absolute; the result of which is that a step is gained for the graduates, and it is clearly shown that the question is not regarded, either by the Court or by the Attorney-General, to be so simple or so clearly in favour of the views held by the Senate as seemed at first to be the somewhat general impression. The final argument will take place early next term.

A Very Slow Poison Indeed. A lady (resident of Lindfield) having lately placed herself under homœopathic treatment, was, of course, supplied with a bottle of the well known globules, about 200, with directions to take "two" for a dose. One of her children obtained possession of the bottle last week, swallowed the whole of the contents, which, of course, created alarm in the family; but, up to the present time, the globules have taken no effect. (*Brighton Examiner.*)

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

F.R.C.S. According to the present regulations of the Society of Apothecaries, no gentleman practising in England or Wales can give his apprentice a legal title to examination unless he is himself legally qualified to practise as an apothecary under the provisions of the act of 1815. But an apprenticeship for not less than five years to a surgeon practising as an apothecary in Ireland or Scotland gives the apprentice a title to be admitted to examination.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

UNIVERSITY COLLEGE HOSPITAL.

I. BLOW ON THE HEAD, FOLLOWED BY DIPLOPIA AND CEREBRAL SYMPTOMS: DEATH FROM COMA.

Under the care of E. A. PARKES, M.D.

WE are indebted for notes of the two interesting cases which we subjoin to Mr. Ringer, the resident medical officer at University College Hospital, under whose observation they occurred. They are interesting in themselves, as well as for the well marked contrast which they present. In the former, every circumstance, both of history and symptoms, was present which could lead to the diagnosis of the presence of some foreign body (probably a blood-clot) making pressure on the central parts of the left hemisphere; yet it seems quite certain that no such body was present, and thus (as so often happens in cerebral cases) the *post mortem* appearances are wholly inadequate to explain the symptoms of the case. This fact is not merely a medical curiosity, but has considerable and important bearing on questions of medical jurisprudence which often occur in reference to injuries of the head. The second case is a well marked example of a very extensive inflammation both of the external and internal membranes of the brain, in which the symptoms were perfectly obscure, or latent, up to within two hours of the patient's death; since the slight confusion which was noticed in the patient's manner might have been, and very probably was, merely one of the effects of the blood-disease which appears to have been the origin of the local inflammation in the lungs.

Samuel L., aged 55, was admitted under Dr. Parkes's care on December 1st, 1858. He had been employed from his youth about stables, and had been much exposed to wet and cold. It appeared that he had been also in the habit of drinking. He had been rheumatic during many years, and had had a severe cough the previous spring, for which he had been under treatment at St. Mary's Hospital, and at the Convalescent Asylum at Walton. On September 23rd, he was struck by a carriage on the back of the head, a little to the right of the middle line. He was knocked down, and the carriage went over his legs. There was no wound or bruise upon the head, but he continued to suffer pain in the head from the occurrence of the accident to the date of admission. The pain in the head is described as being violent, paroxysmal, accompanied by fits of great giddiness just before the pain, so that he was obliged to be held by some one at those times. These attacks occurred five or six times a day, and were getting worse. He had had no fits of any kind. He was very irritable, and suffered from formication, not connected with the seizures, and from a sensation of cold and aching pain all over him. The legs began to swell about a fortnight before admission. His memory had been getting worse of late. Diplopia came on the day after the accident. The accident happened at night, and he noticed this phenomenon in the morning. The sense both of smell and taste had been somewhat impaired since the accident. Slight contraction of the mouth and a slight lisp were noticed a few days before admission. He had had starting of the limbs ever since the accident, but could walk as well as ever. His speech was much impaired, and had become so much worse in the few days preceding his admission, that it had become difficult to understand him. He was slightly deaf before the accident, but had improved somewhat in that respect since. The left ear was better than the right. The pupils were excessively contracted, but equal: they moved very sluggishly, the right better than the left. He saw double occasionally, one object being placed below the other; the lower one less distinct. He had no ringing in the ears, nor headache. The left angle of the mouth was raised; the tongue deviated to the right side; the uvula was drawn up towards the left. No impairment of smell or taste could be verified on admission. He had pain on swallowing, about the level of the hyoid bone; the fauces were red; there was an ulcer on the tongue. He suffered somewhat from dyspnœa and paroxysmal cough. There were sounds indicative of a vomica at each apex.

His look was pasty and anæmic, and his legs were œdematous. He could raise the right hand and arm only imperfectly, and they were weaker than the left. He could move the right leg pretty well, but it felt stiff; it was more œdematous than the left. The right side was also colder than the left. The hemiplegia had existed only for a few days, and was getting rapidly worse. The pulse in the right arm appeared weaker, larger, and more compressible, than in the left. The temperature in each foot was 91½°; the right hand, 96°; the left hand, only 80°. Sensation on the right side was decidedly impaired.

He continued in much the same condition during the next five days. On December 6th, at 3 A.M., after having been quietly asleep, he passed gradually into a semi-comatose condition, from which he could at first be easily roused to recognise people about him. At eight o'clock, he was found lying on his back, breathing laboriously, but not stertorously; and was insensible to the sharpest pinching or loudest sound. His limbs felt as if dead when they were raised; the pupils were still contracted; the left still the smaller. A reflex action was easily excited by tickling the feet. He passed urine involuntarily. The right pupil was noticed soon afterwards to be displaced upwards and outwards; the left upwards, but much less outwards. The right eye was perfectly insensible, and the left almost entirely so; both pupils were immoveable. He could be roused to open his eyes when loudly spoken to, and shook his head when asked if he was in pain. He died soon afterwards.

On *post mortem* examination, forty-six hours after death, the dura mater was found adherent; the pia mater milky, with much subarachnoid fluid, especially on the left side. There was a thickened patch of pia mater on the left hemisphere. The arteries were only very slightly atheromatous. The convolutions looked healthy; and no morbid appearance, nor any softening, could be found in any part of the brain. The corpora striata, optic thalami, fornix, corpus callosum, and, in fine, every part of the brain, were examined carefully, both fresh and after preservation for a short time in spirit; and no morbid appearance was detected anywhere. The cerebellum, pons, and medulla oblongata, were equally healthy. There were cavities in the upper part of each apex, larger on the right side; and a great deposit of tubercle at the left apex, with marks of old pleurisy. There was an adhesion between the heart and pericardium at one part, showing the existence of previous pericarditis; and some old white patches on the pericardium. The heart was surrounded by a great deal of fat; it was dilated and somewhat hypertrophied, weighing sixteen ounces and a half. There was slight calcification at the root both of the mitral and aortic valves. The liver appeared rather coarse in structure, but not obviously diseased; there was some circumscribed thickening of its capsule. The kidneys were slightly granular, and contained a few small cysts and some small masses of fibrine on their surface. The cortical structure was slightly pale.

II. PNEUMONIA: LATENT MENINGITIS.

Under the care of E. A. PARKES, M.D.

James W., aged 44, was admitted, under the care of Dr. Parkes, on December 6th, 1858, on account of pneumonia. He had resided in London for many years, and, except an attack of ague on one occasion, and two attacks of gout, which

seemed to be hereditary in his family, had enjoyed good health.

On the evening of November 29th, he had been seized with rigors, followed by headache, great thirst, weariness, and aching in the limbs. Cough did not come on till some days afterwards. He soon felt pain in the right side and "a catch" in breathing. He had been much exposed to cold previously. He kept the house, but not his bed, until admission. During this time he got very weak, but was able to walk to the hospital, though with difficulty. His tongue was dry and furred; appetite bad. The urine was acid, of specific gravity 1·025; there was a large quantity of albumen and of lithates. Pneumonia could be detected on the right side. It is not necessary to dwell on the treatment.

December 9th. It is noted that there was slight confusion of thought and slowness in answering questions. The pulse was 108, the respiration 46. There was hacking cough, but no expectoration. The right side of the chest moved less than the left; it was dull to percussion posteriorly as high as the third dorsal vertebra, and the respiration over this part was markedly tubular and metallic. A fine dry rhonchus was heard, in inspiration only, between the third and fourth ribs. The vocal fremitus was much decreased over the whole side.

December 11th. He was still more confused, with slight wandering. There was constant twitching of the muscles of the face, even when he was awake, but still more marked during sleep, when twitchings of the left hand and arm were also noticed; his weakness and emaciation were much increased. He lay dozing the greater part of the day, for the most part on the back or left side. The inflammation was now found to have attacked the left side also. Here the thorax posteriorly was dull to percussion as low as the fifth dorsal vertebra, below which point the note became more natural, till quite at the base it was good. The respiration above had a diffused blowing character, and towards the middle of the lung was somewhat tubular, especially in expiration. Rhonchus could be heard posteriorly on this side, but no fine crepitation. On the opposite lung, the inflammation appeared to have extended over almost the entire lung. The vocal resonance was decidedly increased over the whole of the left side of the chest, in front.

At 12 P.M., when the nurse was going to give him his medicine, she found him in a fit. She did not know how the attack came on, but was confident that he was in his usual condition at eleven o'clock. He lay on his back, his face pale and perspiring, the left eye closed; twitchings of features on left side. The pupils were unequal; the left was drawn upwards and outwards, much larger than the right, and unaffected by light. He was quite unconscious, and insensible to external impressions. The breathing was laborious and irregular; the pulse full, bounding, and hard, varying in rate. The limbs on the right side were completely relaxed and paralysed; there was some rigidity in the left arm. Slight reflex action could be elicited by tickling the left foot. There were slight spasmodic movements of the left arm. The breathing occasionally intermitted entirely for some seconds. He was bled to four ounces, croton oil given, and warmth applied to the extremities. He died at 1·45 A.M. After death the right pupil became immediately as large as the left.

On *post mortem* examination, the vessels of the pia mater were seen to be extremely full, and this membrane had a slight yellowish colour, from infiltration of purulent fluid. A thick yellowish stratum covered the pons varolii, medulla, and central part of the cerebellum at the base of the brain, through which the basilar arteries ran. On touching this stratum a thick yellow fluid exuded, which proved, under the microscope, to be pus. It seemed entirely external to the arachnoid. Slight yellowness of the arachnoid and pia mater, with some thickening, was noticed also in the Sylvian fissure. The substance of the right hemisphere was decidedly, though slightly softer than the left. A small quantity of purulent fluid was found in the right lateral ventricle, and the corpus striatum was superficially softened. There was a small semi-calcareous mass, mixed with lymph, connected to the choroid plexus of this ventricle. The septum was softened; the opposite ventricle contained also a little turbid fluid, and there was a little thickening of the lining membrane over the optic thalamus. The cerebellum was healthy. The upper part of the left lung was found to be extremely congested, but none of it sank in water. The right lung was consolidated in a great part of its extent; the lower part presenting a good specimen of grey hepatisation; the upper part of the upper lobe being all that seemed to contain any air. It was bound to the chest by firm adhesions, amongst which circumscribed abscess had formed. There was also a collection of pus in the anterior mediastinum. The liver was healthy. The kidneys were somewhat mottled with adherent capsules.

SAMARITAN HOSPITAL.

OVARIOTOMY.

Under the care of T. Spencer Wells, Esq.

We had the opportunity the other day of witnessing another of these operations, the fourth in Mr. Wells's practice, at the above hospital. It was unfortunate in its result, and this is the only reason why it is here alluded to, in order to counteract an impression which prevails amongst those who are opposed to the operation, that the fatal cases are withheld from the knowledge of the public. So far, however, was this from being the case here, that Mr. Wells has already alluded to the case before us, both at the Pathological and Royal Medical and Chirurgical Societies. Still, we have thought it better to relate it here also, in order that the same publicity may be given to it as has been to the successful cases which we recorded at pp. 764, 1001, of the last year's volume. The present is the fourth of Mr. Wells's cases within twelve months: the first may be found in the *Transactions of the Pathological Society* for 1858, page 321; the next two as above referred to; all these were perfectly successful. Another unsuccessful case in hospital practice occurred at Guy's hospital a few days since.

The patient in the present case was a single woman, aged 39, who was admitted on January 4th. She had been well till two or three years ago. In the autumn of 1856 she complained of pain in the left groin, but no swelling was noticed till May 1857. She then observed a tumour on the left side, which has gradually increased since. She was always regular before this, and continued so up to the end of 1857, when the catamenia ceased, and have not since appeared.

On admission, she looked healthy, but somewhat emaciated, and had lost flesh lately. She suffered a good deal from pain, flatus, and breathlessness after exertion. The lungs were healthy; but the right lung was pushed up by the liver. The tumour was of large size, and was divided by a deep sulcus into two parts, which, on external examination, were so distinct that some of those who saw the case believed both ovaries to be implicated. This, however, proved not to be the case.

The operation was performed on January 21st. An incision was made in the middle line, to the extent of about three inches; and the tissues were divided down to the peritoneum. In the cavity of the latter membrane some transparent and very viscid fluid was contained, which looked exactly like the contents of a cyst. This having been evacuated, the tumour itself came into view. It was of very large size, and, in order to diminish it, a trocar was thrust in. The contents, however, were so viscid that they would not run out. It was necessary, therefore, to extract the tumour entire. The incision was accordingly prolonged upwards and downwards from a little below the ensiform cartilage to within two inches of the pubes, and the tumour freed from the parietes of the abdomen. This was easily effected, as the adhesions were only very slight. One to the omentum contained a vessel, which was tied. The pedicle was connected with the left side of the uterus. It was slender, but not very long; so that it was difficult to get the cut surface outside of the wound. A clamp was put upon the pedicle, consisting of two toothed blades compressed together by a screw, and the tumour was cut off. Unfortunately, at this stage of the proceedings, the clamp slipped, and a good deal of bleeding ensued into the cavity of the pelvis, which it was necessary to sponge out. The pedicle was again secured with strong ligatures, and it was with some difficulty got into the wound. The parietes were then brought together with harelip sutures around hollow gold probes, passed through after the manner of a trocar and cannula; and a bandage was put on. The patient had been kept at first under the influence of chloroform, and, during the latter part of the operation, under that of sulphuric ether.

The operation was necessarily rather protracted, but she did not seem inordinately prostrated. The tumour weighed ten pounds and a half. It was of the ordinary pseudo-colloid structure. Mr. Wells exhibited it at the meeting of the Pathological Society on February 1st. The patient went on well for twenty-four hours, then sudden collapse occurred, and she died thirty-two hours after the operation. On *post mortem* examination, the peritoneum was found quite free from blood, and the pedicle well secured. The opposite ovary was healthy.

Original Communications.

THE STOMACH AND ITS AILMENTS PRACTICALLY ARRANGED.

By W. S. Oke, M.D., Senior Physician of the Royal South Hants Infirmary.

[*Read before the Southampton Medical Society, Nov. 7th*, 1858.]

The subject of gastric disorders will be best handled by considering separately each morbid condition with which the stomach is liable to be affected. This will give us, at least, the most practical view of the symptoms, enable us to treat them with some degree of precision, and with the greatest probability of success. I propose, therefore, to treat the several morbid conditions of the gastric function under the following heads:—The Neuralgic; the Arid; the Acid; the Bilious; the Inflated; the Depraved; the Spasmodic; the Hæmorrhagic; the Inflamed; and the Cancerous. I do not mean to assert that each of these conditions will even generally be found uncomplicated and distinct. Doubtless some of them will often be associated with others: the neuralgic with the acid, and the acid with the bilious, or they may all co-exist. But even then there will probably be some prevailing symptoms which will sufficiently characterise the condition for practical purposes. Any attempt to effect such an arrangement (imperfect as it must necessarily be) will, I trust, be readily excused when it is considered how difficult it is to make any arrangement at all of the various morbid actions of an organ governed by the pneumo-gastric nerves, subjected to the mysterious functions of the sympathetics, and exposed to so many exciting causes both directly and indirectly.

Pemberton, who has left us one of the best practical works on the diseases of the abdominal viscera, when he comes to the stomach, writes as follows:—"The difficulties which present themselves when we reflect on a systematic arrangement of the diseases of the stomach, are so many and so great that the writer finds himself perpetually embarrassed to select and discriminate his materials with precision and perspicuity." Having made these observations in the way of preface, I shall at once proceed with my arrangement, which I trust, will be found practical and useful.

I.—Neuralgic Condition of the Stomach.

This condition of the stomach has been termed gastralgia or gastrodynia. It more frequently occurs in women than in men, and for the most part in the middle period of life. It is characterised by severe aching pain of the epigastric region, which is rather relieved than aggravated by external pressure; the pain is generally brought on by food not easily digested, and especially by strong tea, and the pain continues without any abatement till the contents of the stomach have passed through the pyloric orifice into the duodenum, when it subsides. The patient is made conscious of this by an agreeable sensation of gurgling in the region of the duodenum and jejunum. The tongue is coated in the morning; the bowels are torpid, and the urine high-coloured, depositing the lithates. This condition of the stomach is often attended with the puking of clear watery fluid which, by some authors, is described as a distinct disease termed "pyrosis," or water-brash, but which is most probably caused by the gastric pain. The watery discharge may take place either before or after the taking of food, but more frequently afterwards; and it is singular that, in most cases, none of the food is brought up with it. As soon as the fluid is puked up the pain ceases, and the stomach remains comparatively easy until the next meal, when the pain and the watery puking return.

It is not decided from what source the watery fluid is derived. It is supposed by some to be secreted by the mucous glands of the stomach,—in the words of Pemberton, "from an altered and increased secretion of the glands of the mucous membrane," and when of a mucous character it may, and probably does, come from that source; but when the fluid is watery, might it not be supplied by the pancreatic glands, especially when it comes up in considerable quantities? The pancreatic duct empties itself into the second turn of the duodenum, side by side with the common bile duct; and if from the latter bile can be conveyed through the pylorus into the stomach, which is shown in bilious vomiting, why should not the pancreatic secretion, when the gland is abnormally excited, be conveyed there also? This is my opinion; which is, I think, strengthened by the symptoms accompanying the act of puking, viz. pain at the pit of the stomach, and a sense of constriction, as if the stomach were drawn to the back, which evidently points to the duodenum contracting upon its contents and propelling the increased secretion into the stomach. There is nothing forced in this statement; the pancreas is admitted to be a salivary gland; and as a severe neuralgic paroxysm of the alveolar branches of the fifth pair of nerves often causes an increased flow of salivary fluid into the mouth from the parotid, lingual, and submaxillary glands, so in like manner neuralgic pain of the gastric nerves may produce an increased secretion from the pancreatic gland into the duodenum, but in much larger quantities of course. It might be difficult to prove the fluid to be pancreatic by chemical analysis, because in the stomach it necessarily becomes mixed with the gastric secretions.

The proximate cause of functional gastrodynia appears to be a morbidly sensitive state of the villous coat of the stomach in its connexion, probably, with the pneumogastric nerve, because this nerve has sensitive and motor branches, and in that respect analogous with those nerve-fibres which are most liable to neuralgia in other parts of the body. Prout states "that an excess of acid, and particularly of the lactic, in the stomach is sometimes accompanied with gastrodynia, that is, rheumatic neuralgia, similar to that affecting other nerves of sensation." This, however, does not appear to be an exciting cause of the pain under consideration; because, though there may often be, and doubtless there is, an abnormal quantity of lactic acid present, the pain is seldom removed, or even mitigated, by the use of alkalies only.

Treatment. This morbid condition of the stomach in its early stages, is not difficult of cure. The bowels are to be first cleared by *a*, *b*, or *c*.

a. ℞ Hydrargyri chloridi gr. iij; pulveris rhei gr. x; syrupi q. s. M. Fiat massa et divide in pilulas duas, horâ somni sumendas ad secundam aut tertiam vicem.

b. ℞ Pulveris rhei ℈j; magnesiæ sulphatis ʒij; syrupi zingiberis, tincturæ jalapæ, āā ʒj; aquæ menthæ piperitæ ʒx. M. Fiat haustus primo mane sumendus, post pilulas.

c. ℞ Pilulæ hydrargyri, extracti colocynthidis compositi, āā gr. xxiv. Misce, et divide in pilulas xij, quarum sumantur ij alternis noctibus, ad tertiam vicem.

At the same time, a wineglassful of the infusion of hops may be taken every day at noon, as (*d*), and, after the bowels have been sufficiently cleared, the quinine mixture (*e*).

d. ℞ Strobilorum lupuli ʒiij; aquæ ferventis ʒviij. Macera per horas quatuor, et cola.

e. ℞ Quinæ disulphatis gr. ix; acidi sulphurici diluti guttas xij; syrupi aurantii ʒss; aquæ puræ ʒvss. M. Fiat mistura cujus sumatur ʒj omni mane, et meridie ante cibum.

If the pain be accompanied by watery pukings, the case will be more successfully treated with the nitrate of bismuth (*f*), regulating the bowels with eight or ten grains of pulverised rhubarb every other night.

f. ℞ Bismuthi nitratis, pulveris rhei, āā ʒss; liquoris cinchonæ ʒj; aquæ puræ ʒv. M. Fiat mistura cujus sumatur ʒj ter die.

The diet is to be light and nutritious.

Case I. Mary Head, aged 41, had been for a long time suffering with severe aching pain of the stomach and watery pukings. The pain came on after meals, and never ceased till considerable quantities had been puked up. She complained also of headache, and was much attenuated. She was ordered to take a grain of calomel and four grains of the comp. colocynth pill every other night, and a dose of the bismuth mixture (*f*) twice a day. Under this treatment the symptoms rapidly subsided, and in a few weeks she reported herself cured.

This case must be considered as representing many others of the same kind, which could be adduced, if it were necessary.

When the pain and pukings have continued for a length of time, the morbid sensibility of the mucous membrane becomes so augmented as to occasion the frequent vomiting of the food also, and the patient is reduced to great debility, *extreme atrophy*, and emaciation; such an aggravation will not yield to the above treatment alone, and requires more decided measures. I have met with some of such extreme cases; and the symptoms were so very similar to those of organic disease of the

pylorus, as to render the diagnosis very difficult, till the result of the treatment proved that they were caused by disordered function only. The following is an instance of the kind.

Case II. William Diaper, aged 24, a labourer, had been suffering vehement attacks of gastralgia for two years, for which he had been in a hospital, and under several medical men, without permanent relief. At the end of the year 1845, he was admitted a patient of the Southampton Dispensary under my care. The pain of the epigastrium was of an aching character, extremely severe, came on generally after his dinner, and caused him to vomit up his food, which was accompanied with a bitter or sour fluid; the urine was high coloured, the bowels were torpid, and the stools of a pale colour, showing that the hepatic function was also involved. From his long protracted sufferings and frequent vomitings, he was pale, exhausted, and emaciated to the last degree, in short, his aspect was such as to preclude all expectation of his recovery, from the probability that the case was that of organic disease of the pylorus. A blister was at once applied to the epigastric region, and ordered to be kept open; one of the pills (*g*) to be taken every noon and night, and the bowels to be regulated with fifteen grains of rhubarb taken in the morning.

g. ℞ Hydrargyri chloridi gr. xij; pulveris opii gr. vj; confectionis rosæ gr. xx. Misce et divide in pilulas xij; quarum sumatur una omni meridie et nocte.

By these means the pain and vomiting gradually subsided, and then ceased. He then commenced the bismuth (*f*), and continued it twice a day till his recovery was complete.

f. ℞ Bismuthi nitratis, pulveris rhei, sing. ʒss; acidi hydrocyanici diluti (Scheele) guttas vi; aquæ menthæ piperitæ ʒvi. M. Fiat mistura, cujus capiat ʒi ter die.

On the 30th of July, 1851, he called on me, and reported himself an able-bodied seaman in one of the Royal West India mail steam ships. He presented one of the most remarkable recoveries from severe gastrodynia I ever witnessed.

II.—Arid or Dry Condition of the Stomach.

Sometimes, instead of watery pukings, we meet with a dry condition of the whole of the mucous membrane of the mouth, the teeth, the tongue, the fauces, and, probably, of the œsophageal canal and stomach also. This case is of rare occurrence; indeed, I have seen but one instance during a long experience. Yet when it does occur, it appears of so distinct a character that I have deemed it right to rank it amongst the morbid conditions of the gastric functions. The case alluded to is so well marked, that the symptoms and method of cure will be best manifested by describing it.

Case III. C. Coates, a gamekeeper, married, aged 58, and of very stout form, consulted me in May 1835, for an abnormal and distressing dryness of the mouth, teeth, internal fauces, and pharynx, which had continued for two months, and it was accompanied with a sense of weight at the chest and drowsiness. The mucous membrane of the palate and cheeks was like dried leather, and without the slightest trace of any moisture whatever. The teeth shone with dryness; the tongue felt stiff, as if it would break, and was as dry as a board. There was neither fever nor thirst, nor was the general health much impaired; but the entire surface of the skin was deficient in vascularity, hypertrophied, and studded with elephantiasis tubercles, varying in size from that of a pea to that of a walnut.

The indication of cure in this case was to set free the obstruction of the cutaneous function, which was probably the cause of the internal dryness. With this view, I ordered the patient to take two grains of ipecacuanha every four hours, to produce vomiting and relax the skin. This effect was produced; the liver disgorged a large quantity of dark coloured bile; the salivary secretion was restored; and the dryness was permanently removed.

III.—Acid Condition of the Stomach.

The acid condition of the stomach is more commonly met with than any other. It has been termed cardialgia, or heartburn, and is characterised by a sense of burning heat about the cardiac orifice, a feeling of weight or uneasiness at the epigastrium after meals, flatulent and acid eructations with rumination of the food, and irregularity of the heart's action; the tongue is furred in the morning; the urine scanty and high coloured, depositing the lithates in a yellow lateritious sediment; the bowels are inactive; the stools are either of a pale or dark colour; and the sleep is disturbed by dreams, startings, or cramps of the muscles of the lower limbs. There is no febrile disturbance, and the appetite is but little diminished.

Persons exhibiting this group of symptoms have usually a sallow complexion, are not well nourished, and are subject to various cutaneous eruptions, especially of an acnoid kind; they are subject also to facial and dental neuralgia, and also to gout, if predisposed to that disease. The acids found in the stomach (according to Prout) are derived from two sources, either from the blood circulating in the vessels supplying the stomach, or from changes occurring in the matters secreted in those vessels, and also from the alimentary matter taken into the stomach. The same author states, that the lactic and muriatic acids are principally derived from the blood; and that the oxalic, butyric, acetic, and carbonic acids are derived from the food during imperfect digestion. If this be correct, it follows that the two former acids are necessary to the process of gastric assimilation, and that the four latter are the result of the decomposition of food. The proximate cause of this morbid condition will probably be found in a disturbance or deficiency in the secreting forces of the villous function; the former is temporary, and produced by *occasional* errors in diet; the latter is of a more permanent character, and brought on by the *constant* application of exciting causes, such as the habit of indulging in smoking and drinking to excess—short, perhaps, of actual intoxication, yet sufficient, by daily repetition, to damage the digestive powers for life; and should the habit (as it often unhappily does) become inveterate, it will soon involve the structure of the liver in organic disease, and terminate in dropsy and death.

Sometimes the acidity, from inattention to diet, becomes so intense as to occasion a sudden and violent sympathetic action of the heart, that greatly alarms the patient, and threatens to terminate his life. By abstaining from intemperate habits, and by carefully observing a proper diet, the formation of morbid acid might in great measure be prevented; but any inattention in this respect will soon reproduce it, and convince the transgressor that indiscretion as to diet cannot be practised with impunity.

These facts clearly shew the necessity, on the part of parents, of establishing in their children a *habit of temperance*, that, as they adolesce, the vigour of the constitution may be normally and fully developed. To suppose that the daily allowance of wine, or any such stimulant, is necessary to support the strength of the constitution, is simply absurd. The very contrary is proved by the fact that the physical powers of the strongest animals in the creation—the elephants, for example—are upheld, as to their drink, by water only.

How often does the medical man see this terrible and too prevalent habit of drinking to excess undermine and cast down, in the meridian of life, robust constitutions, which, by temperance, might have enjoyed the blessing of health to a good old age! There may be, perhaps, many addicted to this fascinating vice consoling themselves with the fact that there are hard drinkers who attain a very advanced age, and who have escaped these predicted evils; but, according to my observation, these are but mere exceptions to the general rule of incapacity both of body and mind, and premature death. I will venture to affirm that, of one hundred regular hard drinkers, not more than five shall be found to exceed the age of fifty years, supposing the whole to have commenced the habit at the age of twenty years. In the course of my practice, I have had considerable experience in endeavouring to arrest the habit of drinking, by faithfully stating its fatal consequences; but I confess that a very small amount of success has attended my efforts. The next best thing to be done is to prevent *the habit;* and, in order to effect this, the temperance societies appear to be doing great service to the community. They deserve, therefore, to be encouraged as much as possible.

Treatment. If the gastric acidity be produced by occasional errors of diet, the functions of the stomach may be corrected by the aperients (*a*), (*b*), or (*c*).

a. ℞ Pilulæ hydrargyri, pulveris rhei, ā gr. xxiv; syrupi q. s. Misce et divide in pilulas xij. Capiat duas alternis noctibus.

b. ℞ Magnesiæ sulphatis ʒvj; magnesiæ carbonatis ʒiss; acidi hydrocyanici diluti (Sch.) guttas vj; syrupi zingiberis ʒss; aquæ menthæ piperitæ ad vj. M. Fiat mistura cujus sumantur cochlearia larga duo omni mane et meridie ex aquæ tepidæ pauxillo.

c. ℞ Sodæ bicarbonatis ʒj; sodæ sulphatis ʒvj; tincturæ cardamomi compositæ, aquæ cinnamomi, ā ʒss; spiritûs ammoniæ aromatici ℈iss; aquæ destillatæ ad ʒvj. M. Fiat mistura, cujus bibat quartam partem omni mane et meridie ante cibum.

If the acidity should have continued long, and be the result of a morbid action of the secerning capillaries, a more gradual treatment will be required to correct it, as (*d*) and (*e*).

d. ℞ Hydrargyri chloridi gr. iij; pulveris ipecacuanhæ gr. vj; extracti conii gr. xij; aloës extracti aquosi gr. xij; syrupi q. s. Divide massam in pilulas xij æquales, quarum sumatur i ter die cum hâc dosi.

e. Potassæ bicarbonatis ℈j; acidi citrici gr. xv; liquoris potassæ ♏x; acidi hydrocyanici diluti (Scheelii) ♏j; syrupi aurantii ʒj; aquæ ad ʒiss. Misce.

When the acidity has been corrected by the above means, improvement may be maintained by (*f*), (*g*), or (*h*).

f. ℞ Pilulæ hydrargyri gr. xij; pilulæ rhei compositæ ℈j; pulveris ipecacuanhæ gr. iij. Misce et divide in pilulas vj, quarum sumatur una omni nocte alternâ vel tertiâ.

g. ℞ Sodæ bicarbonatis ʒj; liquoris potassæ ʒj; spiritûs ammoniæ aromatici ʒij; tincturæ gentianæ compositæ ʒiij; aquæ menthæ piperitæ ad ʒvj. M. Capiat ʒj omni meridie et nocte.

h. ℞ Liquoris hydrargyri bichloridi, tincturæ cardamomi compositæ, ā ʒiij; aquæ menthæ piperitæ ad ʒvj. Misce. Capiat ʒj omni meridie et nocte.

Vel ℞ Sodæ carbonatis exsiccatæ, pulveris rhei, ā ʒss; liquoris potassæ q. s. Fiat massa in pilulas xij dividenda, quarum capiat duas meridie et nocte.

Rhubarb is undoubtedly the *best* aperient to correct disorders of the gastric function.

Pemberton, when the alkaline treatment failed, employed with success the mineral acids, of which he prefers the nitric. "It is probable", he says, "that the salutary effect observed from the use of mineral acids in this condition of the stomach may arise from their property of interrupting morbid fermentation. . . As the acid in a stomach predisposed to generate it is constantly forming it, it is necessary that the remedy should be frequently applied: we may, therefore, give five drops of the nitric acid every four hours in cold water, by which the stomach can be kept constantly under its influence." The same mode of treatment is recommended by Heberden in his *Commentaries*. "Feminæ quædam dum ventrem fervet, gravissime inflictabantur cum hoc malo, adversus quod, cum remedia consueta nihil proficissent, acidum vitriolicum tentatum est, et brevi illud sanavit."

It has been stated that great violence in the heart's action is sometimes occasioned by gastric acidity. The following is a case of the kind. A medical gentleman, having been exposed to severe cold several hours in an open carriage, on his return home, late at night, drank some strong coffee, and ate a buttered roll; after which, having drank some brandy and water, he smoked a cigar, and retired to bed. In a few hours, he felt a burning acidity at the cardiac region, which was followed by a most vehement action of the heart, that greatly alarmed him, and made him exclaim that he was about to die! As soon as possible, a full dose of the bicarbonate of soda was given him, which relieved the stomach, and gradually moderated the heart's action; but a hyperaction of the organ, accompanied by sleepless nights, continued to harass him for many months, till at length, by a strict attention to his diet, suitable medicines, and a change of air, the morbid action of the heart subsided, and his natural sleep was completely restored; but, though thirty years have expired since the attack, the same predisposition to acidity remains, and prevails as often as the stomach is subjected to the same exciting causes.

This condition of the stomach, associated, as it often is, with a disorder of the hepatic function (as evidenced by dark acrid secretions), sometimes produces such a *morbid sensibility of the nervous system*, in some constitutions, as to give rise also to idiopathic tetanus. The following case, to which I was called in consultation some years ago in this town, appeared to be derived from this cause.

Case iv. Theodore Cross, 8 years of age, of light coloured hair and fair complexion, had been generally healthy from his birth. On the 12th of September, 1838, when he was about to eat his breakfast, he found that he could not open his mouth; and this inability continued the three following days, except that the jaws could be sufficiently separated to admit of spoon-diet. Up to the 15th, no other symptom was noticed by his parents. On this day, his mother gave him two drachms of Epsom salts at 9 o'clock, a.m., which operated at 11·30, when the first tetanic spasm took place; and it was so violent as to throw him off the night-table. The salts acted only once, and the stool was costive and of a dark colour. He slept badly the following night; and, on the 16th, complained of severe pain across the forehead, which was accompanied with a profuse perspiration. In the evening, the tetanic spasm returned, which so stiffened the whole of the body as to prevent his being placed in the sitting posture. From this date the tetanic rigidity continued, and was always aggravated and increased by the slightest touch on any part of the surface of the body. His mother kissing his lips would bring on the spastic rigidity at any time. I saw him on the 23rd, in consultation, eleven days from the commencement of the disease; and found his jaws almost locked, and his whole body stiff and inflexible. On placing my hand upon the epigastrium, a violent involuntary spasm was instantly produced, and the greater part of the muscles (especially those of the limbs) were straightened and stiffened into the hardness of board. Up to this time he had been treated with calomel and morphia at bedtime, and with the sesquioxide of iron at intervals during the day, without producing sleep, or any other benefit whatever. As nothing had passed the bowels for ten days, two grains of calomel were ordered every two hours, in syrup, which he was enabled to suck betwixt the incisors, and to swallow, for the power of deglutition was not wholly lost; and, as he was feverish, he was directed to suck in currant jelly dissolved in water *ad libitum*, which was extremely grateful to him. This treatment alone was persisted in from the 23rd to the 26th, when the bowels began to act copiously, and continued to do so all that day and the following night, discharging dark fæcal matter. In the morning, he was quite exhausted, fell into a deep sleep at ten o'clock, and did not awake till five in the evening. It was evident that he was greatly relieved. The whole of the tetanic spasms had subsided, and he was able to open his jaws and take fluid nourishment.

He continued to progress from day to day, the spasms only returning once now and then, without distressing him. In order to restore his strength, for he had been without nourishment from the fifteenth, he drank milk freely, which agreed with him well. His nervous system was strengthened with the susquioxide of iron, the bowels were kept soluble by castor oil, and on the 31st of September he was pronounced cured.

Reflecting on this very interesting case, it appears that the tetanic spasms were the result of a reflex action of the spinal motor nerves, originated by some irritation of those fibrillæ of the ganglionic nerves which supply the gastric and hepatic functions, and the irritating cause may reasonably be referred to this morbid condition of the stomach.

In this condition of the stomach, as has been before observed, a suitable diet *must be* observed, or medicine will be taken in vain. It should consist of mutton, roast, boiled, or broiled; poultry, eggs, plain light pastry, with well cooked fruit, and farinaceous vegetables well boiled. The beverage least likely to turn acid is sound bottled porter. All food tending to cause acidity is to be avoided, such as butter, fat meats, fish, rich sauces and soups, lard cakes, suet puddings, and rich pastries, together with home-made wines and beer. On the subject of gastric acidity, Heberden in his *Commentaries* has the following passage: "Lac, olus, piscis, pinguia omnia acido ventriculo parvum conveniunt et acorem augent.' '

[*To be continued.*]

FATAL CASE OF TRAUMATIC GANGRENE.

By R. U. West, M.D., Alford, Lincolnshire.

William Hall, aged 47, the manager of a steam-threshing machine, a man of florid complexion, stout and healthy, a free liver, never intoxicated, but taking regularly four pints of ale daily, was walking home from his work on Tuesday evening, January 25th. At 7 o'clock, the night being very dark and windy, so that it was difficult to either see or hear anything, a young farmer, riding carelessly "at a swinging canter" by the side of the road, met this man and rode him down. He was taken up and carried home, about half a mile further. He had sustained a compound fracture of the right leg about three inches above the instep. Although he was bleeding freely, his friends did not send for professional aid until the next morning, when the young farmer who had been the unfortunate cause of the accident, sent a "bone-setter" to him. This man, on seeing the nature of the injury, contented himself with placing the wounded limb on a cushion, and applying some strips of adhesive plaister on the external wound, and then threw up the case. I was then sent for, and saw the poor man at about noon, on the Wednesday, the day after the accident. I found a compound fracture of the tibia and fibula; the flesh

wound being limited to the integuments covering the shin. There was a large pulpy mass covering the wound, through, or by the side of, which some blood was still oozing. This mass was chiefly coagulum. which I did not think it prudent to remove. The rest of the soft parts appeared to be uninjured, and as the *bone-setter* had placed the leg in a very good position, I merely removed his strips of adhesive plaister, substituting for them three or four thicknesses of wet lint, and bringing up the cushion on each side of the leg, I applied a couple of side splints outside, which I secured with a tape above and below the fracture. There were no bruises anywhere on the leg or thigh; and, notwithstanding the loss of blood, there was plenty of reaction. The pulse was about one hundred, soft and pleasant. He had had some brandy given him. I thought the case would do well, and with a caution to the friends that if gangrene should set in, it might be necessary to amputate in the middle of the leg, I left my patient for that day, sending him the following medicine:—

℞ Tincturæ opii ℥iij; spiritûs ammoniæ aromat. ℥ss; misturæ sennæ comp. ℥iv; aquæ menthæ piper. ad ℥xij. M. Sumat cochlearia ij ampla 4tis horis.

I saw him again the next morning, Thursday, at about 10. I mention the hours, for the case was an affair of hours. His leg had not been disturbed. The lint I had placed over the wound, having been saturated with the oozing blood, was dry, hard, and firmly adherent as far as three or four inches above and below. I therefore did not disturb it, hoping that healthy suppuration would remove it as well as the subjacent coagulum. The temperature of the foot was natural and comfortable; the patient could move all his toes freely, particularly in the act of extension, so that little or no injury had been sustained by the muscles passing down the front of the leg. He could feel the slightest scratch on any part of the foot. I readjusted the two side splints, so as more efficiently to support the foot, and left him again, with the confident hope that all would go on well.

His bowels had been moved once.

The same evening at about 11 o'clock, I received a hasty message that "they were afraid mortification was taking place." This was incredible. I went immediately, reaching the man's residence, distant four miles from my own, at about midnight. I was told that he had had a shivering fit in the middle of the day, and had been very restless ever since, complaining of much pain and aching over the whole leg and thigh; that one of his friends, finding that a finger with which the poor fellow had been scratching, or feeling of, the calf of the wounded leg, had been withdrawn wet, had lifted off the bed-clothes, and found an appearance on the outside of the knee which had alarmed him. I looked, and found that part gangrenous with several of the characteristic phlyctenæ upon it. The gangrenous patch extended round the knee, and on the outside, terminated at a point about the middle of the thigh. On the outside of the leg, it reached as far as the lint which I had placed over the wound, and which was now moist and loosened. The poor man in his restlessness, which could not be controlled, had rolled himself over on his left side, so that the lightly fixed cushion and splints had not prevented some displacement of the fractured bones. The march upwards of the gangrene, for it was spreading rapidly, was preceded by a margin about an inch and a half in breadth of less deeply discoloured skin. The calf of the leg and the underneath parts of the limb generally, where the gangrene was present, seemed most intensely affected, *hypostatically*, if I may use the phrase, although the outside of the limb was most extensively implicated. The foot and all the parts below the fracture, were entirely free from gangrenous taint. The pulse was 120, with some volume, but *very* compressible. There were frequent eructations—if not exactly hiccups.

This was a truly alarming state of affairs—all in the middle of the night. Obviously amputation, even if it could have been performed at once, was inadmissible; for although the case was one of *traumatic* gangrene, strictly speaking, yet, beginning and spreading exclusively *above* the wound, it could scarcely be looked upon as traumatic gangrene *pure et simple*. The line of demarcation must be waited for; therefore I was anxious for a second opinion, to pacify the friends as much as anything; for I could not see that it would be possible to save the man's life; I therefore sent off a man on horseback to fetch my friend Mr. Calthrop, of Withern, four miles off. Mr. Calthrop arrived at about half-past two. The gangrene had spread considerably, and was more intense. We agreed that nothing could be done, and left the poor fellow, after making him as comfortable as we could, at about half-past 3 A.M., Friday.

I saw him again at 10 A.M. He was pulseless. The whole of the thigh, inside and outside, and as far as the groin in front, was gangrenous, the slightly discoloured margin having encroached on the abdominal parietes. The foot was unaffected. He died at 11.

At the inquest, which was held in the evening of the same day, I found, on showing the body to the coroner (himself a medical man) and jury, that although the whole of the leg *above* the wound was intensely gangrenous, the foot and other parts *below* it were entirely untainted.

Remarks. I think the case worthy of record. The points in it are: the commencement and rapid spread of gangrene *above* the wound which caused it; the anomaly that, if caused by absorption, the gangrene should have spread most rapidly on the outside of the limb; its commencement so soon after the accident, less than forty-eight hours; the immunity of the parts below the wound; the death of the patient in less than twenty-four hours after the shivering fit, which doubtless ushered in the gangrene.

Now, there was a smart rigor on the Thursday. Was the gangrene a kind of erysipelas? an *erysipelas gangrænosum*, gangrenous *ab initio?*

At any rate, it may be useful to place on record a case which proves, that after a compound fracture, a limb may mortify in an apparently healthy subject *above* the wound, without its being possible to accuse the treatment. For example, tight bandages have had the blame, when mortification has been found to follow a fractured limb. Here no bandages were applied. If amputation had been performed at first, surely the gangrene which supervened would have been as likely (nay, more likely, with the additional shock of such an operation) to follow the wound made by it, as that made through the integuments by the fractured bones. Indeed, if a fatal mistake could have been made in any direction in such a case as this, I think it would have been easier to err in the direction of commission, than in that of omission. It may be suggested that the delay in procuring skilled assistance for the poor man could scarcely have been in his favour; but how that delay could have brought about precisely the result which followed, I cannot at all see. For my own part, I cannot see how *any* treatment, whether in the direction of commission or in that of omission, could have either caused or prevented the unusual—the rapidly fatal—train of morbid changes which followed this unfortunate case of compound fracture:—it was a termination which science could have had no reason to expect, and which, even if expected, art could have neither averted nor remedied.

STRANGULATED DIRECT INGUINAL HERNIA IN A FEMALE.

By John G. Appleton, Esq., Luton.

Strangulated Direct or Internal Inguinal Hernia in a Female: Operation. A Large Inguinal Gland, wide-spread, and overlying the Hernial Sac. Opening the Sac, and division of the Stricture. Recovery, without any unfavourable Symptoms. I was requested to see Phœbe Marlow, aged 39, an unmarried woman, about midday on the 29th 6 mo., 1858. She was not aware that she was the subject of hernia; at that time there were no urgent symptoms. In the absence of the usual physical signs, I suspected that hernia might be the cause of her illness. There was some swelling in the right inguinal region of a glandular character; and some tenderness and pain in manipulating. Although she was ignorant of the nature of her case, she informed me that she had suffered severe pain in that part about six months previously. As the symptoms were not urgent, and constipation of the bowels was characteristic of her habit, I had recourse to laxatives, and enemas with castor oil: the latter were twice exhibited. On the first occasion, with much relief and encouragement to the patient.

On the 2nd of the 7th month, and the fourth day of my attendance, as there was no decided relief, and the symptoms, indeed, were becoming more urgent, I determined to ask a brother practitioner to see the case; and, if necessary, at once to operate. My friend K. Tomson kindly and promptly lent his aid. Obscure in some respects as the case was, an operation appeared to us to offer the only chance of safety for our patient; and therefore, as soon as we had made the necessary arrangements, we proceeded at once to effect it.

On making the usual incisions of an inverted T over the extended swelling, a large glandular mass was exposed: this,

for the moment, was embarrassing—in doubt how to proceed—whether to divide the mass or remove it; being firmly persuaded that an hernial protrusion must be found in close contingency, I dissected on the inner side of this mass, and on pushing it on one side, I saw deeply imbedded the object of our search—a knuckle of strangulated intestine, and its sac quite detached from the overlying mass of gland. We judged it best to open the sac, rather than to return it, unopened, into the cavity of the abdomen, where a fatal issue, from constriction at the mouth of the sac, might still result. The opening of the sac was followed by the discharge of some fluid. We were able distinctly to discriminate between the circular character of the blood-vessels of the intestine and the comparatively straight ones of the sac; also, the difference presented in the external character and gloss of the surfaces of the two strictures. After opening the sac, and passing down the finger, I distinctly felt the stricture, *directly upwards*, in the region of the external ring, and, to all appearances, probably behind it at the *edge* of the obliquus internus and transversus muscles. On my finger I passed down a common director; and, by its aid, I directed a sheathed hernial knife, known as "Sir Astley Cooper's knife", which, when placed *in situ*, the sheath was drawn back, and on slightly elevating it, the stricture was divided upwards to the extent, probably, of less than a line. The intestine and sac were immediately returned into the abdomen, a suture was used, and the parts brought together with soap plaister and the ordinary bandage.

She recovered without an untoward symptom; and, with the exception of castor oil, she did not require any medicine.

This case may tend to shew the importance of allowing *general indications* to have their full weight and influence on our judgment and practice; in the absence even of some physical signs, on which we are accustomed to rely. In this case, the diagnosis was obscure and equivocal.

PATHOLOGICAL CONTRIBUTIONS TO MEDICAL JURISPRUDENCE.

By William Boyd Mushet, M.B.Lond., late Resident Physician at St. Marylebone Infirmary.

V.—Drowning.

Case I. A well formed female, aged about 30, found in the water, and brought, after considerable delay, to the Marylebone Infirmary, on November 16th, 1856. She was cold and lifeless, and the period of immersion could not be ascertained. Warm bath, artificial respiration, sinapisms, friction, and galvanism, were resorted to for above an hour, without producing any signs of animation.

Post Mortem Inspection forty-two hours after death. The weather was mild. The countenance was placid and pale. Clear fluid, slightly tinted, escaped from the mouth. Rigor mortis was well marked. The hands were clenched; the nails blue. The pupils were dilated. The tongue was not bitten.

Head. The dura mater was adherent to the calvarium; and the meninges were generally injected. The blood in the sinuses was quite fluid. The brain was natural. No fluid was found in the ventricles.

Chest. A little fluid was found in the pericardium. The heart was healthy. The right side was flaccid, and filled with dark fluid blood. The left ventricle was contracted, nearly empty. Some dark fluid blood was present in the aorta. The lungs were much engorged, and contained much frothy fluid. Much frothy mucus was also present in the trachea and its divisions. The liver was congested. The kidneys appeared natural; but the right one weighed only an ounce and a half. The stomach was contracted, and pale; it contained three or four ounces of grumous semidigested matter, but no water. The other viscera were healthy.

Case II. A woman, aged 55, was found in the water, and brought to the Marylebone Infirmary, about an hour afterwards, on October 5th, 1856. The countenance was pale; the pupils dilated. There was no foam at mouth. The tongue was protruded, not bitten.

Examination of the Body fifty-two hours afterwards. The weather was warm and damp. Rigor mortis was slightly marked. The face was calm and a little suffused.

Head. The scalp was much congested, and fluid blood escaped on section. Very numerous points of blood were observed on the dura mater. There was slight subarachnoid effusion. The pia mater was not much congested. The brain-substance was natural. There was no fluid in the ventricles. Much dark fluid blood escaped from the veins at the base, on section.

Chest. No fluid was found in the pericardium. The heart weighed nine ounces; it was healthy, and of good colour. The right ventricle contained dark fluid blood; the walls were flaccid. The left ventricle was empty; the walls were firmly contracted. The lungs were distended; they were healthy, but very slightly congested posteriorly. The mucous membrane of the trachea and its branches were reddened, and contained tenacious mucus, not frothy. There was no fluid in the pleuræ, nor adhesions. A portion of the ileum was darkly discoloured, apparently from *post mortem* action. A calcified mass was attached to the right Fallopian tube, of the size of a marble. The stomach was contracted; it contained no water, but some semidigested biscuit. The other organs were healthy, not congested.

Observations. In the preceding cases, the precise time that the women had been submerged, could not be obtained; but as a bloated and discoloured appearance did not supervene on exposure after many hours, the period in either instance was undoubtedly brief.

In Case I. The appearances were tolerably typical of drowning; *i.e.*, of death from asphyxia.

In Case II. The appearances were very slightly pronounced, as there was little or no engorgement of the lungs, and general absence of congestion of the other viscera. The only evidences in favour of the assumption of drowning, were the condition of the heart and pupils, and the calm pale aspect of the deceased, together with the want of proof of any other cause of death, as there was no suspicion of violence, and the organs were remarkably healthy for a woman of fifty-five. The mucus in the air-tubes might have proved of assistance, had the autopsy been performed earlier, as its frothy and aërated character, if existent, might have disappeared in the two days which elapsed previous to the examination of the body.

I here venture to advert to the syncopal (asphyxial?) condition which occasionally ensues after rescue from the water, as—although it has been long since described—it appears to be little known, or apt to be disregarded. As an example, I may mention a young woman, who was brought to me, pale, haggard, but perfectly conscious, after removal from the canal. When placed in a warm bed, she lapsed into insensibility and apparent death, with cessation of pulse and breathing. Had the patient, under these circumstances, been abandoned to the resources of nature, I feel confident that recovery would have proved hopeless, and that galvanism and artificial respiration, which were promptly employed, were the efficient agents in her restoration to consciousness.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Saturday, January 22nd, 1859.

Present:—Dr. Apjohn, in the Chair; Dr. Williams, Dr. Stokes, Dr. Smith, Dr. Corrigan; Dr. Maunsell, *Registrar*.

The minutes of last meeting were approved and signed.

On the motion of Dr. Smith, seconded by Dr. Stokes, it was resolved—

"That this Council approves of the course taken by the President, in summoning an early meeting of the General Medical Council, for the purpose of considering the difficulties which have arisen on the subject of Registration; and that, as a full meeting of the General Council cannot, under existing circumstances, be expected, it is the opinion of this Council that the General Council should limit its attention to the interpretation of the 11th Section of Schedule A, and the 46th Clause of the Medical Act."

On the motion of Dr. Corrigan, seconded by Dr. Williams, it was resolved—

"That the Irish Branch Council are of opinion, that on any questions of Registration, not already provided for by the resolutions of the General Council, which may arise in the interval between this time and the meeting of the General Council in August, the powers of the General Council should be delegated to the respective Branch Council of that part of the United Kingdom in which such question may arise."

R. C. Williams.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, FEBRUARY 19th, 1859.

LUNACY LAW.

We are not at all surprised that the Home Secretary should fear that, without some director, the proposed Lunacy Commission called for by Mr. Tite, would prove a "mere rambling inquiry" calculated to do no practical good. The meeting of Lunatics' friends, lately held at Exeter Hall, which, to judge from some of the speeches, must have included some not thoroughly restored patients, was enough to satisfy those in authority that the statements of persons once under confinement are not thoroughly to be depended upon with regard to the treatment met with in asylums. We also rejoice to find that Mr. Walpole has not yet been captivated with the idea, so popular among a certain class of fanatics, that private asylums shall give place to public asylums, or that the enormities of Acomb House shall be exchanged for the homicidal accidents of Hanwell. The arguments used by Mr. Walpole with respect to the advisability of maintaining a perfect secresy concerning the confinement of probably curable private patients, are so conclusive that we need not apologise for giving them.

"It has been contended that you ought to have public asylums for all classes of patients, that you ought to register them, and that you ought to confine no one without a public inquiry. I wish the House to consider what would be the consequence of such a course as that. If an inquiry is asked for, for the purpose of leading to its adoption, it is one which I think ought not to be conceded, because, if you once attempt to have public asylums for all classes of patients, this would inevitably follow, that those who thought that this painful malady had better not always be brought before the public eye would seek some private reception-house where patients could be placed, and where they would not have the advantage of the superintendence, the supervision, the care, and the controul which they now enjoy in private houses. But, above all, I must say that I think you could not inflict a greater evil upon these unfortunate people themselves than by, in all instances, granting a public inquiry into these cases. The House must bear in mind that this distressing malady is often the result of most accidental circumstances. It very frequently is not hereditary in its character, and does not recur when once it has been cured. Now, by one illustration I will show the House what would be the consequence of having a public inquiry in all cases. I will suppose that this malady comes upon a person in business from over exertion of the mind, from great anxiety, or, it may even be, from bodily or physical ailment. That person might, under existing circumstances, be cured within a few months, and it might be known to no one in the world that he had been afflicted with this malady; but if you once establish a public inquiry all will be known; the excitement of the patient will be very bad for him, and retard, if not prevent his recovery; and when he returns to his business, he will go back with a suspicion of insanity upon him, and, as a consequence, I am afraid, subject to the mistrust even of his neighbours and relations. [*Hear, hear.*] The evil of such an inquiry would be increased tenfold when you applied such a proceeding to another class of cases, especially to those of the other sex."

We really are at a loss to know on what grounds the advocates of exclusive public asylums for all classes of patients argue. It certainly cannot be on the plea that the per centage of cures in such monstrously overgrown houses of detention is greater than in private asylums, for the reverse is notorious. It cannot be that a greater supervision is obtainable in public asylums, inasmuch as it is clear that supervision, in its medical sense, is a simple farce. Colney Hatch has twelve hundred patients, interspersed in wards which extend over three miles of ground; yet this mentally afflicted community is by law put under the supervision of two medical men! We say, without any fear of contradiction, that the worst vices of private asylums shrink into nothing in comparison with this master vice of public asylums. We have, to the utmost of our power, advocated the dispersal instead of the aggregation of the insane. You can no more expect to cure madmen by herding them together, than you can expect to cure fever patients by adopting the same method. Dispersal among the sane population is, we believe, the proper method of cure, such as we find adopted at Gheel. Have those gentlemen who wish that the state of every temporary lunatic shall be preached upon the house-top, previously to his being mixed with a city of insane people, ever considered that these monstrously overgrown public asylums, from their very nature, become such instruments of routine that the requirements of the patients become completely and hopelessly subsidiary to the necessities of the establishment? The machine, with its eternal and never-ending grind, is everything; and human wants and desires must be made to fit it. We thought the movement was in favour of a little more individual action for the poor lunatic; but we find that "the lunatic's friends" (God save the mark!) are for taking away the little he has left in private asylums, in order that he may be made a mere cog in vast establishments, which must proceed with the regularity of clockwork, or cease to exist.

Mr. Walpole has done good service in warning the committee, to which he accedes, off this dangerous ground; and we thank him heartily for the pains he has taken in the two Bills which he has brought before the House, to point out the reforms in the present lunacy laws which are really necessary. The necessity for a further supervision of private asylums beyond the parliamentary limits, on the part of the Lunacy Commissioners, has long been seen; and we are convinced the proprietors of such houses will be the first to welcome an arrangement which will in some measure lighten the responsibility at present resting on their shoulders.

With respect to Mr. Walpole's statement, that he did not think we need interfere with the existing arrangements as regards criminal lunatics, we beg to observe, that a hardship and a cruelty is at present practised with respect to a certain class of these individuals, which outshines anything to be found in private asylums. We allude to the detention for life of those persons who have committed crimes whilst under the influence of puerperal mania. Many women so confined are at the present moment perfectly sane; and, having arrived at that time of life when the recurrence of this particular form of madness is next to impossible, their detention is perfectly gratuitous, and indeed wicked. Mr. Walpole (who is, we know, extremely anxious that every means should be taken to prevent the detention of a patient for one moment longer than is absolutely

necessary) only requires to have his attention drawn to this great injustice on the part of the State, to modify his opinion that "the law with respect to criminal lunatics requires no alteration". We trust that, among the many able men who will be called to give evidence before Mr. Tite's commission, some one will be found to recommend that freedom be given to this class of patients, who remain sane after a certain time of life.

THE WEEK.

The Committee of London graduates charged with the duty of testing in the Court of Queen's Bench the right of Dr. Storrar to act as the representative of their University in the Medical Council, have issued a letter, the object of which is to obtain funds. The sum required is said to be £100; of this £61:11 have been subscribed by sixty-four medical and other graduates, leaving the sum of £38:9 to be raised. The Committee call upon their fellow graduates to contribute their share towards the unavoidable expenses of the suit. At present the expenditure has been borne by a comparatively small number of graduates, and the postponement of the argument has added somewhat to the estimated outlay. They trust that they will not be permitted to undergo a pecuniary loss, in fighting the battle of the members of the university at large. Surely some of the numerous graduates who have as yet taken no open part in the dispute, will contribute something in order that the question at issue—the right of the senate to elect the representative of the University in the General Council—may be finally answered. This can be done without any prejudgment of another question—whether Dr. Storrar is the most acceptable man to the graduates of the University. If the Court of Queen's Bench decides that the right of election is vested in the senate and graduates together, there will be ample opportunity of deciding whether they will have Dr. Storrar to represent them. We have just heard, that Her Majesty, by the advice of the Privy Council, has nominated Mr. Osler and Dr. Storrar as members of the senate. These gentlemen, it will be remembered, obtained the highest number of votes at the meeting of Convocation on November 10, 1858, when six names were chosen to be submitted to the Queen, for the choice therefrom of two members of the Senate.

The following by-laws were passed at a meeting of the Fellows of the Royal College of Physicians, held on February 16th. It will be observed that they embody some of the principal alterations which, it was said, were to be effected by the new Charter.

"*On the Admission of Extra-Licentiates as Licentiates.* Each of the present Extra-Licentiates who shall have produced testimonials as to character satisfactory to the said Censors, and shall have assured the said Censors that he is not engaged in the practice of pharmacy, and who shall comply with such other regulations as are required by the By-Laws of the said Corporation, may receive a Licence from the said Corporation, and be admitted a Licentiate of the same, on his paying to the said Corporation a fee of Five Pounds, Five Shillings, exclusive of the stamp duty.

"*On the Admission of Graduates and Licentiates of Universities as Licentiates.* Every person practising as a Physician in England or Wales, and who shall, after regular examination, have taken the Degree of Doctor in Medicine at any University in the United Kingdom of Great Britain and Ireland, at least three calendar months previously to the first day of March, 1859, and also every person who shall have received a Licence to practise Physic from any one of the Universities of Oxford or Cambridge, or Dublin, and also every person practising as a Physician in England or Wales who shall, after regular examination, have taken the Degree of Doctor in Medicine at any foreign University approved by this College, at least three months previously to the said first day of March, 1859, and shall not be engaged in the practice of Pharmacy, may at any time within twelve calendar months from the said first day of March, 1859, be admitted a Licentiate of the said Corporation, without any examination, on the production to the Censors of the said Corporation of his Diploma, and of such testimonials of character and professional qualifications as shall be satisfactory to such Censors, and on his assuring such Censors that he is not engaged in Pharmacy, and who shall comply with such other regulations as are required by the By-Laws of the said Corporation, and on his paying to the said Corporation a Fee of Ten Pounds, Ten Shillings, exclusive of the stamp duty.

"*On the Admission of Licentiates to the Fellowship.* During the period of twelve months, to be computed from the first day of March, 1859, the Council of the said College shall have the power to nominate such Licentiates thereof, as in the opinion of the Council shall have distinguished themselves in the practice of medicine, or in the pursuit of science and literature, provided the Licentiates so to be nominated shall have attained the age of thirty years, without any limitation as to the period during which such Licentiates shall have been previously Licentiates of the said Corporation, to be proposed to the Fellows for election as Fellows at Meetings of the Fellows to be holden, with due notice, for this purpose, at any time before the expiration of the said twelve months."

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [General Meeting.]	White Lion, Bristol.	Thurs., Feb. 24th, 6.45.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A General Meeting of the Birmingham and Midland Counties Branch was held at Birmingham, on February 10th; E. H. Coleman, Esq., President, in the Chair. There were also present: A. Allcock, Esq. (Smethwick); R. L. Baker, Esq. (Birmingham); T. Boisragon, M.D. (Birmingham); E. Cheshire, Esq. (Birmingham); J. Clay, Esq. (Birmingham); R. Davis, Esq. (Birmingham); J. S. Gaunt, Esq. (Alvechurch); W. Hinds, M.D. (Birmingham); J. H. Houghton, Esq. (Dudley); T. Howkins, Esq. (Birmingham); W. E. Johnson, Esq. (Dudley); Furneaux Jordan, Esq. (Birmingham); W. J. Kite, Esq. (Westbromwich); O. Pemberton, Esq. (Birmingham); J. Postgate, Esq. (Birmingham); J. V. Solomon, Esq. (Birmingham); T. J. Walker, M.B. (Birmingham); T. W. Williams, Esq., (Birmingham); C. Yarwood, Esq. (Birmingham); G. Yates, Esq. (Birmingham).

NEW MEMBERS.

The following gentlemen, having been elected Members of the Association, were unanimously elected members of the Branch: J. Neale, Esq. (Birmingham); H. E. F. Shaw, Esq. (Sutton Coldfield); W. P. Goodall, Esq. (Birmingham); Furneaux Jordan, Esq. (Birmingham); and Thos. James Walker, M.B. (Birmingham).

PAPERS AND COMMUNICATIONS.

The following papers were read.

1. The Vitality of the Teeth, and its relation to Caries. By T. Howkins, Esq.

2. Three Cases of Resection of Nerve for sequences of Traumatic Injury. By Redfern Davies, Esq.

These papers will be published in the Journal.

3. Paraplegia in relation to Renal Disease. By W. Hinds, M.D.

Papers on the following subjects were postponed until the next meeting.

Observations on the Anatomy and Surgery of Talipes Equinus and Varus. By Furneaux Jordan, Esq.

Illustrations of the Radical Cure of Hernia, by the presence of a patient in whom the operation has been performed. By Oliver Pemberton, Esq.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, February 2nd, 1859.

Edward Rigby, M.D., President, in the Chair.

CASE OF CANCER OF THE UTERUS AND RECTUM IN WHICH ABORTION WAS PRODUCED. BY F. W. MACKENZIE, M.D.

The author was first consulted by the patient on the 26th of November, 1858, when she had reached the fourteenth week of pregnancy. On examination, there was found a scirrhous contraction of the rectum about four inches from the sphincter, a hard scirrhous deposit in the recto-vaginal septum, and a similar deposit in the anterior segment of the cervix uteri, projecting somewhat into the cervical canal. It being thought unadvisable that the course of pregnancy should be allowed to proceed, attempts were made to bring on uterine contractions by means of the uterine douche. Very little effect was, however, produced, until the terminal pipe of the injecting apparatus was introduced into the os, so that the water could be thrown directly into the uterus. This proceeding was repeated on three successive days, its action being aided by the use of electricity; and the entire ovum was then expelled, without hæmorrhage. The patient made a good recovery from the effects of the abortion.

ON THE ABOLITION OF CRANIOTOMY FROM OBSTETRIC PRACTICE. BY W. TYLER SMITH, M.D.

The author stated that craniotomy is resorted to in British practice about once in every 340 labours. The whole number of births in England and Wales exceeds 600,000 *per annum;* so that there is a total of about 1800 cases of craniotomy *per annum.* This was as though every year all the children born in London during rather more than one week were sacrificed; or as though all the children produced during the year in such a county as Westmoreland were born dead. The mortality to the mother from this operation was nearly one in five in British practice, or between 300 and 400 per annum. Craniotomy was performed about twice as often in British as in French practice, and four times as often in this country as it is in Germany. It was an obvious fact that every improvement which has ever been made in obstetrics, has tended to restrict and diminish the cases and conditions in which craniotomy has been resorted to. It was Dr. Smith's object to show that, with the proper and scientific use of all the means at our command, it may be laid down as a general rule, that craniotomy should not be performed in the case of a living fœtus after the period of viability has been reached. It was certain that, up to the present time, the measures which are the alternatives of craniotomy have never been carried out in practice to their full and legitimate extent.

Turning was the first great obstetric operation which checked the voluntary destruction of the fœtus during labour. The objections to turning which some obstetrists entertained depended on an almost superstitious fear of the uterus—a fear mainly owing to ignorance of the nature of the organ, and of the laws under which it acts. The dread of introducing the hand into the uterus has prevailed almost universally. But, apart from the danger of infection, the hand of the accoucheur, properly guided, can do no more harm in the uterus than any portion of the fœtus of equal bulk. Restrictions of the most absurd kind have been laid upon the operation, and it has come to be almost limited to arm presentations and cases of placenta prævia. On the continent, turning is the recognised practice in cases of difficulty, where the head is above the brim, beyond the reach of the forceps, when the os uteri is in such a state as to admit the hand, and when no serious distortion of the pelvis exists. The operation of turning in cases of moderate pelvic deformity was practised by Denman; but it was dealt with rather as an exception than a rule of practice, until the matter was taken up by Professor Simpson. No unprejudiced person could read Dr. Simpson's papers on this subject without coming to the conclusion that turning may be performed in cases of moderate pelvic distortion at the full term, with comparative safety to the mother, and with a reasonable chance of safety to the child. It was also shown to be applicable to cases of greater deformity, in combination with the induction of premature delivery. Nothing had ever occurred in the history of turning which so strongly tended to enlarge its usefulness as the introduction of anæsthesia into obstetric practice. Under chloroform we can turn with comparative ease in cases of excessive sensibility of the os uteri and vagina, in arm cases in which the waters have been long expelled, and the uterus has closed upon the fœtus with spasmodic force. It renders turning practicable in cases of convulsions or maniacal excitement, and in all instances it makes the uterus comparatively quiescent, and thus averts the dangers depending on contraction and resistance during the operation. Turning is performed nearly three times as often in France and Germany as it is in this country.

After turning, the next great step in opposition to craniotomy was the discovery of the *forceps.* Before the time of Chamberlain, whenever turning was impracticable, there was no resource in cases of difficulty except in craniotomy. But it might fairly be questioned whether the whole powers of this instrument have ever been fairly brought out, especially in this, the country in which it was produced. In our standard works, more pains are taken to show when this instrument is not to be used than when it may be. The cases in which the forceps may be used are those of moderate disproportion or distortion, whether the arrest is at the brim, in the cavity, or at the outlet of the pelvis; cases of arrest from failure of the labour pains, without any morbid condition of the parturient canal; cases of convulsions in which the os uteri is dilated, and the head sufficiently low to be within reach of the instrument; cases of occipito-posterior presentation, not otherwise admitting of rectification, and face presentations; cases of accidental hæmorrhage; and cases of rupture of the uterus, in which no great recession of the head has taken place. It should also be used at a comparatively early period in many of the cases which, if not assisted, run on to impaction from swelling of the fœtal head and tumefaction of the soft parts of the mother. The outlet and middle straits of the pelvis are the limits within which the short forceps should be used; at the brim the long forceps is the proper instrument. The forceps is used more than twice as often in France and Germany as it is in this country.

The last, and it might truly be said the greatest, opponent of craniotomy was the *induction of premature labour.* The largest single source of craniotomy is deformity of the pelvis. Now, it might be asserted, without the possibility of contradiction, that in this great mass of cases, it would be right and practicable at once and for ever to abolish craniotomy in the case of the living and viable fœtus. In all cases of known deformity, an examination should be made in the early or middle months of pregnancy, and the proper treatment of such cases should be the induction of abortion or of premature delivery. In cases of excessive distortion, where it would be altogether impossible for a viable fœtus to pass, abortion should be induced before the time of quickening. It would be quite impossible for intercourse and impregnation to take place in any case in which it would not also be possible to induce abortion with safety to the mother. In the very considerable number of cases of moderate distortion in which the diminished capacity impedes delivery at the full term, but would allow of the passage of a child at the seventh or eighth month with a chance of living, the induction of premature labour is the only justifiable practice.

Besides the great operations of turning, the forceps, and the induction of premature labour, there were other means by which, in special cases, the necessity for craniotomy may be superseded. One of the most simple is the *rectification of occipito-posterior presentations.* When the occiput descends towards the sacrum in the third and fourth positions, instead of turning towards the right or left acetabula, great difficulty is produced, particularly in first labours, or when the head is large. Recorded cases of craniotomy show that the want of this rectification, which is generally possible with the hand, the lever, or the forceps, often leads to perforation. Cases of hydrocephalus in the fœtus are amongst the most difficult to deal with in an attempt to abolish craniotomy; but here we have the proposal of Dr. Simpson to tap the hydrocephalic head, and in this way reduce it so as to allow of delivery without the destruction of the fœtus. In actual occlusion or insuperable rigidity of the os uteri, incision is a safer and better practice than craniotomy. While it was the object of the present paper to advocate the abolition of craniotomy in the case of the living and viable fœtus, there was undoubtedly a class of cases in which perforation may be practised beneficially,—namely, in labours where the child had died during the course of parturition. No woman should be allowed to remain in difficult labour after the death of the child has been satisfactorily ascer-

tained. Considering, then, the various means at disposal in the way of preventing the necessity for craniotomy, the author unhesitatingly expressed his conviction that, as a rule of practice, craniotomy in the case of the living and viable fœtus should be abolished; and he believed that if all the resources of obstetrics in the way of prevention, management, and alternative treatment were properly wielded, the necessity for the operation would not arise.

Dr. Rigby congratulated the Society on the circumstance that, at its first meeting, a paper of so much interest and importance had been submitted for their consideration. The views propounded by Dr. Tyler Smith were deserving of the earnest consideration of all obstetricians. He alluded briefly to the statistics of the Dublin Lying-in Hospital, as showing that the mortality to the mother from craniotomy was much greater than when the forceps was employed. He agreed with the author of the paper in his opinion that the point insisted on by some authorities, of reaching the ear, in order to ascertain the position of the head, in forceps cases, was absurd. To bore the finger up to the ear before applying the forceps was a barbarous practice. The position could be easily ascertained in other ways. He should not like to see the use of the forceps pushed to the extreme advocated by Osiander, a learned but obstinate man, who used forceps with long handles and extra hooks, to enable more than one person to assist in the efforts to extract the child, and who did not publish the results of his cases. The forceps might be used, however, more extensively than was the case at present in this country. In vaginal contractions, producing impediment to delivery, craniotomy was to be condemned, as the author had very properly remarked.

Dr. Granville would remind the author of the paper that the statistics brought forward by him referred chiefly to the results of public practice, and he did not think craniotomy was an operation which was had recourse to with such frequency in private practice. He had not performed craniotomy more than a few times, and these were cases of distortion, in which the difficulty only presented itself at the last moment, and when consequently craniotomy was the only resource. The forceps of Asellini was, in his opinion, the best form of the instrument, and he believed that the comparatively infrequent use of the forceps in this country depended on our not having adopted the best form of that instrument.

Dr. Murphy said, the paper which was before the Society was altogether so new, and contained material which was of so much importance, that the casual objections, which were all that could be made by him, were not likely to be of much weight. Agreeing with much that was brought forward by the author of the paper, he differed from him in several important points. There were, in his opinion, cases in which neither turning nor the use of the forceps could be had recourse to, craniotomy being in fact the only resource. Upon the Dublin Lying-in Hospital statistics, referred to by the author, he would make one remark. In that hospital, cases in which the pelvis was deep, conical, and masculine, and in which the head was firmly ossified, were very common, and this gave rise to the apparent frequent necessity for craniotomy. Such cases did not present themselves elsewhere, and he did not think the Dublin professors were then to perform such an operation unnecessarily. He agreed with the author that it was not necessary to feel the ear in order to apply the forceps.

Dr. Waller would ask, is turning to be regarded as a substitute for craniotomy? Is it a fact that the head passes more easily through the pelvis when extracted last? He could not conceive that the dragging the head through a distorted pelvis would be favourable to the life of the child. He had known cases in which the head had been torn off in so doing.

Dr. Rogers considered that the tendency of the paper would be to increase the use of the forceps to a mischievous extent.

Dr. Tyler Smith, in reply, observed that in the cases of abnormal pelvis, which Dr. Murphy had described as being so frequent in the practice of the Dublin Lying-in Hospital, the proper treatment would be the induction of premature labour, and not craniotomy. The child might thus be saved in the majority of such cases, and the mother delivered from the danger of craniotomy. As regards the observations of Dr. Waller, he had no doubt whatever of the superiority of turning to craniotomy in all cases of moderate deformity. He referred to cases which he had treated with fellows of the Society in support of this view. No doubt the alternative methods he had recommended, as sufficient to supersede craniotomy, would require increased care and forethought on the part of accoucheurs, but not more, he believed, than could reasonably be given. He felt that the subject was too large for discussion and settlement at a single meeting of the Society; but the questions raised in the paper would go forth to the profession, and receive their due share of attention.

Editor's Letter Box.

DIPHTHERIA.

Letter from George Harley, M.D.

Sir,—In your Journal of to-day I observe an important communication by Dr. Laycock, on the Parasitic Nature of Diphtheria. In this communication he mentions having observed a tendency to come to conclusions regarding the pathology of the disease "on data wholly insufficient"; and then proceeds to state that "the excellent paper of Dr. Rogers, as reported in your Journal of to-day, and the interesting remarks made by Dr. Harley when that paper was discussed at the meeting of the Medical Society of London, contain illustrations of this tendency... Dr. Rogers and Dr. Harley took similar objections to my views. 1. It is concluded by them that a fungus cannot be the cause of the disease or the exudation, because they had not found it in twelve cases they had examined microscopally. 2. That my views could only apply to *muguet*, which is wholly different from diphtheria, and therefore termed by the French writers *pseudo-diphthérite*. 3. That being a blood-disease (a probable enough theory), diphtheria cannot, *as such*, be due to the action of a parasitic organism on the blood and tissues."

From the foregoing quotations, it appears that Dr. Laycock has entirely misunderstood my views regarding the nature of the disease in question; and, although I have already replied to a similar letter which he published in the *Lancet* some days ago, as many of your subscribers do not see that journal, I trust you will allow me to say a few words in reply to his communication of to-day.

In coupling my name with Dr. Rogers's, Dr. Laycock seems to think that we made our observations conjointly, and that our views on the subject are identical. Neither of these opinions, however, is correct. Dr. Rogers, it is true, sent me some specimens of diphtheritic exudation for examination, and I pointed out to him the oïdium albicans which grew upon one twenty-four hours after it came into my possession; but, beyond that, our researches were made quite independently. Moreover, as I am but imperfectly acquainted with Dr. Rogers's views, I wish it to be distinctly understood that, in the following remarks, I speak for myself alone.

I am surprised to hear Dr. Laycock saying that I appear, with others, inclined to draw conclusions regarding the pathology of diphtheria too hastily. I cannot see upon what he grounds this idea; for I candidly confess that, as yet, I have arrived at no definite conclusion with reference to the origin and nature of this disease. I admit that I look upon diphtheria as a blood-disease, in the same sense as small-pox and typhus; and I believe that it may occur singly, or combined with other affections. Further, I have stated that it is neither scarlatina *minus* the eruption, nor malignant sore-throat, nor croup; but I have never presumed to indicate its nature, or the origin from whence it springs. It appears to me, therefore, that Dr. Laycock's remark is much more applicable to himself than it is to me; for he has not only told us that diphtheria is a blood-disease, but even gone so far as to say that it is of parasitic origin.

What I have stated, and what I still state, is, that the twelve specimens of false membrane, taken from the fauces of diphtheritic patients, that I examined, were not fungoid in their nature; that the exudation consisted neither of fibrine nor fibro-plastic cells, but appeared to be composed of an excessive and modified secretion of the mucus, mucus-cells, and epithelium-scales proper to the part of the throat from which it was removed; that the presence of blood corpuscles was due to the accidental abrasion of the mucous membrane; and that pus-cells were only found in those cases where ulceration of the fauces had occurred after the application of caustic. Moreover, the mucous membrane of the throat was highly congested, and the cells in the exudation itself enlarged, as is seen in the first stage of inflammatory action.

When Dr. Laycock first published his views upon the subject of diphtheria, I understood him to mean that the disease was the result of fungi attacking the mucous membrane of the throat.. In the letter, however, which he has now published, it appears that he thinks the parasite is in the blood, and that its development on

the external surface of the mucous membrane is a point of secondary importance. If the parasite has been detected in the blood of diphtheritic patients, Dr. Laycock has a strong argument in favour of his theory. If, however, it has not been discovered in the blood, may I inquire upon what data your correspondent has founded the hypothesis?

I do not for a moment wish to deny that diphtheria may be of parasitic origin; I only wish, before accepting the doctrine, to have more substantial proof of its correctness than what Dr. Laycock has as yet given me. The muscardine of the silkworm, the blight of wheat, and the potato disease, may all, as he states, be due to the presence of fungi; but that does not prove that diphtheria has a similar origin. We have no proof, as far as I am aware, of diseased potatoes communicating diphtheria to man, or of the two diseases marching hand in hand.

I have tried to communicate the disease to animals, by inoculating them with the false membrane and secretion from the fauces of diphtheritic patients; but with negative results. (*Lancet*, January 1st, 1859, p. 16.) Further, I have injected into a healthy animal the blood of a person who died of the disease; but still failed to reproduce diphtheria. Upon the result of this last experiment, however, I place no importance; first, because it is a solitary experiment; and secondly, because the blood had stood twenty-four hours after its removal from the patient before being used; which circumstance, however, would favour the development of fungi, and would therefore render the experiment more liable to succeed, if the parasitic theory were correct. I may mention, that I have made a careful microscopical examination of the blood of a girl who died on the third day of the disease, and I detected neither filaments nor sporules of fungi in it. The only thing that attracted my attention was an apparent increase in the number of white blood-corpuscles. This, as well as the preceding observation, I intend repeating as soon as an opportunity occurs. Since reading Dr. Laycock's letter, I have availed myself of his hint, and injected into the circulation of animals a quantity of the filaments and sporules of fungi, in order to test the value of the parasitic hypothesis. But, as my researches on this point are not yet completed, I shall delay entering upon the question till some future occasion.

Dr. Laycock, in concluding his ably written letter, recommends the employment of antiseptics and parasiticides in the treatment of this deadly disease. The former I would certainly recommend, in conjunction with other remedies; but I would hesitate in employing the latter, until our knowledge of the pathology of diphtheria is more exact. The treatment, I think, may, for the present, be embodied in a few words:—Support, from the outset, the strength of the patient; and regulate the local applications according to the symptoms. I am, etc.,

George Harley.

77, Harley Street, Cavendish Square, February 5th, 1859.

THE CHARTER OF THE ROYAL COLLEGE OF PHYSICIANS.

Letter from John O'Bryen, M.D.

Sir,—Permit me, as a provincial physician of twenty-two years standing, to dissent from your conclusions touching the proposed new charter of the College of Physicians of London. I should consider it criminal to remain silent at such a moment, speaking as I do the almost universal sentiments of my class in the profession—the provincial physicians. In the leader of your number of January 29th, you state "you do not consider £10, *plus* the stamp, £15, too dear for the privilege of being admitted a member of the College of Physicians of London", because (you go on to say) "every hospital board requires that their medical officers shall be members of this corporation." In the provinces, the contrary is notoriously the fact: the degree of M.D. from a British University is required, and, in some few cases, the license of the College is accepted.

But let us take a common sense and business view of this matter. The College offers us the empty honour of being admitted a member at a cost of £25, without even granting a voice in the affairs of the corporation to its members, or permitting them to hold any office; and, in addition, they require them to renounce their legal right to claim in a court of law fair remuneration for their professional services. For this purpose, at their instigation, an enabling clause was inserted in the Medical Act of last session.

On the other hand, all who hold the degree of M.D. can call themselves physicians, and practise their profession as Doctors of Medicine where they please, without let or hindrance, and at the same time retain their right at law to recover their fees. Where, then, is the advantage the College offers to its members? I confess I can see the disadvantage of joining the body, but I cannot see the benefit to us provincial M.D.'s, supposing the honour was even given *gratis*. The gain to the College would be real and tangible: hence their kindness. The Royal College of Physicians had better consult the wishes and wants of the large majority of practising physicians who reside in the provinces, before they finally decide on the terms of their new charter and their intended disabling bye-law; for, I can assure them, they will be sadly disappointed, if they calculate on gathering the physicians of England under their far from maternal wing on the terms they propose.

I would take this opportunity of warning the provincial physicians, that the ultimate object of this corporation is evidently that none but members and fellows of their body shall be styled physicians, and have this title registered in the fourth column of the schedule under the Medical Act.

I am, etc., John O'Bryen.

93, Shaw Street, Liverpool, February 12th, 1859.

MEDICAL CHARGES.

Sir,—My mind is so constituted as never to have allowed me to combine trade with my profession. In the year 1856, I purchased a large practice, vacant through the death of a man much my senior, and where he and five or six other practitioners had existed for years on profits realised from the sale of their pills, lotions, and potions. I of course foresaw my difficulties in instituting a mode of charging differing from theirs, and so strange to this neighbourhood; but I determined, at any cost, to persevere in that course which, in my opinion, seemed the most strictly honest in our professional calling.

As my bills went in, my professional brethren reaped the benefit of the wrath of some of the most illiterate of my patients; while I still held my ground, refusing to attend on other terms. But I found more friends than enemies, and felt it a happy release to be rid of those who ignorantly sought to treat me as a tradesman. I have now had two years' experience. I am perfectly satisfied that my practice is a lucrative one, and more agreeable to me from having upheld the honour of our profession as I have done. Could we all be unanimous, we might hope our calling would be regarded in the eyes of the public as that of a gentleman. A clear course is open to every one: let each fix his charges *for attendance only*, as best he can to insure his own success. My great ambition is to see the abolition of *surgeries*, which are in reality *shops*. And why should we rob the druggists of their trade, thereby degrading ourselves? I am longing much that some demonstration could be laid before the Poor-law Board at this period of reform, earnestly praying our medical officers freedom from dispensing duties, as I am convinced, in such a case, that many now obliged, solely on this account, to keep shop, would at once close their shutters; and I would urge all the members of our Association, through the medium of their Journal, which has always been foremost in promoting reform, to give their earliest and most earnest consideration upon some decisive means to be adopted. I am, etc.,

Every One to His Trade.

February 12th, 1859.

GRATUITOUS MEDICAL SERVICES.

Sir,—A letter in your last week's number, signed "Hopeful", contains some judicious remarks on the indiscriminate gratuitous services which some hospital surgeons and physicians offer at their own houses to all comers. The charge is too often true, and admits of no defence.

Some time ago, you inserted a communication from me in which I directed attention to a very flagrant case of this sort at Weymouth. I pointed out that vague denunciations hurt nobody, for nobody applies them to himself; and on this principle I would now mention another instance which has recently come to my knowledge, quite as indefensible as the former.

At Frome, in Somersetshire, a physician, of the name of Harrison devotes an hour every Wednesday morning to prescribing gratuitously for any one who chooses to avail himself of such an offer, and the consequence is that wealthy farmers, and others in the neighbourhood, crowd to Dr. Harrison's house, and obtain that advice which Dr. Harrison probably designed for the needy and destitute, but regarding which, he apparently takes no care that it shall be exclusively obtainable by them.

I say again, what I said before, that if the public are to help us, we must begin by helping ourselves. Will Dr. Harrison and others, who err against their poorer brethren, set the example? I am, etc. An Associate.

February 15th, 1859.

MEDICAL CHARGES.

Letter from Messrs. Wybrants and Craddock.

Sir,—We beg to forward the plan adopted by us for many years, and which we find to act better than the drugging and drenching system, which is a disgrace to the profession.

We are, etc., Wybrants & Craddock.

Shepton Mallet, February 15th, 1859.

"Shepton Mallet, January 185—

"Mr. A. B. To Messrs. Wybrants & Craddock, *Surgeons*.

"For Professional Attendance during the year 185– £*x* *y* *z*

"In order to avoid any misconception respecting Messrs. Wybrants and Craddock's charges for professional attendance, they are desirous of stating the following as their constant method:—

	£	s.	d.
"Fee for advice (medicine not charged) either at Dr. Wybrants' or Mr. Craddock's residence, or at that of the patient, if within a mile of the town -		2	6
"Fee for advice (medicine not charged) beyond one and not exceeding five miles - - - - -		5	0
"Fee for advice during the night (medicine not charged) in town - - - - - -		5	0
in the country - - - - -		10	0
"Fee in consultation - - - - - -	1	1	0
"When consulted by letter - - - - -		5	0"

THE MEETING AT THE LIVERPOOL MEDICAL INSTITUTION.

Letter from F. D. Fletcher, Esq.

Sir,—I should feel much obliged if you would favour me by inserting the following corrections of a few sentences in your report of the meeting at the Liverpool Medical Institution on January 28th.

I am made to say that I objected to the new law "because those who voted for it, voted for that which was absurd. They were absurd; therefore they were not medical men." What I did say was to this effect, that I objected to the exclusion of any one on the ground of his holding doctrines which were absurd. In reference to Dr. Turnbull's assertion, that a homœopathic practitioner ceases to be a medical man when he embraces homœopathy, I said, that it was equivalent to the admission that any one practising that which is absurd ceases to be a medical man. Further on, I am reported as asking, "what would they think if the Royal Society were to exclude a man for expressing his belief in the existence of matter; and with what roars of laughter would a chemical society now receive any one who doubted the atomic theory of Dalton." In the former sentence, the word "belief" should be "*dis*belief"; the latter sentence should be, "with what roars of laughter would the Chemical Society receive *a proposition to exclude* any one because he doubted the atomic theory."

The first of the passages to which I have referred would, I think, lay me open to the charge of something like impertinence, in commencing an argument by an abrupt assertion of the absurdity of that which I opposed; and the latter make me appear to use illustrations which had no relation to the subject on which I was speaking. I hope, therefore, I shall not be thought needlessly particular in requesting you to publish these corrections. I am, etc. F. D. Fletcher.

13, Mornington Terrace, February 15th, 1859.

TAUNTON AND SOMERSET HOSPITAL.

Letter from F. H. Woodforde, M.D.

Sir,—Any one who has compared our respective letters will have seen that Mr. Alford, in his laboured attempt to justify himself, confirms my statement of facts (which many others can verify), but gives them a different colouring to suit his own views. I shall not pursue this painful controversy farther than to state that the two vacant offices of physician to the hospital are to be filled to-morrow by two general practitioners of this place, no one else having offered. I am, etc.,

F. H. Woodforde.

Taunton, February 16th, 1859.

THE LATE G. J. SQUIBB, ESQ.

Letter from A. P. Stewart, M.D.

Sir,—As one of the Secretaries of the Metropolitan Counties Branch, and as the member of Council who had the honour and great satisfaction of proposing the late Mr. Squibb as President-elect, in the summer of 1857, may I crave a corner in your columns to express my hearty concurrence in the resolutions passed at the Council meeting held at Dr. Murphy's on the 1st inst.? My absence was owing to severe indisposition, and was to me a matter of much regret, as I wished to testify by my presence the deep respect in which I hold his memory, and the sense I entertain of the loss we have sustained by his sudden removal. I am, etc., A. P. Stewart.

74, Grosvenor Street, W., February 7th, 1859.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Friday, February 11th, 1859.

LUNACY (SCOTLAND) ACT.

Mr. Baxter inquired of the Lord Advocate if he intended, during the present session, to introduce a Bill amending the Scotch Lunacy Act of 1857.

The Lord Advocate said that it was the opinion of the government that the statute to which the honourable member referred required amendment. The first Report of the Lunacy Commissioners appointed under that Act would, however, be laid upon the table in a week or ten days, when they would have a better opportunity of forming a judgment upon the question.

Monday, February 14th.

NAVAL MEDICAL OFFICERS.

Sir E. Perry asked the First Lord of the Admiralty whether it was in contemplation to extend to the Medical Officers of Her Majesty's Navy the same advantages in rank, etc., as had been afforded to the Medical Service of the Army by the Royal warrant of the 1st of October, 1858.

Sir J. Pakington said the only answer he could give at that moment to the question put to him was, that the subject referred to was under the consideration of the Admiralty. In saying so much, he did not wish to be understood as meaning to say that the alterations alluded to would certainly be made. There were several similar suggestions before the Board of Admiralty.

Tuesday, February 15th.

LUNATICS.

Mr. Tite, in moving for a Select Committee to inquire into the operation of the laws relating to the care and treatment of lunatics, especially those so found by inquisition, observed that he had late last session made a similar motion, but limited to lunatics under the Court of Chancery. That motion was received with considerable favour, but the Home Secretary then told him that if he would enlarge its scope and move it early in the present session the Government would probably support him. Acting on that suggestion, he had now to make this motion. He understood that the Government assented to it, and that they intended to refer the two Bills for the amendment of the law relating to lunacy, of which notice had been given, to a select committee. This question was one of great social importance, there being no fewer than 23,000 lunatics in England alone, of whom 17,572 were paupers. There were three distinct jurisdictions with regard to lunatics, applicable respectively to lunatics under the Court of Chancery, to lunatics confined in public and private asylums, and to criminal lunatics. This rendered the law conflicting and difficult of comprehension. Numerous Acts had been passed on this subject since 1828. In 1853 Lord St. Leonard's Act referring to lunatics under the Court of Chancery was adopted, and its operation had proved exceedingly inconvenient and oppressive. The Court of Chancery had about six hundred lunatics under its care, and the amount of property under the commissioners was upwards of £200,000. The horrors which had recently been disclosed

in connexion with lunatic asylums arose from the want of a more complete supervision; and what was wanted was a consolidation of the law as well as of the functions of the different boards which had jurisdiction over this unfortunate class of persons. The whole question demanded investigation by that House, and he had, therefore, according to the terms of his motion, to move for the appointment of a select committee.

Mr. Walpole. When the hon. gentleman brought this subject before the House last year, my hon. and learned friend the Solicitor-General, on behalf of the Government, said he thought it reasonable that some inquiry into it should take place. Perhaps I may be pardoned if I make one or two remarks on a question of so much importance. The House is aware that there are four classes of lunatics in this kingdom—viz., first, criminal lunatics; secondly, lunatics found to be such by an inquisition under the Court of Chancery; thirdly, lunatics in private asylums; and, lastly, lunatics confined in county and borough asylums. With regard to criminal lunatics, I do not think we need interfere with the existing arrangements. With regard to those found to be lunatics by inquisition, I do think that some amendment may be made in the law, chiefly in two respects; one with reference to the manner in which inquisitions are held and inquiries conducted, constantly extending over long periods of time, at great expense, and indeed, I may say, to the great affliction of many people who are concerned in them. I also think that great improvement may be made with reference to the inspection, superintendence, and treatment of these lunatics; and that by providing for that superintendence and treatment in a more careful and constant manner than at present, a great benefit may be conferred upon them. [*Hear, hear.*] I then go to the other two classes of lunatics,—those who are confined in county and borough asylums, and those in private houses. Since the notice of motion was given in the course of the summer, I have felt it my duty to make some inquiries into this subject, and I own I am startled at their results. From the returns of the commissioners it appears that, in the year 1852, the number of lunatics, exclusive of those in the union workhouses, was 17,412, of whom there were in private asylums 4,430—viz., males 2,331, and females 2,099; and in county and borough asylums 12,982. In the year 1857, the total number had increased from 17,412 to 22,310. Of these there were in private asylums 4,738—viz., males 2,508, females 2,230. I pause here for a moment to notice the great increase in the course of these five years, and I want the House to observe this striking feature, that whereas the increase in the number of those confined in county and borough asylums was from 12,982 to 17,572, the increase in the number confined in private asylums was hardly perceptible; it was only from 4,430 to 4,738. Such was the increase in those years, and I believe it has been owing partly to the operation of legislation upon this subject by which so much better provision has been made for the poorer class of lunatics in county and borough asylums, greater care has been taken of them, and consequently their lives have been prolonged. Then I come to the question which is, after all, one of the most important in this matter—"Of these unfortunate persons thus put under restraint, or into necessary confinement, how many of them are curable, and how many incurable?" Now, I find from the report of the commissioners in 1857—and there is no report for a subsequent year—that out of 21,311 lunatics in that year, only 3,327 were curable, and 17,984 were incurable. Analysing these curable patients, I find that in metropolitan and provincial licensed houses there were 917, in borough and county asylums 2,070, and in hospitals 360; so that one quarter of those in private asylums were curable, while only one-tenth of those in county and borough asylums came under that denomination. That being the state of the case,—and a most painful one it is to any one who considers that at the present moment one in 830 of the population are unsound in their minds, and that the number is increasing at a great rate,—you have a double duty to perform, partly to see how those who are incurable can be best taken care of, and partly to see how those who are curable can have the benefit of a restoration to sanity conferred upon them. [*Hear, hear.*] Before the honourable gentleman gave notice of his motion, on the same evening I announced my intention to introduce two Bills upon this subject. These Bills I propose, if the House will give me leave, to read a first time to-night. One relates to improvements in county and borough asylums; the other to improvements in private houses. The improvements in county and borough asylums are chiefly of a practical nature, and relate to matters which have been reported to me during the past year. The course which I propose to take with regard to this motion is, so far as the Government is concerned, to accede, with the alteration of a few words in the terms of the motion, to the inquiry which is asked for, and to refer my two Bills to the committee which is to be appointed. [*Hear, hear.*] It has been contended that you ought to have public asylums for all classes of patients, that you ought to register them, and that you ought to confine no one without a public inquiry. I wish the House to consider what would be the consequence of such a course as that. If an inquiry is asked for, for the purpose of leading to its adoption, it is one which, I think, ought not to be conceded, because, if you once attempt to have public asylums for all classes of patients, this would inevitably follow, that those who thought that this painful malady had better not always be brought before the public eye would seek some private reception house, where patients could be placed, and where they would not have the advantage of the superintendence, the supervision, the care, and the control which they now enjoy in private houses. But, above all, I must say that I think you could not inflict a greater evil upon these unfortunate people themselves than by, in all instances, granting a public inquiry into these cases. The House must bear in mind that this distressing malady is often the result of most accidental circumstances. It very frequently is not hereditary in its character, and does not recur when once it has been cured. Now, by one illustration I will show the House what would be the consequence of having a public inquiry in all cases. I will suppose that this malady comes upon a person in business from over exertion of the mind, from great anxiety, or, it may even be, from bodily or physical ailment. That person might, under existing circumstances, be cured within a few months, and it might be known to no one in the world that he had been afflicted with this malady; but if you once establish a public inquiry all will be known; the excitement of the patient will be very bad for him, and retard, if not prevent, his recovery; and when he returns to his business, he will go back with a suspicion of insanity upon him, and, as a consequence, I am afraid, subject to the mistrust even of his neighbours and relations. [*Hear, hear.*] The evil of such an inquiry would be increased tenfold when you applied such a proceeding to another class of cases, especially to those of the other sex. I think the House has four things for which to provide. It has to provide that there shall be a proper guarantee for the confinement of any person in the first instance; that the houses of reception for these unfortunate persons shall be suitable for the purpose; that they shall not be confined a week beyond the time when their recovery is clear; and lastly, that their treatment, whether curable or incurable, shall be the best which the wisest and most benevolent legislation can secure. [*Hear, hear.*] I point out these things because I wish the committee, to which this matter is likely to be referred, not to embark in a mere rambling inquiry [*hear, hear*], and, consequently, I propose to lay on the table of the House a Bill with reference to private asylums which will, I hope, secure all these objects. With reference to confinement, I think the law is, to a certain extent, defective; and what I propose by my Bill is, that no person shall be put in confinement at all without notice of the fact being sent to the commissioners within twenty-four hours. I also propose that the justices in different counties shall appoint medical examiners for particular districts, and that when the commissioners receive a notice that any person is put under restraint or into confinement, within a week, not the medical officer of the house, not any person sent down from London, but the medical examiner on the spot shall inquire into the case, shall report specially upon it, and shall place the whole matter before the commissioners. I then propose that, after that is done, the commissioners shall have power either to make their report upon that case to the justices of the county, or to call upon the superintendent or proprietor of the house in which the person is confined to give further explanations. With regard to the inspection of plans of private houses, the commissioners have no jurisdiction beyond the metropolis. I propose that the commissioners should have the power to report upon the plans of licensed houses, and to send them to the magistrates in the country, so that the latter may have the advantage of the central knowledge and experience of the commissioners, and may apply it to their own local wants. I am anxious to read an extract from the last report of the commissioners, which shows that some improvement in the law in regard to single patients is required. They say:—

"The condition of single patients has engaged much of our attention during the past year. The lists have been carefully revised; regular returns from the persons having charge of patients have been strictly enforced; and the country has been

divided into districts, so as to insure the regular annual visitation of all cases returned to our office. On the whole, the condition of the patients so visited cannot be described as satisfactory. As a general rule, the accommodation provided is quite incommensurate with the payments, which, in many instances, are very large. The necessity for our continued and regular supervision has been clearly established, and, in some instances, we have found cases of marked neglect. In two or three we have discovered that, besides the patient who has been regularly certified and returned to this office, the proprietors of houses have also had under their charge other persons of unsound mind, relative to whom no return whatever had been made. In these cases, although from the presence of circumstances of an extenuating character we have not deemed it proper to institute prosecutions for the legal penalties incurred, we have insisted, by way of warning to others against commission of the same or any similar offence, that the offenders should insert apologies in the daily and medical papers."

In order to insure greater vigilance of inspection, I propose that, in addition to four inspections in the year by the visitors on the spot, the commissioners should, by themselves, or by some person authorised by them, make three visits to each licensed house. I also propose that they should have the power of calling upon the proprietors to show the accounts relative to patients, in order that they may see that their allowance is properly applied to their maintenance. [*Hear.*] The fourth provision of the Bill has been framed to watch over all cases of lunacy, with the object of ascertaining that the patients are not confined a single day when they ought to be discharged. [*Hear.*] In the first place, finding, on the authority of all those best informed on the subject, that the cures which are effected are generally accomplished at the earlier stages of the disease [*hear, hear*], I propose that a commissioner should go down within three months after the confinement of a patient, and report specifically upon that case, independently of the other visits that he may be required to make. I propose also that in the course of the year, subsequent to the admission of each patient, the commissioner shall be required, when making one of his usual visits, to make a specific report upon the progress of that case, so that he may know the state and progress of that patient's malady from the period of his restraint to the end of the first year. I think also you ought to require that the proprietors of these houses should not be allowed to certify any person to be of unsound mind who is to be confined in any other licensed house—in other words, that you should take away from proprietors of licensed houses the power of favoring another licensed house, or of sending patients to each other. Another provision is, that the notice of recovery should not merely be sent to the friends of a patient, but that it should also be immediately sent to the commissioners, so that they may take action upon it. I hope by means of these and other provisions that we shall throw around these unfortunate persons every check and guard that can insure the propriety of the original confinement; secondly, the suitableness of the licensed house in which they are confined; thirdly, a more careful and vigilant treatment of each particular case; and, fourthly, the dismissal of the patient as soon as his recovery has been effected. We propose that power should be vested in the commissioners to allow the patient to be out on trial when the case admits, in order that it may be seen whether the restoration to liberty has any effect in promoting his recovery. If it should have no such effect, he may then be again confined. This provision is in one of the Acts of Parliament relating to lunatics; but has not yet been extended to those confined in private houses. I should desire to confine the inquiry so that it may embrace every practical object without leading the committee to embark upon a rambling investigation that can lead to no good result, and that must give pain to the friends of many of these unfortunate persons. [*Hear, hear.*] I should, therefore, propose that the resolution appointing the committee should be in the following words, which would equally effect the object the honourable gentleman has in view:—"That a select committee be appointed to inquire into the operation of the Acts of Parliament and the regulations for the care and treatment of lunatics." I propose, if the House will allow me to introduce the Bills of which I have given notice, to refer them to the select committee. I believe that my honourable and learned friend, the Solicitor-General, also contemplates referring to the Committee another Bill in reference to persons who have been found of unsound mind by inquisition under the Court of Chancery. The Committee will then have practical points before them, and if the effect of the inquiry should be to increase the comforts of these unfortunate persons—if it should improve their treatment—and, still more, if it should effect their recovery and secure their return to their families, I shall feel gratified that I have supported such an inquiry with such a hope. [*Cheers.*]

Mr. Drummond said he was glad to find that the inquiry would be extended to the condition of lunatics under the Court of Chancery.

Mr. Tite had no objection to adopt the amendment suggested by the right honourable gentleman. He was far from desiring a rambling inquiry, and was anxious that the Committee should report as soon as possible, in order that some legislative measure might be passed during the present session.

Mr. Packe hoped that the Committee would take into consideration the law and practice relating to criminal lunatics.

The motion, in its amended form, was then agreed to.

APPOINTMENT OF A MASTER IN LUNACY.

Mr. Clive asked the Chancellor of the Exchequer whether the right hon. gentleman was aware that Mr. Francis Higgins had been appointed a Master in Lunacy?

The Chancellor of the Exchequer. Sir, since this question was addressed to me yesterday, I have had a communication with the Lord Chancellor, in which that noble and learned lord informed me that he should not have appointed Mr. Francis Higgins to the office in question unless he had been thoroughly convinced of his competency to fulfil its duties. But the moment Mr. Higgins was apprised of what took place in the House of Commons yesterday, he resigned the office which had been offered to him. [*Cheers.*] Mr. Higgins took that step, not from any belief that he was unable to perform the duties of that office, but because, after what had occurred, it was not consistent with his feelings any longer to hold the appointment. I am bound to say that, in adopting that course, Mr. Higgins has acted with a due sense of self-respect, and consistently with the tenour of an honourable life.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Croft. On February 11th, at 13, Camden Road Villas, the wife of Robert C. Croft, Esq., Surgeon, of a daughter.

Hassall. On February 9th, at Richmond, the wife of Richard Hassall, M.D., of a son.

Knaggs. On February 14th, at Malden Place, Haverstock Hill, the wife of H. G. Knaggs, M.D., of a son.

Reid. On February 12th, at Pembroke, the wife of Douglas A. Reid, M.D., of a son.

Ross. On February 11th, at Bayswater, the wife of W. H. B. Ross, Esq., Her Majesty's Bengal Medical Service, of a son.

Sammutt. On January 26th, at Malta, the wife of *Joseph B. Sammutt, M.D., of a daughter.

Sharman. On February 9th, at Birmingham, the wife of *Malim Sharman, Esq., Surgeon, of a son.

Steggall. On February 9th, at 3, Queen Square, Bloomsbury, the wife of J. W. B. Steggall, Esq., Surgeon, of a daughter.

Sumner. On February 10th, at 25, Wellington Road, St. John's Wood, the wife of W. Allen Sumner, Esq., Surgeon, of a daughter.

Wilson. On February 14th, at Runcorn, the wife of *Henry Wilson, Esq., Surgeon, of a son.

MARRIAGES.

Bell—Fletcher. Bell, the Rev. John, rector of Brington, Hunts, to Lucy, daughter of *Bell Fletcher, M.D., of Birmingham, on February 15th.

Cresy—Spencer. Cresy, Theodore Grant, Esq., Surgeon, of Ticehurst, Sussex, to Hannah Jane, youngest daughter of Thomas Spencer, Esq., of Wrotham, Kent, on Feb. 9th.

Ferguson—Hill. Ferguson, C., Esq., only son of F. Ferguson, Esq., Surgeon, of High Hesket, Cumberland, to Miss Amelia Hill, of Stanwix, in the same county, at St. John's Church, Bayswater, on February 3rd.

Higman—Croft. Higman, Albert D., Esq., Royal Marines Light Infantry, to Eulalie Rose, third and youngest daughter of Jonathan Croft, Esq., late Army Medical Staff, of Sydney, New South Wales, at St. Marylebone Church, on February 10th.

McShane—Monk. McShane, Charles, Esq., Surgeon Royal Navy, to Jane, only daughter of the late Lieutenant J. M. Monk, R.M., of the Royal Hospital, Greenwich, at the Church of St. Aloysius, Somers Town, and at St. Pancras Church, on February 5th.

Murray—Woodall. Murray, Richard Henry, LL.B., barrister-at-law, eldest son of Thomas Murray, M.D., of Trinidad, to Georgina, youngest daughter of the late Robert Woodall, Esq., of Ardwick, Lancashire, at St. George's, Hanover Square, on February 2nd.

Neame—Spencer. Neame, —, Esq., of Northfleet, Kent, to Harriette, youngest daughter of the late Charles Spencer, Esq., Surgeon, of Ash, at Canterbury, on February 3rd.

Wardell—Piper. Wardell, John Richard, M.D., of 38, Mornington Road, Regent's Park, to Jane, fifth daughter of the late Robert Piper, Esq., formerly of Burgate Hall, Pickering, Yorkshire, at Pickering, on February 10th.

Warner—Maule. Warner, George Augustus Alves, Esq., 32nd Madras Native Infantry, to Louisa Caroline William, second daughter of John Templeman Maule, M.D., Superintending Surgeon Nagpore Force, at Christ Church, Kamptie, Madras, on December 28th, 1858.

DEATHS.

Allen, Paterson, Esq., Assistant-Surgeon F. troop Horse-Artillery, at Jheitpore, Bundelcund, aged 30, on December 23rd, 1858.

Annesley, Charles, M.D., late Surgeon Royal Scots Greys, at Cheltenham, aged 75, on February 2nd.

Devenish, Samuel, Esq., Surgeon, of Honiton, suddenly, on February 5th.

Handyside, Charles Baird, M.D., late of the H.E.I.C. Service, at the Louvre Hotel, Boulogne-sur-Mer, on February 2nd.

Lightfoot, Thomas, M.D., of apoplexy, while on duty at the Royal Artillery Hospital, Woolwich, on February 4th.

Seager. On November 22nd, 1858, at Attock, Anne Clarissa, wife of Captain Thomas Seager, and daughter of the late Samuel Plumbe, Esq., Surgeon.

Scott, Alexander, M.D., at Slough, aged 79, on January 31st.

Spence, John, Esq., Surgeon, of 37, Upper Marylebone Street, aged 47, on February 2nd.

Spilsbury. On January 30th, at Lower Norwood, Ann, widow of the late George Spilsbury, Esq., Surgeon, aged 56.

Terry. On February 11th, at Northampton, Mary Ann Stona, eldest child of *Henry Terry, jun., Esq., Surgeon, aged 10.

Thomas, William, M.D., formerly Surgeon of the 67th Regiment, at Wakefield, on December 2nd, 1858.

Wolseley, William Augustus, M.D., late Staff-Surgeon Turkish Contingent, at Edinburgh, on February 13th.

APPOINTMENTS.

Gowland, Peter Y., Esq., appointed Surgeon to St. Mark's Hospital.

Lane, James R., Esq., appointed Surgeon to St. Mark's Hospital.

*Lowe, Septimus, Esq., appointed Surgeon to the Lincoln County Hospital, in the room of *James Snow, Esq., resigned.

*Snow, James, Esq., appointed Consulting Surgeon to the Lincoln County Hospital, having filled the office of Surgeon to that Institution for nearly fifty years.

Storrar, John, M.D., appointed, by the Queen, a Member of the Senate of the University of London.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, February 11th, 1859:—

Barratt, Oglethorpe Wakelin, Birmingham
Binns, Weldon Henry, Covington, Kimbolton, Hunts.
Bramah, Thomas Joseph, London
Chenhalls, William, Land's End, Cornwall
Coward, William, South Shields
Maltby, John Westbrook, Durham
Martyn, Richard Westcott, Martock, Somerset
Mayor, Thomas Orlando, Bristol
Powell, Alfred John, Southwark
Ramsden, Walter Henry, Royton, near Oldham
Strong, Septimus, Upper Tooting
Thomas, George Frederick, Philadelphia
Thornhill, John, Gateshead
Watts, John, Haverfordwest

Licentiates in Midwifery admitted at a meeting of the Board, on February 9th:—

Bensley, Edwin Clement, Calcutta: diploma of membership dated November 5th, 1858
Bilderbeck, John, Madras: December 20th, 1858
Gutteridge, Edwin Parker, Brighton: April 28th, 1856
Gwynne, Thomas, Brecon, South Wales: Jan. 19th, 1859
Horton, Henry, Wednesbury, Staffordshire: Jan. 14, 1859
Ince, Eugene Seys, Wilton Street, Belgravia: November 7th, 1856
Jones, George, Newhall Street, Birmingham: March 9th, 1838
Jones, Thomas, Colt Street, Limehouse: Oct. 24th, 1856
Leach, James, Shaw, near Oldham: January 14th, 1859
Sutton, William, Smethwick, near Birmingham: February 7th, 1859
Watson, John, Southampton Street: Dec. 20th, 1858

Apothecaries' Hall. Members admitted on Thursday, February 3rd, 1859:—

Adams, Joseph Dixon, Martock, Somerset
Call, Thomas James, Yorkshire
Cunningham, Charles Lennox, Hailsham, Sussex
Dee, John, Royal Mail Service
Godrich, Thomas, Chichester Road, Westbourne Terrace
Kibbler, Richard Commander, Duncan Place, London Fields, Hackney
Robinson, Augustus, Annapolis, Nova Scotia

The following gentlemen also, on the same day, passed their first examination:—

Barter, Clement Smith, Bath
Read, Samuel, Hemel Hempstead

Thursday, February 10th:—

Collins, Edward Stephens, Stalbridge, Dorset
Copestake, Walter, Kirk Langley, Derby
Dandy, Thomas, Rufford
Hilditch, John, Sandbach
Owen, Owen, Leamington
Pearce, Charles, Watham, Peterborough

The following gentleman also passed his first examination:—

Harrison, Reginald, Stafford

HEALTH OF LONDON:—WEEK ENDING FEBRUARY 12th, 1859.

[From the Registrar-General's Report.]

The deaths registered in London, which in the previous week had fallen to 1243, were 1274 in the week that ended last Saturday, showing an increase, but not of considerable amount. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1180; but as the deaths returned for last week occurred in a population which has increased, they can only be compared with the average raised proportionally to the increase; namely, 1298. The actual number of deaths last week was therefore rather less than the number obtained by calculation.

The deaths arising from scarlatina and diphtheria continue slightly on the decrease, the numbers from the two diseases together in the last three weeks having been 113, 92, and 89. Nineteen deaths from diphtheria occurred last week in the following sub-districts:—one in St. John, Paddington; one in Hanover Square; one in Belgrave; two in Christchurch, Marylebone; one in Kentish Town; two in Islington West; one in Islington East; one in Stamford Hill; one in St. Giles North; one in St. George, Holborn; one in Holywell, Shoreditch; one in St. Leonard, Shoreditch; one in Hoxton New Town; one in Haggerstone West; one in Spitalfields; one in Kent Road; and one in Battersea. It appears that all, except two, occurred on the north side of the river. The indications of an increase of small-pox, which the reports of recent weeks have contained, are now very decidedly confirmed, the deaths from this disease having risen last week to 29. Twenty-four of these occurred in the central and east districts, the parts chiefly infested being situated in the sub-districts of Finsbury, Whitecross Street, East and West Haggerstone. The registrar of Finsbury recorded no less than six deaths from small-pox last week, two of these in a family at 19, Cowper Street. He

states that an unusual number of children are suffering from this complaint in Paradise Place and Cowper Street, that the locality is well paved and drained, but lies rather low, and that the habits of the poor people who occupy it are very dirty.

Of seven nonagenarians, whose deaths were registered last week, six were 90 and 91 years of age, and a woman was 96 years.

Last week the births of 898 boys and 856 girls, in all 1754 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1713.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·353 in. The barometrical readings varied from 29·15 in. on Sunday to 29·69 in. on Saturday. The mean temperature of the week was 42·4°, which is 3·5° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature rose considerably above the average on the last four days. The thermometer fell to 30·8° on Tuesday, the lowest point in the week, and rose to its highest point, 52·2°, on Saturday. The range of the week was therefore 21·4°. The mean daily range was 11·4°. The difference between the mean dew-point temperature and air temperature was 3·6°. The mean degree of humidity of the air was 89. The wind blew almost every day from the south-west. Rain fell to the amount of 0·48 in.

THE POOR-LAW MEDICAL RELIEF SCHEME: DEPUTATION TO THE POOR-LAW BOARD.

On Wednesday, February 9th, a numerously attended deputation of the medical officers of the City and Metropolitan Unions waited, by appointment, upon the Right Hon. T. Sotheron-Estcourt, M.P., the President of the Poor-law Board, at Gwyder House, Whitehall, for the purpose of laying before him a memorial and a series of resolutions agreed to at a meeting of medical officers, with reference to the proposed new scheme of the Poor-law Board for a suggested new arrangement of medical relief. The deputation was introduced by Lord John Russell, and was attended by Sir James Duke, Bart., M.P.; Sir John Villiers Shelley, M.P.; Sir Charles Napier, M.P.; R. W. Crawford, Esq., M.P.; Charles Salisbury Butler, Esq., M.P.; John Brady, Esq., M.P.; A. S. Ayrton, Esq., M.P.; John Locke, Esq., M.P. The deputation consisted of J. G. Sparke, M.D. (London City); W. E. Jeffreys, Esq. (St. Pancras); G. G. Lowne, Esq. (St. Mary, Newington); J. G. Gerrans, Esq. (St. Marylebone); J. W. Hooper, Esq. (Camberwell); Robert Fowler, M.D., Hon. Sec. (London, East); R. H. Whiteman, Esq. (Wandsworth and Clapham); H. Blenkarne, Esq. (London City); G. E. Nicholas, Esq. (Wandsworth and Clapham); S. J. Burt, Esq. (London, West); Nicholas Miskin, Esq. (Lambeth); H. Sutherin, Esq., (St. Pancras); George Ross, Esq. (London, West); Charles M. Frost, Esq. (Kensington); J. B. Guazzaroni, Esq. (Kensington); C. F. J. Lord, Esq. (Hampstead); Benjamin Brookes, Esq. (Strand); L. M. Goddard, Esq. (Clerkenwell); James Leonard, Esq. (St. Martin's-in-the-Fields); Thomas K. King, M.D. (Camberwell); J. G. French, Esq. (St. James, Westminster); Thos. Hodgkin, M.D. (formerly Chairman of the Committee of Poor-law Medical Officers); Edwin Chabot, Esq. (St. George's, Camberwell); and John Elliott, Esq. (City of London Union).

Lord John Russell said, that the gentlemen forming the deputation had asked him to do that which, however, he felt, was unnecessary; namely, to introduce them to the Right Hon. the President of the Poor-law Board. He was quite sure that the important subject upon which they had waited upon the President would meet with the attention it deserved, and which they were so justly entitled to for the skill and ability which they devoted to the sick poor of the metropolis. It happened that, some years since, his own attention had been called to the subject of medical relief, and from that time he had remained convinced that the poor of the country obtained, in medical and surgical attendance, an article at a price far below what it was worth, if paid for according to its real value in the market. He had nothing to say in respect to the subject upon which they had waited on the right hon. gentleman to discuss, but he would at once introduce Dr. Sparke, of the City of London Union, and Mr. Ross, of the West London Union, who would more definitely state the object of their visit.

Dr. Sparke said, that the medical officers of the City Unions had been in the habit of meeting together, in times of epidemic, to compare their experiences, and determine upon a common course of conduct. They had adopted that course in respect to the heads of a scheme for a new arrangement of medical relief, which had been put forward by the Poor-law Board. On the 13th of January last, a public meeting of the members of the medical profession was convened at the Freemasons' Tavern; and they very carefully considered the proposals of the scheme, and a series of resolutions were adopted. The gentlemen now present had come to present to the right hon. gentleman the result of their deliberations on the subject. They were unanimously and uniformly united as to the justness as well as the expediency of the appointment of a Poor-law medical officer being a permanent one; and, with respect to the metropolitan officers, that, without a fixed salary, they could not be fairly and equitably remunerated; leaving the provincial towns and rural districts to be regulated in accordance with the judgment of the Poor-law Board. Then the third point on which they were also unanimous was, that there should be only one medical officer to each district, which they were of opinion would be much better for all purposes. They were of this opinion, whatever reason there might be for dividing the districts when they were too large. Having thus briefly stated their opinion, he would ask Dr. Fowler, the Hon. Secretary, to read the memorial.

Dr. R. Fowler then read the memorial: it embodied the resolutions passed at the meeting referred to by the last speaker, which have already appeared in this Journal.

The President. Before any other statement is made, I wish to set myself right with the deputation in reference to a passage which occurred in the circular letter of my private Secretary. I think the words in question have been rather harshly construed; for, when it was stated that the proposed scheme was intended to improve the present system, by conducing to a more careful attendance upon the sick poor, I was not reflecting on the medical profession generally, or on such members of it as are interested in the administration of medical relief, and who, I know, faithfully perform their duties; but I should not think myself justified in proposing to Parliament any scheme that does not contain provisions for securing to the poor all the improvement which can possibly take place in their treatment. My aim was to meet your views, so far as they are compatible with the interests of the guardians and the poor. [*Hear, hear.*]

Mr. George Ross was sure that the Poor-law medical officers were gratified to hear the right hon. gentleman express his opinion that they did discharge their duties; and their common feeling now was to expunge the resolution at which they had arrived upon a misconception of his opinions with respect to them. But he hoped that he would make some allowance for their susceptibility in a matter which they thought reflected upon them. It was unnecessary for him to go into statistics, as, within the last few days, a return had been published giving the most ample details with respect to the salaries of the Poor-law medical officers, the number of patients, and various other statements connected with the administration of medical relief. The average remuneration for each case attended to in the metropolis was one shilling and three farthings; and it was calculated that each case remained on the hands of the medical officer for three weeks, and often requiring daily attendance. He considered that that was a preposterous and an inadequate payment; when, in those unions where the drugs were provided by the guardians, the payment per case *for drugs* alone was one shilling and sixpence halfpenny. There was no doubt that, in many cases, the appointments were held for incidental advantages; but still it was not right for the Government to ask persons to perform services so inadequately paid for. They were there to ask for an accession to the salaries of such gentlemen who were employed under the Poor-law Board, and that something should be done to compensate them for what was actual expenditure. The scheme, therefore, did not meet with their concurrence; but still they recognised in it a conscientious desire to meet the demands of the profession. At the same time, they thought that the scheme was rather complicated; the complication having arisen from a desire to do as much justice as possible. They wished to adhere to the rule with respect to salaries recommended by the Poor-law Commissioners in 1839. They approved then of the principle of a fixed salary, based on a calculation of the number of cases attended; and this, they contended, was the most equitable way of settling the matter. They had no objection to those salaries being revised every three years, but they considered it indispensable that the appointment should be permanent. They also thought that there should only be one medical officer to each district, as the appointment of two to each district would lead to ill-feeling

and animosity amongst medical men, and would lead to misunderstanding between them. This they considered very important, as it would be attended by the disadvantage that, in order to increase the number of their cases, they would compete for the favour of the paupers; and the ratepayers would have to bear the expense of the supply of meat, bread, etc., to the patients.

The President. Do I understand the deputation rightly, that you wish to retain the principle of permanency in the appointment, and to have the salary regulated by the cases that are attended?

Mr. Ross. Precisely so.

The President. I do not wish to imply that the medical officers would trump up cases to increase their salaries; but Parliament has so strong an objection to such a system, that it would be impossible to agree to it. I do not think you clearly understand the scheme. I propose that the salary shall be based on three elements of calculation, two of which would be operative in every case. These elements are—first, the amount of population; secondly, the number of cases attended to; and then thirdly, the mileage, an element which will not come into calculation in the metropolis, but which will be a very important consideration in determining the salaries in the country. It does not propose that the salary should be changed year after year, but that it shall be regulated every three years, and that 1*s.* 6*d.* each case should be the item of remuneration. I should like to know whether these principles meet your views.

Mr. A. S. Ayrton, M.P., said he would call the attention of the right honourable gentleman to the disparity between the extent of relief administered in the metropolis and the Lancashire district. In Lancashire, with a larger population than the metropolis, the number of cases attended was not half those which the medical officers of the metropolitan unions attended. The amount of pauper population was therefore not a basis that could be relied on. He thought it would lower the status of the profession if they were exposed to the temptation of getting up as many cases as possible.

Mr. Ross begged leave to differ with Mr. Ayrton, and reiterated his opinion, that the number of cases was the fair calculation, and instead of the item of remuneration being 1*s.* 6*d.*, it ought to be at least 5*s.* [*Hear.*]

Sir John Shelley remarked as to the third part of the scheme, namely, that the "guardians shall appoint (if possible) two medical officers for each parish in their union, between whom the poor, when sick, shall be allowed to make choice," etc., that they would have the medical officers courting the favour of the paupers, and would be ordering the paupers "mutton and porter, mutton and porter." [*A laugh.*] He begged leave to call the right honourable gentleman's attention to that, as he did not conceive that any good could come of their laying down such a rule.

Mr. Brady, M.P., agreed that the three elements should be considered in any regulations of the medical salaries. He thought that, as regards the workhouse, where the pauper inmates were under 200, the salary of the medical officer should be £50 per annum; above 200, but under 400, it should be £80 per annum; and £5 per annum for every 100 beyond that number. He would raise the scale of remuneration for each case from 1*s.* 6*d.* to 2*s.* 6*d.* He was opposed to any restriction being put upon medical men in prescribing nourishing food for their patients, as meat cured where physic would not. [*Hear, hear.*] Neither in our army or navy, nor in our hospitals was any restriction placed upon the medical officer as regards the quantity of meat, wine, etc., he thought proper to order.

Sir Charles Napier, M.P., completely confirmed what Mr. Brady had stated in reference to the army and navy.

Mr. Goddard disagreed from that part of the scheme which proposed to give to the guardians as well as the relieving officers power to issue orders for medical relief.

After some other remarks—

The President said he felt that the preponderance of feeling was in opposition to his scheme. He therefore wished the deputation to understand that he should not think of proposing for legislative adoption any plan on which he had not obtained a full and correct opinion out of doors; his desire being not to bring forward any scheme on the subject which did not have the concurrence of the medical profession, the guardians, and the poor themselves.

Dr. Sparke thanked the right honorable gentleman for the kind and courteous manner in which he had received the deputation, and the interview terminated.

EPIDEMIOLOGICAL SOCIETY: DIPHTHERIA COMMITTEE.

A Committee, consisting of Dr. Babington, F.R.S. (President of the Society), Dr. McWilliam, C.B., F.R.S., Dr. Milroy, Dr. James Bird, Dr. Seaton, Dr. Camps, Dr. Murchison, and Messrs. Ernest Hart and J. N. Radcliffe,—has been appointed by the Epidemiological Society, to collect information and report upon the epidemic of diphtheria which is prevalent at the present time in several districts of England. The Committee, in carrying out the duties assigned to them, solicit the co-operation not only of the different members of the Society throughout the kingdom, but also of those professional gentlemen, not members of the Society, who may have had an opportunity of observing the disease, or who may be able otherwise to aid in carrying out the objects of the inquiry.

In order to secure uniformity of character in any reports upon the disease with which the Committee may be favoured, they make the following suggestions:—

I. It is requisite that the term *diphtheria* should have attached to it one and the same signification by different reporters. Diphtheria is a synonyme of the word *diphtherite*, which was originally adopted by Bretonneau to designate a peculiar form of disease affecting the mucous membrane or the skin, and which is characterised by the formation of a false membrane. Among other examples of diphtheric affection, Bretonneau included *cancrum oris*, *croup*, and *inflammation of the throat accompanied with the formation of a false membrane*; but in this country the use of the term diphtheria has been restricted to the last affection, the chief characters of which are described by Dr. Copland in the following words:—"The tonsils, the velum palati, the pharynx, either successively or at the same time, present irregular patches of a yellowish, buff or greyish-coloured exudation on the inflamed surface. These patches enlarge, coalesce, and extend to the nasal fossæ, or to the larynx, with the usual symptoms of primary *croup*, and often also to the œsophagus. In adults, the disease often commences in the nasal fossæ, and extends to the pharynx." (*Dict. of Practical Medicine*—Art. *Throat.*) The committee suggest that, unless the peculiar pseudo-membranous formation be present, the term *diphtheria* should not be used; for if this restriction be not adopted, the term will be deprived of all precision, and it will be impracticable either to collate reports from different districts, or to determine the relation of the disease to other forms of throat-affection.

II. The committee, also, would suggest that the attention of medical men should be directed to the existing state of throat affections in those districts where *diphtheria* has not yet appeared. It is most important, in endeavouring to elucidate the etiology of an epidemic disease, to watch the progress and character of cognate affections in districts where the epidemic has not become manifest, and to be on the look out for the first traces of it. Often the earliest (and scientifically, perhaps, the most important) manifestations of epidemic disease are lost sight of from the want of this anticipatory observation.

III. The Committee, further, suggest that the following questions should be made the foundation of any report with which they may be favoured, and that they should be dealt with in the order given.

1. State the date of the first case of diphtheria which came under your observation, or, if practicable, the date of the first case which occurred in your district.

2. Has diphtheria ever prevailed in the district, within your knowledge, previous to the present epidemic?

3. What was the prevailing character of the throat affections which occurred contemporaneously with diphtheria, or, that disease being absent, what has been the character of the throat affections which have come under your observation recently; have those affections prevailed to a greater or less extent than in previous years, and have any of them been contagious?

4. State what facts you have observed, and what conclusions you have formed respecting the *contagiousness* or *non-contagiousness* of the disease; and if the disease be contagious, what, according to your observation, is its period of incubation or the interval of time between the exposure to contagion and the appearance of symptoms?

5. State what facts you have observed respecting the occurrence of diphtheria in connection with *scarlet-fever*.

Note.—Whether any patient with diphtheria has ever had a previous attack of scarlet-fever, or ever been in communication with any one suffering from that disease, and

whether those members of the same family who escaped diphtheria, have, or have not had scarlet-fever; also, whether you have ever observed the co-existence of any cutaneous eruption with diphtheria, and if so of what description has the eruption been, and at what period of the disease did it occur.

6. What were the sanitary conditions of the dwellings in which diphtheria occurred?

7. Have any particular classes of persons, or those engaged in any particular occupations, been more affected by the disease than others?

8. Give what meteorological data you possess bearing upon the development and progress of the disease.

9. Describe briefly the locality in which you have observed the disease, in respect to altitude above the sea, configuration of surface, geological formation, proximity to the coast or large rivers, cultivation and drainage, and the general character and principal occupations of the inhabitants.

10. What were the ages, and what the sex of those you have visited in the disease, and what age do you consider most liable to it?

11. What were the symptoms which you observed on the invasion of the disease, in its course, and towards its termination? State also its duration.

12. Was the urine examined chemically or microscopically at any period of the disease, if so, at what period or periods, and with what results?

13. Was the false membrane examined microscopically and its appearance compared with those of the exudations or secretions accompanying other forms of throat affection prevailing at the same period, and with what result?

14. What has proved in your practice the most successful treatment in the different stages of the disease, and if tracheotomy has been performed in any case, state the result?

15. What was the proportion of deaths to recoveries, and what were the time and mode of death in each case?

16. Describe what you have found on *post mortem* examination, (1) as regards the parts which are the seat of diphtheric disease—the pharynx, the trachea, the larynx, etc.; (2) as regards other organs, especially the kidneys.

It is requested that reports and communications for the Diphtheria Committee be forwarded to the Secretary of the Committee, Mr. J. N. Radcliffe, 32, Guildford Street, Russell Square, W.C.

Obtaining a Diploma under False Pretences. On February 9th, Mr. Edward Protheroe and Dr. Evans Reeves, both of London, were indicted before the Commission in Dublin for obtaining, under false pretences, a diploma from the King and Queen's Colleges of Physicians in Ireland. The counsel for the defence having intimated that the case had been arranged with the consent of the crown, it was deemed advisable the traversers should plead guilty and be freed from their recognisances. The Solicitor-General (Mr. George, Q.C.) stated that the crown had agreed that the case should be settled as the counsel for the prisoners had stated. Though a diploma or degree had been obtained under false pretences, yet it should be remembered that this could be of no possible use to the prisoners, and that it was at present in the custody of the police, by whom it would be restored to the college. Under these circumstances, and although the crown were ready to prove the case, they thought that, considering the length of time for which Mr. Protheroe and Dr. Reeves had been in custody, and the injury done to their prospects and character by the charge, they had been sufficiently punished; and it was accordingly agreed not to press for severe punishment, but to permit the prisoners, upon pleading guilty, to be discharged, having entered into recognisances to appear for judgment when called on. He thought that the counsel for the defence had shown a wise discretion in advising this plea of guilty. He hoped such an offence would not again be committed. A new Act had lately come into operation, in which the status of the King and Queen's College of Physicians was recognised, and in which stringent punishments were provided to be inflicted on any party who should cause false registration or obtain a diploma under false pretences. On these grounds, and as the college authorities seemed to believe the character of the college would be sufficiently respected, and justice vindicated by the course it was proposed to adopt in this case, he agreed that the prisoners should be discharged from custody.

Baron Richards said, that as the crown had agreed to the arrangement of the case, he would not question the propriety of the course which had been adopted, and he must say that he believed the prisoners had been very well advised. The offence which had been committed he considered to be one of a very serious nature.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Mr. J. V. Solomon; Dr. G. Harley; Dr. R. U. West; Dr. Oke; Mr. T. Holmes; Dr. W. B. Mushet; Mr. J. G. Appleton; Dr. Barclay; Mr. J. Z. Laurence; Mr. T. M. Stone; Dr. J. O'Bryen; Dr. A. P. Stewart; Every One to his Trade; Mr. J. A. Hingeston; Delta; Messrs. Wybrants & Craddock; Dr. Jonathan Wybrants; Mr. G. B. Masfen; Mr. J. N. Radcliffe; Mr. F. D. Fletcher; An Associate; Mr. H. Terry, jun.; Mr. J. Ingram; Dr. McWilliam; Mr. H. Thompson; Mr. W. Copney; Mr. O. Pemberton; Dr. Gibb; Mr. G. Southam; and Dr. J. Russell.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Prevention and Treatment of Mental Disorders. By G. Robinson, M.D. London: Longmans. 1859.
2. Chemistry for Schools. By Dionysius Lardner, D.C.L. With 170 Illustrations. London: Walton and Maberly. 1859.
3. The Diseases of the Stomach: with an Introduction on its Anatomy and Physiology: being Lectures delivered at St. Thomas's Hospital. By *William Brinton, M.D. London: Churchill. 1859.
4. On the Treatment of Anchylosis, or the Restoration of Motion to Stiff Joints. By Bernard E. Brodhurst. Second Edition. London: Churchill. 1859.
5. Practical Observations on the Operations for Strangulated Hernia. By *J. H. James, F.R.C.S. London: Churchill. 1859.
6. Veterinary Medicines: their Actions and Uses; with a copious Appendix on the Diseases of the Domesticated Animals. By Finlay Dun, V. S. Second Edition. Edinburgh: Sutherland and Knox. London: Simpkin, Marshall, and Co. 1859.
7. The Irritable Bladder: its Causes and Curative Treatment. By Frederick James Gant. London: Churchill. 1859.
8. Lectures on Chancre, delivered by M. Ricord, Surgeon to the Hôpital du Midi, Paris. Published by M. Fournier, with Notes and Cases, and Translated from the French by C. F. Maunder. With Remarks on Perinæal Section of Stricture of the Urethra, by the Translator. London: Churchill. 1859.
9. A Treatise on Human Physiology, designed for the Use of Students and Practitioners of Medicine. By J. C. Dalton, Jun., M.D. With Two Hundred and Fifty-four Illustrations. Philadelphia: Blanchard and Lea. 1859.

ADVERTISEMENTS.

Just published, price 1s. 6d.

An Essay on the History, Pathology and Treatment of DIPHTHERIA. By EDWARD COPEMAN, M.D., Physician to the Norfolk and Norwich Hospital, Lind Hospital for Children, etc.
Norwich: Henry W. Stacy, Old Haymarket. London: John Churchill.

Post 8vo, 4s.

Science and the Higher Sentiments, with a Chapter on the Relations of Medical Life. By WILLIAM HINDS, M.D.
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London: John Churchill, New Burlington Street.

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The Anatomy of the Liver. 8vo. 6s. 6d.

The Archives of Medicine. Edited by Dr. BEALE. Half-Yearly. Nos. I, II, and III. 3s. 6d. each.
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BRITISH MEDICAL JOURNAL:

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

I. EXCISION OF THE KNEE WITH A SINGLE INCISION.

Under the care of W. FERGUSSON, Esq.

[*From Notes by* J. WALTERS, ESQ., *House-Surgeon.*]

H. F., aged 8 years, living in one of the suburbs of London, was admitted into King's College Hospital, under the care of Mr. Fergusson, on August 6th, 1858, suffering from disease of the left knee-joint. The patient was a fair-haired strumous-looking child: he stated that his knee had been affected nearly all his life, and that he had never been able to walk without crutches, but that the most of his time had been spent in bed or on a couch. The knee had been frequently blistered and painted, but with no good result.

On admission, the left knee was considerably swollen, and had lost its natural prominences: it was in a semiflexed position, and allowed of very limited motion. The leg, with the foot, was somewhat everted. The swelling was elastic to the touch, and exquisitely painful; the joint allowed more lateral motion than natural; the whole limb was somewhat wasted, but not so much as might have been expected, from the little use the boy made of it. On the inner side, just below the head of the tibia, there was an elastic swelling, which Mr. Fergusson opened, and gave exit to a large quantity of sero-purulent fluid. The abscess, which extended upwards by the side of the joint, continued to discharge freely up to the time of the operation, which was performed on August 14th. Chloroform having been administered, Mr. Fergusson made a transverse incision across the joint, just below the level of the lower border of the patella, and divided the structures down to the joint. On the leg being further flexed, the tissues were readily separated from the ends of the femur and tibia; and the saw was easily applied to them, and a slice taken off each. The patella was then dissected out. The leg came into capital position, and was put on the usual back splint before the boy was removed from the theatre. The synovial membrane was pulpy and gelatinous, and the articular surfaces of the bones were at some points much roughened, and at others denuded of their cartilage.

Mr. Fergusson remarked, that he had adopted a modification of the usual operation in this case; viz., by removing the ends of the bones forming the joint by a single transverse incision through the soft parts; and, in doing this, he had met with no difficulty.

The boy progressed favourably. The wound healed almost by the first intention. The abscess, however, still discharged; and, from its position, the orifice was readily blocked, and therefore required dressing several times during the day.

October 19th. A gutta percha splint was substituted for the ordinary excision-splint; and the little fellow from this time began to walk about the ward on crutches.

October 28th. He left the Hospital, wonderfully improved in health. The difference between the two limbs was an inch and a quarter. The union between the bones was becoming much firmer every day.

II. DISEASE OF THE KNEE-JOINT: EXCISION: RECOVERY, WITH USEFUL LIMB.

Under the care of W. BOWMAN, Esq.

Wm. G., aged 17, a pale strumous lad, living in the country, was admitted with disease of the knee-joint, under the care of Mr. Bowman. In early life, he suffered from glandular enlargements in the neck. When ten years old, an abscess formed on the inner side of the left knee, which was cured by a long sojourn at the seaside. In January last, the knee became swollen for the second time, and two abscesses formed on the outer side of the joint, which were discharging on admission. The knee was then much enlarged, the swelling being for the most part solid, and not from effusion: its shape was globular. The leg was almost at right angles with the thigh, and very little motion existed in the joint. There was but slight tenderness, except on moving it; and then grating was felt between the ends of the bones. The patella was moveable without any grating. There were two orifices behind the head of the fibula, which led down to bone. The knee was strapped, an interval being left open, corresponding to the discharging sinuses; and the limb was placed on a McIntyre's splint and swing. He was ordered to take iodide of potash and cod-liver oil.

March 3rd. The sinuses were laid open, as they seemed to be burrowing. Pain and tenderness now set in, accompanied with heat of skin, quick pulse, and furred tongue. The strapping was removed, and the knee well fomented.

Fluctuation became very obvious on the inner side of the joint; and Mr. Bowman made an opening, which gave exit to a quantity of purulent synovia. A blush appeared over the knee, and the superficial veins were very prominent. The splint had to be removed. The pain and swelling continued, and two more openings were subsequently made, one on either side of the ligamentum patellæ: these caused great relief, and the patient was enabled to get some sleep. The matter evacuated was of dark colour, and very offensive.

The boy's health gradually improved, and the wounds began to cicatrise; and, on April 6th, it is noted that grating between the bones was very evident, and that he could not move his leg without assistance.

May 22nd. The least movement still caused pain; and, within the last few weeks, the leg had become more bent on the thigh. The general health was much improved. Mr. Bowman determined to excise the joint. Accordingly, the boy was rendered insensible by chloroform. The joint was opened by the H incision, and a slice was taken off from the femur and tibia. The former involved nearly the whole thickness of the condyles, and the latter was about three-quarters of an inch in thickness. The section of the tibia went through a cavity containing a soft gelatinous substance. The portion that remained on the exposed surface of the tibia was freely gouged. The patella was then dissected out. The limb came into capital position, without any tension of the parts; and was placed on the usual back splint. The articular surfaces of the bones forming the joint were in a carious condition. The synovial membrane was represented by a soft, pulpy, and gelatinous tissue.

The boy bore the operation very well, and began very soon to improve in health. The limb was kept on the same splint for one month, without being once taken off. The wound by that time had healed, excepting at one or two places. Before he left the Hospital, which was in the early part of August, he was enabled to get about with one crutch, the limb being supported by a gutta percha splint.

January 1859. The lad can now walk about with the help of the stick, with a very little limp. There is still a little motion in the knee. All the wounds have healed, and the cicatrices bear manipulation without the slightest sign of tenderness. His health is much improved.

Original Communications.

SCARLATINA, AND ITS TREATMENT.

By T. E. Ruttledge, M.R.C.S., etc. (late House-Surgeon at the London Hospital), Dartford, Kent.

The recent prevalence of scarlatina in the metropolis, and in many rural districts, has called attention to the treatment of this disease.

Unfortunately the term scarlatina, derived from the Italian word *scarlatta*, has induced the public, and sometimes even medical men, to look upon the scarlet rash as the essence, rather than a symptom or merely local manifestation of this disorder.

Scarlatina is the effect of a certain morbific poison received into the blood, which has produced an infectious and contagious disease, and the scarlet rash is a means of elimination which nature adopts to rid the system of a noxious agent.

One of the generally received doctrines of physiology teaches, that when a poison has entered the circulation, a specific effect follows, and that a certain distinct process is required for its excretion. The specific effect of poisons is very evident. Lead always produces muscular paralysis, mercury ptyalism, the poison of measles never fails to produce measles, and the imbibition of the poison of scarlatina is always followed by scarlatina. That a distinct process is required for the elimination of a poison is equally manifest. We see the selective affinity which the poison of typhoid fever has for the solitary and aggregate glands of Peyer. The skin, the conjunctival and bronchial mucous membranes, are the chosen emunctories for the poison of measles, the poison of scarlatina is eliminated by the skin, the tonsils, the pharyngeal mucous membrane, and the kidneys.

Much misconception has arisen from the use of a number of terms relating to one disease, such as *scarlatina simplex*, *scarlatina anginosa*, *scarlatina maligna*, and *scarlatina latens*. These variations of degree, not of kind, confound the student and impede a clear knowledge of the pathology of an important disease. All these various effects may, doubtless, be traced to the intensity of the poison, the condition of the patient at the time of infection, and the hygienic means made use of to facilitate the excretion of the materies morbi.

The treatment of scarlatina, therefore, resolves itself into a problem. Given a patient infected with a certain poison, it is required to promote the elimination of that poison *tutò, citò, et jucundè*.

There is no antidote for the poison of scarlatina; nor can the disease be cut short.

In a large proportion of the cases, which come under the notice of the practitioner, little or no medicine is required. Sydenham cautions his reader as to the *nimia medici diligentia*. We are merely required to place the patient in the position best suited to facilitate the elimination of the poison; and, though by the absence of officiousness, we may seem to deserve the sarcasm of Voltaire, "that the doctor stands by and amuses whilst nature cures the patient," we must, nevertheless, remember that we are the assistants, not the substitutes of nature.

About eighty per cent. of the cases of scarlatina will be found in children. In accordance with the principles of treatment enunciated, the patient should be requested to remain in bed, a temperature of about 65° Fahrenheit being preserved, the diet consisting of beef tea and milk, with cold water to quench thirst *ad libitum*. As it is needful to yield somewhat to popular prejudice, the practitioner may prescribe a little acetate of ammonia, or if the epidemic be of an extremely adynamic type, some sesquicarbonate of ammonia. Under this mode of treatment the majority of cases will be convalescent in a week or ten days. But if the poison has been more intense, if the patient was delicate and the *vis vitæ* diminished the cutaneous excretion of the poison may not be sufficient. The tonsils will now be seen enlarged, and the mucous membrane of the fauces injected, and of a bright red colour; patches of lymph will likewise be visible upon the tonsils and palate; if these be removed, depressions are evident, showing ulceration; in fact, there are all the phenomena of inflammation in a mucous membrane.

The indications of treatment are now of an active nature—counterirritants to the angle of the jaw, as blisters, or the application of the thermic hammer, together with the free use of a saturated ethereal solution of nitrate of silver to the tonsils. The use of leeches is contraindicated. If the blisters are applied in the early stage, the patient will probably escape an extension of the inflammatory process to the lining membrane of the Eustachian tube, and consequently also a troublesome form of otitis. The use of counterirritants, likewise, is the best preventive of that arachnitis which sometimes supervenes in severe cases. The patient should be supported with a nutritious diet, beef-tea, port wine, and the *mistura vini gallici* of the London *Pharmacopœia*—a useful combination of the nutritive and stimulant elements. In the use of stimulants, it is well to bear in mind the advice of Ovid—

"Data tempore prosunt,
Et data non apto tempore vina nocent."

In this stage, the use of sesquicarbonate of ammonia is beneficial, not from any specific effect, but solely because it is a diffusible stimulant.

Another feature of this disease arises where the kidneys are chosen as the emunctories of the scarlatinal poison. Anasarca, the result, as shown by Dr. G. Johnson, of acute desquamative nephritis, usually appears about three weeks from the commencement of the disease. In the majority of cases of scarlatinal dropsy, the cutaneous eruption has been slight, and consequently the patient has been exposed to cold.

The great object of treatment is to relieve the renal eliminative action. This will be best effected by free purgation. Full doses of compound jalap powder are very useful; but, at the same time, the patient should be supported by a nutritious diet, and small doses of tincture of sesquichloride of iron may be administered with advantage; for we find a great destruction of the red corpuscles of the blood, and experience has shown that preparations of iron promote the formation of these essential elements of the blood.

The prevailing adynamic type of diseases clearly requires that the old antiphlogistic system of treatment should be repudiated: therefore, in the treatment of such an asthenic disease as scarlatina, the bleeding lancet and mercury may be safely omitted.

How conducive to the advancement of medical science would be the adoption of a *rational* mode of treatment! How injurious to the scientific character of the medical practitioner is the use and laudation of *specific* remedies!

CASE OF STRANGULATED FEMORAL HERNIA.

By Jonathan Wybrants, M.B., L.R.C.P., Shepton Mallet.

On Monday night, January 31st, Mr. J. F. Cartner requested me to operate on Ann Padfield, residing at Holcombe, for strangulated femoral hernia. The hernia had not been reduced for upwards of six years, and had become strangulated twenty-four hours before my arrival. The patient was 56 years old, and debilitated.

Mr. Cartner having used the usual means to relieve her, and the symptoms getting worse every hour, I proceeded to operate, first putting her under the influence of chloroform. After opening the sac, I found a large piece of omentum, which had old adhesions, behind which was a large knuckle of intestine. I carefully dissected and removed one ounce and a half of omentum, divided the stricture, and returned the intestine into the abdomen.

It is plain enough that the omentum had formed the hernia for six years; and that, when the intestine became protruded, symptoms of strangulation came on. The sac was so tight that I could not take hold of it with the forceps, and was obliged to use the knife. This was no easy matter with merely the light of two small candles, and with several large veins passing over the tumour.

Mr. Cartner gave forty drops of laudanum immediately, and twenty every four hours. The following Sunday, the patient had a motion, and has been doing well since.

THE STOMACH AND ITS AILMENTS PRACTICALLY ARRANGED.

By W. S. Oke, M.D., Senior Physician of the Royal South Hants Infirmary.

[*Read before the Southampton Medical Society, Nov. 7th*, 1858.]

[*Continued from page* 149.]

IV.—Bilious Condition of the Stomach.

This condition is characterised by a bilious aspect, nausea, with bitter risings, or the vomiting of bile. In the absence of these symptoms, there is often a giddiness, aggravated sometimes by the erect, and sometimes by the horizontal posture. There is little or no febrile disturbance; the tongue is coated with a thick fur; the urine is high coloured, with a bilious tint and lithate deposits; the bowels are sluggish; and the appetite deficient, or wholly lost. This condition is occasioned by, and almost always the result of, eating fat or rich food, accompanied, perhaps, by an excess of drinking, exciting the liver, and causing it to secrete abnormal quantities of bile, which, from its redundance, finds its way into the stomach, and produces the symptoms above described. Thus it often occurs that a person unaccustomed to a rich diet, after a relished meal of this kind, will in a few hours feel himself giddy, or, on first lying down, will perceive every object in motion; or, on going to bed, not suspecting anything to be the matter, will, on rising from his bed the next morning, feel himself unable to stand. This symptom is probably occasioned by the bile acting upon the sensitive branches of the eighth pair of nerves.

The treatment in this case is simply to evacuate the redundancy of the bile, either by emetics or purgatives. Should there be vomiting, it may be encouraged by copious draughts of hot water, after which the purgative (*a*) may be taken.

a. ℞ Hydrargyri chloridi gr. iij; extracti colocynthidis compositi gr. iv. Misce et divide in pilulas duas post vomitum sumendas; et repetantur in horis quatuor nisi satis operaverint.

Should there be no vomiting, but great giddiness, (*b*) may be taken, instead of the second dose of the pills.

b. ℞ Pulveris rhei ℈j; magnesiæ sulphatis ʒiij; tincturæ jalapæ, syrupi zingiberis, ā ʒj; aquæ cinnamoni ʒss; aquæ puræ ad ʒiss. Misce; fiat haustus.

Should the symptoms commence towards evening, the pills (*a*) should be taken at bedtime, and the draught (*b*) early the following morning. This treatment must be continued at proper intervals till the symptoms have ceased, and the secretions have become healthy.

There is no symptom more indicative of the necessity of purgatives than hot bilious acrid discharges from the bowels. It is this condition of the stomach, arising from rich diet and the drinking of acescent wines, which often occasions what is termed a "fit of gout". The attack is generally severe, affecting one or more of the smaller joints, but usually selecting the metatarsal joint of the great toe, which is swollen, red, painful, and so exquisitely tender as to be intolerant of the slightest touch. The skin is moist, exhaling perspiration of a peculiar odour; the nights are, nevertheless, sleepless. The tongue is coated; the pulse frequent and voluminous; and the urine is high coloured, depositing a lateritious sediment of pink or red lithates, which in some cases are very abundant, as if the constitution were evacuating by the renal functions the *materies morbi*. When the attack is the result of an occasional error in diet, it will be successfully and best subdued by rest in bed, temperance, and a course of such cooling aperients as may appear to be most suitable to the symptoms and character of the system: (*c*) may be given at bedtime, and (*d*) the following morning.

c. ℞ Pilulæ colocynthidis compositi gr. v; hydrargyri chloridi gr. ij; pulveris Jacobi veri gr. iij; syrupi q. s. Misce, et divide in pilulas duas horâ somni sumendas.

d. Olei ricini ʒss. Fiat dosis primo mane sumenda.

This purgative may be repeated once or twice, and the diet should be plain and nutritious.

But should the patient, when relieved by this simple and safe treatment, resume an incautious diet, the same effects will follow the same causes, and a podagral diathesis will be set up, which will require a more specific remedy; and that remedy is colchicum. In this place, I shall venture to make a few remarks on the administration of this important drug. The colchicum was known as far back as the time of Paulus Ægineta, as a remedy for gout—that is, in the ninth century; but, from some cause or other, not easily explained, it was at length abandoned. At the end of the last or the beginning of the present century, the practice was revived, and, as it was found to be efficacious, has been continued to this time in the treatment of gout.

That colchicum possesses a remarkable and specific therapeutic efficacy for the relief of this disease is beyond a doubt, although the *modus operandi* has not yet been accurately ascertained. The colchicum, however, ought always to be given with due caution, as in large doses it acts as a powerful acro-narcotic poison to the nervous system. The frequent administration of such large doses is, therefore, much to be condemned. This practice will doubtless often quickly subdue the pain, and arrest the progress of the disease; but, although heroic doses may exalt the skill of the medical practitioner and suit the convenience of the patient, the latter will find, to his cost, that the *materies morbi* has not been eradicated or expelled from the system; for, after a short interval, the disease will return with equal force, and require a similar dose for his relief; and thus the frequent repetition of the malady and the medicine will speedily and completely destroy the tone of the nervous system. Such an effect was plainly manifested in the following instance. A nobleman, of a gouty habit, was advised to treat the paroxysms with heroic doses of a quack preparation of colchicum, called "Wilson's Tincture"; the dose being equal to one drachm of the vinum colchici. This so magically removed the attack, that, as soon as it returned, he repeated the dose, which never failed at once to relieve him: indeed, he was so pleased with the effect of the remedy, that he used frequently to say, "I shall always speak well of the bridge that carries me safe over". But, unfortunately, it did not eventually do so; for, as he continued to take the medicine, one attack had scarcely left him before another succeeded it. The result was, in a few years his nervous system became so shaken, from the frequent returns of the disease and the wear and tear of the medicine, that, during its action, his valet was strictly ordered to sit by his bedside, and to speak the very instant he awoke from sleep, to testify his presence; and thus his constitution soon succumbed under the effects of the frequent adhibition of such large doses of this powerful medicine. A much safer way of administering this medicine is to prescribe it at intervals of four or six hours, in moderate doses, either with the acetate or citrate of ammonia, and with a plain aperient pill every other night.

Case v. A gentleman, of robust constitution, full habit, and advanced age, had been for many years liable to gout, which occasioned a large quantity of chalky concretions around many of his fingers and toes. The attacks were always severe and wearing, and could not be subdued *without the aid of colchicum*, although various other methods had been fairly tried. The colchicum, therefore, was always had recourse to; and, by taking fifteen or twenty drops of the vinum colchici at the intervals above stated, as in (*e*), with an aperient pill of the compound extract of colocynth (*f*) every other night, the pain and swellings in a few days always subsided; and by this treatment (the paroxysms returning only after considerable intervals) his health was maintained till he arrived at the age of eighty-five years. Large doses of the drug always disagreed with him, and once, when absent from home, brought on an alarming degree of stupor.

e. ℞ Liquoris ammoniæ acetatis ʒij; vini colchici ʒiss (*vel* ʒij); spiritûs ætheris nitrici ʒij; spiritûs myristicæ, syrupi zingiberis, ā ʒss; aquæ menthæ viridis ad ℥vj. Misce. Fiat mistura cujus capiat ʒj 4tâ quâque horâ.

f. ℞ Extracti colocynthidis compositi ℈ij; saponis Hispanici ℈ss; scammonii gr. xij; olei caryophyllorum q. s. Misce et divide in pilulas xij, quarum sumat unam omni nocte alternâ.

This was a favourite pill with the late Mr. Vance; and a very good plain aperient it is.

V.—Inflated Condition of the Stomach.

It is not intended in this place to consider the *flatulent* condition of the stomach, which is of ordinary occurrence in most cases of dyspepsia, and requires little or no treatment, but that degree of inflation which, by its physical distension of the organ, occasions a serious interruption or a sympathetic disturbance in other functions.

Gastric inflation may be either secreted or set free by the mucous membrane of the stomach, or it may be evolved by the

decomposition of the ingesta. That gas may be thus produced by the mucous membrane, seems to be clearly ascertained. In Andral we find the following:—"Besides the gases introduced into the alimentary canal from without, or formed in it by the mutual chemical action of the various substances taken as food, there are also some that are furnished directly by the mucous membrane lining the internal surface of the stomach and intestines. . . . There are some animals provided with an organ for the express purpose of secreting gas, such as those fishes that have an air bag or swimming bladder." (*Pathol. Anat.*) John Hunter writes:—"I am inclined to believe that the stomach has the power of forming air, and letting it loose from the blood, by a kind of secretion." (*Animal Economy.*)

Professor Brande has also shewn that gas (meaning hereby carbonic acid gas) exists in considerable quantities in the blood while circulating in the arteries and veins, and is very largely poured forth from blood placed, while warm, under the receiver of an air-pump, so as to give an appearance of effervescence. He calculates that two cubic inches are extracted from every ounce of blood thus experimented upon; the venous and arterial blood containing an equal proportion. The experiments of Dr. Hales and Baron Haller have shewn the same results as those of Professor Brande. When large volumes of gas are thus secreted, or set free by the gastric mucous membrane, it is probably the result of some exciting cause either in the ingesta or in the mucous membrane itself: the former may be referred to certain edible poisons, such as mussels, mushrooms, etc.; the latter to some morbid action of the gastric branches of the par vagum nerve. For example, in cases of asthma, the quantities of gas that are discharged from the stomach are sometimes immense. The same thing is occasionally seen during the paroxysms of hooping-cough, though in a far less degree; and the same thing may also be caused when the stomach is under the morbid excitement of gout or dyspepsia. When inflation takes place from a decomposition or fermentation of the ingesta, it is quite extraordinary what volumes of gas in some cases may be set free. Apples, under certain conditions of the stomach, are capable of producing this effect; but what that precise condition is, it is scarcely possible to explain, because this fruit, when ripe, and is sufficiently cooked, is as wholesome a food as can be eaten; but that apples are sometimes capable of evolving enormous quantities of gas in the stomach, is certain, not only from the observation of Dr. Hales, in his *Introduction to the Arts and Sciences*, and of others, but from a fact which came under my own notice, and which I shall presently mention. Dr. Hales, in his experiments, found that a single apple, during fermentation, gave out six hundred times its weight in gas, which he called fixed air. The symptoms in this case are sufficiently manifest. There are frequent discharges of air from the stomach; great distension of the epigastrium, which is resonant under percussion; and of the abdomen also, if the intestines are inflated by fermentation. The breathing is embarrassed by the pressure of the stomach against the diaphragm; and the action of the heart may be interrupted, and the pulse become irregular, from the same cause.

Treatment. When the inflation has been directly produced by an acrid poison, whether mussels or some of the vegetable fungi, these should immediately be brought up by a decided emetic, and the irritated condition of the mucous membrane allayed by calomel and opium; but, should it appear that the gas is set free from the mucous membrane, as in the paroxysms of asthma, gout, etc., the inflation will be removed and the breathing relieved, in *a remarkable manner*, by the iodide of potassium, as in (*a*).

a. ℞ Potassii iodidi gtt. xlviij; potassiæ bicarbonatis ʒij; tincturæ scillæ ʒiij; aquæ menthæ piperitæ ad ʒvj. Misce. Capiat ʒss ex aquæ menthæ pauxillo ter quotidie.

The following is a most satisfactory instance of its efficacy in this case.

Case vi. A lady, aged 31, unmarried, began in 1833 to suffer severe attacks of bronchial catarrh, which interrupted her in her duties as a governess. The disease retained this character for some years, each attack terminating in muco-purulent expectoration. In 1840 it assumed the form of spasmodic asthma, the paroxysms of which commenced with catarrhal symptoms, and were generally associated with nausea, vomiting, and excessive gusts of flatus. The course of each attack occupied about three weeks, and terminated in expectoration, as did the bronchitis. The asthmatic attacks returned after intervals of about six weeks, threatening suffocation, and alarming her exceedingly. She anxiously tried all the ordinary remedies for this dreadful malady, and consulted divers opinions, some of which were adverse to any expectation of recovery. Finding no relief from medicine, she relinquished the locality of Southampton, and entered a family at Clifton. The change of air gained her a considerable respite; and in 1843 she went to Ireland, where she became so much worse that she could not lie down for several months, and, during the violence of the paroxysms, she was compelled to smoke cigars till, by faintness, the spasm was overcome and the breathing relieved. At the end of 1843, she returned to Southampton: the change again gave her a respite; but the attacks soon returned with great severity, and, during one of them, I was requested to visit her. I found her breathing with great difficulty, her shoulders rising to her ears at every inspiration; wheezing and harassed with gastric inflation, which greatly *aggravated* the dyspnœa; and greedily smoking a cigar for her very life. As she was worn down, pale, and attenuated, the tongue being clean, and there being no fever, I resolved to try the iodide of potassium, in the hope that it might remove the inflation and support the system. It was prescribed in doses of four grains, as in (*a*), every four hours, with the aperient (*e*); and my hope was not disappointed.

e. ℞ Pilulæ hydrargyri, extracti colocynthidis compositi, ā gr. iv; pulveris Jacobi veri gr. ij. Misce, et divide in pilulas duas omni nocte alternâ sumendas.

The gastric inflation was speedily relieved; the paroxysms subsided; and, in about twenty-four hours, she became so much better that she said, "I know not what you have given me; I feel new life!" After this she remained better for a considerable time, the paroxysms being comparatively mild, and returning at longer intervals. But, in February 1850, she suffered another fearful attack, as bad as the last. She was feverish, and the dyspnœa was so distressing that she could not lie down for several weeks without the danger of suffocation, and could obtain snatches of sleep only in the sitting posture, with the trunk bent forward, and the head resting on her knees. In this attack, as soon as the acute symptoms had subsided, the iodide was equally successful in *magically* subduing the spasms and removing the *gastric inflation*, which were always associated. From that time to this, although the asthma has always been "within call", the iodide of potassium has never failed to manifest its extraordinary power in putting an end to the paroxysms as soon as the pulse had lost its febrile character. I have not stated the physical signs of the chest: suffice it to say, that it sounded normally under percussion; and that, during the paroxysms, the respiration murmur was, of course, inaudible from the spasms of the bronchi.

The next case appears to have depended on latent gout.

Case vii. A gentleman, aged 62, the left side of the face showing paralysis of the portio dura of the seventh pair of nerves, had been long subject to gastric disturbance, the principal feature of which was inflation of the stomach. Fifteen years ago, during one of these inflations, he felt a sudden movement at the anterior and lower part of the chest, which flew to his head, and for a moment deprived him of his senses. These alarming symptoms frequently returned; and, as they resisted every remedy prescribed, they were attributed to a stricture of the rectum which had existed for some time. The stricture was examined and dilated. By this means he was in some degree relieved for many months, when the same sudden syncopes returned, and continued to harass him from time to time, as before: indeed, they recurred so frequently as to deprive him of consciousness several times in twenty-four hours. Such alarming symptoms filled his mind with constant apprehension; and his friends were convinced that he would die in one of these syncopes, which were now attributed to some organic disease of the heart.

At this time he consulted me. His aspect had not the appearance of any organic disease: it was not venous. He had no headache, no pain across the chest, nor down the arms. His pulse was sometimes irregular, but generally equal and normal; and no morbid sound of the heart could be detected. His bowels were costive. The syncopes were still preceded by the same *inflation*, and he could not venture upon any solid food without the fear of bringing on the syncope.

As all other medicines which he had taken had failed, I gave him, for the first time, the iodide of potassium (*c*), with the aperient pills (*d*), believing that the symptoms were the result of inflation from disordered gastric function, and not of organic disease of the heart.

c. ℞ Potassii iodidi gra. xxiv; sodæ bicarbonatis ʒj; tincturæ aurantii ʒss; aquæ menthæ piperitæ ad ʒvj. M. Fiat mistura cujus sumatur ʒj ter die.

d. ℞ Pilulæ hydrargyri, extracti colocynthidis compositi, ā gra. xxxiv; olei pimentæ guttam. M. Divide in pilulas xij quarum sumantur ij alternis noctibus.

After ten days, he called on me, and reported that this medicine had effected a decided improvement in his complaint; that he had lost the inflation; that the syncope had not returned; and that, to his surprise, he could bear light solid food upon his stomach.

The medicine was continued several weeks, and for three years (the last time I heard of him) he had had neither inflation nor syncope, and enjoyed a good state of health, excepting occasional attacks of gout.

The sudden deliquia in this case were certainly very similar to those in the true *syncope anginosa;* and that the cardiac function was sometimes functionally involved is shown by the pulse being irregular and probably interrupted during the syncope; but as the pulse always became in every respect normal after the deliquium passed away, and as it was always accompanied by gastric disturbance, and especially by inflation, it was clear that the attacks were not the result of an organic disease, but of functional disorder, and occasioned, probably, by a reflex morbid action of the gastric branches of the par vagum upon the cardiac flexus.

The following case of true *syncope anginosa* will show the difference between the two cases. It happened many years ago, but the symptoms, especially the state of the pulse, were so remarkable, as to make a deep impression on my memory.

Case. viii. A gentleman, aged 63, tall, muscular, and of a healthy aspect, whilst out shooting, and getting over a fence, suddenly fell down in a state of insensibility. In a few seconds he recovered himself, and walked home, supposing the symptom to have been the result of some mere accidental cause. Some time afterwards the same thing occurred, from which he recovered as from the first. From this time, however, he became subject to the attacks at irregular intervals; and they continued in like manner for some years, till they suddenly terminated his life.

There were no symptoms nor feelings to warn his attendant or himself of their approach; no marked disturbance of the digestive or respiratory functions; no anasarca of the limbs, and no inability to lie down; in short, he looked well, and occasionally walked about the town in which he lived, as if he were in perfect health. The pulse, however, as the disease advanced, without losing its regularity or its volume, gradually became slower, till it fell to twenty beats in a minute, at which number it remained for a long time. Indeed, it was a pulse of an awful character, which, though perfectly regular, too plainly indicated a sudden and fatal termination of the disease.

I was always hastily summoned to every attack; but before I could reach his house (a short distance from my own) he had generally recovered, and appeared as if nothing had occurred. On one occasion (the last but one) his female attendant met me with the announcement "that her master was dead!" and such appeared to be the fact; but whilst looking at his countenance, a bright scarlet arterial spot formed on the side of his nose, and, as it was extending, he drew a gasping inspiration, and once more recovered. A few weeks afterwards, whilst putting on his flannel waistcoat, he fell back upon his pillow, and instantly expired. Here the absence of any gastric disturbance, and the constant abnormal character of the pulse, showed organic lesion of the heart. I very much regret that an examination of the body was not permitted; as I might have found some morbid condition of the brain, or of the valvular mechanism of the heart, which would enable me to explain the cause of the extraordinary character of the pulse.

It may be objected that the iodide of potassium in these prescriptions is not fairly tested, being associated with other medicines; but as the latter have been unsuccessful when given without it in the same cases, the therapeutic results are clearly due to the iodide of potassium.

When gas is evolved by fermentation in consequence of weak digestive power, especially after eating food capable of yielding a large quantity of fixed air, such as apples or some other fruit, the quantity of gas given off is much larger than when it is secreted by the mucous membrane; indeed, it is sometimes so enormous, that were there not a free exit for its escape through the œsophagus and intestinal canals, the effect may be hazardous to life either from distension or the poisonous quality of the gas; but so long as it readily escapes, no such effect need be apprehended.

Case ix. A gentleman of advanced age and of weak digestive power, after a long journey, ate a plain dinner from roast mutton and an apple tart, the fruit of which was under cooked. He felt no inconvenience till about three hours after the meal, when the stomach became unusually inflated—discharging *immense* volumes of air, such as he had never experienced, and these odourless volumes constantly evolved and discharged were *so enormous*, that he feared, from their cumulation, some serious lesion of the alimentary canal might take place. However, after a continuance of a few hours, it subsided, either from the fermented body ceasing to evolve gas, or from the effect of a grain of calomel and half a grain of opium, which I thought it right to give him, in order to prevent any ill effect on the mucous membrane. He passed a good night, and rose the following morning in his usual health.

That the ventosity was the product of acetous fermentation, and that the gas evolved was the carbonic, there can be but little doubt; if so, the under baked apples, acted upon by a peculiar condition of the gastric function, were the most probable cause of the inflation, thereby confirming Dr. Hales's evidence of the quantity of fixed air contained in that fruit.

The indication in this case is to put a stop to the acetous fermentation, and, according to Pemberton, this will best be done by the mineral acids, of which he prefers the nitric. He writes—"The acid which I have given with success is the nitric, this not only prevents the *acid fermentation*, but becomes, at the same times, a tonic to the stomach." (*Practical Treatise.*)

The dose should be five drops in a glass of water, and repeated at short intervals if required; but should the gas, however produced, find no means of escape by the cardiac orifice, and make its way into the bowels, the intestinal canal might become tympanitic, and distended beyond the power of expelling the air by the rectum; if so, it must be drawn off by means of a fine trocar. I have recommended this to be done in several urgent cases of intestinal tympany, from organic stricture, without the slightest injury to the bowel or peritoneum.

[*To be continued.*]

SUBCUTANEOUS OPERATIONS FOR CLUB-FOOT: RESULT OF TREATMENT AFTER SOME YEARS.

By Frederic Page, M.D., Surgeon, etc., Cambridge.

There is nothing more interesting to the practical surgeon than the results of his operations after a period of years has elapsed; and this is the more especially so in those which are performed for the cure of deformities, distortions of the limbs, and diseases of that nature. I have heard some say, and men of good standing in the profession, that "these operations are of no use, the deformity, after a time will return." Now, I can confidently assert, that when the treatment has been judiciously carried out, there are no cures in surgery more successful. It must be understood, that it is not simply dividing the tendons implicated in the distortions; but an important point is the careful adaptation of mechanical means after the operation. The first case in which I saw the operation performed, by the then most eminent surgeon in London, was a complete failure, from the child having been left under its mama's care, who, of course, relaxed in her efforts, and the deformity was as great as ever. This patient was operated upon some years afterwards, with the greatest success.

I am in the habit of taking a plaster-cast of the limb, for the surgical instrument maker to adapt his apparatus to it. I then continue to superintend their application myself for some days; and, to be able to do so, I have for some years occasionally had patients in my own house, or at a convenient distance.

Until about twenty years since, these cases were considered the *opprobria* of surgery, and left entirely in the hands of the surgical mechanist, who, after years of treatment by mechanical distension, effected but little good, and left their patients in much the same condition as when they found them; and this, after years of great suffering, produced by this rude and unscientific mode of treatment.

At the above period, Dr. Little, I believe, introduced into this country the invaluable discovery of the great German surgeon, Stromeyer; viz., dividing the tendons of the muscles producing the distortions by subcutaneous incision. This was soon taken up by many surgeons; with others, by myself; and I have continued to practise it up to the present time.

I shall select a few of these cases, amongst a great many since the performance of which many years have passed; and

as the parties are alive, I may confidently speak as to their present condition; and I may say, that I know of no operation in surgery more successful, or capable of conferring greater benefit on society, than the great discovery of Stromeyer.

Case I. *Talipes Equinus: Foot resting on the Toe.* (Reported in *Lancet* and *Medical Times*, February 1844.) Mrs. Martin, of Newmarket, aged 46, about seven years since, after a severe attack of hysteria, or what was termed so, was left with rigid contractions of the muscles at the back of the legs, which had existed ever since.

December 3rd, 1843. The heel was drawn up, the tarsal and metatarsal bones forming a straight line with the legs, the patient resting on the end of the great toe. Mechanical apparatus had from time to time been applied, without effecting the slightest benefit; and she appeared to have abandoned all idea of ever walking. Having operated in several cases of this kind, I at once recommended it, to which she readily acceded. On the day above named, I divided both Achilles tendons, after the plan of Stromeyer, with but slight pain or loss of blood; they were found much enlarged and thickened; the feet were placed in pasteboard splints; and on the third day, gentle extension was applied, so that on the seventh day, the feet were brought to right angles with the legs, and the patient able to stand.

It is scarcely necessary to recapitulate the daily rapid progress of this case. It is sufficient to state, that in six weeks she walked some distance to church, and was quite cured. In November 1857, I received a letter from her husband, in which he stated that the operation had continued up to that time most successful; that her feet were in perfect form; and that she could walk any distance, as well as she could before her deformity came on. There was no soreness left; nor did she ever feel any pain in the parts operated upon.

Case II. *Talipes Varus: Feet resting on Outer Ankle.* Henry Webb, of Dullingham, aged 8, was born with this deformity; he had never walked on the soles of the feet. An operation was performed on February 26th, 1846. I divided both tendo Achillis, and treated the case in the usual way. He could walk well in six weeks.

January 1859. This lad (now a fine man, a farm labourer, living at Dullingham) has a perfect cure.

Case III. James Hitchcock, aged 12, came under treatment on July 3rd, 1846. This was a very severe case. He was a heavy boy; and, from having walked on the outer ankle for so many years, the distortion was very great. There was partial paralysis of the left side; the thigh, leg, and foot, were considerably smaller. The operation was performed.

1858. His condition was much improved; but he retained a tottering gait, which, no doubt, will always continue.

Case IV. *Double Talipes Valgus.* Mary Cusbourne, aged 6, of Burwell Court, came under care in November 1843. This child was sent me by the Newmarket Board of Guardians, as she was a burthen on the parish. The operation of dividing the tendo Achillis produced a perfect cure.

December 1858. She had not the slightest return of the disease; and walked perfectly.

It would be useless my reporting more cases; but I could enumerate many others that have been done at various intervals, from the years 1842 and 1843, and I do not know of a single instance where there has been the slightest return of the deformities; of course, I mean where the operation has been successfully managed in the first instance.

Many of the early cases were published in the medical periodicals of the day; and it is satisfactory to know of their result after some years have elapsed.

PATHOLOGICAL CONTRIBUTIONS TO MEDICAL JURISPRUDENCE.

By William Boyd Mushet, M.B.Lond., late Resident Physician at St. Marylebone Infirmary.

VI.—Strangulation.

A male child, aged about 6 months, was found in the Canal, and brought to me, on March 17th, 1857. It was reported to have been twelve hours in the water. It was dressed in a frock petticoat, and the usual articles of clothing, and had a ligature of twisted diaper, of about the calibre of the little finger, tied *once* very tightly round the neck, the knot being rather to the left of the median line. The ligature caused the skin to be raised in folds beneath the chin, and in the middle line posteriorly. It was so tight and adherent from the wet, that I thought it advisable to divide it behind with scissors, in preference to attempting to untie it, from fear of lacerating the skin and interfering with the appearance produced by its application. On its removal, a line of constriction was found to exist *entirely round the neck*, over the larynx. Posteriorly and laterally, this line was *whiter* than the adjacent skin; and there was no trace of ecchymosis. In front, the line *was darker*, and had a *greyish, pearly, semishining* (*parchmenty?*) appearance, with a *faint brownish border* at its upper margin. A very faint ecchymosis was discoverable at the site of the knot, and here the skin was slightly grey in colour. A faint but evident discoloration, of about the diameter of a pea, in a line with the lobe of the right ear, also existed in the circle of constriction.

There were no external marks of violence. Slight excoriation was observed about the groins and scrotum. The fingers were clenched; the nails pale; the palms and soles a little sodden. The tongue was slightly protruded. There was no foam at mouth; no lividity of the tongue or lips. The pupils were contracted; the conjunctivæ were pinkish, slightly chemosed; the palpebral conjunctivæ were darkly congested. Dark patches of redness were observed about the mouth, nose, and glabella. The rest of the body was pale, flabby, and emaciated. The left central incisor had passed through the gum.

Necropsy fifty-four hours afterwards. The brain was not extra-congested. A few veins of the pia mater were rather prominent posteriorly; and there was fine ramiform injection over the surface of the hemispheres. There was no subarachnoid effusion. The brain-substance was firmish. About a drachm of serum was found in the ventricles. The puncta vasculosa were not abnormally numerous. A little dark fluid blood existed in the longitudinal and lateral sinuses. About three drachms of serous fluid were found at the base. There was no contusion, laceration, or ecchymosis, about the seat of ligature, either subcutaneously or among the muscles. No foreign body was found in the mouth or throat. The larynx was uninjured; its lining membrane was pale; and no froth or mucus was present on the surface.

Chest. About two drachms of serum were found in the pericardium. The lungs on both sides were collapsed, especially posteriorly; they were not diseased. There was no fluid in the pleura, or adhesions. The heart was healthy, flaccid, not distended. Some black fluid blood was found on the right side; and a little, also dark and fluid, on the left. The bronchi and their branches were natural; and there was no appearance of frothy mucus.

Abdomen. The stomach was filled with food—apparently, half-digested bread—of sweetish odour. The mucous membrane was dark pink, neither softened nor eroded. The liver was not congested. The large intestines contained yellowish fluid muco-feculent matter. The small intestines contained less fluid, of the same character. The mucous surface was uniformly injected, with ramified vessels at spots. The mesenteric glands varied in size from that of a pea to a bean. The spleen was pale and firm. The kidneys were not congested. The bladder was empty. No fluid was found in the peritoneum.

Remarks. The inspection in this case did not reveal the presence of any obvious cause of death—the appearances being insufficient to justify the opinion of drowning or *vital* strangulation. The only deviations from the natural standard were, the collapse of the lung (a common phenomenon in infants dying under many different circumstances), and the hyperæmic state of the small intestines. These conditions, with the emaciated appearance of the body, and the character of the fæcal excreta, would have inclined me to conjecture—had the child come under notice without history, and the ligature absent—that death had ensued from exhaustive diarrhœa, as the band of constriction, unless specially attended to, might have been overlooked. The mark passed continuously round the neck, and the ligature was tolerably large and soft. In front, the usual *parchmenty* appearance was perceptible, but the remainder of the circle was completed by a line whiter than the surrounding skin (bloodlessness). The redness of the face and state of the conjunctivæ were most probably consequences of the immersion. To sum up, an unqualified dictum could not be asserted. The utmost that could be conceded was, that the appearances were not *antagonistic* to strangulation; but no positive conclusion could be arrived at, whether the constricting force was applied immediately *ante* or *post mortem*. In favour of the latter event, certainly, no

motive could be suggested; nevertheless, medical testimony should be ever uninfluenced by any theory of probability.

The case was elucidated by the confession of the mother, who admitted that she applied the ligature to the child whilst alive, and at once threw it into the water.

46, Upper Baker Street, N.W.

CASE OF TAPEWORM.

By W. Collyns, Esq., Exeter.

J. P., aged 41, under butler at Haldon House, shewed me, about six weeks ago, nearly six yards of tapeworm, which he had just voided, after taking a drastic purge (extract of jalap and aloes) the night before. I advised him to try kousso; and, having prepared him by low diet, without animal food, beer, or spirit, and a dose of castor oil twenty-four hours before, I administered to him half an ounce of the *fresh* powder of the herb, infused for fifteen minutes in boiling water. He drank this dose at 10 A.M. on February 4th, having swallowed a tablespoonful of lemon-juice half an hour before. At about 1 P.M. he voided many yards, and pieces of the dead worm; and at 7 P.M. he voided some more, together with the head of the worm. The next morning, he took another dose of oil, but no more worm has passed; and he expresses himself so much relieved as to feel better than he has during the preceding three years. He is able to eat with a good appetite, is quite well, and in good spirits—quite the reverse of what he used to be.

Inventions and Appliances

IN

MEDICINE AND SURGERY.

A NEW CHLOROFORM INHALER.

We had an opportunity, the other day, at St. George's Hospital, of witnessing the employment of a new chloroform apparatus, the invention, we believe, of Mr. Weiss, which has also been used at other hospitals, and appears to be well thought of by those who have watched its employment. It is a modification of Dr. Snow's inhaler, being provided with valves to regulate the quantity of chloroform admitted into the inhaler, and the instrument being made altogether less cumbrous. It consists of a bottle holding the coil of bibulous paper, and surrounded by a water bath, as in Snow's inhaler, to the front of which is connected the mouthpiece, which is made of flexible metal, plated—an improvement, in respect of cleanliness, on the leather of which other mouthpieces are made. This is connected to the bottle by a sort of hinge, so that the angle can be altered. At the top of the bottle is a glass receptacle, graduated for holding chloroform, and provided with a screw by which a certain measured quantity can be admitted into the bottle. This receptacle turns round upon its axis; and, by an ingenious arrangement of valves, the position of the upper receptacle, marked by an arrow on the rim of the lower, regulates the amount of the mixture of diluted chloroform vapour which is admitted into the air passing through the mouthpiece. Thus, when the arrow stands at one extremity of the scale, marked A, the patient is breathing pure air; when at the other, marked Cl, he is breathing the highest dilution which the instrument admits of, and which, if we understand the invention correctly, cannot be higher than in Snow's inhaler; when at intermediate points, the dilution varies in a known proportion. Thus, the object of the instrument is exactly the same as that of Dr. Snow's; viz., to ensure the dilution of the vapour. But it is said to effect this in a more equable and certain manner, so that the narcotic effect can be produced in pretty nearly the same time, viz., about four minutes, in all patients. If this is so, it will be a great advantage, as the danger of narcotism would be almost abolished if the equable action of the anæsthetic could be ensured. Further trial is, of course, necessary before pronouncing a judgment on Mr. Weiss's apparatus. At present, we shall only say that, from seeing it applied to three or four patients, we were inclined to think favourably of it.

MEDICAL REGISTRATION.

PUBLICATION OF THE REGISTER.

We have been requested by Dr. Hawkins to give notice tha all persons who desire their names to appear in the Register printed for 1859, should apply to be registered before the 1st day of May, 1859.

A BILL

TO AMEND THE MEDICAL ACT (1858).

[*Prepared and brought in by Mr. Secretary Walpole and Mr. Hardy.*]

Whereas by an Act passed in the last Session of Parliament, chapter ninety, "The Medical Act," provision is made for the registration of members of the medical profession, and certain disabilities are imposed, after the first day of January one thousand eight hundred and fifty-nine, on members of that profession who are not then registered: and whereas, by reason of the time required for the collection and examination of the proper evidence on the first formation of "The Medical Register," it is expedient to amend the said Act as herein-after mentioned: be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

I. The *first day of July, one thousand eight hundred and fifty-nine*, shall be substituted, in Sections Thirty-two, Thirty-four, Thirty-six, and Thirty-seven respectively of the said Act, for the first day of January, one thousand eight hundred and fifty-nine; and the said several Sections, and all provisions of the said Act having reference thereto, shall be construed and take effect as if the word *July* had been originally inserted in each of the said Sections instead of the word January.

II. Section Thirty-three of the said Act shall be repealed, and no person shall by reason of the said Act be or be deemed to have been disqualified to hold such office as mentioned in the said Section Thirty-three, or any appointment mentioned in the said Section Thirty-six, unless he shall have failed to be registered on or before the *first day of July one thousand eight hundred and fifty-nine.*

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, April 14th, 6 P.M.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

Social and scientific meetings of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on the undermentioned days:—

Friday, March 25th, 1859, at 3.30, at the Town Hall, Gravesend.

Friday, April 29th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Duiney, *Honorary Secretary.*

Brompton, Chatham.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, FEBRUARY 26th, 1859.

THE SALE OF POISONS BILL.

The events of the last few years have proved that the liberty of the subject as regards his power to murder others, or to kill himself, requires some little modification. The last Act altogether failed in accomplishing its purpose; indeed, we question if crime received the least check in consequence, whilst it has been made clear that the legitimate operations of the chemist and druggist did. In the Bill just brought in, and which will be found at p. 173, the following substances are proposed to be considered poisons in a parliamentary sense, and to these only the measure will apply.

Schedule (A.)

Arsenic and its Compoundss.
Corrosive Sublimate.
The poisonous vegetable Alkaloids and their Salts.
Prussic Acid.
Cyanides of Potassium.
Essential Oil of Bitter Almonds, unless deprived of its Prussic Acid.
Cantharides.
Aconite and its preparations.
Oxalic Acid.
Nux Vomica.
Cocculus Indicus.
Opium, crude, or in tincture, extract, or powder.

This list includes, without doubt, all the deadly drugs in common use; that is, all drugs pure and simple; but we find that all prescriptions of medical men (very properly), and all *patent medicines* are exempted from the action of this Bill.

Thus our dear old friends Godfrey's Cordial, Daffy's Elixir, and Dalby's Carminative, a sacred trinity of death-dealing compounds, which have slain their tens of thousands to the tens destroyed by any other deadly drug, are not to be counted poison at all, and may be sold over the counter, as heretofore, with impunity! What about another old friend, Black Drop? Is this to be ranked under the head of "tincture of opium," and to be excluded from general sale, or is it to go free to do its deadly work as heretofore?

The only reason that we can see for the exclusion from the provisions of this Bill of these "quietners",—which, in the manufacturing districts, horrible to say, are considered "real blessings to mothers",—arises from the fact that they are *patent medicines;* to meddle with which would be to touch a thing far more precious than life itself in the eyes of Chancellors of the Exchequer—the revenue.

But surely a Sale of Poisons Act should be levelled at those matters which do the practical poisoning of the country. Of what avail will it be to render the sale of cocculus Indicus difficult, if one of the most popular drugs, containing deadly doses of opium, is allowed to do its work without let or hindrance? We trust some protest will be made in the House with respect to this omission, which may be remedied, we imagine, without touching other patent medicines at all. Government cannot any longer levy its toll of one shilling and a penny upon the sale of liquid death. If they persist in doing so, they will be stamped with nothing less than taking blood-money for the slaughter of the innocents.

Then, again, we cannot perceive that the regulations for the sale of poisons wholesale will in any way prevent the recurrence of such a catastrophe as that which took place at Bradford. Arsenic need not be coloured in certain cases where the colouring matter will interfere with manufacturing processes.

It is clear, therefore, that, with the exception of the rendering compulsory the labelling of sundry deadly compounds as *poison*, this Bill is aimed rather at the suicide and wilful poisoner, than at those dreadful mistakes which sweep off their victims by the score, or those domestic doctorings which decimate the infant populations of our large towns. As far as the impulsive wretch is concerned, who determines to put an end to his troubles without more ado, the Bill is, without doubt, calculated to be effectual. Suicides about to poison themselves do not generally like to let their friends into the secret; and if possibly they should determine to take the risk of detection, the filling up such a form as Schedule B may afford sufficient time to cool their courage, and give them opportunity for changing their minds.

Even here, however, the determined suicide would find no impassable barrier to the accomplishment of his purpose; for we must interdict the use of neckties, abolish razors, put an embargo on powder and ball, pump out the rivers, and level the precipices, ere we can finally take from him the instruments of death. We are thankful, however, for the little the Bill will be able to accomplish; and we trust that the emendations we consider imperatively called for will yet be supplied.

THE WEEK.

A trial which took place in the Court of Queen's Bench on Saturday last, in which damages were claimed of the North-Western Railway Company for injuries received in an accident on their line by a person named Phillips, on behalf of his wife, gives us another example of a very disreputable custom, to which, we are sorry to say, some medical practitioners have lent themselves. It appeared that the Company's surgeon, almost directly the alleged injury was received, offered the plaintiff £10, and induced him to sign a receipt to the effect that it was in full satisfaction of his claims for injuries, expenses, and losses. Lord Campbell, in the language of the report, "strongly condemned the practice of the Company's surgeons carrying about them printed receipts, and getting parties to sign them at a time when the extent of their injuries could not be ascertained". We have so often commented upon this disgraceful practice in this Journal, and, in doing so, have created such ill-will against us on the part of several individuals, that we rejoice to find one of the judges has so emphatically denounced the practice from the bench. We hold that it is quite impossible that any gentleman possessing a nice sense of honour

can bring himself to practise this trick—too disreputable, we should think, to be adopted by a third-rate attorney's clerk. The publicity given by the press to such examples of low-toned professional feeling as this, does more harm to the profession than can well be imagined. We are glad to find that, as far as the North-Western Railway Company are concerned, this practice will be discontinued; the directors, through their counsel, intimating that they took the same view of the matter as the judge.

The Fothergillian Gold Medal of the Medical Society of London for the present year has been awarded to Mr. A. T. H. Waters of Liverpool, for an Essay on the Anatomy of the Human Lung. Our associates will doubtless join us in heartily congratulating Mr. Waters, who is well known as the active and efficient Secretary of one of our largest Branches, on the honourable distinction he has thus gained.

An inaccurate use of words is a fruitful source of litigation; if it were not so, our legal authorities would not be so often asked to decide the meaning of wills and such like documents. Within the last few weeks, an example of the assertion made above has been presented in the Salop Infirmary, on the occasion of the election of a successor to the late Dr. Drury. Two candidates appeared—Dr. Styrap and Dr. Watts. Of their relative professional merits, we know nothing; and are content to hold them as equally capable and equally honourable members of the profession. As to their qualifications; Dr. Watts is an M.D. of the University of Edinburgh, and a member of the Royal College of Surgeons of England; Dr. Styrap is a licentiate of the King and Queen's College of Physicians in Ireland. The election was fixed to take place on January 21; but, when the names of the candidates were brought forward, an objection was taken to Dr. Styrap on the ground that he did not come within the following law of the Infirmary.

"That no physician by diploma shall be eligible to fill the office of physician to this Institution, who shall not have such diploma granted after study and examination at the University granting the same: that diplomas on certificate be excluded."

After a great deal of discussion, the meeting was deferred for a month; and the matter was referred to a committee. On February 18, the governors of the Infirmary again met; and the Committee brought up a report that Dr. Styrap was ineligible as physician to the Infirmary, being, although a licentiate of the College of Physicians in Ireland, not a graduate of an university. It was shown, on the other hand, that Dr. Styrap was duly registered as a physician by Dr. Hawkins; and that he, if elected, would be recognised by the Court of Examiners of the Society of Apothecaries as a physician within the meaning of their regulation. In the discussion, it was very sensibly argued that the framers of the law referred to had had no other intention than that of preventing persons from becoming candidates who had obtained their degrees by purchase; and that the apparently exclusive use of the word "university" was a mere blunder. This, which was the only sensible view of the case that could be taken, found favour with the governors present; for, by a majority of 92 to 68, they decided, in opposition to the report of the Committee, that Dr. Styrap was eligible, and he was forthwith elected. We like to hear of such a defeat of an attempt to put a man out on a quibble; especially as the affair seems in this case not to have been managed in the most honourable way—the opposition to Dr. Styrap, at the meeting in January, having been brought forward without his having had intimation of what was in contemplation.

Some explanation is necessary with regard to the new by-laws of the Royal College of Physicians, which were published at page 152 of last week's number. Although these regulations appear to embody some the principles of the intended charter, they do not altogether do so; inasmuch as the term licentiate is retained, instead of being replaced by that of member. The real object of the College in passing the new regulations has been, so far as we have been able to learn, to meet the wishes of those extra-licentiates and graduates in medicine who may be desirous of obtaining the licence. In this way it is thought possible that, by establishing a sort of year of grace, various difficulties may be quietly surmounted. The present resolutions are not to be regarded otherwise than as a temporary measure; they will not affect the new charter and by-laws, which will, no doubt, be promulgated as soon as they are in a sufficiently developed state. We believe that it is the wish of the majority of the Fellows of the College to act in a liberal spirit, and to regain the ground they have lost in the estimation of the profession. One thing, however, we would especially recommend to their consideration—the possibility of relieving those who have already paid a stamp duty on their diplomas, or licenses, from the necessity of being again subjected to the same tax. Surely, if the College would take the matter in hand, they might do some good: at all events, the remission of the stamp duty, where one had been already paid, would increase the number of applicants for their license.

A short Bill to amend the Medical Act has been introduced into the House of Commons by Mr. Walpole. Its object is to extend the time at which the privileges of registered persons, and the restrictions imposed on non-registered persons, commence, from the first day of January to the first day of July. The section which compelled the Poor-law medical officers to register within six months from the passing of the Act is repealed, and these gentlemen are merely required to enter their names on the register before the first of July next.

The two bills relating to Lunatic Asylums, which were introduced by Mr. Walpole, have been referred to a select committee. They are to be taken into consideration at a meeting of the Association of Medical Officers of Hospitals for the Insane, which will be held at the Great Western Hotel, Paddington, on February 28th. We hope that good will result from their deliberations.

A BILL

TO REGULATE THE KEEPING AND SALE OF POISONS.

[*Prepared and brought in by Mr. Secretary Walpole, Mr. Hardy, and Lord John Manners.*]

Whereas an Act was passed in the Session holden in the fourteenth and fifteenth years of Her Majesty, chapter thirteen, "to regulate the Sale of Arsenic;" and it is expedient to make provision concerning the keeping of Poisons, and to make further provision for regulating the sale and delivery of Poisons: Be it enacted by the Queen's most Excellent Majesty,

by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

I. This Act shall commence and take effect from and after the *thirty-first* day of *December, one thousand eight hundred and fifty-nine.*

II. The said Act of the fourteenth and fifteenth years of Her Majesty shall be repealed.

III. In the construction of this Act the word "Poison" shall mean any drug or substance mentioned or referred to in the Schedule (A.) to this Act.

IV. Every person keeping for sale by retail any poison, and every apothecary, surgeon apothecary, or other member of the medical profession, and every chemist or druggist, and every officer of any hospital, infirmary, or dispensary, having under his custody any poison, shall keep all poisons in boxes, bottles, or vessels, distinctly labelled respectively with the names of the poisons contained therein, and with the word "POISON" in conspicuous capital letters.

V. No person shall sell any poison to any person who is unknown to the person selling the poison, unless the sale be made in the presence of a witness of full age who is known to the person selling the poison, and to whom the purchaser is known; and no person shall sell any poison to any person other than a person of full age.

VI. Every person who sells any poison shall forthwith, and before the delivery of the same, enter or cause to be entered, in a fair and regular manner, in a book or books to be kept for such purpose, in the form set forth in the Schedule (B.) to this Act or to the like effect, the following particulars of and in relation to such sale; (that is to say,) the date of the sale and delivery and the name and quantity of the poison sold, together with the name, surname, place of abode, and condition or occupation of the purchaser, and the purpose for which the poison is required; which particulars, so far as they are not within the knowledge of the seller, he is hereby authorised and required to inquire into of the purchaser, before the delivery of the poison; and in every case before the delivery of the poison such entries shall be signed by the seller and by the purchaser, and (where the sale is required to be made in the presence of a witness) also by the witness, who shall add his place of abode.

VII. No poison shall be sold, either in a solid or liquid state, unless the box, bottle, vessel, wrapper, or cover, as the case may be, in which such poison is delivered, be distinctly labelled with the word "POISON" in conspicuous capital letters, and with the name, surname, and address of the person selling the poison.

VIII. No person shall sell any arsenic unless the same be before the sale thereof mixed with soot or indigo in the proportion of *one ounce* of soot or *half an ounce* of indigo at the least to one pound of the arsenic, and so in proportion for any greater or less quantity: provided always, that where such arsenic is stated by the purchaser to be required for some purpose for which such admixture would, according to the representation of the purchaser, render it unfit, such arsenic may be sold without such admixture in a quantity of not less than *ten* pounds at any one time.

IX. The provisions herein-before contained concerning the sale and delivery of poison shall not extend to the sale of opium, where the quantity sold does not exceed grains of the opium, crude or in powder, or extract, or minims of the tincture, or to the sale of any medicine required to be made up or compounded according to the prescription of a legally qualified medical practitioner, or made up or compounded by a legally qualified medical practitioner or pharmaceutical chemist, or by a veterinary surgeon having a licence or diploma from the Royal College of Veterinary Surgeons, or from the Royal Highland and Agricultural Society of Scotland, or to the sale of any patent medicine, or to the sale of poison by wholesale to retail dealers upon orders in writing in the ordinary course of wholesale dealing.

X. Provided nevertheless, that all liquid medicines intended for external use, and consisting of or containing any poison, shall be delivered or sold and delivered (as the case may be), as well by legally qualified medical practitioners as by others, in bottles labelled in conspicuous capital letters "POISON" or "FOR EXTERNAL USE."

XI. It shall be lawful for two justices of the peace in England or Ireland, or the sheriff or two justices of the peace in Scotland, to authorize any constable at all seasonable times to enter into any shop or place where poisons are kept for sale by retail, or for compounding (other than the dwelling of a legally qualified medical practitioner), for the purpose of ascertaining whether or not all boxes, bottles, and vessels in which poisons are kept are distinctly labelled as required by this Act, and to make search and do all acts necessary for the purpose aforesaid.

XII. If any person who is subject to the provision herein-before contained in respect of the keeping of poisons fail to comply with such provision in respect of any poison kept by him or under his custody;

Or if any person sell any poison, save as authorised by this Act;

Or deliver the same without having made and signed the entries hereby required on such sale, or without having obtained such signatures to such entries as are required by this Act, or without complying with all the provisions of this Act in relation to the sale of such poison;

Or if any person purchasing any poison give false information to the person selling the same in relation to the particulars which such last-mentioned person is hereby authorized to inquire into of such purchaser;

Or if any person sign his name as aforesaid as a witness to a sale of poison to a person unknown to the person so signing as a witness;

Or if any person sell or deliver any liquid medicine intended for external use, and containing any poison, otherwise than in a bottle labelled as aforesaid;

Or if any person refuse to admit any constable authorized to enter as herein-before provided into a shop or place which he is so authorized to enter, or shall obstruct or hinder him in the execution of his authority;

Every person so offending shall for every such offence, upon a summary conviction of the same before two justices of the peace in England or Ireland, or before two justices of the peace or the sheriff in Scotland, be liable to a penalty not exceeding *five pounds* for the first offence, and to a penalty not exceeding *twenty pounds* for the second offence;

And every person so convicted of such offence more than twice shall for the third and for every subsequent offence, upon a summary conviction of the same as aforesaid, be liable to a penalty of not less than *twenty* nor more than *one hundred pounds.*

XIII. If the person selling or delivering any poison, or any liquid medicine intended for external use, and containing poison, without complying with all the provisions of this Act in relation to the sale or delivery thereof, be an apprentice or servant acting on behalf of his master, then the master, on whose behalf the sale or delivery is made, as well as such apprentice or servant, shall be liable to the penalty imposed by this Act in respect of the offence.

Schedules to which this Act refers.

SCHEDULE (A.)

Arsenic and its Compounds.
Corrosive Sublimate.
The poisonous vegetable Alkaloids and their Salts.
Prussic Acid.
Cyanides of Potassium.
Essential Oil of Bitter Almonds, unless deprived of its Prussic Acid.
Cantharides.
Aconite and its preparations.
Oxalic Acid.
Nux Vomica.
Cocculus Indicus.
Opium, crude, or in tincture, extract, or powder.

SCHEDULE (B.)

Date of Sale and Delivery.	Name and Surname of Purchaser.	Purchaser's Place of Abode and Condition or Occupation.	Name and Quantity of Poison sold.	Purpose for which required.
Saturday, Sept. 26, 1860 10 30 A.M.	*Henry Holmes,*	*27, Snows Fields, Bermondsey; Shoemaker.*	*Arsenic ½ lb. Coloured Blue with Indigo.*	*For destroying rats and mice.*

(*Signature of Purchaser.*) HENRY HOLMES.

(*Signature of Witness.*) JOHN SIMS, 26, Tooley Street, Southwark.

(*Signature of Seller.*) SAMUEL EDWARDS.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 25th, 1858.

Sir Charles Locock, Bart., M.D., President, in the Chair.

CASES OF DISLOCATION OF THE OS CALCIS AND SCAPHOID FROM THE ASTRAGALUS: DIVISION OF THE GASTROCNEMIUS AND OTHER TENDONS, TO FACILITATE REDUCTION.

BY GEORGE D. POLLOCK, ESQ.

A man was admitted into St. George's Hospital in 1843, under Mr. Keate, with the right foot and ankle much bruised, the sole everted, and a prominence on the inner side of the instep, apparently produced by the head of the astragalus, the os calcis and scaphoid being dislocated outwards. All attempts to reduce the dislocation failed; extensive destruction of the skin and suppuration followed, and the leg was amputated below the knee some weeks after. The os calcis and scaphoid, with the remaining bones of the foot, were found dislocated outwards on the astragalus, the upper surface of the latter not being displaced from the tibia and fibula. The head of the astragalus was lying internal to the anterior tibial tendon, on the upper and inner surface of the scaphoid; while the posterior inferior extremity of the astragalus was pressed into the groove on the upper surface of the os calcis. The man died two months after the accident.

A man was admitted into St. George's Hospital in August, 1858, under the care of Mr. Pollock. An extensive lacerated wound occupied the back part of the left leg. The left foot was very much distorted. There was slight bruising of the shin over the instep, and a considerable prominence of bone on the outer side. The foot was inverted, so that the sole was turned inwards, and the outer border was turned downwards. The internal malleolus was buried in the soft tissues by the side of the foot, but the external malleolus was very prominent. Attempts were made to reduce the dislocation, which was apparently that of the os calcis and scaphoid inwards upon the astragalus. Extension was made by drawing on the foot, the leg being firmly held, with the knee well bent; but no impression being made on the parts, Mr. Pollock decided to divide the tendo Achillis; immediately this was done, reduction was effected with very slight extension. The patient had sustained other severe injuries, and was also suffering from delirium tremens at the time of admission. He died a few days after the accident, but the state of the foot remained quite satisfactory. The tendo Achillis of the left foot was found divided about an inch and a half above its insertion. The bones of the foot were in their natural position. The slightest force sufficed to displace the os calcis and scaphoid from the astragalus, so as to allow the foot to turn inwards with the foot vertical.

Whether the astragalus be dislocated from its upper and lower articular receptacles; whether it be dislocated inwards or outwards from the os calcis and scaphoid; or whether the dislocation be complicated with external wounds, every surgeon would allow that attempts at reduction were generally attended with much trouble, and were often productive of much mischief to the soft parts. Considering the difficulties of reduction, and the mischief frequently attendant on the means used, it appeared to the author desirable to divide the tendo Achillis whenever any difficulty was experienced in the reduction of dislocation of the astragalus. Dislocations of the astragalus might, however, occur in certain instances, in which no difficulties to reduction presented themselves. Two cases, one occurring in St. George's Hospital, the other in St. Bartholomew's, under Mr. Paget, were recorded in illustration of this fact. Others, again, from the recorded experience of Mr. Shaw and Mr. Hancock, were quoted in illustration of the difficulty of reduction in mere dislocations; in these two cases it was subsequently necessary to remove the bone, or a portion of it. The patient recovered in each case with a useful limb, after protracted treatment.

Sir Astley Cooper alludes, in his work on *Dislocations*, to the difficulties to be encountered in attempting to reduce dislocations of the astragalus, and recommends the use of pulleys, and the administration of tartarised antimony. In fourteen cases mentioned by him of dislocation of the astragalus, reduction by ordinary measures was effected in three instances only.

A case in most respects similar to the second case related in this paper, and recorded by Dupuytren, showed the partial benefit of repeated attempts at reduction, as compared with the practice advocated in this paper.

The author did not claim for himself the credit of being the first to suggest division of the gastrocnemius tendon in these dislocations. Mr. Turner says: "Tenotomy may be regarded as a means of facilitating reduction; and in this point of view the practice is justifiable." Mr. Pollock had not seen these observations when he first determined to put in practice division of the gastrocnemius tendon in cases of dislocation of the astragalus. He considered himself fortunate in having his ideas strengthened by the suggestion of such an authority, and more than satisfied that the practice which so completely succeeded subsequently in his hands had already been alluded to by a surgeon of such experience as Mr. Turner.

Mr. De Morgan's paper (in the 33rd volume of the Society's *Transactions*), on the Section of the Gastrocnemius Tendon in certain Cases of Fracture of the Bones of the Leg, was next alluded to as confirmatory, in a great measure, of the view taken of the importance of dividing the tendon in dislocations of the astragalus, whenever the slightest difficulties are experienced in attempts at reduction. In the first volume of the third series of *Guy's Hospital Reports*, was an account of several cases, under Mr. Cock, Mr. Birkett, and Mr. Poland, of fractures and of dislocations about the ankle, in all of which the gastrocnemius tendon was divided. The treatment of these cases in every respect confirmed Mr. De Morgan's views, and they also in most respects bore upon the author's proposal.

Most dislocations of the astragalus, Mr. Pollock believed, were to be reduced by gentle extension subsequent to division of the gastrocnemius tendon; but he thought there were some exceptions to this rule, and in these cases he expected that division of the tibialis posticus tendon became necessary. In dislocations of the os calcis and scaphoid inwards on the astragalus, he believed division of the tendon would always enable reduction to be effected; but in dislocation of the os calcis and scaphoid outwards, with the head of the astragalus projecting inwards, it sometimes happened that the tendon of the tibialis posticus was thrown in front of the neck of the astragalus, and thus fixed that bone between the tendon and the inferior calcaneo-scaphoid ligament. In such instances, the division of the gastrocnemius tendon might be necessary; but the division of the posterior tibial tendon was essential to successful reduction. A case illustrative of this displacement, is recorded by Broca, and reported in the *Clinique de Marseille* in October 1842. The posterior tibial tendon was divided before reduction could be effected.

Mr. Birkett had favoured the author with the notes of a second case, in which he divided the gastrocnemius first; but, not being able to reduce the dislocated bone, proceeded to remove the astragalus. He experienced some difficulty in the operation, until he divided the tendon of the tibialis posticus which was lying in front on the neck of the astragalus. Subsequent to the division, the bone was readily removed.

Mr. Poland also furnished notes of a case that occurred at Guy's Hospital, in which all attempts at reduction failed; subsequent sloughing exposed the dislocated bone, and the patient died within a few days. The tendon of the tibialis posticus was found running in front of the neck of the astragalus.

In the third volume of the *Bulletin de la Faculté et de la Société de Médecine*, a case was reported of dislocation of the astragalus, in which all attempts at reduction failed, until the anterior and posterior tibial tendons were divided.

The figures in the table appended strongly pointed to the very serious character of dislocations of the astragalus, unless reduction were effected, and by gentle means. The author trusted, therefore, that he was not too urgent in his endeavour to impress upon the Society and the profession generally the advantages to be derived from division of the tendons in all dislocations of the astragalus, if simple extension failed in the hands of the surgeon. The following appeared to him to be the most reasonable rules to guide us in our practice:—

1. In all simple dislocations of the os calcis and scaphoid *inwards* upon the astragalus, in which moderate extension failed to effect reduction, the gastrocnemius tendon should be divided.

2. In all simple dislocations of the os calcis and scaphoid *outwards* on the astragalus, if moderate extension failed, the gastrocnemius tendon should be divided. If this were not sufficient to allow of reduction by gentle extension, then division of the posterior tibial tendon must be had recourse to.

3. In compound dislocations, not reducible by gentle means,

division of the tendons which interfere with reduction should be performed, rather than that the astragalus be at once removed.

4. In compound dislocations with fracture of the astragalus, the gastrocnemius tendon might be divided, although it might be desirable to remove entirely or partially the fragments of bone.

Mr. Pollock said, in conclusion, that too much must not be expected from the division of the tendons necessary to the reduction of these dislocations. He expected that it would assist, usually and materially, to facilitate their reduction. He did not anticipate that it would, to any great extent, modify or affect the subsequent treatment and progress of severe cases of compound dislocation with fracture; but he believed it would materially diminish the mischief to the soft parts which was apt to follow severe handling, or the application of pulleys in attempts at reduction.

A table was appended to the communication, giving an analysis of the nature of the accident, the treatment, and result, in fifty-five cases of simple and compound dislocation of the astragalus.

Mr. Hilton observed that most likely no one surgeon had seen many of the cases under discussion. In Mr. Pollock's case, scarcely any allusion had been made to the use of chloroform for the reduction of muscular force as an antagonistic to the reduction of the dislocation; but it was probable that reduction could have been effected had chloroform been employed. The man, however, was suffering from delirium tremens, and it was thought unadvisable to administer chloroform. A case in point had lately occurred to himself. A gentleman, whilst jumping, dislocated the astragalus inwards. Reduction was unsuccessfully attempted without chloroform; when this, however, was administered, the gastrocnemius and the other muscles were completely relaxed, and reduction was effected with little difficulty. If he had not succeeded, he had determined on dividing the tendo Achillis. He thought the author had gone too far in stating that all cases of "dislocation of the astragalus" ought to be considered as dislocation of the scaphoid and the os calcis from the astragalus, leading to the inference that the latter was never displaced from its tibio-fibular articulation. He had no doubt that dislocation of the astragalus had actually occurred; indeed, if it were not so, one could scarcely see the advantage of dividing the tendon of the tibialis posticus. In the drawing before the Society, there was complete dislocation of the astragalus. The under surface presented inwards, and the head projected forwards and inwards; yet there was no evidence of the dislocation of the os calcis and scaphoid from the astragalus, but the latter was dislocated from the tibio-fibular articulation, and also from its natural relation to the os calcis.

Mr. Holmes Coote was of opinion, with Mr. Hilton, that it rarely happened to a surgeon to see many of the cases under discussion. During the last twenty-eight years, he only recollected one doubtful case in the hospital with which he was connected, and one not doubtful in private practice. This was the case of a lady, who fell from a carriage and dislocated the foot outwards, the astragalus being dislocated from the os calcis and scaphoid. Reduction was easily effected, but there was subsequent sloughing, and it was found necessary to remove the astragalus. A large gaping wound was left, but the patient ultimately recovered. In many cases of severe injury to the foot, it was true the astragalus left the articulation with the foot, but the amount of damage was such as to raise in his own mind the question of immediate amputation. Cases of dislocation of the foot backwards were mentioned in the paper, in which the tendo Achillis was divided. He (Mr. Coote) had seen many such cases, and he considered that the tendo Achillis might be divided immediately or afterwards with equally good results. In these cases, he thought that we ought rather to consider the amount of injury to the foot than the mere dislocation of the astragalus. The escape of the bone from the cavity which received it, he believed, constituted the minor part of the injury.

Mr. Pollock quite agreed with Mr. Hilton as to the importance of administering chloroform previous to the division of tendons. In the case related, he should have administered that agent; but the patient was at the time so insensible, that he did not feel the puncture of the knife through the skin. When he had divided the tendon, he was surprised at the facility with which the bone was slipped into its place. He did not intend to say that dislocation of the astragalus from all its articular surfaces never occurred, but he regarded it as the most unfrequent of the dislocations of that bone. He had alluded to the record of such cases, but they were uncommon.

ORGANS OF GENERATION OF A HERMAPHRODITE SHEEP.

BY WILLIAM S. SAVORY, ESQ.

This case was chiefly remarkable for the complete union of well-developed male and female organs. There were two testes, possessing a natural structure and seminal vesicles, with a uterus and vagina. During life, the sheep was regarded as an ewe.

EPIDEMIOLOGICAL SOCIETY.

Monday, February 9th, 1859.

B. G. Babington, M.D., F.R.S., President, in the Chair.

ON THE CAUSES OF CONTINUED FEVERS, WITH SPECIAL REFERENCE TO THE RECENT "WINDSOR EPIDEMIC".

BY CHARLES MURCHISON, M.D., L.R.C.P.

The author commenced by making a few general observations on the necessity of devoting increased attention to the causes of disease, and expressed his conviction that, in time, the whole class of continued fevers would be as completely eradicated from this country as agues and other malarious fevers now are. The difference was pointed out between preventable and non-preventable diseases, and an opinion was expressed, that the causes might yet be discovered of many diseases at present considered non-preventable. Preventable diseases were described as belonging to four classes: 1. Those preventable by hygienic care of the individual. 2. Diseases to which certain classes of men are liable from the nature of their avocations. 3. Diseases to which a whole community are liable from causes of a more general nature. 4. Those preventable by inducing a previous mild attack of the same affection.

The immense mortality caused by continued fevers was next considered; and the author then proceeded to maintain the necessity of recognising different species of continued fevers, in order to arrive at a true knowledge of their causes. Continued fevers were described as embracing four distinct species of diseases: 1. Simple fever or febricula; 2. Typhus; 3. Relapsing fever; and, 4. Pythogenic, or the so-called "typhoid fever." The distinctive character of each of these was pointed out; and, as regards their origin, they were classified as follows:—

Classification of Continued Fevers.

		CAUSES.
I. Simple Fever or Febricula		Exposure to sun, fatigue, surfeit, etc.
II. and III. Epidemic	Relapsing	Famine.
	Typhus	Destitution, and the concentrated exhalations from living bodies.
IV. Endemic, Pythogenic, or Typhoid		Putrid emanations from sewers, etc.

Simple fever being dependent upon non-specific causes did not require much attention. With regard to relapsing fever and typhus, although the author believed them to depend upon different causes, yet as they prevailed in great epidemics at the same time, and under similar circumstances, for the sake of convenience and brevity on this occasion, he considered them together under the single designation *Epidemic*.

I. Epidemic Fevers.—A. *Predisposing Causes.*

1. *Proofs of the Epidemic nature of Typhus and Relapsing Fever.* The Irish and Scotch epidemics were alluded to; and it was shown, that there had been admitted into the London Fever Hospital, of typhus, in 1848, 408 cases; in 1851, only 68; in 1856, 1062 cases; in 1858, only 15; and during the last six months of 1858, only one case. Again, of relapsing fever, in one year there had been 256 cases; for the last three years there had been none.

2. *Age and Sex* have little influence as predisposing to epidemic fever. Nearly one half of the typhus cases, and one third of the relapsing, were above thirty.

3. The prevalence of epidemic fever is independent of the *season* of the year.

4. Epidemic fever is essentially a disease of the *poor* and *destitute*, and is almost unknown among the upper classes.

5. All the great epidemics of fever have originated during seasons, or under circumstances, of scarcity and *famine*.

6. Epidemic fever, and especially typhus, is limited for the most part to the *overcrowded districts* of large towns.

7. The circumstances which give rise to epidemic fever are more likely to take effect *the longer an individual is exposed to them.*

B. *Exciting Causes.*

1. *Contagion.* There is the most unquestionable proof that epidemic fever is eminently contagious; but there is also reason to believe, that the disease may originate under circumstances where every possible source of contagion has been excluded. The original cause of typhus the author believes to be,

2. *The respiration of the concentrated exhalations from living bodies.* Various instances were brought forward in support of his position, and more particularly the typhus epidemic on board the French prison ships at Plymouth in 1810, that in the French convict hulks at Toulon in 1829, and the "Crimean typhus", which ravaged the French and Russian armies after the capture of Sebastopol. It was observed, that there were some concomitant conditions which appeared necessary for the development of the typhus poison, such as a certain period of time, a certain range of temperature, etc.

II. Endemic Fever. A. *Predisposing Causes.*

1. *Proofs of the Endemic nature of Pythogenic or Typhoid Fever.* The number of cases admitted into the London Fever Hospital was shown to vary but slightly from year to year. During ten years, the largest number was 234, the smallest, 137, and the average number for the ten years was 182. During the last year, in which typhus has well nigh disappeared from London, there has been no diminution in the number of admissions of pythogenic fever, this being 180, or exactly tallying with the above average. Under certain conditions, pythogenic fever might become epidemic.

2. Pythogenic fever is peculiarly a disease of *early youth and adolescence.* Less than one seventh of the cases were above thirty.

3. Pythogenic fever is always most prevalent towards the *end of autumn*, and particularly after very hot weather.

4. It attacks *rich and poor* without distinction.

5. *Famine and destitution* have no influence over its origin or propagation.

6. It is *not confined to overcrowded localities*, but prevails equally in the suburbs of towns and in country districts.

7. A person *recently exposed* to its cause is more liable to become affected than one who is habituated to it.

B. *Exciting Causes.*

1. *Contagion.* While it has been almost universally admitted, that epidemic fever is highly contagious, many of the best authorities entertain grave misgivings as to whether pythogenic fever is contagious at all. Dr. Murchison believes that this fever may occasionally be communicated from the sick to the healthy; but whether in the manner to which the term contagion is usually applied, he thinks doubtful. The great majority of cases, however, cannot be traced to contagion, and necessitate our searching for some other cause. The cause assigned by the author was:

2. *The putrid emanations from decomposing animal matter, and more particularly from the drains and sewers.* Numerous instances were given, showing the intimate relation which subsisted between such emanations, and the so-called "typhoid fever" as cause and effect. The "Westminster fever" in 1848, the "Cambridge fever" in 1853, and that in the National Hotel, Washington, in 1857, were more particularly alluded to. Various objections to his views were considered, and more especially instances of immunity from fever, notwithstanding the existence of putrid emanations.

The author then proceeded to notice:—

III. The Recent "Windsor Epidemic."

A general description was first given of the town and surrounding district, including some remarks on their geological formations. The total population of the town of Windor, including the rural district of Clewer and Old Windsor, (both of which were included in the returns of deaths made to the registrar of the district,) amounted in 1851 to 12,430. That of Windsor alone, to which the epidemic was confined, amounted to 9,562. The mortality in 1858 for the entire district was greater than it had been for many years, amounted to 375, or to 29·36 per thousand, the highest in any of the preceding fourteen years being 328, and the mean mortality for the fourteen years being 21·32 per thousand. This great mortality in 1858 was attributable to two diseases, scarlet fever and pythogenic or typhoid fever. The deaths from scarlet fever, including 5 entered as diphtheria or diphtheric croup, amounted to 37. The disease was shown to have attained its maximum prevalence in October and the beginning of November. The deaths from pythogenic fever amounted to 34, and in addition to these, 5 at least, who had contracted the fever in Windsor, died at their own homes in other districts. The cases, according to the author's own observations, presented all the ordinary symptoms of the disease. The author then pointed out the causes of this pythogenic fever, which he divided into predisposing and exciting.

A. *Predisposing Causes.*

1. The fever was an *endemic disease in Windsor, which, in* 1858, *became epidemic.* It was a mistake to imagine that it was a new disease there. It was shown that not one of the previous fourteen years had passed, without a certain number of deaths from the fever, and the only peculiarity of 1858 consisted in its greater prevalence.

2. As is generally the case with pythogenic fever, the disease showed itself with most virulence towards the *end of autumn.* Of 34 fatal cases 21 died in the month of November.

3. The great majority of the persons affected were shown to have been *under thirty years* of age. *Sex* had no influence over its prevalence.

4. *Rich and poor* were shown to have equally suffered.

5. *Famine and destitution* had, therefore, no influence over its origin or propagation.

6. Overcrowding had nothing to do with its origin. Very few cases, and not a single death, occurred in that district of the town comprising Beer Lane and its neighbourhood, where were the worst and most crowded houses. Deficient ventilation might occasionally have been injurious by concentrating the already existing poison.

7. Several instances were given to show the influence of *recent residence* in an infected locality, in predisposing to the disease.

B. *Exciting Causes.*

1. *Contagion.* Although a general impression had existed that the fever was eminently contagious, the author showed that a great deal of the evidence adduced upon the point had been fallacious. Seven instances were given which had been reported as examples of contagion, but in which the evidence had broken down. In several, the disease was scarlet fever; and in others, the only proof in favour of contagion was, that a number of cases had followed one another in the same house. Four instances were quoted to show that the fever had really, in certain cases, been communicated from the sick to the healthy, but there was no reason to believe that it had been imported into Windsor from any other place. The most of the cases could not be attributed to contagion, and could only be explained by

2. *The Putrid Emanations from the Sewage in the Drains.* The author divided the town into three districts. 1. A low level district comprising Gloucester Place, Adelaide Terrace, Sheet Street, etc. 2. A high level district, containing the Castle, Royal Mews, etc. And 3. Another low level district, nearest to the river, and consisting of Beer Lane, Charles Street, and the surrounding courts and alleys. The sanitary arrangements, including the drainage and water supply, characterising each of these districts, were pointed out; and it was shown that almost all the cases of fever occurred in the first two of these districts. In the third division, in fact in all that part of the town to the north-west of Peascod Street, which comprised the worst and most crowded houses, there had been scarcely any cases, and not a single death. Bad smells from the drains had been complained of in the first two districts, but scarcely at all in the third. Moreover, the third district differed from the other two in the circumstance, that the water-closets were, for the most part, situated outside the houses, and consequently there was no communication between the drains and the interior of the houses. In the principal part of the Castle, which had a separate drain of its own, not at all connected with the town drainage, as also an independent system of flushing which was had recourse to every morning, there had not been a single case of the fever. Again, of the Royal Mews, one portion drained into the town sewers; another, separated from the former merely by a roadway, drained into the private sewer from the Castle; in the latter, no cases of fever had occurred; in the former, there had been about thirty cases and three deaths.

The reasons assigned for the fever being so much more prevalent in 1858 than in previous years, were the unusually high temperature, and the long continued drought. Owing to the drought, the sewers had not been properly flushed, and accumulations of sewage in them resulted. The high temperature

favoured the fermentation of this sewage and the formation of noxious gases, which escaped into the houses.

The author concluded by giving ten very remarkable instances of houses, in which several cases of fever had occurred, and into which there had been an obvious escape of fetid gases from the drains.

The paper was illustrated by numerous tables, maps, and plans of the Windsor drainage.

MEDICAL SOCIETY OF LONDON.

Monday, January 24th, 1859.

W. H. Willshire, M.D., President, in the Chair.

CHILDBIRTH AFTER OVARIOTOMY. BY JOHN CROUCH, ESQ.

In the year 1849, Mr. Crouch removed, by a large abdominal section, a multilocular tumour connected with the left ovary. The operation and its subsequent treatment were published at the time. The preparation offered for inspection showed that the ovary was completely extirpated. The patient, after a good recovery, married in 1850, and, in the following year, was safely delivered of a fine healthy boy, at the full term of gestation. The birth of this child was reported in the thirty-fifth volume of the *Medico-Chirurgical Transactions;* and was the first instance of the kind recorded in that important publication. A second delivery, in 1854, produced a female infant of full growth and vigour. The mother and both children were now living and in good health; the former was again three months advanced in pregnancy. He had endeavoured to ascertain how many cases of parturition had occurred after the extirpation of one ovary, and the following statement was the result of the inquiry. The ovary removed and the sexes of the children were mentioned, because some still imagined that each ovary could only produce one sex. It appeared that *nine* women had borne children after complete ovariotomy. Five of these cases were patients of Dr. Clay. The operators in the other four cases were Mr. Jeaffreson, Mr. I. B. Brown, Mr. Cornish of Taunton, and himself (Mr. Crouch). Four of these patients had the left ovary removed, and afterwards gave birth to three boys and five girls. In five cases, the right ovary was extirpated, and the offspring were seven males and an equal number of females. The number of children, in all, amounted to twenty-two; seventeen of whom were now living. These facts amply proved that each ovary was capable of producing children of both sexes; and the following statement showed that this fact had been known for many years. Dr. Granville, in the *Philosophical Transactions* for 1818, described a dissection of a woman who had borne eleven children, male and female, and who died soon after being delivered of twins of both sexes. The left half of the uterus was undeveloped, and the left ovary and Fallopian tube did not exist. Dr. Elliotson, in his work on *Human Physiology*, writes as follows:—"The doctrine of each ovarium furnishing a different sex is, indeed, found in Hippocrates, Aristotle, and Galen, but has been long exploded, as Dr. Granville's dissection proves that one ovary, like one testis, is capable of producing children of both sexes."

THE VEGETABLE PARASITIES OF THE HUMAN SKIN. BY JABEZ HOGG, ESQ.

The object of the paper was to show the fallacy of the theory propounded by certain physicians, who attributed certain special diseases of the skin to a vegetable parasite peculiar to each disease in question: thus, that the porrigo favosa (the cupped or honeycombed ringworm of Willan) is caused by a parasitic fungi called *achorion Schönleinii;* that the porrigo scutulata of Willan is due to the parasite *tricophyton tonsurans;* that the porrigo decalvans is due to the *microsporon Audouini;* that sycosis or mentagra is due to the *microsporon mentagrophites;* and that the pityriasis versicolor is due to the *microsporon furfur.* The author combated this hypothesis by exhibiting the microscopic appearances of the fungi which were found in the products of these diseases, and showed that the same fungi were common to all, as also to other skin-diseases not included in the category of other authors; and summed up his arguments as follows: Fungi are well characterised throughout nature by feeding on effete or decayed matter; the fungi supposed to be peculiar to certain diseases of the skin were also found in many other diseases of the cutaneous surface; competent observers had not been able to find them in those peculiar diseases; sporules and filaments, described as the cause of one definite disease, had been found in the products of another definite disease, supposed to have a parasite of its own, differing from this and peculiar to itself; and, lastly, attempts had been made in vain to implant these parasites in the healthy skin; hence one could not but conclude that the whole theory was erroneous, and that special parasites peculiar to and productive of special diseases did not exist. It was the author's conviction that the fungi found on the skin and hair were not primarily the cause, but rather the result, of disease. Mr. Hogg concluded by sketching the natural history of the vegetable parasites, with a view to illustrate the subject by analogy.

The President was decidedly of opinion that there were no such things as vegetable parasites in the human skin. He believed that these fungi, the lowest and simplest forms of vegetable life, were not divisible into species, but that they were, one and all, simply a conversion of the molecules of higher organised matter into that of a lower state of existence, in consequence of a diminution of vital power under disease or decay,—indeed, a peculiar kind of metamorphosis of a retrograde character, from the higher to the lower; in the first instance, perhaps, requiring no spores, although they seemed to be afterwards developed by falling on a congenial soil. He had himself, several years ago, advocated this theory in a paper which gained the medal of this Society. The same observations, he thought, applied to the *oïdium* found in croup, diphtheria, and other diseases.

Mr. Hunt had always doubted the truth of the hypothesis that certain special diseases were produced by a special vegetable parasite, and he expressed a hope that, for the future, men who were endeavouring to advance pathological science by the use of the microscope, would be more cautious in inventing names to distinguish species where there was no difference, and thus multiplying the difficulties of science, instead of paving the way for improvement. He could not agree with the President in believing that vegetation could be produced by a retrograde action, or the metamorphosis to which he had referred, without the intervention of a germ. It was true we had something like this occur in the production of the yeast-plant; but further observation, he thought, would show that this was no deviation from the great law of germination.

Mr. Streeter inquired how the author thought arsenic exerted its influence in curing these diseases—whether through the blood as a tonic, or by its well-known antiseptic properties? and also what occurred when arsenic had arrested the disease, which yet returned after the arsenic had been discontinued?

Mr. Lee doubted much whether the President really meant to say that organic matter had the power of passing from one form of life into that of another, whether higher or lower. He, for one, was certainly not prepared to admit the doctrine of spontaneous generation, which the President's theory seemed to involve. Life, he believed, could only engender life of its own kind, not that of any other.

Dr. Hare believed that there were two kinds of fungi at least infesting the skin. His investigations of the skin-diseases led him to that conclusion; but he was often unable to find the specific fungus said to produce the disease under examination.

Mr. Hogg did not look upon arsenic in the light of a specific for all these diseases, although he had seen five-sixths of them cured by its use, and without any topical application whatever. He found it necessary to resort to the use of cod-liver oil, with alteratives and purgatives.

Editor's Letter Box.

THE NEW BY-LAWS OF THE ROYAL COLLEGE OF PHYSICIANS.

Sir,—I have just read the new by-laws of the College of Physicians, admitting as licentiates any one who has taken the degree of Doctor of Medicine in a British University, without examination, on mere payment of the fee and stamp duty; and of engaging to comply with the by-laws of the College. This, although intended liberally, appears an obvious injustice. Why should a man enjoy this privilege merely because he chose, from motives of convenience or economy, to study medicine north instead of south of the Tweed? The degree of M.D., as obtained in a Scotch University, is equivalent, and no more than equivalent, to the ordinary double qualification (M.R.C.S., L.S.A.) of the English general practitioner. It is obtainable at the same age, by examination on the same subjects, after a less

comprehensive curriculum, and no longer a period of study. Why, therefore, should it confer any higher status? In common justice, the boon thus offered to the Scotch M.D. should, on the same terms, be extended to his unquestionable equal, the M.R.C.S. and L.S.A. of England.

The period of study required by the Scotch Universities is four winter and one summer session; *i.e.*, twenty-seven months; the age at which the degree may be obtained being twenty-one. The time required to obtain the conjoint diplomas of the College of Surgeons and the Apothecaries Society of London is three winter and three summer sessions—twenty-seven months; in addition to previous training of two or three years apprenticeship.

Having myself studied in Edinburgh, I have neither the intention nor wish to disparage the Scotch Universities; but surely no one will aver that as good and sound a training in medicine cannot be obtained at one of the London hospitals (Guy's or Bartholomew's, for instance) as at any University in the empire.

The degree of Doctor of Medicine in an English University is quite a different thing. The period of study required is—for the University of London, six years; for Oxford, or Cambridge, or Durham, from eight to eleven years. That the English degree should, therefore, entitle its holder to the highest status in the profession, is perfectly reasonable; but that the same precedence should be allowed to the (comparatively) worthless Scotch degree, is absurd and unreasonable in the extreme, and should be strenuously opposed by every general practitioner in England, who should assert his perfect equality to, and claim every privilege of, the Scotch M.D.

The scheme now arranged offers but one visible advantage, that of preventing the illegal and dishonest assumption of the title of physician (which, in England, implies a more than ordinarily qualified medical man) by Doctors of Medicine of a Scotch or German University, whose qualifications are no higher than those of three-fourths of the practitioners of the country, and who, though claiming the status of physician, carefully avoid the wholesome responsibilities and disabilities required by the bye-laws of the College.

By the recent Act, all local disabilities were very properly removed, and all qualifications became valid throughout the empire; but surely it was never contemplated that the Scotch M.D., who is, in his own country, the ordinary general practitioner, should, by travelling a hundred miles southward, at once become the consulting physician, towering above the heads of the benighted Englishers around him. Either give or refuse the same privileges to the general practitioners throughout the empire. I am, etc., S. D.

February 21st, 1859.

DEATHS FROM CHLOROFORM.

Letter from C. Kidd, M.D.

Sir,—As two deaths from chloroform recently in Paris have frightened several surgeons in the country and in London, would you permit me to say that the rule of administration now adopted in London and Edinburgh, as most free from accident, is the following?

In all operations of surgery where the anæsthetic is required for a period of five minutes or under—lithotomy, for instance, and several amputations—chloroform should be given boldly, but carefully, in maximum doses, so as to obviate the dangers of the stage of vomiting and convulsive action; whilst, in all tedious or slow operations, such as those for vesico-vaginal fistula, necrosis, resections, etc., the minimum dose from the commencement is safest.

We are told now by a young but observant student at King's College, that Dr. Snow usually poured two drachms of chloroform into his tubular inhaler at a time in most surgical operations in adults!—the belief being that, when chloroform is used in quarter-drachm doses, there is great and dangerous prolongation of the period of irritation of the bronchial tubes induced with epileptoid convulsions. This quite agrees with what I have seen, as stated in my book, where I said (a half-year before Dr. Snow's work was published) that I believed, with due steadiness and care, one-drachm-and-a-half doses are the safest, in the generality of operations, as maximum doses.

I am, etc., Charles Kidd.

43, Sackville Street, Piccadilly, February 21st, 1859.

GRATUITOUS MEDICAL SERVICES.

Sir,—If the matter has not been already too long before the readers of the Journal, in connexion with the *fraças* at Taunton, will you allow me to make a few remarks on the hospital and dispensary system in general?

In all the comments on that affair in your pages, it has been taken for granted that the rule introduced by the governors there, of requiring the signature of the medical men at their respective times of attendance, was a piece of unbearable oppression, as well as a gross insult to those gentlemen; and utterly needless. This I very much doubt. I have not the slightest acquaintance with Taunton, or any of its inhabitants; but I do know something of the way in which these medical institutions are generally worked, and I have little doubt that some mode of insuring the regular attendance of the medical officers was become imperatively requisite.

That the attendance of physicians and surgeons at the hospitals and dispensaries to which they are attached, is in very many instances shamefully irregular, I know beyond mistake. In one dispensary, to which I was for some time house-surgeon, of the three surgeons, every one of whom should have attended (by their own voluntary offer) twice a week, not one made his appearance oftener than once or twice in a month, and one gentleman passed three months without attending. I believe this is no solitary case; but this irregularity is, in too many such institutions, the rule, not the exception.

It is not the slightest excuse for the delinquents to allege that the offices are unpaid, or that their time is too occupied by urgent private practice. The reply to the first is, "Don't act a lie by accepting—nay, canvassing and struggling for—an office the duties of which you don't intend to perform." To the second excuse the answer is equally simple, "Resign at once an office which you can no longer properly fill."

Let medical men say at one, "We are willing to aid charities as other men do, but cannot afford to give our services gratuitously to so large an extent;" or else let them at once openly avow that their motive for seeking hospital appointments is to get known, and that by that notoriety they are repaid; and admit that the managers of the institution have a right to see that the duties thus paid for are properly fulfilled. Don't let medical men disgrace themselves, their profession, and their religion, by making a pretended kindness to the poor a mode of forming a connexion; or by begging for appointments of which they never intend to fulfil the duties; or by retaining offices which ought long ago to have been resigned, and this often only to prevent their being filled by younger men.

For my own part, I heartily wish that punctual attendance on the part of the medical officers was rigidly enforced in every hospital and dispensary of the kingdom. We should then, I expect, see much less of the humiliating canvassing for the appointments, if it were known that the work was to be real, and not sham. The whole business is commonly a double cheat. The public cheat the profession by claiming from them gratuitously services which ought to be paid for; and, in return, the medical officers cheat the public by neglecting the work they have undertaken. It is notorious that the actual work is usually done by the paid resident medical officer. Of itself, this is quite fair; but the dishonest part is the pompous announcement of Drs. A., B., and C., as physicians *regularly* attending. Let the real truth be told. Say at once, Mr. Z. is the paid and actual medical officer; by him the work is to be done in all ordinary cases; he has been selected for that purpose. Drs. A., B., and C., are the *consulting* physicians: they cannot be expected to sacrifice a twentieth part or more of their available time; and will not do it, even if they undertake it. They are only to be appealed to in extraordinary cases, which occur but rarely; and to the appeal of the house-surgeon or apothecary, in such cases, there is no doubt but they would attend.

How much is the same cheat practised, on a still larger scale, in the case of Poor-law medical officers! In too many cases does a surgeon eagerly grasp at one of these appointments, well knowing that he must lose money by it, if he performs the duties; but which duties he never intends to perform, at once delegating them to an unqualified assistant or raw pupil. The express order of the Poor-law Board is, that the medical officer is to attend *himself*, and in *no case* is he to employ an unqualified assistant.

I am, of course, far from including all medical officers of hospitals, dispensaries, or union districts, under this censure. To those who manfully and conscientiously do their duty they have undertaken, whether well or ill paid, be all honour; and many such there are. To those who defraud their profes-

sional brethren by promising to do gratuitously work which would else be readily paid for, and who defraud the poor by not fulfilling their promises, be shame and confusion.

I am, etc., Delta.

February 15th, 1859.

THE STAMP DUTY ON DIPLOMAS.

Sir,—I hope you will aid us with your powerful pen, at the present time, in getting that odious stamp duty done away with by the College of Physicians, else a large number like myself will hesitate to join their body. I am, Sir,

A Provincial Physician.

February 22nd, 1859.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Friday, February 18th, 1859.

SALE OF POISONS BILL.

Mr. Walpole moved the second reading of the Bill regulating the sale of poisons.

The Bill was read a second time. [It will be found at p. 173.]

MEDICAL ACT AMENDMENT.

Mr. Walpole obtained leave to bring in a Bill to amend the Medical Act.

The Bill was read a first time. [It will be found at p. 171.]

LUNACY LAWS.

Mr. Walpole obtained leave to bring in two Bills for amending the laws relating to lunatics in county and private asylums.

The Bills were severally read a first time.

Monday, February 22nd.

MEDICAL ACT (1858) AMENDMENT BILL.

This Bill was read a second time.

LUNATIC POOR (IRELAND) BILL.

On the order for the second reading of the Lunatic Poor (Ireland) Bill—

Mr. Bagwell moved that the Bill be referred to a Select Committee.

The debate which followed, related almost entirely to the machinery and details of the measure, especially whether the control should be given to the Grand Jury.

Lord Naas said the principle of the Bill was the substitution of local for Government control, under a vigilant system of inspection, and its provisions substantially would remedy the evils brought out by the report of the Commissioners.

The Bill was read a second time, the proposal to refer it to a Select Committee being withdrawn.

LUNATICS (CARE AND TREATMENT) BILL.

This Bill was read a second time, and ordered to be referred to the Committee on Lunacy.

LUNATIC ASYLUMS, etc., BILL.

This Bill was read a second time, and ordered to be referred to the Committee on Lunacy.

Tuesday, February 23rd.

ADULTERATION OF FOOD.

Mr. Scholefield obtained leave to introduce a Bill to prevent the adulteration of articles of food or drink.

The Bill was subsequently read a first time.

PUBLIC RECREATION.

On the motion of Mr. Slaney, leave was given to bring in a Bill to facilitate grants of land to be made near populous places for the use of regulated recreation of adults, and as playgrounds for poor children.

The honourable member afterwards brought in the Bill, and was read a first time.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Caparn. On February 18th, at Banbury, the wife of John Caparn, M.D., of a son.

Carruthers. On February 21st, at Finchley, the wife of James Carruthers, Esq., Surgeon, of a son.

Couch. On February 16th, at Islington, the wife of W. O. Couch, Esq., Surgeon, of a son.

Harding. On February 22nd, at Sandford House, Highbury New Park, the wife of John Fosse Harding, Esq., Surgeon, of a son.

Kemp. On August 3rd, 1858, on board the *Khersonese*, the wife of the late James George Kemp, M.D., Assistant-Surgeon Bengal Army, of a daughter.

Willett. On February 16th, at Wyke House, Isleworth, the wife of E. S. Willett, M.D., of a son.

MARRIAGES.

Callender—Bousfield. Callender, George W., Esq., Surgeon, to Sophia, fourth daughter of the late J. R. Bousfield, Esq., of Clapham Park, at Christ Church, Paddington, on February 17th.

Cox—Overend. Cox, the Rev. Charles William, rector of Croxton, Lincolnshire, to Mary Isabel, eldest daughter of Wilson Overend, Esq., Surgeon, of Sharrow Head, Sheffield, on February 17th.

Higman—Croft. Higman, Albert D., Esq., Royal Marines Light Infantry, to Lavinia Eulalie Rose, third and youngest daughter of Jonathan Croft, Esq., late Army Medical Staff, of Sydney, New South Wales, at Marylebone Church, on February 10th.

Mackerlie—Macwhirter. Mackerlie, John, Esq., to Harriett Seton, eldest daughter of the late John Macwhirter, M.D., H.E.I.C.S., at All Souls' Church, Langham Place, on February 21st.

DEATHS.

Hickman, Edward, Esq., Surgeon, at 206, Euston Road, aged 62, on February 14th.

Hickman. On February 17th, at Elm Grove, Lower Norwood, Charles Cowper, youngest son of Edward Hickman, Esq., Surgeon, aged 18.

Lee, Thomas Masson, M.D., 47th Bengal Native Infantry, second son of the Very Rev. John Lee, D.D., Principal of the University of Edinburgh, on board the *Princess Charlotte*, between Hongkong and Singapore, on November 30th, 1858.

Schœnbein. On February 13th, at Stamford Hill, aged 22, Emilie, eldest daughter of Professor Schönbein, of Basle.

Sturgis, Thomas, Esq., Surgeon, of 11, North Street, Manchester Square, aged 71, on February 1st.

APPOINTMENTS.

Davis, J. Hall, M.D., appointed Honorary Physician to the London House for Surgical Diseases of Women.

*Styrap, Jukes de, M.D., elected Physician to the Salop Infirmary, in the room of the late *T. J. Drury, M.D.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, February 18th, 1859:—

Arden, Septimus, Sheffield
Cæsar, John Augustus, Cork
Cooke, Alexander Haldane, Belfast
Copeland, John, Lindfield, Sussex
Jackson, Thomas, Eltham Park, Kent
Kisch, Joseph, Finsbury Circus
Knill, James, Bristol
Maingay, Alexander Carrall, Great Ayton, Yorkshire
Timmins, Daniel, Dudley, Worcestershire

Trotter, Charles Hardy, Coleford, Gloucestershire
Weise, Edwin, Coathupe, Bristol
Wotton, Henry, Cavendish Square

At the same meeting of the Court—

Eastcott, James Crawder, of Her Majesty's ship *Sea Lark*, Portsmouth, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date October 15th, 1852.

Wednesday, February 23rd:—

Bickerdike, James Bird, York
Bird, William Valentine, Seacombe, near Birkenhead
Fearon, Henry Hall, Cockermouth, Cumberland
Hanbury, Jas. Arthur, Parkhurst Barracks, Isle of Wight
La Mert, Lima Abraham, Bedford Square
Llewellyn, Ernest George Thomas, Puddington, Devon
Merryweather, Philip Edward Collins, 182, Euston Road
Morris, Henry, jun., Gosberton, Spalding, Lincolnshire
Plummer, Jonah, Clifton, York
Sarjant, Josiah, Limehouse
Stack, Michael, Listowel, co. Kerry
Tripe, Julius Decimus, Commercial Road

The Fellowship. The following members of the College having been elected Fellows at previous meetings of the Council, were admitted on February 10th:—

Bates, William, Manchester
Browning, Charles, Dorset Place, Regent's Park
Du Pasquier, Claudius Francis, Pall Mall
Ebsworth, Alfred, Trinity Street
Gaussen, John Laird, Royal Antrim Rifles
Jones, John Dalston, Dalston
Keddell, John Staples, Sheerness
Mapleton, Henry, Army Medical Department
Paul, John Hayball, Camberwell
Robinson, John Frederic, Limehouse
Sharp, Henry Locker, Great Cumberland Street
Steel, Charles Deane, Royal Marines
Stevens, James, Bloomsbury Square
Warwick, Richard, Richmond
Ward, John, R.N., Sheerness

Her Majesty's Indian Army. The following gentlemen were reported as qualified Assistant-Surgeons by the Board of Examiners, on January 17th, 1859:—

Allen, William E., M.R.C.S.E.
Bensley, Edward, M.R.C.S.E.
Benson, Henry, M.R.C.S.Ed.
Bilderbeck, John, M.R.C.S.E.
Blanc, Henri J., M.D. Montp., M.R.C.S.E.
Bremner, George, M.D. St. Andrews, M.R.C.S.Ed.
Chesnaye, George, L.R.C.S.I.
Condon, James H., M.R.C.S.E.
Constant, F. G., M.D. St. And., M.R.C.S.Ed.
Costello, Charles P., M.R.C.S.Ed.
Davies, John, M.R.C.S.E.
Dougall, Joseph, M.R.C.S.Ed.
Duncan, John, M.D. Aberdeen, M.R.C.S.Ed.
Durant, James J., M.R.C.S.E.
Dymock, William, M.R.C.S.E.
Ellis, John, M.B. T.C.D.
Fawcus, James, M.D. Lond., M.R.C.S.E.
Grant, George, M.B. Aberdeen, M.R.C.S.Ed.
Hooper, William R., M.R.C.S.E.
Lackersteen, Mark H., M.R.C.S.E.
Maingay, A. C., M.D.Ed.
Mantell, Riners, M.B. Lond., M.R.C.S.E.
Marriott, Peter W., M.R.C.S.E.
Nichol, William, M.D. Ed., M.R.C.S.Ed.
Odevaine, Ferdinand, M.R.C.S.I.
Parsons, Francis, M.R.C.S.E.
Pearse, Robert E., M.R.C.S.E.
Purefoy, James R., M.D., M.R.C.S.I.
Rhind, Robert, M.R.C.S.E.
Riddell, George D., M.R.C.S.Ed.
Ross, Æneas M., M.R.C.S.Ed.
Selous, Edric, M.R.C.S.E.
Sexton, Edward, M.D. St. And., M.R.C.S.Ed.
Sheppard, Thomas W., M.R.C.S.E.
Simpson, David, M.D.Ed.
Smith, Henry S., M.B. T.C.D., M.R.C.S.Ed.
Tandy, Edward O., L.R.C.S.I.
Thomson, William J., M.R.C.S.Ed.

Apothecaries' Hall. Members admitted on Thursday, February 17th, 1859:—

Grose, Samuel, Boston, Lincolnshire
Rentzsch, George Henry
Rix, William Hawells, Tunbridge, Kent
Storey, Robert, Ashby-de-la-Zouch

As an Assistant:—

Jones, William Robert, Broadway, Westminster

HEALTH OF LONDON:—WEEK ENDING FEBRUARY 19th, 1859.

[*From the Registrar-General's Report.*]

The returns for London exhibit a comparatively satisfactory state of the public health. The deaths registered, which in the previous week were 1274, declined to 1156 in the week that ended last Saturday. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1178; but as the deaths in the present return occurred in a population which has increased, they should be compared with the average after it is raised in proportion to that increase, namely with 1296. The result of the comparison is, that 140 persons survived last week, whose deaths would have been placed on the registers, if the mortality had been equal to the average rate for this period of the year.

The mortality from scarlatina and diphtheria showed a decrease in the first week of the present month, but it has been stationary since that time. The deaths from these two diseases last week were 90, the corrected average for corresponding weeks being 36. Diphtheria was recorded in 21 cases, which occurred in the following sub-districts:—one in St. Mary, Paddington, one in Chelsea, north-east, two in Belgrave, one in Long Acre, one in Golden Square, one in Regent's Park, one in Tottenham Court Road, one in Gray's Inn Lane, one in Kentish Town, one in St. Mary-le-Strand, one in London City, north-east, one in Ratcliff, one in St. Saviour, one in St. Olave, one in London Road, one in Trinity, Newington, two in Peckham, one in Woolwich Dockyard, and one in Lee. A girl died from diphtheria last week at 7 Rush Grove, Woolwich, and it appears that six children, five of whom were in one family, have died in that house from the same disease since January 3rd.

It is satisfactory to observe that small-pox was less fatal last week, the deaths, which had risen to 29, having again declined to 13. Seven children died of syphilitic disease; two persons from intemperance; five infants from malformations, two by murder. Five nonagenarians, all women, were registered; the oldest was a widow, aged 96 years.

Last week the births of 996 boys and 944 girls, in all 1940 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1662.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·991 in. The mean daily reading was above 30 in. on three days. The barometrical readings varied from 29·69 in. on Sunday to 30·25 in. on Saturday. The mean temperature of the week was 45·1°, which is 6·9° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week, and on Wednesday and Thursday this excess was equal to about 12°. The thermometer in the shade reached its highest point 59° on Wednesday, and fell to its lowest 33·2° on Saturday. The range of the week was therefore 25·8°. The mean daily range was 14·7°. The difference between the mean dew-point temperature and air temperature was 5·1°. The mean degree of humidity of the air was 83. The mean temperature of the water of the Thames was 44·3°. The wind blew generally from the south-west. On Friday it was in the north-west. On Wednesday the horizontal movement of the air was 255 miles, and on that day the wind reached a maximum pressure of 12 lbs. on the square foot. The amount of rain in the week was not more than 0·09 in.

A Medical Registration Committee has been established for Hastings and the neighbouring towns, in connexion with the East Sussex Medico-Chirurgical Society. In order to avoid the possibility of deception, each candidate for admission is obliged to produce his diplomas of qualification, or (if registered) his certificate of registration; and two members of the Committee are required to attest his personal identity and respectability. The Committee have already denounced to the Registrar one medical practitioner who was believed to be practising illegally, and who has since disappeared from the neighbourhood.

QUALIFICATIONS OF POOR-LAW MEDICAL OFFICERS.

The subjoined memorial has been addressed to the President of the Poor-Law Board.:—

To the Right Honourable T. Sotheron-Estcourt, President of the Poor-Law Board, Whitehall, London, the Memorial of the President and Council of the Royal College of Surgeons of Edinburgh,

Sheweth,—That your Memorialists have had their attention directed to the subjoined order of your Honourable Board for determining the qualifications of the medical men who are to act under your authority.

That the said order appears to your Memorialists to be unjust to the medical men who have received their qualifications in Scotland and in Ireland; inasmuch as it makes it necessary, in every instance, that those holding office under your authority should possess at least one purely *English* qualification.

That this appears to your Memorialists to be inconsistent with the principle of the Medical Act of last session,—one of whose most important objects was to establish reciprocity between the medical qualifications conferred in the three divisions of the kingdom, both as to the conditions of obtaining them, and as to the legal rights of those who possess them; and to put an end to the just complaints which had so long been made, that certain legal qualifications had only a local significance, and were without value beyond the limits of that division of the United Kingdom in which they had been conferred.

That the course of instruction pursued by candidates for the diploma of this College, and the examinations undergone by them, have been at all times as complete, not merely in Surgery, but in Medicine, Pharmacy, and Midwifery, as those of any other board in the kingdom; that they have been progressively extended to meet the increasing requirements of medical education and of the public service; and that they are at this moment under revision, as indeed are those of all the other medical boards in the kingdom, with a special view to the improvements which will probably be required by the Council established under the new Medical Act.

That if two qualifications are deemed necessary by your Honourable Board, on the part of candidates for medical offices under your patronage, and if the diplomas of the three Royal Colleges of Surgeons of the United Kingdom, and those of the Faculty of Glasgow, the sufficiency of which throughout the kingdom as purely *surgical* qualifications, has long been undisputed, are not to be held sufficient as *medical* qualifications, it does in that case appear to your Memorialists to be unjust to the medical gentlemen of Scotland and of Ireland that they should be obliged to resort to England for a second qualification; inasmuch as the preference thus given to English University degrees, the licenses of the College of Physicians of England, and the licenses of the English Apothecaries' Company, over the degrees of Scotch and Irish Universities, and the licenses of Scotch and Irish Colleges of Physicians, cannot be defended on any principle which will bear investigation, while it will deprive your Honourable Board of the services of some of the best educated medical men in the kingdom, will establish, so far as your patronage is concerned, an invidious monopoly in favour of English medical boards, and will contravene, if not the letter, at least the spirit and aim of the recent Medical Act.

On these grounds the President and Council request your Honourable Board to reconsider the terms of the order, with a view to effect such changes therein as to remedy the evil complained of.

(Signed) Robert Omond, *President.*

Surgeons' Hall, Edinburgh, February 17th, 1859.

From various representations which the Royal College of Surgeons have received from their licentiates resident in England, it appears that, according to the consolidated order of the Poor-law Board of London, no medical officer can hold any permanent parochial appointment under the Board "unless he possess one of the four following qualifications; that is to say,—

"*Article* 168.—1. A dipioma or degree as a Surgeon from a Royal College or University in England, Scotland, or Ireland, together with a degree in medicine from a University in England, legally authorised to grant such degree, or together with a diploma or license of the Royal College of Physicians of London.

"2. A diploma or degree as Surgeon from a Royal College or University in England, Scotland, or Ireland, together with a certificate to practise as an Apothecary from the Society of Apothecaries of London.

"3. A diploma or degree as Surgeon from a Royal College or University in England, Scotland, or Ireland; such person having been in actual practice as an Apothecary on the 1st day of August, 1815.

"4. A warrant or commision as Surgeon or Assistant-Surgeon in Her Majesty's Navy, or as Surgeon or Assistant-Surgeon or Apothecary in Her Majesty's Army, or as Surgeon or Assistant-Surgeon of the Honourable East India Company, dated previous to the 1st August, 1826."

NAVAL MEDICAL SERVICE.

The following is the substance of a letter which appeared in a recent number of the *Standard*. The points insisted on are the differences as to rank and pay between the medical officers of the navy and those of the army.

"An assistant surgeon in the navy never ranks, whatever his servitude be, above a mate, whose equivalent in the army is a lieutenant; but the army assistant, after he has completed six years, ranks with a captain of his own regiment, and consequently with a surgeon in the navy. This surely is a degradation to the latter. So again, at each step above the assistant. An army surgeon ranks, from his commission as such, with a major, whose equal in rank afloat is a commander, with whom, were a naval surgeon in his proper place, he ought to be equal. The same applies to surgeons major, deputy inspectors, etc.

"Then again, as to the scales of pay, how much inferior is the naval surgeon's pay to that of his brother officer in the sister service. To begin with the assistant, as before. On entrance into the service a naval medico receives 8*s.* 1*d.*, an army one 10*s.* After three years servitude, the former receives an increase of 6*d.* a day; while the latter, after five, receives three times that sum, making the one receive 8*s.* 7*d.*, the other 11*s.* 6*d.*, their qualifications being the same. Again, the army assistant, if promoted before being ten years in the service, receives 15*s.*, while a naval officer of the same standing may only receive 11*s.*, and not more than 12*s.* An army surgeon of fifteen years servitude receives 18*s.*, whereas a surgeon of the royal navy receives, after ten years full pay time, 14*s.*, and has no increase until he shall have completed no less than twenty years on full pay,—a very difficult matter now-a-days, and only to be done by the fortunate. Can such an invidious injustice be allowed. The same, however, holds good with the higher grades. But a greater hardship still exists in the incompetency of a naval medical officer (who must live according to his education) to subsist on the miserable pittance allowed him on half-pay. A young assistant of the royal navy gets 2*s.* a day! out of which he is to keep himself. His equal in the army gets three times that sum. The naval assistant may get 3*s.* His brother officer in the army after five years gets 8*s.*

"The like disparity exists in the case of the surgeons in the two services as regards half-pay. I may, however, observe that whereas the naval surgeon is frequently on half-pay, which is one reason why his half-pay ought to be far better than it is, the army surgeon is seldom, I may say almost never, in such an unhappy condition. However, be that as it may, the naval surgeon commences his half-pay on 5*s.* a day, while his compeer in the army at once gets 11*s.* After fifteen years servitude the naval officer gets 8*s.* a day, his brother officer in arms of the same standing gets 13*s.* 6*d.* Could any greater injustice be made manifest to you? The anomaly still holds good the higher up the scale we advance. Again, in the service whose claims I strongly urge upon you to advocate and bring to the notice of members of Parliament, the medical officer attains an advanced age before he can complete twenty-five years full pay time, when only he is at liberty to retire; whereas, in the sister service, the medical officer has a continuous period of service, and has the option of retiring after twenty-one years time.

"The medical officers of the navy, I feel convinced, have more confidence in the present First Lord than in any of his predecessors, yet he may be so influenced by the other lords that, without the support of the House of Commons, he might have been restrained from granting the concessions needed to put the medical officers of the navy on a proper footing, thereby permitting more of the young surgeons from our great schools of medicine, who have hitherto kept aloof, to enter the service so much in need of their assistance."

POOR-LAW MEDICAL REFORM.

The medical officers of the Basford and Radford Unions passed the following resolutions at a meeting held at Nottingham, on January 29th.

1. That, whilst expressing its thanks to the President of the Poor-law Board for his fulfilment of a promise given to the Poor-law medical officers, by framing a scheme for their improved remuneration, it cannot but signify its unanimous disapproval of the scheme proposed.

2. That any law confirming the present mode of appointment and the permanency of such appointment, but increasing the amount of remuneration already received, with the addition of mileage in such cases as are beyond one mile from the medical officer's residence; and also a revision of the present scale of extra fees would be more acceptable, and more likely to meet the wants of the medical officers generally, inasmuch as it is the decided opinion of this meeting that the present scale of remuneration is wholly inadequate for the services rendered.

The Queen's College and Hospital, Birmingham. The principal of Queen's College, Sands Cox, Esq., F.R.S., has commenced the arduous task of collecting a million of postage stamps on behalf of the Queen's Hospital, equivalent to £4166 : 13 : 4, which sum would cover the present liabilities of the charity, afford additional accommodation to the out patients, who are now crowded into two small waiting-rooms, open a ward for the diseases of the eye, a ward for burns and cases of a similar character, and erect a small chapel, for which an endowment of £40 per annum has been provided by the late Dr. Warneford. The following gracious communication has been received from Her Majesty the Queen:—"Sir Charles Phipps has received the commands of Her Majesty the Queen to forward to Mr. William Sands Cox the enclosed cheque for £100, as a donation from Her Majesty to the funds of the Queen's Hospital.—Buckingham Palace, Feb. 15th."

The Jardin des Plantes. The collection of animals at the Jardin des Plantes has recently suffered several losses. Two cat-faced monkeys, from New Granada, have died within a few days of each other; the female from inflammation of the lungs, and the male apparently from grief, as after the death of its companion it refused all food. These models of conjugal tenderness were at the Jardin des Plantes for seven years. They have been replaced in their cage by two brown coatis from Surinam. They are nocturnal ramblers, and are fond of rats, birds, and insects. As they now usually feed on carrots, it is thought not improbable they may not long survive. One of these animals was long kept on board the Uranie frigate. It was very tame and caressing; it uttered a shrill cry on seeing those who showed it kindness; and at night it took up its quarters in any empty hammock. When the owner of it returned, he had always some difficulty in getting possession of his quarters. The poor elephant Roger is evidently wasting away, and, it is feared, dying. It is really piteous to see the gigantic animal with scarcely strength enough to support itself. The interesting position of the female hippopotamus is becoming more and more apparent. It is to be hoped that measures will be taken to prevent the newly-born offspring from injury, the last, it may be remembered, having killed itself by coming with force against the sharp edge of the basin. The accouchement is expected in the course of next month.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

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Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Communications have been received from:—Mr. T. E. Ruttledge; Dr. Frederic Page; Dr. W. B. Mushet; Mr. J. V. Solomon; Dr. Oke; Mr. T. Holmes; Mr. J. R. Humphreys; Mr. Samuel Drew; Dr. J. Styrap; Mr. Richard Sandford (with enclosure); Mr. G. B. Norman; Mr. T. M. Stone; Mr. George Forbes; A Provincial Physician; Dr. Camps; Dr. Kidd; Dr. H. Hancox; Mr. Goodworth; and Mr. E. Watson.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. On Poisons, in Relation to Medical Jurisprudence and Medicine. By Alfred Swaine Taylor, M.D, F.R.S. Second Edition. London: Churchill. 1859.
2. General Debility and Defective Nutrition: their Causes, Consequences, and Treatment. By Alfred Smee, F.R.S. London: Churchill. 1859.
3. Third Report of the Clinical Hospital, Manchester: containing Results of Physical Development, Hooping Cough, and Transmitted Diseases. By *James Whitehead, M.D. London: Churchill. 1859.
4. The Causation and Prevention of Disease. By John Parkin, M.D. London: Churchill. 1859.
5. The Mortality after Operations of Amputation of the Extremities, and the Causes of that Mortality. By Arthur Ernest Sansom, Associate of King's College. London: Churchill. 1859.
6. A Handbook of Hospital Practice: or an Introduction to the Practical Study of Medicine at the Bedside. By Robert D. Lyons, K.C.C., M.B., etc. London: Longmans. 1859.

ADVERTISEMENTS.

Just published, Fifth Edition, price 1s. 6d., or by post, 1s. 8d.

Lateral Curvature of the Spine, with a New and Successful Method of Treatment for Securing its Removal, without Confinement. By CHARLES VERRAL, Surgeon to the Spinal Hospital, Portland Road, London, Author of "The Spine, its Curvatures and other Diseases", etc. etc.

London: John Churchill, New Burlington Street, and all Booksellers.

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The Archives of Medicine. Edited by Dr. BEALE. Half-Yearly. Nos. I, II, and III. 3s. 6d. each.

London: John Churchill.

BRITISH MEDICAL JOURNAL.

Cases for the Volume for 1858, and previous years, are to be had at the Office, 37, Great Queen Street, by those Gentlemen desirous of binding their numbers. May be ordered through any bookseller, price 1s. 6d.

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BRITISH MEDICAL JOURNAL:

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

UNIVERSITY COLLEGE HOSPITAL.

EXCISION OF THE KNEE.

Under the care of J. ERICHSEN, Esq.

[*From Notes by* J. S. WILKINSON, ESQ., *House-Surgeon.*]

THE following case, lately under the care of Mr. Erichsen, is communicated as affording a well marked instance of strumous disease of the knee-joint, and as illustrating some of the difficulties which have to be overcome in the treatment of cases after resection.

The patient was Mary Ann B., aged 30, a single woman, and was admitted December 29th, 1858. Her parents are alive, and, with the exception of the father, who is subject to rheumatism, her family enjoy good health. She was born and brought up in the country. She entered service as a servant, and had knelt a great deal on stone steps. Six years since, she had pneumonia, which invalided her for twelve months. Four years and a half ago, she had a catching pain in the left knee, under the cap, accompanied with crampy stiffness whilst walking, especially on going up and down stairs. This did not prevent her from performing her ordinary work. Two years afterwards, the joint inflamed and swelled much, occasioning continuous and excessive pain; this was relieved by leeching, rest, and subsequent blistering; and the swelling decreased somewhat, so that she returned to her duties. Twelve months later, she had another attack: the inflammation was less marked, although there was a good deal of pain and swelling, for which she was treated with benefit at Winchester Hospital. Twelve months since, startings at night began; and blisters were applied with advantage. She then continued under surgical treatment up to the time of her admission.

Until within the last eight months, the patient had not felt pain in the knee, except whilst exercising it; since then, it had prevented her walking; and, if she stood for any time, the joint became puffy, as also the leg and foot. This subsided on reclining. During the night, she would awake with pain; and if the foot were knocked, the pain was excruciating. She had been losing flesh fast, especially of late.

On admission, the patient seemed careworn, much emaciated, and had altogether a tubercular aspect. She had a bad appetite and a slight cough; but the chest revealed no physical signs of disease. The diseased knee was semiflexed, round, and full. The outlines of the various points were barely perceptible to the eye or touch. It measured fourteen inches and a half in circumference over the patella (the sound knee measuring eleven inches and a half); and the skin and tissues were thickened, œdematous, and resisting, and conveyed a semi-elastic feeling. Manipulation caused much pain, especially when gliding the opposed articular surfaces of the femur and tibia over one another, which was readily permitted, from the laxity of the ligaments and capsule. This elicited no grating. Pressure over the tuberosity of the tibia caused a smart pain; and the outer boundary of the joint was reddened and inflamed. The thigh was emaciated; and the leg and foot were œdematous, contrasting much with the meagre limb of the opposite side.

The knee was fixed in leather splints; and the patient was put on a tonic of quinine and iron.

January 5th, 1859. Her general health was much better; the appetite had improved; and there was no pain in the knee, except when the splints were taken off, or towards night, when she dropped off to sleep. Mr. Erichsen decided upon resecting the joint.

Operation. The patient being under chloroform, and placed on the operating table, the knee was well flexed, to stretch the tissues in front of it. A transverse incision was made from condyle to condyle, over the lower part of the patella; and the patella was dissected out. In doing this, a quantity of liquid softened-down pultaceous *débris* escaped. The articular cartilages were ulcerated to a great extent, and the ends of the bones exhibited cavities containing softening tubercle. The lower end of the femur was removed just above the condyles, and the upper end of the tibia was removed to the depth of half an inch. The freshly sawn surface of the femur was healthy; but that of the tibia presented three or four largish spots of tubercular deposit, which were gouged out. Three vessels required ligaturing, and the edges of the wound were brought together by three sutures. The wound was kept well covered with water-dressings.

After the operation, the patient went on well up to January 24th, when she unfortunately caught erysipelas, that affection being very rife at the time. This subsided, leaving her weak, and unable to bear the pain of having her splints changed (which was absolutely necessary). This was done with chloroform. When the anæsthesia passed away, the patient was sick, and continued retching up to the afternoon of the 28th, in spite of all the remedies tried. She now had small quantities of brandy at short intervals, and a brandy and egg enema, with beef-tea, in hopes of rallying her; but she gradually sank, and died at 8 P.M.

The following were the means adopted in order to ensure the highly essential points of keeping the cut ends of the bones in close apposition, and preventing their movement. Immediately after the operation, the limb was bandaged to a well padded straight splint running up the back of the leg and thigh as high as the tuber ischii, with a foot-piece at right angles. When the sutures were removed, on January 10th, the edges of the wound, which were for the most part united, were supported by three strips of plaister. On Jan. 12th, the apparatus having become loose, it was reapplied, with the addition of two broad pieces of gutta percha lined with a thin layer of cotton wool, arched the one over the front of the leg, and the other over the front of the thigh; and further support was given by a strip of gutta percha on each side of the knee; but, although this answered admirably at first, in the course of a few days the gutta percha yielded to the heat of the limb, and allowed displacement of the bones. In January 26th, to obviate this, the following alterations were made in the splint. The gutta percha was used, as on the last occasion; but, in addition, it was embraced by a pair of wooden flaps (two inches by thirteen inches) hinged on to the back splint on either side of the leg, and a similar pair (three inches by nine inches) on either side of the thigh, thus affording an unyielding support to the limb, keeping the ends of the bones in perfect apposition, and preventing the slightest movement of them. (See Fig. 1.)

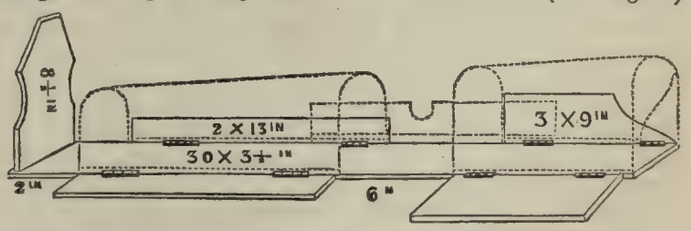


Fig. 1.

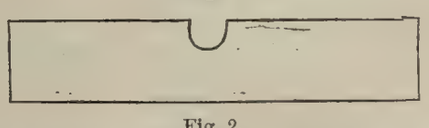


Fig. 2.

To facilitate dressing the wound, and allow free exit to the discharge, without disturbing or soiling the apparatus, a piece of gutta percha, cut to the shape shewn in the accompanying

diagram (Fig. 2), was bandaged on either side of the knee, external to the general splint. In future, I should make several apertures in the arch of gutta percha, to allow evaporation of the perspiration, as its warmth tends greatly to admit of its yielding.

ST. GEORGE'S HOSPITAL.

I. LACERATION OF THE LUNG, WITHOUT FRACTURE OF THE RIBS.

Under the care of H. C. Johnson, Esq.

At page 185 of the volume for the year 1857, the reader will find reported a case of the above injury, at least a case of rupture of the lung evidently not produced by fractured ribs, although some of the ribs in another part of the chest were fractured. We referred there to the only complete account with which we are acquainted, of a form of injury which has certainly attracted too little attention, viz., M. Gosselin's memoir in the Transactions of the French Société de Chirurgie. It is quite possible that this injury, rare as it must be supposed to be under any circumstances, would be more frequently found if it were better known and more studied. The only other case which has been observed at St. George's Hospital, in the course of many years, was in a man, aged 25, in whom there was also fracture of the ribs, but not corresponding to the injury. This patient died in a very short time, so that the symptoms could not be investigated; and in the two other cases, the youth of the patients, and the distress which they suffered, rendered ineffectual all attempts to examine the chest satisfactorily. In the case before us, indeed, the rapid increase of fluid accumulation in the pleura rendered probable a breach of substance of the lung communicating with that cavity, and was so extensive as to mask the signs of pneumothorax, which must have also existed; but the other symptoms, which are usually present, were not noticed. These are laid down by M. Gosselin as gurgling and metallic tinkling from the air passing through the collection of fluid, ægophony, mucous râles, dyspnœa, frequency of breathing, and hæmoptysis. The gurgling and metallic tinkling may be absent when the laceration does not communicate with the pleural cavity; and sometimes emphysema may be present from the laceration being situated at the root of the lung and allowing of the escape of air into the cellular tissue of the mediastinum, or from there being a fractured rib at a different part of the chest and from the air passing from the pleura through this fracture to the subcutaneous areolar tissue. These symptoms, in a case where no fracture can be detected in the bony walls of the chest, will suffice for the diagnosis of an injury which is, when not extensive, very amenable to treatment, but which, if overlooked, may rapidly proceed to a fatal termination. The subjects of the accidents in the few well authenticated cases which have been preserved have most of them been children or young people; one of them, however, was thirty-eight years of age.

James D, aged 7, was admitted under the care of Mr. Johnson on January 16th. Just previous to admission, at 9 P.M., he was knocked down by a cab, and the wheels passed over the lower part of his chest. On admission, he was complaining of great pain in the abdomen and lower part of the chest, especially on the left side, and there was vomiting of blood, which recurred once in the night. There was great dulness over the whole left side of the chest, and no breathing could be heard on that side. Four hours afterwards, when the house-surgeon visited him, he noticed that there was a good deal of bulging of the left side, especially of the intercostal spaces. The abdomen felt very hard from contraction of the muscles, but on firm pressure no pain seemed to be felt. There was great dyspnœa and turgescence of the face. On the 17th, he was in a half insensible state, and was very low. Four ounces of brandy were ordered. During the day he frequently wandered, still suffering much from dyspnœa, and gradually becoming weaker and less sensible. He died on the following day.

On *post mortem* examination, all the viscera were found healthy, except the left lung. The ribs were carefully examined, and found quite uninjured. The left pleura was full of blood, and the upper lobe of the lung much compressed thereby; it seemed, however, otherwise healthy. The lower lobe, on the contrary, was extensively consolidated, so as to be almost entirely solid. This resulted, as it would appear, from the extravasation of blood into its substance and subsequent inflammation. The presence of inflammation was inferred from the deposition of lymph on the pleural surface of the lung, for no section was made of the affected portion. The extravasation had proceeded from an extensive rupture of the substance of the lung, which started from its posterior edge, just below the entrance of the main bronchial tube, and passed obliquely downwards for about an inch on the surface of the lung.

II. STRICTURE AND ENLARGED PROSTATE: PUNCTURE OF THE BLADDER FROM THE RECTUM.

Under the care of T. Tatum, Esq.

William B., aged 78, was admitted under the care of Mr. Tatum on January 10th, on account of retention of urine. He had suffered from symptoms of stricture for ten years, and had had several attacks of retention during the last two or three years. A small catheter could always be passed for him till a fortnight before his admission, since which time it has not been possible to pass the instrument. On admission, he was low and feverish, and the urine was dribbling away. An attempt was made, now and on subsequent occasions, to introduce a catheter; but it always got into a false passage leading down towards the left side. This occasioned a good deal of bleeding. He was ordered ten drops of laudanum, in saline mixture, every six hours. He remained in the same condition during the next few days. There was no positive retention, but the bladder was becoming more distended, and the urine getting ammoniacal. It was thought better, therefore, to give relief to the bladder by a puncture *per rectum*. This was done on January 15th. Examination *per rectum* showed the prostate of very large size, but it was just possible to get the finger beyond its posterior margin. He experienced some relief from the puncture, but was evidently sinking gradually, from old age and the effects of long continued stricture. He was occasionally delirious; the hands cold and clammy; and the pulse weak. The urine, however, passed freely by the cannula, and was clear and healthy: none now passed by the urethra. On the morning of January 21st, it was found that the cannula had slipped out of its place, and that no urine had passed since the previous night. It was withdrawn; and, on this being done, some fœtid urine was found to ooze out *per rectum;* but the cannula could not be reintroduced. Another ineffectual attempt was made to pass a catheter. He had now become very low, but was supported by brandy and diffusible stimulants. On January 23rd, as the bladder was again becoming distended, the puncture was repeated, and a large amount of fœtid urine drawn off. This afforded temporary relief; but he continued to sink, and died on the 26th.

Post mortem examination showed that the peritoneal cavity was healthy. The urethra presented a stricture, occupying about half an inch of its extent, at the junction of the spongy and membranous portions. Behind this, it was dilated, and its interior coated with lymph. In front of the stricture was a false passage, large enough to admit a full sized catheter, and leading for about an inch into the cellular tissue between the bladder and rectum. The prostate was of very large size. The bladder was inflamed and fasciculated. In the floor of the bladder were two punctures from the rectum. The openings of these punctures on the mucous membrane of the bladder were close together, nearly in the median line, between the points of entrance of the ureters, and about an inch behind the margin of the prostate gland. The more posterior of them was at a distance of not more than half an inch from the bottom of the recto-vesical pouch of peritoneum. The ureters were distended. The kidneys were large, with dilated pelves; and the renal substance was sprinkled with small abscesses.

Remarks. The above case is worthy of record, as showing the ease with which, in enlarged prostate, even to a great extent, the bladder may be punctured from the rectum. The combination of stricture with enlarged prostate is one which is often seen, which rapidly leads on to retention of urine, and in which, if the former affection has been mismanaged, very serious difficulties are often experienced in the attempts to relieve the patient. The age at which such conditions occur is another unfavourable particular in their history, and renders it more imperative that something should be done to empty the distended bladder, the pressure from which upon the already diseased kidney is sure to rapidly aggravate the pyelitic inflammation which is either commencing or impending. The present case proves that the difficult and formidable operation of reaching the bladder from the perinæum, or that above the pubes, is in all ordinary cases unnecessary, and that the comparatively painless and momentary puncture from the rectum will afford the desired relief. It should not be forgotten, however, that the recto-vesical pouch of peritoneum is in close

proximity to the part operated upon; and that that reflexion is not, as the anterior reflexion on to the abdominal parietes is, moveable with the distension of the walls of the bladder. So that there is no more (or, at any rate, not much more) room when the bladder is full than when it is empty. Perhaps, however, the danger from that source has been exaggerated, since the puncture is always made through a part of the rectum where the bulging fluctuating tumour formed by the enlarged bladder is felt; and this point cannot, of course, be behind the peritoneum. In the present case, the operation seems to have been quite successful in attaining the object proposed, which was merely to spare the patient pain during the few last days of his life, as he was evidently dying on his admission.

III. DISLOCATION OF THE HIP AT A VERY EARLY AGE.

Under the care of E. Cutler, Esq.

Jane B., a little girl, 4 years of age last November, was admitted under the care of Mr. Cutler on January 31st, on account of an accident in which she had been knocked down by a carriage, which was supposed to have passed over her, though this latter fact seemed doubtful. On admission, all the symptoms of dislocation of the right hip on to the dorsum ilii were apparent. The extremity was shortened to the extent of nearly two inches; the pelvis was in its natural position; the foot pointing across that of the opposite side. There was no crepitus on making pressure on the femur, and the head of the bone could be indistinctly felt under the gluteal muscles. The child was put under the influence of chloroform, and then reduction was very easily effected by extension with the hand. The bone slipped into its place with the peculiar sensation which attends the reduction of a dislocation, and the length of the limb was permanently restored. The child's legs were bandaged together, and she was kept in bed for a fortnight.

She was discharged on February 23rd, walking quite well, though with a little stiffness.

Remarks. The present is the earliest case of dislocation of the hip which we remember to have read of, and is therefore put on record as a fact which deserves mention. Mr. Erichsen says that Travers met with a dislocation of the hip in a child five years of age. If this means, as it probably does, between five and six, the patient would have been about a year older than the little girl who was the subject of the present accident.

Original Communications.

ON THE REAL VALUE OF BLOOD-LETTING IN ACUTE DISEASES.

By A. W. Barclay, M.D., Assistant-Physician to St. George's Hospital.

[*Read before the Western Medical Society of London, February*, 1859.]

Before entering on the subject, on which I propose to address a few remarks to the Society, I must say a word, not of apology, but of explanation, in order to justify the selection I have ventured to make. It is not for me to presume to dictate on so intricate a point of practice to those whose experience, may be, must be much greater than my own; it is a point which cannot be elucidated by experiment, or calculated from statistics; it is not one on which an elaborate essay compiled from the library shelf can throw much light; pretty nearly all that can be done in this way has been done, and has left the question very much as it found it. I come before you this evening as a learner, not as a teacher, to state my difficulties, and ask your help in the solution of them, rather than to offer any conclusions of my own.

And if I understand the purpose of our occasional meetings in this room aright, I think that such a subject as I have selected, and such a manner of treating it, will conduce more to our mutual benefit and instruction than if the most undeniable inferences from the most logical premises were laid before you by any of the greatest masters of our art. The light may shine brightly when the flame is once kindled, but it is in the collision of the flint and steel that the spark is first given out.

From the very infancy of the medical art, one of the most powerful agents in the hands of the practitioner has been the abstraction of blood; but to the end of time, in every new case which comes under treatment, the question must still be ever new, ever unanswered, except by the judgment of the practitioner himself, how much good or how much ill may be done by the employment of this particular agent. To ransack the history of the past, or to collect the experience of the present, whether venesection has been followed by beneficial or baneful consequences in any one disease, can never settle the question beforehand, whether in the very next instance that occurs, the practice ought to be adopted or withheld. It may, indeed, give us some general idea of the probabilities on either side, it may, indeed, serve to point out how far some have erred in following a fashion, or in carrying out a theory, and so it may serve to warn us against dangers we had not thought of; but in the end we must return to the study of the case we are about to treat, and our judgment must be formed on its own individual merits.

And in forming this judgment, however difficult it may be to divest the mind of all preconceived opinion, and of theory regarding the *modus operandi* of the practice, there can be no question that the most unbiassed mind will come to the most correct conclusion; that the man whose theories are least hypothetical, and are based on the largest generalisation of facts will be the least likely to be misled by appearances. It is not very long since the presence of the buffy coat was taken not merely for what it really is, an indication of an abnormal condition; but was regarded as indicating that the blood was changed from the stream of life into a baneful poison, which must be got rid of at all hazards; it was regarded as the sign, and the only sign, that more bleeding was still wanted, and in opposition to all the teaching of other symptoms, in opposition to the clearest indications, and the dictates of common sense, the rule was followed by some so-called heroic practitioners to the death; the heroism, as has been well remarked, consisting not in the risk of the practitioner, but in that of the patient. Such must ever be the result of acting in blind compliance with a theory; and if I may venture to enunciate a proposition on the present occasion, it is this, that those who bleed, and those who abstain from bleeding, are alike wrong, if theory alone be their guide in treatment. We may not hastily put aside the experience of past ages, we may not hastily condemn those who have been our teachers, when they tell us that they believe such and such modes of treatment have done good; but we may unhesitatingly discard their teaching, when it comes not simply as the result of observation, but as the effect of a preconceived opinion, whether they speak of evacuating the humours, of getting rid of the buffy coat, or, as is not uncommon now-a-days, of eliminating the poison.

Let us for a moment consider the meaning of the terms we use before attempting to reason upon them. Disease, including under this name all the ills that flesh is heir to, is very frequently used in two very distinct senses. It is taken to express not only the noxious agent, of which we have in reality scarcely any notion, but also the condition of body arising in consequence, among other things, of the impression which the noxious agent has produced. In the one sense, we have two distinct entities—the agent and the object; in the other only one—the person who is the subject of the malady.

In the first sense we can recognise at different times a variation in the intensity of the injurious agent—just as we can also recognise a variation in the receptivity of the patient, or in his powers of resistance and recovery. It is in this way alone that we can understand the prevalence of an epidemic at one time which ceases at another. Cholera comes and goes—attacks one and not another; at one time the poison, if we choose so to designate it, must be in greater intensity than at another; in one person, the receptivity, or the power of resistance, must be greater than in another. This I conceive to be all that is meant by those who assert that there is in the present day a change of type in disease, that all active diseases now tend to assume a typhoid character, which, in former days, presented a more sthenic or inflammatory condition. I do not propose to enter into this question. It is one of the past; it is merely a dispute as to whether our forefathers were right or wrong in their interpretation of symptoms, for no one in the present day proposes to revive their practice; but I must say that, so far as it goes, the theory may, for anything I can see to the contrary, be correct, with reference to active disease in general, because we can have no question as to its truth regarding some specific forms of disease in particular. The plague, for example, is no longer known in London. Scarlatina is at one time most malignant and destructive, at another, ceases altogether; and no one who knows the history of the Irish famine can doubt that the people were predisposed by want, for the development of a most fatal form of fever. If,

then, we admit these variations in the power of external impressions as modifying the whole character of the subsequent disease; if we also admit that the condition of the patient, anterior to the attack, does more or less determine the course of events after the impression from without is made upon him; we have unquestionably, in these two circumstances, most important indications with reference to treatment, provided only that we can make them out satisfactorily.

That the first of these does influence the course of epidemics there can be no question, but we have no proof one way or other in regard to other acute diseases. There are certainly no epidemics now-a-days which assume such characters as to lead us to employ the lancet; and in our ignorance of the forces which excite other acute diseases, we can predicate nothing with reference to them one way or other on the question of venesection; and, therefore, I think we may dismiss from our consideration the causes of disease, the external impressions of whatever kind which operate on the organism as the excitants of the morbid action which follows.

Neither can we, as it appears to me, with our present knowledge, assume that there is any general condition of the race, either as superior or inferior to that of past ages, as tending to death or tending to recovery, as liable to a fatal issue by want of vital power, or excessive vital action; in fact, that there is any antecedent condition of all persons indiscriminately, that demands or forbids, in any general manner, the employment of blood-letting.

We may speculate, indeed, on such curious facts, as the cessation of the plague and the advent of cholera, and, I think, justly conclude, that this and others of a similar kind do indicate some change in our circumstances from those of our forefathers; but I fear they must remain for the present as barren speculations.

The only available knowledge of any condition of body which may serve as a guide in determining the question of venesection, is that of the particular case submitted to our consideration. We must, therefore, pass on to the second sense, in which the term disease is employed; viz., that in which it is used to designate a series of changes going on in the body of the patient, which take their definite form from the combination of the two circumstances which have just been mentioned; the impression from without—the receptivity from within; taking these in their broadest sense, as including all the external agencies which combine to set up the morbid action, and all the tendencies which original constitution has impressed upon the internal organs, to produce certain actions under the influence of a given stimulus.

This, then, is the question which we have to consider:—How far will blood-letting modify for good or for ill the course of those actions going on in the body, produced by the combined influence of the external impression and the inherent tendencies of the organs? I fear that we are apt to speak, and, perhaps, to think rather vaguely on these subjects. The same actions, in one sense, are spoken of as the disease, and constitute the study of pathology; in another sense, as the symptoms, and constitute diagnosis; and yet, after all, they must be regarded only as the exhibition of that conservative tendency with which the living structure is endowed to preserve it from dissolution. The one aspect cannot be considered to the exclusion of the rest without great injustice to science, injury to the patient, and detriment to the practitioner. Pathology teaches us how they tend to the injury of the patient, but they must not, therefore, be regarded as unmixed evil. Indeed it is one of the first elements in a sound pathology, that constant reference should be made to the reparative purpose of all the changes it reveals. Diagnosis similarly fails of its purpose if it be limited to making out the place of the morbid symptoms in a classification of disease, and only indicates the remedies to be used by the name assigned to the group of phenomena. Its real use is to discover all the deviations from normal action, and to trace their progress, both as they are excited by the primary impression, and as modified by the remedies employed.

If we ask why it is that this reparative process in acute disease does not always end in recovery, the answer must be, that the cause is sometimes in the violence of the impression, sometimes in defect of the process of repair, and this either in its exceeding the limits compatible with the maintenance of other functions, or in its falling short of the requirements of the case, whether from deficient energy at its commencement, or from failure of the powers of life to carry it through. Manifestly these circumstances must have much weight in the determination whether blood-letting is likely to do good or harm, and, as I conceive that no argument drawn from mere experience can be good or valid, unless it accord with our present knowledge of symptoms and of vital phenomena, whether normal or morbid, I will venture to review them more in detail.

1. *Force of the Impression.* We are all familiar with the terms "shock" and "reaction". To a certain extent, the truth they are meant to express is a universal one, corresponding to the two elements of an external impression, and the vital action consequent upon it. But in the sense in which they are generally used, they express something more. Shock implies a depression of some or all of the vital actions, which may end in their total suspension and the death of the patient. Thus, a person is said to die from the shock of an operation or a severe injury, when there is no reaction. And reaction again, is only applied to those vital phenomena which present themselves in excess after the period of depression has passed. No one would propose venesection as a remedy for this depression in cases of injury, and, by parity of reasoning, it seems to be similarly excluded in internal diseases, in which the first effect of the impression is to cause a lowering of the vital actions. The only argument which can be adduced in its favour is that to which I have already alluded—an attempt to eliminate or get rid of the poison. But this I conceive to be a mere confounding of names. We do not think of attempting to get rid of any actual poison, which has got from the stomach into the blood, by venesection, and it is just as impossible to get rid of any fever poison in this way. It is quite true that in either case venesection may possibly do good with reference to the subsequent vital actions, but it can do nothing to remove the primary impression. So far, then, the force or severity of the impression can only be regarded as contraindicating venesection.

2. *Process of Repair.* This may be said to begin in most cases from the very moment the impression is made. In disease, we do not recognise to the same extent as in injury, a period of shock or depression, and when it exists, it occurs rather as a result of the first stages of the reparatory process. Taking this phrase in its largest sense, we must include those changes, which, in themselves, are pernicious, as well as those which are more distinctly beneficial, as all conducing to the ultimate result—of recovery, when the powers of life are sufficient to carry the patient through the attack—of death, when they fail to do so, whether aided or not by remedial means.

To illustrate my meaning, we may take, for example, an attack of small-pox. Here, a poison being introduced into the economy, the alteration in the condition of the blood which follows, is recognised by the development of fever and the appearance of pustules on the surface of the body, and either the fever or the suppuration may kill; but we should be viewing these actions in a very false light if we were to regard them as of a destructive nature. The poison acts on a living organism which has the inherent power of self-preservation—it does not act on a dead body. And, although it be true that the poison itself is regenerated ten thousandfold—that every pustule contains a hundred times as much poison as that which, in the form, perhaps, of an insensible miasm, first entered the patient's body—yet we must believe that the blood throughout conducts itself in a manner calculated to restore the patient to health, simply because after the introduction of a sufficient amount of the poison, he could not recover without every one of these stages being gone through. But, just as in inoculation, he might recover without more than the occurrence of a few pustules on his arm; so we believe that the amount of these vital acts for recovery may be far in excess of what is absolutely needed, and do, so far, constitute disease, and must be regarded as pernicious. The very same relations may be established in regard to inflammation, which is a vital reparatory process in the solid tissues, as fever and pustulation in small-pox are vital reparatory processes in the blood—neither being limited to the part first affected, but in the one case the blood being altered as consequence of alteration in solids, in the other, solids being affected in consequence of a change in the blood.

This reparatory process, then, may fail at any stage of its progress, in consequence of its erring either on the side of excess or deficiency. The action may be carried far beyond what is necessary for recovery, and so may either interfere with some vital function, or may produce such changes in the body, that the parts cannot be restored to their natural conditions. On the other hand, it may be from the first insufficient, or at any period of its progress it may be arrested by inherent weakness of vital force, or by some other injurious influence being brought to bear upon the body. Here it is that the question

of the beneficial or injurious influence of venesection opens upon us. If it be true that vital action in excess may be arrested by blood-letting, and prevented from proceeding to an injurious extent—its influence is beneficial—if, on the other hand, by diminishing the quantity of the life-blood in the body, and reducing it to a more watery condition, the powers of the constitution are so weakened, that, at some future period, the vital reparatory process will be unable to proceed—it is then an unmixed evil. For we never can by any means, except transfusion, restore blood.

The answer to this inquiry seems to me to embrace three points. 1. The antecedent actual condition of the patient. 2. The known course of the disorder at all periods, or any special modification of it for time existing. 3. The stage at which the remedy is proposed.

The first of these is one on which no general propositions can be laid down, except such as are familiar to the merest tyro in medicine. No one who practises medicine in a ratioual manner can think that an anæmic ex-sanguine person can bear the same amount of loss of blood without contingent injury, as one who is plethoric. No one can imagine a fat flabby person, with a weak heart and a small pulse, is likely to derive benefit from bleeding in the same circumstances in which he might think it likely to do good to one with firm flesh and full pulse. But in each case the circumstances differ so greatly that the disease, call it by what name you please, may be such as to call for loss of blood in the weak, and not to require it in the strong. The very fact of the heart being weak may, for example, cause the circulation to be so laboured in an attack of bronchitis that venesection may be justifiable, or even imperatively demanded, in such a case, when the very same amount of mucous inflammation might be left to warm drinks and starvation in one whose health was previously good. This part of the question, then, resolves itself into an examination of the actual condition of the patient, and the probability that loss of blood will really materially improve that condition, and will not entail future evil which cannot afterwards be remedied.

Attention has been called by writers on this subject to the difference between the local and the general abstraction of blood. And I think we may concede without hesitation the principle that when blood can be withdrawn from the immediate neighbourhood of the distended capillaries, so as to obviate their undue congestion and restore them to their natural calibre, we can afford much relief to the patient without any appreciable diminution of his powers of rallying from the disease. But for this purpose there must be actual vascular connexion between the inflamed part and that to which the leeches or the cupping glasses are applied. So far as we can reason on this subject, I should be inclined to say that leeching can have as little influence over a pure and simple pneumonia or bronchitis—I mean one in which there is no pleurisy—as the loss of the same amount of blood by venesection, together with perhaps the adjunct of some counter-irritant to the thorax. Upon this part of the subject it is quite unnecessary to occupy your time. The only points to be considered in regard to the local abstraction of blood are merely whether the relief of the congested capillaries can be effected, and whether such a mode of relief is called for in the circumstances of the case. For example, in an inflamed joint, if the action be set up by external violence, when we know that suppuration or adhesive inflammation may result, the propriety of applying leeches will be questioned by none; whereas if it be of a gouty or rheumatic character, in which such results are rare, and the constitutional malady is the important element, there are few persons who would advocate the practice.

Venesection stands on a wholly different ground. It is scarcely possible within any reasonable bounds to carry venesection so far as to relieve local congestion. The *vis à tergo* may, indeed, be greatly reduced, the heart's action lowered, and the pulse reduced in frequency and firmness; but the local congestion is not dependent on the force of the circulation. The quick hard pulse is a consequence, not a cause, of the local inflammation; and while any blood remains in the body the distended capillaries continue in their state of dilatation, because they have lost their contractile force. The rules for the practice of venesection must be derived from the general condition of the patient, and not from the special condition of the inflamed part, over which we must admit that it has very little control. I must, for my own part, express my conviction that when such cases are met with as are described in our systematic treatises as models of genuine sthenic inflammation, where the patient is full blooded, or perhaps inclined to plethora, the abstraction of a few ounces of blood is as clearly called for, to reduce the inflammatory fever, as any mode of practice is ever indicated to us in the whole course of medical experience. And I think we may be perfectly satisfied that if a moderate loss of blood has done such an one no good, it has certainly done no harm. Persons in good health who have suffered very considerable hæmorrhage from a wound, are not therefore found to recover less satisfactorily from the results of the injury, although the loss of blood was quite unnecessary. No one can doubt, unless we doubt all empirical knowledge together, that patients previously in robust health recover better from inflammatory attacks when the febrile state is encountered by antimony and salines and starvation, than when it is left to run its course, to whatever point that may reach. And it is my firm conviction that the same course of treatment will be still more beneficial in the class of cases to which I have alluded, when venesection forms a part of the means employed. But let me repeat that it is not against the inflammation as a local disorder that we have to contend, but against the excess of the reparatory process in the fever which accompanies it. When that is moderate, neither antimony nor blood-letting will do good, and even starvation becomes pernicious when the fever is of an adynamic or typhoid kind.

One other indication in regard to venesection has been mentioned by a recent writer on this subject. It is the presence of general venous congestion, leading especially to congestion of the right side of the heart, and necessarily also of the lung. This may very well be the result of imperfect arterial action, and we may have to employ means to stimulate the action of the heart and arteries, while removing part of the circulating fluid in order to counteract this condition of congestion. It seems not improbable that the beneficial action of blood-letting in apoplectic attacks is in great measure due to the relief of this part of the circulation rather than to any reduction of the amount of blood in the brain. Even in cases of peritonitis, pleurisy, and pericarditis, it is well to bear in mind this second indication of laboured action of the heart, in consequence of its impeded movement, as well as that to which I have already referred, the amount of the inflammatory fever.

The argument generally brought forward against venesection —that it has no power of relieving the local distension of blood vessels, or of restraining the effusion of lymph by lessening the amount of blood in the body, or diminishing the *vis à tergo* of the circulation—seems to me a very erroneous one. It is not with that view that a rational practice suggests its employment at all,—any such mode of reasoning leads us at once into hypotheses; and as blood letting based on theory has in times past led to great abuse, so we may be sure that abstaining from it on theoretical grounds, is no less likely to lead to erroneous practice. I feel sure that, in the present state of our knowledge, the true—the only reliable indication, is the condition of inflammatory fever present in any given case presented to us, and I cannot help fearing that most of us are too apt, in the present day, to neglect this very powerful means that we possess of checking that fever when it runs too high, of keeping this part of the reparatory process in proper control.

But we have also to bear in mind, in the second place, the known character and course of any disorder at all periods and any special modification of it for the time existing; because if venesection be powerful for good in suitable cases, it is also powerful for harm in those to which it is unsuited. It must be in the recollection of many, that when influenza appeared some twenty years ago, when the natural course of the disorder was less known, many endeavoured to check the febrile symptoms which attended the affection of the mucous membrane by venesection, and utterly failed in their object, because that fever was not genuine inflammatory fever, but fever of an asthenic type; and we now know that where medical interference does good, it is rather by the administration of tonics and stimulants, than by starvation and antiphlogistics. The latter may, indeed, sometimes do good in moderation, but bleeding can only be regarded as injurious.

What, then, are the evils which may follow venesection, and against which we have to guard? They seem to be chiefly two: the lowering of the vital energy at the time to such an extent, that the reparatory process is suspended or interfered with; and the reducing the patient's strength, so that at some future period of the disorder his powers of life may fail, before recovery can be reached. These are the points on which the practitioner must exercise his judgment; and his decision, whatever it may be, is not one that can be brought to the bar of public opinion—the prudence of the course he has adopted can only be known to his own conscience, enlightened by a thorough knowledge of all the revelations of a constantly pro-

gressive science. It is, indeed, scarcely possible that the judgment should not be biassed by popular prejudice one way or other; in a doubtful case, any single individual will not, as he certainly ought not, to risk his reputation by running counter to such a prejudice, when he foresees that the disease is very likely, under any circumstances, to prove fatal. This is just one of the points on which we might help each other by mutual counsel and confidence, and I am sorry that there is so much feeling with many against consultations. Each one of us is too fond of his own experience, too opinionated of his own knowledge. Let us not forget that we must be to the end still learners, and, as once said by your late president, none among us is too old to learn, none too young to teach.

The only rule that I can find for my own guidance is, that in all acute diseases a certain amount of febrile disturbance is an essential element in the reparatory process—without it there is no recovery—and it must be our care that this neither runs beyond what is necessary to recovery, nor falls short of that ideal standard. Where antimony and starvation are likely to do good, in the known progress of the disease, blood-letting is likely to do the same amount of good in shorter time, if the organism be otherwise healthy, and the pulse full and firm. But neither the one nor the other must be blindly followed simply because inflammatory fever exists, as if this fever were of itself an unmixed evil—their real use is to keep it within due bounds. My belief is, that excessive febrile action leads to further local mischief, and that by reducing the force and frequency of the pulse we can, to a certain extent, limit the amount of inflammatory disorganisation. But I must confess that this belief is rather the expression of an empirical formula than the enunciation of a pathological fact. It may be that the inflammatory fever is simply the consequence of the intensity of the local disorder, and does not in its turn react upon the diseased organ; but if we adopt this view, we must discard the whole of our antiphlogistic treatment together, we must unlearn all the teaching of experience, and I think we must ignore the very results of our own observation.

But further, if our knowledge of the course of disease, existing in the present day, teaches that a time will come when the death struggle will not depend upon the excess of febrile action, but on the failure of vital force; then we must carefully guard against unnecessary depletion: venesection is then an irreparable evil: starvation must give place to tonics and stimulants. I very much question whether this be the case to anything like the extent which is asserted by many of the supporters of the modern doctrine of stimulation. It is not the result of my own limited experience, that people die worn out with a protracted struggle in acute diseases so frequently as from the severity of the attack in the first days of its existence. All will agree, that in the aged and the infirm antiphlogistic remedies are wholly out of question, and, probably, most here present have seen life imperilled in such persons by a very moderate employment of these means.

Undoubtedly in the progress of any severe disorder, a time comes when there can be no longer any question of further lowering the strength of the patient, and this brings us to the consideration of the third point already referred to,—the stage of the disorder at which venesection may be beneficially employed. If the object of blood-letting be such as I have assumed, it is manifestly only in the access or increment of the disorder that it can materially aid our treatment; as soon as the congestion and exudation have become stationary, when the febrile action no longer excites fresh local mischief, the abstraction of blood must fail of giving relief, so far as the inflammation is concerned. Still there are one or two other considerations which must not wholly be overlooked. We must all, no doubt, have seen how remarkably pain may sometimes be relieved by it, and it may become a question at any period of a disorder, whether the persistence of pain may not cause more mischief than the loss of a few ounces of blood. Then again there can be no question that it often materially promotes the action of remedies. The text books, with which we are all familiar, abound with cases in which, although the febrile action was not such as to indicate the need for venesection, its judicious employment has been attended with the most happy results in bringing about changes which remedies previously administered had failed to do; and I feel that we are bound to listen to the teaching of experience in such matters.

I may also again allude to the laboured action of the heart and the congestion of the lungs, whether due to the primary effects of the general inflammatory fever, or merely produced in a secondary manner by the movements of the heart being impeded, as an important point in deciding the question of blood-letting in any case. Here the principles which guide us seem to me very analogous to those which may be beneficially followed in chronic disorders, attended with similar conditions of congestion and impeded cardiac action. I have frequently had occasion to observe the unmistakeable relief afforded to patients suffering under disease of the heart, aneurism, or chronic bronchitis with emphysema, by small losses of blood, and I believe that this must be the experience of all, who are not too much influenced by the too prevalent prejudice against venesection.

I fear that I have very imperfectly fulfilled the object which I proposed to myself in bringing this question before the society. It was my wish to elicit the opinions of others rather than to express my own, and I fear that too much of dogmatic assertion has mingled with what I have ventured to advance. I confess to a very strong feeling, that we are going away too much from what may be called the traditions of medicine, because of our just pride in the advances made in pathological knowledge in our own day. And when I find certain teachers advocating that all cases are to be treated by stimulation in place of by lowering remedies, I cannot but feel that there is a great danger of our running into an extreme, which will assuredly bring about a reaction; and some of us may live to see the doctrine of venesection as widely advocated as it is now by some persons indiscriminately condemned.

The evil of such teaching is not limited to our own ranks. Popular prejudice runs in favour of anything that is new, and popular conceit fancies itself well able to decide the merits of such pretensions. A gentleman told me the other day that he would never sanction bleeding of any sort in his house; and that he had consulted a homœopathic practitioner because he was sure that he would not bleed. But a few years ago, patients were in the habit of sending for a medical man simply in order that they might be let blood, and if he hesitated to perform the operation, however unnecessary it might seem, some more compliant person was sought for. It requires the exercise of judgment, conscientiousness, and firmness, to oppose such prejudices; but surely the exercise of these higher attributes of our nature will bring a more sure and lasting reward than the mere money-value of attaining popularity, if that be accompanied by loss of self-respect.

THE STOMACH AND ITS AILMENTS PRACTICALLY ARRANGED.

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[*Read before the Southampton Medical Society, Nov. 7th*, 1858.]

[*Continued from page* 169.]

VI.—Spasmodic Condition of the Stomach.

The stomach is rendered liable to vehement spasmodic action by various exciting causes, acting upon the motor fibres of the par vagum nerve. These causes are—1. Crude indigestible food, such as shell-fish of every kind, raw cucumbers, melons, celery, and any other uncooked vegetables; 2. The sudden application of cold, either internally or externally, when the body is heated, as the hasty swallowing of an ice after dancing, or plunging into water of low temperature; 3. The passing of biliary concretions; and 4. The metastasis of gout.

There is also a peculiar spasm of the pylorus, that has not been noticed that I am aware of, independent of any of the above causes. This spasm is very similar to that of the bile-duct during the passage of a gall-stone, but it is very distinct from this, as the spasm is unaccompanied by the passage of any concretion, or jaundice, or slowness of the pulse. The urine also, although high coloured, is not deepened with a bilious tint; and, although the pain returns at intervals, it does not so completely and abruptly cease as in the passing of a biliary calculus, but more or less continues to wear the patient till another spasm returns; and the spasms continue to harass the patient sometimes for weeks and months together. I have met with several of these cases. The following case is one of this kind.

Case x. A lady, aged 55, residing near Cowes, of spare habit, had been attacked for a considerable time with severe spasms in the epigastric region, accompanied with vomiting, and returning at intervals. The stools were full, and the urine high coloured. The pain was attributed by her medical attendants, very reasonably, to a morbid secretion of the hepatic

function. She was treated by a variety of remedies, by warm baths, purgatives, large doses of morphia, and by mercury until the gums were under its influence; and also by divers external applications; but no permanent relief was obtained, and she continued to suffer most painfully. Having been requested to visit her, and finding that sedatives of almost every kind had failed, I resolved to digress from the beaten track, and try the following pills.

℞ Extracti hyoscyami gra. xxiv; pulveris digitalis gra. viij; saponis duri ʒiss. Misce bene et divide in pilulas xxiv æquales, quarum sumat duas ter die.

This medicine was given in the hope of relaxing and subduing the spasm, and it completely succeeded. The pain was at once subdued; and, by continuing the medicine, she became free from any return of the spasm. In a note which she wrote to me on January 2nd, 1844, she writes: "I have taken four pills each day, beginning the 15th of December; and from that period have been free from spasm and severe pain. I have never been so sensible of benefit from any medicine as from this since the commencement of my malady." I have treated several cases of the same kind with the above remedy, and have always found it eminently successful. I might here mention that, when the bowels are constipated from spasmodic action, I have often found the digitalis a good relaxant to facilitate the action of purgatives.

Case xi. A married lady, aged 29, had suffered for six years from severe spasmodic pain in the right hypochondriac region. It was usually of a heavy, aching, but sometimes of a tearing character, extending either towards the epigastrium or to the loins. The spasms came on three or four times a week, were succeeded by rigors, and accompanied with vomiting; and sometimes so severe as for a while to deprive her of consciousness. The urine was high coloured, and the skin of a bilious tint, but not amounting to jaundice. She consulted several medical gentlemen in London and in the country, who attributed the spasms to the passing of biliary concretions; but no concretion could be detected, although the alvine evacuations were attentively examined. The renal function was free from any irritation, and no calculous deposit was observed in the urine. When she came for my advice, I attributed the pain to spasm of the pylorus, resulting from gastric causes; and prescribed for her the above pills, which completely relieved her sufferings; and for four months she has had no return of the pyloric spasms.

The symptoms of gastric spasm are characterised by vehement excruciating pain and a feeling of constriction at the epigastrium, vomiting, and (if the diaphragm be involved) by embarrassed breathing and irregular action of the heart. In retrocedent gout, there will also be a distressing sense of weight and *coldness* in the region of the stomach.

The severity of the spasm sometimes destroys life at once; but, in such a case, this result can scarcely be attributed to the stomach alone, but more probably to the spastic action being extended or reflexed to the muscular walls of the heart, which are governed by the same nerve, and thus producing a fatal cramp.

I have often thought that this cause of sudden death, especially if preceded by vehement pain, is more frequent than is generally supposed, and often overlooked, from there being no evidence after death of the cardiac muscles having been so acted upon. In angina pectoris, pathologists are to this day at a loss to account for the sudden death of the patient, which is generally preceded by the most violent pain; and, for want of a more obvious cause, have attributed the sudden loss of life by this disease to an ossification of the coronary arteries, which can hardly be considered a satisfactory explanation, since, in a great number of subjects, the ossified state of the coats of these arteries and other parts of the heart's mechanism is found where no such symptom preceded death, as will be presently shewn. Might it not be far more naturally attributed to a cramp of the cardiac muscles, however induced? The difficulty of deciding the question may be certainly increased when sudden death takes place without being preceded by vehement pain; but, even in such a case, the death may be so sudden as to prevent the consciousness of pain, and the possibility of expressing its occurrence, as in the following instance. An elderly gentleman, of corpulent form, and of luxurious and inactive habits, was sitting after dinner at his fireside, in the act of peeling an orange, when, without the slightest warning, his head fell upon his chest, and he died instantly. Upon examining the body, the following day, the falx major of the brain was found to be a plate of bone, and the valves of the heart also in a state of complete ossification. Here ossification must have existed for many years, without producing such an effect.

Gastric spasm will be most efficaciously treated by opium and ether, in doses proportioned to the violence of the spasm, according either to the draught (*a*), or the pills (*b*). At the same time, the epigastrium may be embrocated by (*c*).

a. ℞ Tincturæ opii, ætheris chlorici, ā ʒj; misturæ camphoræ ʒjss. M. Fiat haustus statim sumendus.

b. ℞ Pulveris opii gr. i; camphoræ gra. v; misturæ acaciæ q. s. M. Divide in pilulas duas statim sumendas, et repetantur omni horâ urgente spasmo.

c. ℞ Linimenti camphoræ compositi ʒiss; chloroformyli, ætheris chlorici, ā ʒiij. M. Fiat embrocatio.

If the spasm have been caused by irritant indigestible food, an ounce of ipecacuanha wine should be given first, with a view to dislodge it; and the emetic effect should be promoted by copious draughts of hot water. After this, the spasm may be treated with opium and ether, as recommended; and, when the vomiting has subsided, the bowels should be opened by the calomel pills (*d*), and the warm aperient draught (*e*).

d. ℞ Hydrargyri chloridi gra. iv; extracti colocynthidis compositi gra. v; olei caryophylli guttas ij. M. Divide in pilulas duas statim sumendas.

e. ℞ Pulveris rhei ℈i; magnesiæ carbonatis ʒss; tincturæ sennæ compositæ ʒi; aquæ cinnamomi ʒss. M. Fiat haustus horis duabus post pilulas sumendus.

If eating ice when the body is heated has caused the spasm, a glass of pure brandy should be given immediately. Should the spasm continue, it ought to be treated with chloric ether and laudanum, as above recommended, and with the embrocation (*c*), or a hot mustard poultice.

When the cramp has been caused by cold bathing, the same treatment is indicated; and a warm bath may be prepared, in case it might be required.

If it have been produced by the passing of biliary calculi, it should be treated by opium or laudanum, as in (*f*) and (*g*), repeated as often as the spasms may require.

f. ℞ Pulveris opii gr. j; pulveris digitalis gr. ¼; saponis gr. iij; liquoris potassiæ q. s. M. Fiat pilula statim sumenda, et omni horâ repetenda, vehemente spasmo.

g. ℞ Tincturæ opii ♏xl; ætheris chlorici ʒss; tincturæ digitalis ♏x; aquæ cinnamomi ʒiss. M. Fiat haustus statim sumendus, absente vomitu et urgente dolore; et repetatur omni horâ si opus fuerit.

Should it have been caused by retrocedent gout, a glass of pure brandy, which is generally at hand, should be given instantly; and, at the same time, the joint or joints from which the gout has receded, be enveloped in hot sinapisms, with a view of restoring the gouty inflammation to the joints it had affected, and of abstracting the disease from the gastric function.

VII.—Depraved Condition of the Stomach.

This state of the stomach is characterised by an abnormal appetite for food, either in respect of quantity or quality. In the former case, the appetite is ravenous, and sometimes enormous to a degree scarcely to be credited, constituting a disease which has been termed *bulimia*. Most extraordinary accounts of this disease are on record. Dr. Mortimer relates a case, in the *Philosophical Transactions*, of a boy only twelve years of age, who ate, in six successive days, three hundred and eighty-four pounds of food, making an average of sixty-four pounds of food daily! Other cases still more extraordinary are recorded, but these I shall not cite, as they are too disgusting and improbable to be believed.

Abnormal appetite is supposed by some to be sheer gluttony, rather than the result of disease; but this opinion is clearly refuted by the fact that the body is not nourished in proportion to the quantity of food eaten.

Case xii. I once saw a well marked case of this kind in one of my own servants, who acted as groom. He was 25 years of age, of a strumous habit, and usually ate so much at his meals as to disgust his fellow-servants with his supposed gluttony: indeed, they at last complained of the quantity of food which he devoured, lest they should be accused of extravagance. One day, after he had eaten the greater part of a leg of mutton, he declared that his appetite was not at all satisfied, and that he could gladly eat as much again, if it were put before him; and doubtless this he would readily have done, had not his fellow-servants cried shame upon such gluttony. But the result proved that, instead of gluttony, his abnormal appetite was caused by disease; for very soon afterwards he fell into

confirmed phthisis, and rapidly sank under the exhausting effect of a psoas abscess in each groin.

But it is amongst the ill-fed children of the labouring classes that we shall most frequently find the depraved condition of the stomach here alluded to. In these, there will generally be a gnawing pain of the stomach and a morbid sense of hunger; but, although food enough is given to satisfy the craving for awhile, the body is not nourished by it. The aspect is pale; the nostrils in a perpetual state of irritation; the limbs attenuated; the muscles flabby and the abdomen tumid; the hair erect; and the digestive functions so weak as to allow of worms being generated in the alimentary canal, especially the lumbrici, several of which are frequently passed either by the bowels or the stomach. These are the symptoms which characterise this depraved condition of the stomach; and its pathology must be sought for in a disordered function of the ganglionic nerve. What that disorder is, it is not easy to explain; nor is it of much importance to do so, as the disease is not only readily diagnosed, but easily cured. If the patient be an adult, the pills (*a*) and the mixture (*b*) must be taken.

a. ℞ Hydrargyri cum cretâ gra. xxiv; pilulæ rhei compositæ gra. xxx; syrupi q. s. M. Divide in pilulas xij, quarum sumantur ij tertiâ quâque nocte.

b. ℞ Misturæ ferri compositæ ℥viij; decocti aloes compositæ ℥iv. M. Fiat mistura cujus sumantur cochlearia magna iij mane et meridie.

Should the case be that of a child over two years old, (*c*) and (*d*) will be preferable.

c. ℞ Hydrargyri chloridi gra. ij; pulveris rhei gra. iv; pulveris cinnamomi compositæ gr. i. M. Fiat pulvis tertiâ quâque nocte in theriacâ sumendus.

d. ℞ Vini ferri ℥iij. Sumatur ℥i bis quotidie.

I cannot state the reason, but it is certain that the vinum ferri is much more efficacious for children than any other preparation of iron, and at the same time more easily given, from its being palatable.

The depraved condition of the stomach which respects the quality of food is often manifested in unmarried chlorotic young females, in whom abnormal appetite leads them to crave after unnatural food, such as chalk, slate pencil, or even cinders; sometimes acids are preferred, and sometimes raw flour or coffee.

In this case, also, we find the signs of debility, probably from imperfect sanguification; the aspect is remarkably pale, and the lips colourless. The breathing and the heart's action are embarrassed by the least exertion, especially in ascending the stairs. The pulse is weak, and the extremities cold; there is great depression of spirits, lassitude, and inactivity; the catamenia are either unhealthy, deficient, or wholly absent; and, as the disease goes on, there is often cough, increased embarrassment of breathing, and œdematous legs.

The pathology of this case is also referrible to a morbid condition of the mysterious functions of the great sympathetic nerve; and to this cause, likewise, must be attributed that extraordinary disposition in some young females to feign diseases. A few instances of this kind have fallen under my own notice.

Case xiii. A young woman, about the age of puberty, consulted me for a troublesome cough, accompanied with small quantities of blood in the expectoration. She affirmed also that, with the expectoration, she brought up occasionally some calculous concretions, and, upon examining some, which she shewed me, they appeared to verify her statements; but, having some suspicions, I requested her to call again, and to bring with her any other substances that might be expectorated. She returned in a few days, and brought a pill-box, containing all that, she declared, had come up; but, to my surprise, I found the box to be supplied with small gravel, which she had picked up on the shore!

Case xiv. A young woman, who was in service as a maid-of-all-work, complained to her mistress of having a swelling on the left side of the lower jaw, for which she was ordered to consult me. On examining the tumour, it was found to consist of a wadding of brown paper stuffed between the cheek and lower jaw; and, having been there for some time, it was not a little offensive, and formed an excellent imitation of a true swelling.

Some young women affected with this condition of the stomach are liable to a cough of a remarkable character: it is dry and harsh, having a rasping or sawing sound; and it sometimes continues for weeks and months together, with scarcely any intermission, except during sleep: indeed, it is so incessant as to irritate and distract the acoustic nerves of all who reside within its range. In one instance, I was earnestly entreated by the neighbours of the patient to subdue the cough as speedily as possible, as they had been so constantly disturbed and annoyed by it, that they could not tolerate it any longer. I have seen about six cases of it, all of which, to the best of my recollection, eventually got well under the use of morphia, alterative aperients, and preparations of iron. This result of the depraved condition of the stomach is easily explained by referring it to a disordered and irritated state of the laryngeal branches of the pneumogastric nerves, arising out of this cachectic condition of the gastric function.

Treatment. The treatment of abnormal appetite for unnatural food, and other effects of this condition of the stomach, is also simple and efficacious. The pills (*e*) and (*f*) are to be taken till the general health and the gastric and uterine functions are restored, which will usually be effected in a few weeks.

e. ℞ Hydrargyri chloridi gra. vj; pilulæ aloes cum myrrhâ gra. xxiv. M. Divide in pilulas vj, quarum capiat unam alternis noctibus.

f. ℞ Pilulæ ferri compositæ ℥iij. Divide in pilulas xxxvi, quarum sumantur ij ter quotidie.

Walking exercise in the open air, a nutritious diet, and one glass or two of white wine daily, will greatly assist in the cure.

Under this morbid condition, I will relate a remarkable instance of hypochondriasis, for which I was consulted not long ago, and which was probably caused by a morbid condition of the gastric nerves in their connexions with the cerebro-spinal nerves. I am not certain that it was the result of a depraved condition of the gastric function; but I am upheld by Watson in connecting it with *that function*, as he speaks of hypochondriasis in his lecture on *Dyspepsia*. He says: "In respect to all these feelings and apprehensions, there is commonly a most obstinate belief and persuasion."

Case xv. An elderly gentleman, formerly member of Parliament, who had long and actively employed his mind not only as a county magistrate, but as a committee-man of the House of Commons, became at length so shaken and nervous that he believed he had no power to raise himself from the sitting posture. He was at the Dolphin Hotel when I saw him, and had come from an adjoining county for my opinion. Having requested him to raise himself from his chair, he *appeared* to *endeavour* to do so again and again; but all his seeming efforts were as unavailing as if he were trying to raise the beam beneath the floor; and, from his general appearance and the shaking state of his upper extremities, I really thought his lower limbs were paralysed. He then said that, if he "clapped his hands together", he could succeed. This he did smartly: when—up he jumped and walked around the room in quick time, to my utter astonishment, and to a severe trial of my risible muscles. The same experiment was made several times, with the same result; but, without the clapping of his hands together, he *believed* that he had no power whatever to rise from his seat.

In this case is clearly demonstrated that "most obstinate belief and persuasion" alluded to by Watson as sometimes occurring in hypochondriasis arising from dyspeptic causes. I believe Dr. Watson quotes the above from Cullen.

[*To be continued.*]

RADICAL CURE OF HERNIA.

By Henry Hancox, M.D., Wolverhampton.

The operation introduced to the notice of the profession by Wutzer, for the radical cure of hernia, is one that is worthy of trial in all cases of inguinal rupture, no matter at what period of life the rupture may have occurred, as the following case will shew.

A. L., aged 12 years, had been the subject of rupture of the right side from birth. He wore a truss from eighteen months old up to a period of two years before coming under treatment, when he discontinued it: the rupture had been down since that time. His parents applied to me to measure him for a new one, when I suggested the operation for its radical cure, to which they readily consented.

The patient was very thin, pale, and of a decidedly strumous habit of body, and not by any means a good subject for the operation; but, there being a chance of its succeeding, and the pain of the operation being so slight, I determined upon performing the operation, which I did on November 4th, 1858. I proceeded in the usual manner, by passing the forefinger of my

left hand up the inguinal canal, pushing before me a portion of the integument of the scrotum as far as the outer pillar of the internal ring; then with my right hand I introduced the plug (smeared with a little ceratum cantharidis, for the purpose of producing inflammation). Withdrawing the finger, the plug being fairly within the canal, I pushed the needle through the integuments, and afterwards adjusted the cover wooden plate, fixing it by means of the screw.

November 5th. The patient was going on well. The plug remained in its proper place. He complained of no pain.

November 8th. There was a little redness, of about the size of a sixpence, around the place the needle entered, where he complained of slight pain. There were no constitutional symptoms.

November 15th. This day I removed the plug. There was slight sloughing where the needle entered; the invaginated portion still remained.

February 19th, 1859. Up to this date, the rupture has not descended; the sloughing sore is quite well; and he is able to run and jump about, without any fear of its again coming down.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, MARCH 5th, 1859.

DIPHTHERIA: STATISTICAL RETURNS.

We propose to publish a collection of cases of this disease in a tabular form, embracing the principal points in the experience of the London and country hospitals, and of our associates in general. We shall be greatly obliged if those members of the Association who have met with cases of diphtheria, and preserved notes of them, will forward abstracts to the office of the Journal.

The points to which we propose to direct principal attention, are the following:—

1. The *Age* and *Sex* of the Patient.

2. The *Hygienic Conditions* under which he had been living; *e.g.*, occupation, supply of food and clothing, purity or impurity of atmosphere, etc.

3. The *Meteorological Conditions* prevailing in connection with the spread of the disease, in its increase or decline.

4. Evidence of the presence or absence of *Contagion*.

5. Had the patient had *Scarlatina* or not? Was scarlatina prevalent in the neighbourhood?

6. *Appearances* and *Symptoms* when first seen.

7. Time at which the *Leathery Membrane* appeared; and its situation.

8. Presence or absence of *Fungus* in the membrane, as shewn by microscopic examination.

9. Presence or absence of *Affection of Internal Organs; e.g.*, of *Kidneys*, as denoted by albumen in the urine

10. *Treatment* and *Progress* of the disease. Under the latter head, special attention to be directed to the state of the trachea; and, as a part of this subject—

11. The indications for and success of *Tracheotomy*.

12. *Duration* and *Event* of the case.

13. *Post Mortem Appearances* in the fatal cases.

THE PROPOSED NEW LUNACY BILL.

We publish in another page the new Bill of pains and penalties directed against all persons engaged in the private treatment of lunacy: for such this Bill, as it comes from the hands of the late Home Secretary and Mr. Hardy, undoubtedly is. It really would seem as though the Government looked upon the proprietors of asylums in much the same light as the public look upon the swell mob, as a class of people banded together to prey upon their fellow men—a set of outcasts to be watched and dogged in their ingoings and incomings, and in every way prevented, as far as possible, from torturing and defrauding Her Majesty's lieges. Public opinion, always too prone to confound the old and cruelly coercive treatment of lunatics with the present eminently humane method, has, indeed, been reinforced of late by the absurdities of the *Times*, which only a week since, spoke of the "whitewashed cell of the lunatic," just as though we were living in the middle of the last century, when Bedlam was a name of terror, and Pinel, Conolly, and other reformers had not lived.

Under these circumstances, we were prepared for further restrictions upon the practice of the alienist physician, but certainly not, after the remarks of Mr. Walpole in the House of Commons, for a Bill stained with such abominable clauses as the one before us. We have hitherto, as Dr. Winslow remarked at the meeting of proprietors of asylums on Monday last, been taken by surprise by those who have legislated for lunatics; but we must see that we are so no more, and we must be prepared to deal not only with the present Bill, but to review all past legislation upon the subject. We must see if we cannot throw some of that protection around the proprietors of asylums, which is at present reserved entirely for the insane patient.

At the meeting before alluded to, which was very numerously attended, the clauses of the new Bill, which provided for the appointment of District Medical Examiners—men not necessarily conversant with lunacy, to act as spies and censors of their brethren who have been bred to the speciality—was very loudly and properly denounced as un-English, and grossly unfair to the proprietors of asylums. If more inspection is needed, it was very justly argued that we should have an increase of the present staff of Commissioners, chosen for their acknowledged conversance with the speciality, and not at haphazard from among the friends of those in authority. It was also urged—fairly, we think—that a proportion of such new Commissioners should be chosen from the proprietors of private asylums, a class rendered ineligible by the present law, which does not allow of their being appointed until they have purged themselves for two years of the moral dirt supposed to hang about them in consequence of their previous occupation.

Clause xv, which enacts that no persons wholly or partly proprietors of any licensed house *shall sign any certificate for the reception of a patient into any licensed house whatever*, is another specimen of the suspicion which is hurled against the asylum proprietor, and of the determination to prevent his practising the ordinary duties of his profession outside the walls of his house. It certainly must strike Mr. Walpole, on a more careful consideration of this clause, that its effect will be to throw the duty of consigning lunatics to an asylum pre-

cisely into the hands of those least capable of performing it. If we take away those medical gentlemen who possess asylums, and have been specially engaged in studying the nice shades which lie between sanity and madness, we have nothing left but ordinary medical practitioners, many young members of which body have never, perhaps, seen a case of lunacy before. The result of this extraordinary clause, of course, would be to lessen the liberty of the subject; for, without doubt, cases of delirium tremens and of phrenitis would thus find their way into asylums, which would be instantly rejected by "experts" in lunacy. Possibly, however, this eventuality was considered, when the framers of the Bill provided that the new Medical Examiners should visit patients immediately after they have been received into asylums; for, without doubt, their services would be required.

It really does seem extraordinary that any sane persons should contemplate, as the framers of this Bill evidently do, the constant interference of the Medical Examiners with the treatment of the insane. Let the law throw as much protection as it possibly can around the patient before he is certificated; but, once in the asylum, he should have the quietude his case requires. What would be thought, as Dr. Winslow remarked, of a person who, hearing that a man's broken leg had been set, should, on the plea that he doubted the fact, rotate the bones, and destroy their nice apposition, in order to satisfy himself that a fracture really existed? Yet this is exactly what is proposed by this Bill to be done with a poor creature suffering a mental lesion. The Medical Examiners would come and question, and cross-question, and put the mind of the lunatic upon the strain, just at the moment when it required perfect repose. As Dr. Burnett remarked, no gentleman would be found, by and by, to conduct private asylums on such terms, and they would fall into the hands of low class persons.

Clause xxvi, however, out-Herods all the others. We give it, in order that those interested in private asylums may see to what extent this Bill will, if passed, interfere with their private concerns.

"xxvi. The proprietor or resident superintendent of any licensed house, or the person having the charge of any single patient, shall answer all inquiries of the Commissioners or any Commissioners or Commissioner visiting such licensed house or single patient, touching the payments made or agreed to be made for or in respect of their patients or patient, and touching any other matters concerning such patients or patient, and shall, if required, produce to the said Commissioners or Commissioner accounts of all receipts in respect of patients, and deliver or transmit to the said Commissioners or Commissioner, as they or he may direct, a true statement in writing of such receipts under the hand of such proprietor or such person having the charge of such single patient."

The Commissioners have been long hankering after an inquisitorial power of this kind, which has not yet been suggested even for common lodging-house keepers, much less for the members of a learned profession. If lunatics managed their own property, there would be an absolute necessity for such a clause; but, as this is not the case, we should like to know what possible excuse there can be for this request to make every medical man confess to the Commissioners the amount of his professional income. We thought there were Commissioners already appointed for that duty. This proposition was so monstrous that it drew from the Secretary of the Lunatics' Friend Association, who was present at the meeting on Monday, an indignant disclaimer, on the part of those for whom he was acting, of the idea that such a clause should be inserted. Of course, there is no chance of such a clause being carried, if the Bill is well watched; and this, no doubt, will be the case, as a Committee has been appointed, from among the members of the Association of Medical Officers of Asylums, for the special purpose of drawing up a plan to be presented to Mr. Walpole upon this—to proprietors of asylums—very momentous matter.

THE NAVAL MEDICAL SERVICE.

All members of the medical profession must feel highly gratified with the statements made last week, with reference to the Medical Officers of the Navy, by the first Lord of the Admiralty. In his speech on the naval estimates, Sir John Pakington gave his opinion of the condition and merits of the medical officers of the navy in unmistakable terms.

"I mean to express in distinct terms my opinion that the present position of the surgeons in the navy is not satisfactory. But I go still further. The complaints we now hear from these officers are, no doubt, much founded upon the late warrant issued in respect to the army; but I think that even before the date of that warrant the surgeons of the navy were not relatively placed on an equality with their brethren of the army. Now, however, they have an unanswerable claim to the consideration of their country. Nothing in the military service could be nobler or more gallant than the manner in which the medical officers of the navy have discharged their duties under the most trying and painful circumstances; and they are, therefore, entitled to more liberal treatment than they now receive. Their claim is based upon two grounds: first, it is due to them as gentlemen that their position should be improved; and, secondly, public policy requires that the services of this most useful branch of the profession should be more highly appreciated and better requited, so that able and efficient men may not be deterred from joining the navy."

With this acknowledgment of the high claims of the naval medical officers, Sir J. Pakington stated it to be the intention of the Government to place these gentlemen in the position to which they are entitled: at the same time, the differences between the military and naval services, and several other points of detail, which would have to be considered carefully, prevented him from at present stating the manner in which the reform would be carried out. Our brethren of the naval service may rest assured that a better day is at hand for them. Without in any way committing ourselves to an expression of opinion on political matters, we must say that the general tone of the address of the First Lord of the Admiralty is such as to inspire us with the firmest confidence, that it is his honest intention to act justly to the naval surgeons; and that justice, when it is given, will be abundant in measure.

THE WEEK.

The remarkable case of Robinson *versus* Robinson and Lane was brought to a close on Wednesday last. The trial, it will be remembered, was one of a petition for divorce from the matrimonial bond, instituted by a gentleman named Robinson against his wife, on the ground of her having committed adultery with Dr. Lane, the proprietor of a hydropathic establishment. The accusation was founded on various entries made by Mrs. Robinson in her diary, in which familiarities on the part of Dr. Lane towards her were mentioned, and expressions were used which conveyed, or appeared to convey, the idea of adultery. The evidence against Dr. Lane, however, was held to be so un-

certain, that he was dismissed as co-respondent from the case, and examined as a witness. With regard to the diary, medical testimony was brought forward to shew that Mrs. Robinson's effusions were but the insane fancies of a brain disordered by an old standing uterine malady. In giving judgment on Wednesday, the Lord Chief Justice Cockburn said that the Court found nothing which could warrant its agreeing with this conclusion; and therefore, that the diary must be examined, to see whether there was any ground for supposing that adultery had actually been committed. But of this there was no proof; there was nothing in the document which consisted in a clear and unequivocal admission of adultery; and therefore the petition of Mr. Robinson was dismissed. This judgment was perfectly proper; and, indeed, no other could have been delivered, consistently with common sense. But the Lord Chief Justice seems to have gone by a somewhat roundabout way to arrive at it. Here was a medical opinion before him, that Mrs. Robinson's diary was the production of a mind disordered through corporeal disease—an insane mind. "No," says his lordship, "there is no proof of that; we must take the diary as it is, and see whether it bears out the idea of adultery." But, in his further remarks, the Lord Chief Justice virtually admitted, under another form, a plea very similar to that which he had just rejected.

"The Court," said his lordship, "was dealing with one whom an ardent imagination and a passionate nature too often led away beyond the bounds of reason and truth, and who, in all relating to her intercourse with men for whom she had conceived a partiality, was prone to exaggerate and over colour every circumstance which tended to her gratification. It was plain that she dwelt with impure gratification on the portraiture of these scenes, and on the details of the guilty endearments and caresses which she narrated. It was impossible to say how much of all this might not be the work of an imagination corrupted by sensuality, and dwelling with morbid satisfaction on its own impure creations, or how far any groundwork of fact might be distorted or overcharged by the fanciful additions of the writer. The Court was, at all events, of opinion that all that came from such a quarter on such a subject, far from being taken as a ground for drawing further inferences of criminality, must be received with very great allowance and distrust."

This seems to us to leave the matter just where the medical opinion brought it before—that the diary of Mrs. Robinson was the production of a fanciful and diseased mind, and not to be trusted.

Several correspondents have expressed to us their opinion of the injustice under which they labour, in being called on to pay a stamp duty for the diploma or license of the Royal College of Physicians, after having already been taxed in a similar manner as graduates of an University. We quite feel with them the weight of the burden of which they complain, and would most gladly see it lightened; but we fear that some time may be required before Chancellors of the Exchequer will be induced to allow doctors to take as many diplomas as they please, and pay stamp duty on one occasion only. We say this with all due recognition of the good intentions towards the medical profession of those gentlemen who are and have been members of Lord Derby's administration. Nevertheless, nothing is gained without effort; and some good may be expected from the position which the Medical Council and the Royal College of Physicians have taken in the matter. The Medical Council, at a meeting on November 27th, 1858, passed the following resolution:

"That by the Stamp Act a duty is imposed on the diploma of M.D. of Universities: that by the same Act a duty is imposed also on Licentiates of Medicine and Fellows of the Colleges of Physicians: the Council is of opinion that such tax is injurious to the interests of the profession, and remits to the Executive Committee of the Council, to prepare and forward to the Lords Commissioners of Her Majesty's Treasury, a memorial seeking to relieve the profession of the tax, and generally to use all exertions to secure its removal; and they authorise the memorial to be signed by the chairman."

On Wednesday last, a deputation of the president, treasurer, senior censor, and late and present registrars, of the Royal College of Physicians, had an interview with the Chancellor of the Exchequer on the subject of the stamp duty on diplomas and licenses. Those graduates in medicine who are interested in the matter, might do some service by memorialising the Government for a remission of all payments of the duty beyond the first. They should shew that the profession does not look on the matter with an indifferent eye.

A testimonial, in the form of a silver tea-service and salver, has been presented by the Medical Officers of the Navy to Dr. F. J. Brown of Chatham, in recognition of his valuable services in the cause of Naval Medical Reform. For many years, Dr. Brown has been untiring in his efforts; and, indeed, he was one of the earliest champions of the cause of the assistant-surgeons of the navy. His labours were commenced while he was himself in the service, and have been continued since his retirement into private practice—an event which is said to have been accelerated by the distaste felt by Admiralty Lords in past years at the subjects he was constantly bringing forward. He, with Dr. McWilliam and others, must be gratified that their labours are not likely to have been in vain.

Association Intelligence.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

An Ordinary Meeting of this Branch was held at the White Lion Hotel, Broad Street, Bristol, on Thursday, February 24th, 1859; James Crang, Esq., President, in the Chair. There were also present: J. Beddoe, M.D. (Clifton); F. Brittan, M.D. (Bristol); W. Budd, M.D. (Bristol); G. Burder, M.D. (Bristol); H. Clark, Esq. (Bristol); W. M. Clarke, Esq. (Bristol); G. G. Corbould, Esq. (Bristol); J. G. Davey, M.D. (Northwoods); W. Davies, M.D. (Bath); F. Flower, Esq. (Chilcompton); R. S. Fowler, Esq. (Bath); E. L. Fox, M.D. (Bristol); James Godfrey, Esq. (Bristol); J. M. Granville, Esq. (Bristol); T. Green, Esq. (Bristol); W. Henderson, M.D. (Clifton); W. B. Herapath, M.D. (Bristol); W. Hutchins, Esq, (Keynsham); J. Lancaster, L.R.C.P. (Clifton); C. Leonard, Esq. (Bristol); R. Lucas, Esq. (Long Ashton); D. G. McPherson, Esq. (Bristol); H. Ormerod, Esq. (Bristol); A. Pritchard, Esq. (Clifton); R. N. Stone, Esq. (Bath); S. H. Swayne, Esq. (Bristol); J. Taylor, Esq. (Bristol); J. S. Tylor, M.D. (Bristol); G. Vicary, Esq. (Warminster); J. G. Wilson, Esq. (Bristol); J. Wybrants, L.R.C.P. (Shepton Mallet); and as visitors, Dr. Carter; M. Coates, Esq.; — Davey, jun., Esq.; C. J. Hellicar, Esq.; and — Wilson, jun., Esq.

NEW MEMBERS OF THE BRANCH.

The following members of the Association were balloted for, and elected members of the Branch: R. W. Falconer, M.D. (Mayor of Bath); J. M. Granville, Esq. (Bristol); J. P. McDonald, Esq. (Bristol); T. J. C. Powell, Esq. (Royal Infirmary, Bristol).

CASES AND COMMUNICATIONS.

The following communications were made. The papers and cases read, with the discussions, will be published in the Journal.

1. Hydatid Cyst in the Brain: with Specimen. By F. Brittan, M.D.
2. A Specimen of the Bothriocephalus Latus. Exhibited by W. Budd, M.D.
3. Hydatid Cyst in the Liver, cured by Operation. By W. Budd, M.D.
4. Case of Bite of an Adder. By T. Green, Esq.
5. Case of Dislocation of the Knee. By T. Green, Esq.

A BILL

TO AMEND THE LAW CONCERNING THE CARE AND TREATMENT OF LUNATICS.

[Prepared and brought in by Mr. Secretary Walpole and Mr. Hardy.]

Whereas an Act was passed in the Session holden in the eighth and ninth years of Her Majesty, chapter one hundred, for the Regulation, and Care, and Treatment of Lunatics; and the said Act has been amended by Acts passed in the Session holden in the sixteenth and seventeenth years of Her Majesty, chapter ninety-six, and in the eighteenth and nineteenth years of Her Majesty, chapter one hundred and five; and it is expedient further to amend the said first-mentioned Act: Be it therefore enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

I. Before the grant by the justices of any county or borough of a licence of a house or houses for the reception of lunatics, which shall not have been previously licensed for that purpose, the notice given by the applicant, and the plan and statements accompanying the same, or copies of such notice, plan, and statements respectively, shall be transmitted by the Clerk of the Peace to the Commissioners, and the Commissioners shall inspect or cause to be inspected the house or houses, and land or appurtenances proposed to be included in the licence, and shall ascertain, with reference as well to the situation as to the structure, arrangements, and condition of the premises, whether the same are suitable for the reception of the patients proposed to be received therein, and the Commissioners shall transmit to the Clerk of the Peace for the county or borough a report in reference to such application; and no licence shall be granted by the Justices of the county or borough, in pursuance of such application, until the report of the Commissioners with reference thereto has been received by the said Clerk of the Peace, and taken into consideration by such Justices in general or quarter sessions assembled.

II. In every case where a licence is granted by the Justices of a county or borough as aforesaid in respect of a house or houses not previously licensed, such licence shall, as nearly as conveniently may be, be according to the form in the Schedule to this Act, instead of the form prescribed by the said Act of the eighth and ninth years of Her Majesty.

III. Before the consent of any visitors is given to any addition or alteration being made in or about any licensed house, or the appurtenances, the notice of the proposed addition or alteration, and plan thereof, and accompanying description given to the Clerk of the Peace, or copies thereof respectively, shall be transmitted by him to the Commissioners, who shall, after making or causing to be made such inquiries or inspection (if any) as they may deem proper, transmit to the said Clerk of the Peace a report stating their approval or disapproval thereof; and the visitors shall not consent to such addition or alteration until they have received and considered such report.

IV. The Commissioners shall annually, at their quarterly meeting in the month of *November* in every year for licensing houses for the reception of Lunatics, appoint so many legally qualified medical practitioners as they may think fit to be "Medical Examiners," for the purposes of this Act, of the licensed houses within the immediate jurisdiction of the Commissioners, each such examiner to act for such district as in his appointment, or by any subsequent order from time to time, the said Commissioners may direct.

V. The Justices of every county or borough respectively in which a house has been licensed for the reception of Lunatics shall at the Michaelmas general or quarter sessions in every year appoint so many legally qualified medical practitioners as they may deem necessary, having regard to the number and situation of the licensed houses within their jurisdiction, to be "Medical Examiners" for the purposes of this Act, each such Examiner to act for such district within the jurisdiction of the said Justices as in his appointment, or by any subsequent order from time to time at general or quarter sessions, the said Justices may direct; but no person shall hold together the office of Visitor and the office of Medical Examiner.

VI. The Commissioners and Justices, within their respective jurisdictions, may as and when there may be occasion appoint additional Medical Examiners, and for such districts as they may think fit, and may on any such appointment, or at any other time, alter the existing districts for which Medical Examiners may have been appointed, and may at any time appoint a temporary substitute duly qualified for any Medical Examiner, and any such appointment or alteration of districts may be made by the said Justices at any general or quarter sessions.

VII. The Medical Examiners appointed under this Act shall hold office until the next yearly appointment, but shall be capable of being reappointed; and in the event of the death, inability, disqualification, resignation, or refusal to act of any Medical Examiner appointed under this Act, the Commissioners, if such Medical Examiner was appointed by them, shall, as soon as conveniently may be, appoint some other legally qualified Medical Practitioner in his place, and the said Justices, if such Medical Examiner was appointed by them, shall, as soon as conveniently may be, at some general or quarter sessions, appoint some other legally qualified Medical Practitioner in his place.

VIII. The Commissioners may allow to every Medical Examiner appointed by them a reasonable sum for his services and expenses, such sum to be paid out of such moneys as may be provided by Parliament for defraying the contingent expenses of the Commissioners; and every Medical Examiner appointed by Justices shall be paid such remuneration as the said Justices in general or quarter sessions may direct out of the same moneys or funds as by law provided with respect to the remuneration of the Medical Visitors of licensed houses appointed by Justices under the said Act of the eight and ninth years of Her Majesty.

IX. The Commissioners, as regards houses licensed by them, and the Justices of counties and boroughs as regards houses licensed by them, shall give or cause to be given to the proprietor or resident superintendent of every house licensed by them respectively for the reception of lunatics notice of the name and address of the Medical Examiner under this Act for the district in which such house is situate, as soon as conveniently may be after the appointment or order in this behalf; and the said Justices shall, as soon as conveniently may be after every such appointment and order, cause notice thereof to be given to the Commissioners.

X. The copy of the order and medical certificates or certificate, and the notice required to be transmitted to the Commissioners after two clear days, and before the expiration of seven clear days from the day on which any person is received into a registered hospital or licensed house, and also the like copy and the duplicate of such notice required in certain cases to be transmitted to the clerk of the visitors, within the like period, and the copy of the order and medical certificates or certificate, and the statement required to be transmitted to the Secretary of commissioners within seven clear days after the reception of any person as a single patient, shall in all cases be transmitted as aforesaid by the superintendent, or proprietor of the hospital, or house, or person having the care or charge of such single patient (as the case may require), before the expiration of *twenty-four* hours after the time of the reception of the patient into the hospital, or house, or as a single patient, and all provisions requiring the transmission to the Commissioners or their Secretary, or the clerk to any visitors, of the copies or other documents aforesaid, shall be construed as requiring the same to be transmitted before the expiration of such *twenty-four* hours: provided always, that the statement now required to be subjoined to the notice of admission into any hospital, or licensed house, shall be transmitted as heretofore, save that the same shall be transmitted separately from the said notice, and the said statement shall refer to the notice of admission by the date thereof instead of referring to it as the above notice, and the said notice shall omit the words referring to the said statement as being subjoined.

XI. The proprietor or resident superintendent of every licensed house shall, before the expiration of *twenty-four* hours after the time of the reception of any patient into such house, transmit to the Medical Examiner of the district in which such house is situate the like notice of such reception as is required to be transmitted to the Commissioners, and any such proprietor or superintendent who neglects so to transmit such notice shall be guilty of a misdemeanor.

XII. The Commissioners shall, within *twenty-four* hours after receipt by them of a statement of the reception of any person as a single patient, transmit a copy of such statement to the Medical Examiner for the district in which the house into which such patient has been received is situate.

XIII. Upon the receipt of any such notice, or copy of statement as aforesaid, by any Medical Examiner, he shall forthwith visit and examine the patient therein named, and within

seven days after the receipt of such notice or copy shall in all cases transmit a report to the Commissioners, upon the mental and bodily state and condition of the patient, and also, in the case of patients in licensed houses within the jurisdiction of any visitors, transmit a duplicate of such report to the clerk of the visitors, but he shall not make an entry in any of the books of the licensed house or communicate his report or his opinion in relation to the case to the proprietor or superintendent.

XIV. The said Medical Examiner shall, before the expiration of *three* months after the reception of any person as a patient in any licensed house, or as a single patient, (unless in the meantime such person be seen and examined by one or more of the Commissioners,) again visit and examine, and report as aforesaid upon the mental and bodily state and condition of such patient.

XV. No Medical Examiner shall sign any certificate for the reception of a patient into any licensed house in his district; and no person wholly or partly proprietor of any licensed house sign any certificate for the reception of a patient into any licensed house whatever; and no person receiving, or who may have stipulated to receive, directly or indirectly, from the proprietor of or any person having any pecuniary interest in any licensed house, any per-centage, commission, or profit in respect of patients admitted therein, shall sign any certificate for the reception of a patient into such house.

XVI. In any case in which the medical certificate, or, if more than one, both or either of the medical certificates upon which a patient has been received into any hospital, or licensed house, or as a single patient, is deemed by the Commissioners incorrect or defective, and the same is or are not duly amended to their satisfaction within *fourteen* days after the reception of such patient, the Commissioners, or any two of them, may, if they see fit, make an order for the patient's discharge.

XVII. Section eighty-six of the said Act of the eighth and ninth years of Her Majesty shall extend to authorise the proprietor or superintendent of any hospital or licensed house, with such consent, and to be given on such approval as thereby required, to permit any patient to be absent from such hospital or house upon trial for such period as may be thought fit; and two of the Commissioners, as regards any hospital or any licensed house within their immediate jurisdiction, and two of the visitors of any licensed, may of their own authority permit any pauper patient therein to be absent from such hospital or house upon trial for such period as they may think fit, and may make or order to be made an allowance to such pauper not exceeding what would be the charge for him in such hospital or house, which allowance shall be charged for him, and be payable as if he were actually in such hospital or house, but shall be paid over to him, or for his benefit, as the said Commissioners or visitors may direct: In case any person so allowed to be absent on trial for any period do not return at the expiration thereof, and a medical certificate as to his state of mind certifying that his detention as a lunatic is no longer necessary be not sent to the Commissioners, or, in the case of a house licensed by justices, to the visitors, he may, at any time within *fourteen* days after the expiration of the same period, be retaken as in the case of an escape.

XVIII. The medical officer of every asylum and superintendent or proprietor of every registered hospital or licensed house, and every person having the care or charge of any single patient, shall forthwith, upon the recovery of any patient in such asylum, hospital, or house, or of such single patient, transmit notice of such recovery to the Commissioners: and in case such patient be not discharged or removed within *fourteen* days from the giving of such notice, shall, at the expiration of that time, give notice of the non-discharge or non-removal to the Commissioners, and such last mentioned notice shall be in lieu of the notice which in the like case is now required to be given to the Commissioners.

XIX. If there be no person capable or qualified under Section Seventy-two or Section Seventy-three of the said Act of the eighth and ninth years of Her Majesty to direct the discharge or removal of any such patient as therein mentioned from any registered hospital or licensed house, the Commissioners may order the discharge or removal of such patient as they may think fit.

XX. Section Fifty-seven of the said Act of the eighth and ninth years of Her Majesty shall be repealed: and in every house licensed for fifty patients or more, in which there is not a resident proprietor who is a legally qualified medical practitioner, there shall be a legally qualified medical practitioner resident as superintendent or medical attendant thereof, who shall be appointed subject to the approval of the Commissioners where such house is within their immediate jurisdiction, or of the visitors where such house is not so situate; and every licensed house in which a legally qualified medical practitioner is not resident as proprietor, superintendent, or medical attendant, shall, if licensed for thirty patients or more, and less than fifty, be visited *daily*, and if licensed for less than thirty patients, be visited *three* times in every week, by a legally qualified medical practitioner.

XXI. Provided, That it shall be lawful for the visitors of any licensed house to direct that such house, and for the Commissioners to direct any licensed house, shall be visited by a legally qualified medical practitioner at any other time or times, not being oftener than *once* in every day; and that the power of the Commissioners or visitors, under Section Fifty-eight of the said Act, to dispense with visitation so often as twice every week, in the case of houses licensed for less than eleven lunatics, shall extend to authorise the dispensing with visitation of such houses so often as *three* times in every week.

XXII. Every licensed house shall be visited *once* at least in every year by one or more of the Commissioners, in addition to being visited in every year four times where the same is situate within the immediate jurisdiction of the Commissioners, or *twice* where not so situate, by two at least of the Commissioners, as now required by law; and every Commissioner visiting alone shall have the like powers as two Commissioners would have under Section sixty-one of the said Act of the eighth and ninth years of Her Majesty.

XXIII. So much of the said Act of the eighth and ninth years of Her Majesty as authorises the Lord Chancellor to reduce the number of visits of the Commissioners to any licensed house shall be repealed.

XXIV. The Commissioners or Commissioner visiting any asylum, hospital, or licensed house, or any single patient, shall on every visit specially report in writing to the Commissioners on the mental and bodily state and condition of every patient received within *one year* before the time of such visit, and with respect to all other cases which appear to such visiting Commissioners or Commissioner to call for special remark; and all such reports shall be preserved, and shall be entered by the Secretary of the Commissioners in their books.

XXV. The proprietor or resident superintendent of every licensed house within the jurisdiction of any visitors shall transmit a copy of all entries made by any visiting Commissioners or Commissioner in any of the books mentioned in Section sixty-seven of the said Act of the eighth and ninth years of Her Majesty to the clerk of the visitors, as well as to the Commissioners, within the like time, and shall be subject to the like penalty for neglect so to transmit the same, as by the said section provided with respect to the transmission of copies of such entries to the Commissioners; and the copies so transmitted to such clerk of entries so made since the grant or last renewal of the licence of such house shall be laid before the Justices on taking into consideration the renewal of the licence to such house.

XXVI. The proprietor or resident superintendent of any licensed house, or the person having the charge of any single patient, shall answer all inquiries of the Commissioners or any Commissioners or Commissioner visiting such licensed house or single patient, touching the payments made or agreed to be made for or in respect of their patients or patient, and touching any other matters concerning such patients or patient, and shall, if required, produce to the said Commissioners or Commissioner accounts of all receipts in respect of patients, and deliver or transmit to the said Commissioners or Commissioner, as they or he may direct, a true statement in writing of such receipts under the hand of such proprietor or such person having the charge of such single patient.

XXVII. This Act shall be construed with the Act of the eighth and ninth years of Her Majesty and the Acts amending the same as one Act.

SCHEDULE.

Form of Licence.

Know all men, that we, the undersigned Justices of the Peace, acting in and for , in General [*or* Quarter *or* Special] Sessions assembled, do hereby certify that *A. B.*, of , in the parish of , in the county of , hath delivered to the Clerk of the Peace a plan and description of a house and premises proposed to be licensed for the reception of lunatics, situate at , in the county of , and which has not been previously licensed for that purpose, and hath applied to us for a licence thereof: And whereas the particulars of the said

application have been transmitted to the Commissioners in Lunacy, and their report in reference to the said application has been received, and has been taken into consideration by us; and we, having considered and approved the application, do hereby authorise and empower the said *A. B.* (he intending *or* not intending to reside therein), to use and employ the said house and premises for the reception of male [*or* female, *or* male and female] lunatics, of whom not more than shall be private patients for the space of calendar months from this date.

Given under our hand and seals, this day of , in the year of our Lord, one thousand eight hundred and .

Witness, *Y. Z., Clerk of the Peace.*

Editor's Letter Box.

THE NEW BY-LAWS OF THE ROYAL COLLEGE OF PHYSICIANS.

Sir,—In regard to the recent resolutions of the London College of Physicians, by which they offer to all British graduates practising as physicians, their license (*licence!!!*) on payment of twenty-five pounds. I think the gentlemen concerned will not be found to catch at the bait (if bait it can be called), excepting, perhaps, it may be those amongst them whose degrees and positions may be somewhat doubtful. The use of the words "license or licentiate," is simply an absurdity under all the circumstances of the case; but let us consider the whole question as it stands.

Firstly,—What advantage is here offered to the University doctor and physician, after the late Act of Parliament, which has over-ridden every old worn-out charter, which no new one dare trench upon, and which has given to him the right of practising his profession throughout the length and the breadth of this vast empire? To comply with the solicitation (under the supposition of receiving a license!), would be merely paying money to obtain that which he already possesses; and as to any honours, or privileges, it may be well asked, what are they? The so-called "license," instead of being an honour, would be a degradation: for all University doctors in medicine who have acted up to their position, have been from that very fact, physicians in the eyes of the world, and now are so in the eyes of the law also, even within the old boundaries of the London corporation itself.

As to "titles," or "title columns," it is in the very word Doctor that the real essence of title lies: the name physician not being a title at all, but only indicating the calling or business which necessarily devolves upon the person who holds such title of doctor of medicine, and acts upon it in society. The terms of each doctor's diploma prove this fact, as it consists of a recital of the title conferred, followed by a statement of the privileges as to practice, which accompany its possession. These University rights (derived from the crown as the sole source of honours) being now further endorsed by the omnipotent authority, so to speak, of an Act of Parliament, the old-fashioned city corporation privileges of the London College are thereby nullified. Yes: even from the beginning of its existence, all of its members were presumed to be *bonâ fide* physicians before they joined the college; excepting only those who were never educated at an University as such, but only derived their power to practise after the manner of physician, from the license of the College. Further, would any one of the fellows, etc., of the College be contented to relinquish the title of doctor, and content himself with the trade-like appellation of licensed physician? Oh, no! on the contrary; the mere licentiates stick to the word doctor as much as they can, and do not relish being dubbed by the above appellation; just as the licensed apothecary rather affects the politer cognomen of surgeon, and shrinks from being designated by his own proper name. Take away its University doctors of Oxford, Cambridge, Edinburgh, etc., and what manner of thing were this College?

But not only does the College confer nothing upon the University physician for his money, but, by the by-laws regarding the non-recovery of fees, it actually asks him to despoil himself of a power now conferred upon him by the recent act. It will, therefore, behove the College to consider well the propriety or desirability of this, and others of their by-laws. The rule seems utterly out of date, and untenable in the eyes of common sense; and the sooner it is swept off the statute-book the better. Not that litigation for such fees is ever to be wished or expected; but it is far from right and just that expedients should be contrived for the encouragement of dishonest purposes. It lies within my knowledge, and no doubt within the knowledge of every one of us, that physicians, after having generously attended upon patients up to the time of their death, have had their just expectations cavalierly ignored by unprincipled relatives or trustees. I am credibly informed, in regard to one gentleman, that having been called into consultation on certain occasions, in the case of a lady of considerable fortune, and relying confidently upon ultimate remuneration, as a matter of course, he has found his claims laughed at by a rascally spendthrift family of surviving sons and daughters, upon no other ground than that he had no right to recover. In the name of common sense, and of common justice, or for the sake of personal dignity, ought such things to be?

If the doctrine of the mere gratuity system is to be maintained, let us next see upon what ground it rests, if upon any at all, beyond some worn-out apostolic, or rather, Quixotic tradition. Practically speaking, in this our nineteenth century, every fellow and licentiate of this very college expects payment for his advice and other offices, and looks for it, and would feel in high dudgeon with any one who took advantage of his self-forged shackles to deny him the same. The doctrine could only be sustained by the supposition that physicians are so replete with wealth, or of so pure angelic a nature, as to be quite above all vulgar wants and ties, and to have no other calling than to do good to others, without even a shadow of regard to ways and means. Such an Utopian dream needs no refutation. It is simply absurd.

Then, as to dignity, that ground is equally fallacious; for beyond hotel waiters, hangers-on at old castles and mansions, and other personages of that kind, I know none, except barristers, who profess the same gratuity system of remuneration; and then, in this latter case, how do the acts illustrate the doctrine? Do they not prove it to be a wretched farce, when we know that no barrister, as a rule, allows himself to act without the previous payment of fees, no matter what plea may be put forward as to danger to life or property? Do we wish to be in such a position, or so to act? God forbid. From the highest to the humblest of us we are ever ready to answer to the call of suffering men. Our genuine benevolence, as a profession, whether we consider hospital services, or gratuitous advice in private, is almost unbounded. We habitually forego, from mere fellow and family sympathy, fees innumerable; and let this work of benevolence go on by all means, if we please; but let it not be so abused as to encourage persons, possessed of means, to commit acts of fraud towards the profession by taking advantage of so foolish a statute. Dignity? Do the judges of the land, and other officers of the highest courts of judicature, decline the power of recovering moneys as a recognition of their services? Do the exalted nobles, or ancient landed magnates, forego the right of obtaining their rentals and other dues? Do the clergy, inclusive of curate and archbishop, repudiate their privilege at law of obtaining their tithes, stipends, or other charges? Does even our gracious sovereign renounce the right of enforcing attention to lawful demands?

If, then, in all such dignified, patriotic, humane, and benevolent callings, such as those of chief magistrate of an empire, archbishop, bishop, or priest of a church, or chancellor or judge at law—if nobles and great territorial masters, admirals, generals, cabinet ministers, and all, do not consider it beneath their position to cling to such a right, what, I ask, is the peculiarity of the physician (usually only a cadet of his house) that he should shut himself out from a like share of bare and simple justice? If I answer the question myself, I fear I must say to those who hold by the antiquated custom, that it is merely a piece of traditional old-womanism, and nothing better; for unless we possess the power to enforce, we cannot even exhibit a show of forbearance.

I feel free to confess, that I do not believe any physician would act upon his right of recovering fees when there was no estate fit to bear them; just as it is certain that there are countless cases in which his advice is invaluable, and not to be estimated by any money price. In all such instances, where patients have wealth, indefinite gratuities are to be expected, and will be given, just as in the examples of naval, military, and political services. No one presumes to say that these are paid for, or can be paid for, in the ordinary mercantile sense of the term; yet they have a recognised minimum legal price, so

to speak, and when such services are of a distinguished order, or are felt to be so, the state is ready to recognise them by gratuities of a princely magnitude beyond the so-called pay. So, while gratuities are undoubtedly to be expected for special services—for cures, as one may say, effected by a stroke of the pen—yet I certainly think that, when pecuniary ability is combined with a desire to defraud, there ought to be no repudiation of the power to recover fair charges for duties performed.

Again, therefore, I ask, how the university physician, possessing the respect and confidence of the public, scientific reputation, and the support of an Act of Parliament, is to be expected to pay twenty-five pounds for the receipt of a so-called license, which to him (as he needs it not), is no license at all? The offer of it, even for nothing, would have been a gratuitous insult. As it is, we have insult with an attempt at extortion. Is he to strip himself of his freedom, and of the powers and privileges which he now possesses under the protection of the Imperial Parliament, and be bound by the antiquated rules of a mere city corporation, such as the College still continues to be? I should say not; but rather that the College must alter itself a little in the first place, and then the great body of physicians may be allied to it as members or fellows, but certainly never as permissi or licentiates, as matters now stand. I offer these remarks without any disrespect to the individual members of the College, most of whom, as university physicians and doctors, have reflected the lustre of their academic learning and professional renown upon the College, while the College has conferred nothing upon them, excepting till of late the territorial privilege of practising their profession over seven miles of ground around the City of London.

I am, etc., University Physician.

February 28th, 1859.

THE MEDICAL ACT AMENDMENT BILL.

Sir,—Ought not this Bill to be enlarged, so as to abolish the impossible fourth column of Schedule D, and to remove all ambiguity as to the qualifications of poor-law medical officers? At present, there is doubt as to the legal fitness of persons (however high may be their professional qualifications) to hold appointments under the poor-law authorities, unless they have an *English legal qualification*. Is this justice to Scotland and Ireland? Is this medical reform?

I am, etc., Scotus.

London, March 1st, 1859.

THE ROYAL COLLEGE OF PHYSICIANS.

Sir,—Your correspondent S. D., whose letter appears in this day's Journal, appears to entirely misapprehend the object and intention of the College of Physicians in the admission of British graduates for their license to practise in England without further examination, on the condition of their being subject to the by-laws of the College, and paying the £10 fee and £15 stamp duty. The latter will, of course, be objected to by graduates who have already paid that amount of duty on obtaining their degrees.

I happen to be one of a large class of medical practitioners holding the diploma of a Scotch University (King's College, Aberdeen), attainable only by an extensive and searching examination in all branches of the sciences connected with medicine and surgery. At least one half of the candidates were usually rejected on presenting themselves for examination twelve or thirteen years ago. Besides the adducing evidence of having undergone the usual course of study, I spent nearly six years in attendance on the London hospitals, viz., three winter sessions and six summer courses in anatomy and dissections, besides holding a dressership for twelve months in a London hospital. I am a Fellow of the Royal College of Surgeons in England, and a Licentiate of the Hall, and now of thirty years standing in practice (general and consulting), and am glad to find the College of Physicians are about to take a step in the right direction and intend offering, for a limited period, their license to those holding the M.D. degree. The College has not legal power to give the title of M.D., which can only be assumed by courtesy by its fellows and licentiates, and not by right, as in the case of British graduates; but it (the College) will, by admitting graduates to its license, then afford the opportunity of such graduates being eligible to most of the hospitals and dispensaries of this metropolis. I congratulate the College in conferring this tardy act of justice on a numerous body of our profession who, by preliminary and subsequent education, possess attainments not inferior to their fellows, and whose qualifications are not capable of being tarnished by the arguments of S. D. I am, etc. Vindex.

February 26th, 1859.

Do, Mr. Editor, obtain, if you can, the consent of the government for the remission of stamp duty (£15) for the British graduates, who having already paid that amount feel it an act of injustice to pay it a second time.

DR. RICHARDSON ON COAGULATION OF THE BLOOD.

Letter from A. Wynn Williams, M.D.

Sir,—It appears to have escaped the recognition of the various reviewers of Dr. Richardson's work on *The Cause of the Coagulation of the Blood*, that he was not the first to point out that the cause of the coagulation of the blood was owing to the escape of the volatile alkali ammonia. The *British and Foreign Medico-Chirurgical Review* writes—"But when we take into account that this work has had far more than an ordinary measure of success, having issued in a discovery of a most important character.....In saying this, however, we would not be understood as endorsing the affirmation of the author, that he has discovered 'the cause of the coagulation of the blood.' That cause, as we shall show in the sequel, is far more recondite than he seems to suppose. But we believe him to have succeeded in bringing to light an immediate and necessary antecedent of this phenomenon, which was previously *unsuspected*."....

Again: "That the volatile agent, on the escape of which the coagulation of the fibrine immediately depends, is ammonia, seems to have been suggested to Dr. Richardson by the well known power which the fixed alkalis possess of keeping fibrine in solution."

I shall be able satisfactorily to point out that the coagulation of the blood was attributed to the escape of ammonia by M. Raspail. On reading in the British Medical Journal an account of Dr. Richardson's work, I felt convinced the theory of the coagulation of the blood being due to the escape of ammonia was not new to me. After some trouble, I have at length discovered where I saw it, viz., in Hooper's *Medical Dictionary*, seventh edition, article "Sanguis." I will copy a paragraph from that article: "He (M. Raspail) asserts that fibrine and albumen are identical, and that the fibrine is preserved liquid by the alkalis of the blood, soda and ammonia, which if they become saturated by the carbonic acid of the atmosphere and that which forms in blood when exposed to the air, can no longer act as a solvent, and the fibrine accordingly coagulates. *The escape of the ammonia* and of a certain quantity of the water of the blood augments this effect, and blood coagulates the sooner as it is less watery." Thus it is quite evident that M. Raspail not only *suspected* but was fully aware of the fact, that the escape of ammonia, or its combination with carbonic acid, was the great or chief cause of the coagulation of the blood.

I have written these few lines, not with any intention or wish to detract from the well-deserved praise of Dr. Richardson's work, but to point out to him and others that he was not the first to discover the cause of the coagulation of the blood, it having been ascertained and acknowledged by M. Raspail at least twenty years ago. I am, etc.,

A. Wynn Williams, M.D.

Tan y Graig, Carnarvon, February 7th, 1859.

[The passage in M. Raspail's work, in which he connects the coagulation of the blood with ammonia, was referred to at the last meeting of the British Association for the Advancement of Science, by the Rev. J. B. Reade, who very correctly, we think, characterised M. Raspail's statement merely as an *approximation* to the discovery made by Dr. Richardson. We cannot find, from an examination of M. Raspail's own words, any indication that his statement was more than an hypothesis, unsupported by evidence. So far from being aware of the facts of the case, he made two egregious misstatements, which have been quoted in Dr. Williams's letter. The first of these is, that coagulation of the blood is in a great degree dependent on the neutralisation of its ammonia by the carbonic acid contained in the atmosphere: the real fact being, that coagulation goes on equally well in the absence of carbonic acid. The other statement is, that the rapidity of coagulation is in proportion to the quantity of water: whereas Dr. Richardson has shewn that the addition of water in excess retards coagulation.

These two primary errors stamp the hypothesis of Raspail as one of those curious literary dreams, which, now and then, are found in the multitude of speculations to be close guesses, but nothing more. Their resuscitation may be curious or interesting: but it can never in the least affect the claims of those who have established a discovery on the basis of actual evidence. Our correspondent will at once perceive our meaning. Dr. Richardson was the first to *demonstrate* that the escape of ammonia causes coagulation: M. Raspail only *guessed* it. Editor.]

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, February 24th, 1859.

THE NAVAL MEDICAL SERVICE.

Sir E. Perry asked the first Lord of the Admiralty whether, on going into the navy estimates to-morrow, he would be enabled to state the decision of Government as to the claims of the naval medical service to be placed on a footing of equality with the army medical service, in point of rank and other advantages, such as they enjoyed before the issuing of the Royal Warrant of October, 1858.

Sir J. Pakington said it was his intention, in the statement he proposed to make, to express the views he had formed upon the subject referred to.

Friday, February 25th.

NAVAL MEDICAL OFFICERS.

Sir John Pakington, first Lord of the Admiralty, in a speech on the Naval Estimates, made the following observations in reference to the Medical Officers of Her Majesty's Navy:—In answer to a question put to me yesterday, I stated that I should avail myself of this occasion to allude to a subject which has lately excited very great interest; viz., the present position of the surgeons of the Royal Navy. [*Hear, hear.*] I am sorry to find that my answer has been very much misunderstood. I by no means intended to imply that I had any doubt or hesitation as to the course to be adopted. On the contrary; I then meant, as I mean now, to express in distinct terms my opinion that the present position of the surgeons in the navy is not satisfactory. [*Hear, hear.*] But I go still further. The complaints we now hear from these officers are, no doubt, much founded upon the late warrant issued in respect to the army; but I think that even before the date of that warrant the surgeons of the navy were not relatively placed on an equality with their brethren of the army. Now, however, they have an unanswerable claim to the consideration of their country. Nothing in the military service could be nobler or more gallant than the manner in which the medical officers of the navy have discharged their duties under the most trying and painful circumstances; and they are, therefore, entitled to more liberal treatment than they now receive. Their claim is based upon two grounds: first, it is due to them as gentlemen that their position should be improved; and, secondly, public policy requires that the services of this most useful branch of the profession should be more highly appreciated and better requited, so that able and efficient men may not be deterred from joining the navy. It is, therefore, our intention in spirit and in substance to concede to naval surgeons the advantages which they justly seek to obtain. At the same time, I will not and cannot now commit myself to the exact mode in which that object shall be carried out. The peculiarities of the naval service may render it inconvenient to follow the precise rule pursued in regard to the army; but these and other points of detail will be duly considered before our plan is finally decided upon.

Monday, February 28th.

VOTES FOR MEDICAL MEN.

The Chancellor of the Exchequer, in the course of his exposition of the New Reform Bill, made the following observations:—It has, indeed, been proposed that the basis of such a franchise should be sought for among the members of the various learned societies. But, as it has been very accurately observed, it does not follow that the members of learned societies should be learned. [*Hear, hear, and laughter.*] In these days, we frequently see names followed by an amount of alphabetical combination which is almost appalling; yet, though we associate the highest learning, the greatest antiquarian and scientific acquirements, with those persons, it sometimes turns out that they only possess a respectable character, and pay ten guineas a year. [*Renewed laughter.*] An educational franchise, according to that high empyrean of imagination which some have attempted to reach, has baffled all our practical efforts. But it will be our duty to recommend to the House that the privilege of a vote, irrespective of the more formal qualification arising from property, should be conferred upon those classes whose education has involved some considerable investment, many of them, no doubt, exercising the franchise under the previous qualifications which I have described. We have thought it advisable that the suffrage should be conferred upon Graduates of all Universities [*hear, hear*]; upon the ministers of religion—whether ministers and deacons of the Church or ministers of denominations—under regulations which the House will find in the Bill; upon the members of the legal profession in all its branches, whether barristers, members of the inns of court, solicitors, or proctors; and upon all members of the medical body who are registered under the late Medical Act.

MEDICAL ACT (1858) AMENDMENT BILL.

This Bill passed through Committee.

LUNACY LAWS.

The following were appointed the Select Committee on Lunacy Laws:—Mr. Tite, Sir George Grey, Mr. Secretary Walpole, Mr. Whitbread, Mr. Drummond, Sir Erskine Perry, Colonel Clifford, Mr. Briscoe, Mr. Kendall, Mr. Horsman, Mr. Rolt, Mr. Monckton Milnes, Mr. Nisbett, Mr. Coningham, and Mr. Kekewich.

Wednesday, March 2nd.

MEDICAL ACT (1858) AMENDMENT BILL.

This Bill was read a third time, and passed.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Barnes. On February 28th, at Islington, the wife of *J. Wickham Barnes, Esq., Surgeon, of a son.

Bremner. On February 20th, at Rossie House, Perthshire, the wife of Bruce A. Bremner, M.D., late of Bombay, of a daughter.

Dixon. On February 23rd, at Worthing, the wife of Frederick Dixon, Esq., Surgeon, of a son.

Ellis. On February 28th, at Crowle, Lincolnshire, the wife of *Henry W. T. Ellis, Esq., Surgeon, of a son.

Hounsell. On February 28th, at Downe Hall, Bridport, the wife of Henry S. Hounsell, M.D., of a daughter.

Minshull. On February 28th, at Abercromby Square, Liverpool, the wife of *J. L. Minshull, Esq., Surgeon, of a daughter.

Tulk. On February 28th, at 42, Porchester Square, the wife of Alfred Tulk, Esq., Surgeon, of a daughter.

Woodforde. On February 25th, at 5, Lansdowne Place, Bromley, the wife of W. T. G. Woodforde, M.D., of a son.

MARRIAGES.

Carpenter—Butler. Carpenter, John William, Esq., Surgeon, of Lambeth, to Mary, only surviving daughter of George Butler, Esq., of New Shoreham, Sussex, on February 24th.

Shand—Spalding. Shand, Captain John, Her Majesty's 51st Regiment of Madras Native Infantry, to Eliza Jane, youngest daughter of the late Hinton Spalding, M.D., of Kingston, Jamaica, at the British Embassy, Munich, on February 23rd.

Turner—Aldis. Turner, the Rev. S. W., to Emily, eldest daughter of C. J. B. Aldis, M.D., of Chester Terrace, Chester Square, at St. George's, Hanover Square, on Feb. 28th.

DEATHS.

Ely, George, Esq., Surgeon, at Chatham, aged 70, on February 24th.

APPOINTMENTS.

Sharman, John, Esq., elected Surgeon to the Islington Dispensary.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, February 25th, 1859:—

Arden, Arthur Octavius, Hull
Baxter, William Henry, of H.M.S. *Victory*, Portsmouth
Bennet, William Ford, Bath
Dracachis, Leonidas, Scio, Greece
Gill, John Beadnell, Arnold Terrace, Bow Road
Hanslip, Thomas, Milner Street, Islington
Huleatt, John Arthur, Charlemont Street, Dublin
Larkin, Henry William, Lichfield
McBride, Andrew, Newry, co. Down, Ireland
Woolryche, Arthur Edward, London

Monday, February 28th:—

Aldrich, Pelham, Mildenhall, Suffolk
Alexander, Frederick John, Stratford, Essex
Attwater, Alexander Henley, South Molton, Devon
Blackshaw, Joseph, Stockport
Coombes, James, Bedford
Dale, Thomas, Islington, Liverpool
Davis, William, Wellington, Salop
Downing, Edward, Deptford
Fotherby, William Forster, Sheffield
Freeman, Thomas Anthony, Minster, near Ramsgate
Girling, George Lansdall, St. Ives, Hunts.
Hunt, John, Tachbrook Street, Pimlico
Lambe, John, Bibury, Gloucestershire
Love, James, Burton Street, Eaton Square
Noble, Thomas, Charing Cross
Pierpoint, Nathaniel Bradford, Little Pulteney Street, Golden Square
Rayner, John, Kingsland Crescent
Richard, Edward Williams, Great Bardfield, Essex
Scott, John, Hanley, Staffordshire Potteries
Taylor, William, Cardiff, Glamorganshire
Thompson, Robert Farrer, Jarrow, Durham
Thornton, Peter, Dewsbury, Yorkshire
Truman, Edwin Thomas, Old Burlington Street
Williams, William Jay, Oldham Road, Manchester

Wednesday, March 2nd:—

Asslin, William John, Woolwich
Auterson, Francis, Magherafelt, co. Derry, Ireland
Bone, William, Brunswick Square, Camberwell
Bower, Edmund, Weymouth
Curry, William, Sunderland
Da Silva, Leo Charles, Percy Cross House, Fulham
Jones, Philip William, Highgate, Birmingham
Joyce, Lancaster, Portadown, co. Armagh, Ireland
Marsdin, Frederick, Stainforth, near Doncaster
Watts, Robert, Calcutta
Wright, Joseph Hiles, Evesham, Worcestershire

HEALTH OF LONDON:—WEEK ENDING FEBRUARY 26TH, 1859.

[*From the Registrar-General's Report.*]

The total deaths registered in the metropolitan districts, which in the previous week were 1156, rose to 1226 in the week that ended last Saturday. In the ten years 1849-58 the average number of deaths in the weeks corresponding with last week was 1223; but as the deaths in the present return occurred in a population which has increased, they can only be compared with the average raised in proportion to that increase, a correction which will make it 1345. The public health is therefore, at present, so far in a satisfactory state, that the deaths were less by 119 than the number which the average rate of mortality for the end of February would have produced.

The mortality from scarlatina (including diphtheria) exhibits a considerable decrease on the returns of previous weeks. At the end of January the deaths under this head, in a week, were 113; at the end of February they were 68. But those from diphtheria appear to be not less numerous, for out of the 68 deaths 21 were from this disease, which occurred in the following sub-districts:—one in Brompton, two in Belgrave, one in St. Margaret, Westminster, one in Regent's Park, one in Islington West, one in St. George, Bloomsbury, one in St. Giles South, one in St. Mary-le-Strand, one in St. Clement Danes, one in Goswell Street, one in West London North, one in London City, North-east, one in Hackney Road, one in Ratcliff, one in Bow, one in St. Peter, Walworth, one in Peckham, one in Greenwich East, and two in Lee. There were 11 deaths from small-pox, 6 of which occurred in the East districts. Sixty-four children died from whooping-cough. Diarrhœa was fatal in only 6 cases, all of which occurred to children. Seven children and two adults died of syphilitic disease; two persons from intemperance, besides three from delirium tremens. The deaths of 5 nonagenarians are recorded, the oldest of whom was a man who died at the age of 95 years. The widow of a licensed victualler died at the age of 93 in the Licensed Victuallers' Asylum, Peckham, where she had been an inmate for the last 27 years.

Last week the births of 991 boys and 949 girls, in all 1940 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1693.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30.166 in. The mean daily reading was above 30 in. on every day till Saturday. The barometer fell from 30·50 in. on Wednesday to 29·57 in. on Saturday. The mean temperature of the week was 44·1°, which is 5·1° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week, and on the first three days was about 8° above it. The thermometer in the shade rose to its highest point 56° on Monday, and fell to its lowest 31·8° on Friday, or below the freezing point of water. The whole range of the week was therefore 24·2°. The mean daily range was 15·7°. The difference between the mean dew-point temperature and air temperature was 6·3°. The mean degree of humidity of the air was 79. The mean temperature of the water of the Thames was 45°. The general direction of the wind was south-west. No rain fell during the week to any measurable amount.

MEDICAL REGISTRATION: MEETING AT HULL.

At a meeting of the medical men of Hull, held at the Infirmary, on Saturday evening, February 19th—Robert Hardey, Esq., in the chair—the following resolutions were carried:—

1. Moved by Henry Gibson, Esq., and seconded by T. McManus, Esq.—

"That a society be formed, consisting of registered medical practitioners resident in Hull and the neighbourhood, to be called the Hull and East Yorkshire Medical Registration Society."

2. Moved by J. H. Gibson, Esq., and seconded by Dr. Bell—

"That the object of the Association be the efficient carrying out of the clauses of the new Medical Act."

3. Moved by Henry Gibson, Esq., and seconded by J. A. Locking, Esq.—

"That a committee be formed to carry out the above named object."

4. Moved by J. F. Holden, Esq., and seconded by Dr. A. McMillan—

"That an annual subscription of two shillings and sixpence be agreed to, to defray necessary expenses."

The business of the meeting being ended—

It was proposed by Henry Munroe, Esq., and resolved unanimously—

(1) That in the opinion of this meeting the same privileges as to rank, etc., which have been granted to the medical service in the army, be extended also to the navy.

(2) That the members of the borough be solicited to support any measure in Parliament having the above object in view.

James Clay, Esq., one of the members, has signified his intention to comply with this resolution.

The thanks of the meeting were then voted to the Chairman, and the meeting separated.

Henry Carnley, M.B., *Honorary Secretary.*

Hull, February 24th, 1859.

The Battle of Quackery. Testimonials are glorious despatches written by the survivors, but which make no mention as to how many have been killed or wounded. *Punch.*

Association of Medical Officers of Asylums and Hospitals for the Insane. On Monday afternoon, a special meeting of this Association was, by desire of the President, Dr. Conolly, D.C.L., held at the Great Western Hotel, Paddington, to take into consideration the provisions of Mr. Walpole's new Lunacy Bills, and proposed select committee of inquiry into the operation of the existing lunacy laws. The President took the chair; and, in addition to Dr. Conolly, there were present, among numerous medical officers of lunacy asylums, Dr. Bucknill, Dr. Lockhart Robertson (Hon. Secretary of the Association), Dr. Stevens, Dr. Davey, Dr. Wynter, Dr. Hood, Dr. Forbes Winslow, Dr. Burnett, Dr. Bartlett, Dr. Blandford, Dr. Harrington Tuke, Dr. Boisragon, Dr. Webster, Dr. Wood, Dr. Sutherland, Dr. Miller, Dr. Prichard, Dr. Stillwell, Dr. Stevenson Bushnan, Dr. Chevalier, Mr. Bolden, etc. The chairman, in opening the proceedings, reviewed the provisions of the Bills referred to, and stated his objections to them. A special committee of the members of the committee of management of the Association was then appointed to cooperate with the committee at Edinburgh in watching the further proceedings in the case of these Bills before Parliament; and Mr. E. Conolly, barrister-at-law, was appointed honorary secretary. The injurious portion of the Bills, and the blame and discredit they cast on the whole body of medical men engaged in the treatment of lunatic diseases, and keeping private asylums for the insane, were then expatiated upon at some length by Dr. Sutherland, Dr. Burnett, Dr. Forbes Winslow, and Dr. Bucknill; after which Dr. Davey moved a resolution, which was unanimously carried, that the meeting deprecated most strongly the provisions in the Bills for the appointment of medical examiners, and receiving their reports. Another resolution was also passed, protesting against practitioners in lunacy being precluded from signing certificates. On the motion of Dr. Forbes Winslow, the following gentlemen were appointed a committee to consider a plan to be submitted to Mr. Walpole:—Dr. Conolly, Dr. Sutherland, Dr. Campbell, Dr. Tuke, Dr. Bucknill, W. Ley, Esq., Dr. Stevens, Dr. Lockhart Robertson, Dr. Seaton, Sir C. Hastings, Dr. Forbes Winslow, Dr. Wood, Dr. Hood, Dr. Wynter, Dr. Paul, and the Scotch and Irish Secretaries of the Association.

Adulteration of Food. Mr. Scholefield, M.P., has revived his Bill "For Preventing the Adulteration of Articles of Food or Drink." It imposes a penalty (not yet fixed) on every person vending or exposing for sale any article of food or drink with which, to the knowledge of such person, any noxious ingredient has been mixed. More than this, the name, residence, and offence, of the offender will be published (at his own expense) in the newspapers or otherwise, at the discretion of the magistrates. Vestries and district boards and town councils are authorised to appoint analysts, possessing competent medical, chemical, and microscopical knowledge. Purchasers of provisions may have their purchases (of food and drink) analysed by these officials on payment of a fee of 2*s.* 6*d.* to 10*s.* 6*d.*, and the certificate of the analyst will be made evidence against the fraudulent vendor. The Privy Council is empowered to cause analyses to be made, and to regulate the use of materials or ingredients distinct from the natural composition of any article of food or drink with which it may be mixed. Thus chicory, used to adulterate coffee; *cocculus indicus* and treacle, used by brewers to adulterate porter; red lead, used to make "cayenne pepper;" vitriol, used to counterfeit acetic acid, or vinegar; and logwood, used in the manufacture of "port wine," would come within this category. The Act is not to extend to either of the sister kingdoms.

The Stamp Duty on Diplomas. A deputation on the subject of the repeal of the stamp duty on the diploma of a fellow, and on the licence to practise physic granted by the Royal College of Physicians of London, had an interview with the Chancellor of the Exchequer on Wednesday last, at his official residence in Downing Street. The deputation consisted of Dr. Mayo, President of the College; Dr. Francis Hawkins; Dr. Alderson, Treasurer; Dr. Sutherland, Senior Censor; Dr. Pitman, Registrar; and Mr. Barrow, M.P.

University of Durham. At a Convocation held on March 1, graces were passed to the effect that the medical school of King's College, London, and the senior medical department of Queen's College, Birmingham, shall each be held to be a medical school, at which students in medicine may be permitted to pursue their studies, under the regulation Tit. viii., § iv., ¶ 3, 4, 6. A grace was passed for setting the University seal to a memorial praying for the remission of the stamp duty on the license and diploma of the Royal College of Physicians.

London Medical Registration Association. The monthly meeting of the General Committee, which was numerously attended, was held on Wednesday evening last at the British Coffee House; Dr. Kirby in the chair. Dr. Webster, of Northampton, was present as a deputation from the local Association established in that town. In consequence of letters of warning issued by the Association, several notorious advertising quacks presented themselves before the Committee, to make certain statements in reference to their conduct and their misdoings. After hearing these statements, the Committee distinctly informed them that they were acting illegally, and that it was the intention of the Association to prosecute in all cases coming under the cognisance of the Act. One of the applicants begged for time, inasmuch as he had several touters now employed whom he could not inform of the decision of the Committee within a fortnight. Another stated that he had a large stock of advertising bills on hand, and begged the indulgence of the Committee to allow of their distribution. The Chairman remarked to both applicants, that they had admitted the illegality of their practice, and, if they persisted in their evil courses, the Association would certainly prosecute. As for the handbills which the latter applicant modestly proposed to circulate to the injury of the junior members of the medical profession, the Chairman suggested that they should be committed to the flames. The precise position that the chemists might assume, and the dangers they would run in attempting to practise illegally, were also pointed out to this person, who had commenced his statements by asserting that he first began business as a chemist, and, finding he could not succeed, added the quack-advertising by hand-bills, etc., as a means of ekeing out a livelihood for himself. This person, it should be stated, expressed himself in very peculiar English. The recent bye-laws of the College of Physicians on the question of prosecuting impostors, and the funds for undertaking them; the supply of certificates of death by persons not registered; the relations of the central to local associations, and many other subjects, were carefully deliberated on and ably discussed. It is intended by this Association that a "prosecution fund" shall be immediately established for the purpose of protecting the interests of the legally-qualified members of the medical profession against unqualified pretenders.

Recreation Grounds for the People. A Bill of Mr. Slaney, M.P., Mr. Thornely, M.P., and Mr. Mackinnon, M.P., provides that six acres of land in any one parish may be legally conveyed to trustees, to be held by them as open public grounds for the resort and recreation of adults, and as playgrounds for children and youth. Personal property not exceeding £1,000 may be bequeathed for the same purpose. This Act only benefits England and Wales.

Epidemiological Society. On Monday, March 7th, a paper will be read "On the Advantages to be obtained from a more extensively organised system of Sanitary Supervision;" by H. J. Paine, Esq., of Cardiff.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Mr. Crosby Leonard; Dr. C. Handfield Jones; Mr. W. Minshull; Dr. Pursell; Mr. T. W. Nunn; Scotus; Mr. H. Terry, jun.; Dr. A. W. Williams; Dr. Oke; Dr. Barclay; Mr. J. A. Hingeston; Mr. T. Holmes; An University Physician; Dr. McWilliam; Mr. J. W. Barnes; Dr. Coleman; Dr. L. Newnham; Dr. T. Skinner; Mr. H. W. T. Ellis; L. M. D.; Vindex; Mr. Solomon; Mr. T. M. Stone; Mr. G. Terry; and Mr. G. Horney.

ADVERTISEMENTS.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXV.] LONDON: SATURDAY, MARCH 12, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

SACCULATED ANEURISM OF THE ABDOMINAL AORTA, FATAL BY GRADUAL HÆMORRHAGE.

Under the care of JAMES RUSSELL, M.D.

(E. RYLAND, Esq., *Clinical Clerk.*)

W. C., aged 35, a labourer, of good general health but intemperate habits, was admitted on January 7th, 1859. He had complained of pain in the lower part of the abdomen at different times during three years; but, as his health did not suffer, he continued to work until four months before his admission. He was completely laid by for two or three weeks, about two years before admission, and the pain then left him, and did not return until last August, from which period it was severe, and never ceased for any length of time, excepting during sleep. During the last four months, he had lost flesh, and had grown gradually weaker. It was not until a fortnight before admission that he discovered a tumour in his epigastrium.

On admission, he was considerably emaciated, but his face had not an unhealthy aspect. His sole complaint was of pain, seated with greatest intensity in the epigastric region, but also diffused generally over the front of the chest and abdomen; the epigastric pain was increased by the presence of food in the stomach. All the functions of the body were performed naturally.

On examining the abdomen, a firm inelastic tumour was discovered, situated in the epigastrium; its most prominent part was about an inch and a half to the right of the median line, and rather above the central point between the ensiform cartilage and the umbilicus. It appeared of about the size of a full sized orange, nearly spherical in shape, and with a uniform surface; it projected slightly above the level of the abdominal parietes, and received a strong heaving pulsation from every contraction of the heart, sensible to the eye, as well as to the hand; it was entirely without *frémissement*. The fingers could easily pass around the entire circumference of the tumour. Percussion was perfectly resonant over the region which it occupied. A loud soft bellows-sound was audible over the tumour; but it was found that, when care was taken to avoid pressure, the *bruit* diminished to so great an extent as to suggest the probability that, if pressure could be entirely prevented, no sound would be present. No *bruit* was audible behind, in the region of the spine. The sound and impulse of the heart were natural. The liver and the other viscera of the abdomen appeared healthy.

The treatment consisted principally of rest in bed, and, for some time, of the use of a milk diet, with the effect of temporarily removing the pain. Two or three days before his death, however, the pain returned with much severity.

On the evening of January 30th, the patient was attacked with vomiting, and with great increase of pain, for which a grain of opium was twice administered. During the night, he was very restless. About eight on the following morning, he suddenly exclaimed that he was dying; he became ghastly pale, and fell into a state of extreme collapse. He was revived by an enema of half an ounce of sulphuric ether, administered by Dr. Roe's direction; but he continued much exhausted and very pale. At noon he had a second enema, with two grains of opium given by the mouth. He was very restless during the remainder of the day; his bowels acted involuntarily several times; his pulse was very feeble, and his pupils contracted. He became gradually weaker, and died at four o'clock in the morning, twenty hours from the first occurrence of the collapse.

EXAMINATION OF THE BODY, thirty hours after death. A very small quantity of fat was present in any part of the body. *Thorax.* All the organs were healthy. *Abdomen.* The tumour was perfectly concealed by the distended stomach, and by the arch of the colon. A few slight traces of bloody serum were noticed upon the intestines, but a large quantity of recently coagulated blood lay in the cavity of the pelvis. The tumour, which proved to be an aneurism of the abdominal aorta, was as large as a fœtal head, rounded in shape, and lay upon the three upper lumbar vertebræ. The duodenum, in its second and third portions, was attached pretty closely to its right and inferior surfaces, and the pancreas was intimately connected with its superior surface. It sprang from the abdominal aorta immediately below the origin of the cœliac axis; its connection with that vessel extending rather below the commencement of the superior mesenteric, which sprang from the aneurism itself. The aneurism communicated with the aorta by a large oval aperture, an inch in its longest and three quarters of an inch in its shortest diameter. The orifice was entirely occluded by a soft coagulum, perfectly smooth and covered by a membranous layer of fibrine. The aneurism was perfectly solid, and apparently filled by fibrine;* unfortunately, it was not carefully examined until it had macerated for two days, when the closest inspection failed in detecting any rupture by which the escape of blood had been effected. Within the aorta were one or two spots of atheroma; but the inner layers of the vessel, along its whole extent, were much corrugated. The coats of the aorta in the neighbourhood of the aneurism were greatly attenuated—in some spots to the extent of reducing them almost to the thinness of paper; and it was probable that the laceration had occurred at one of these portions. The arteries which rose from the aorta in the neighbourhood of the aneurism, were surrounded for the length of an inch by a thick layer of cellular tissue, so dense and closely connected to the vessels, that the knife was required to effect its removal; their cavities were unobstructed.

REMARKS. The uncertainty which attached to the existence of the *bruit* in front of the tumour, and the entire absence of any bellows-sound from the vertebral region, left a doubt in the diagnosis of this case. This circumstance, together with the want of any expansive pulsation in the aneurism, are fully explained by its being completely filled by fibrine, and by the smooth surface of the coagulum which occupied its orifice. On the other hand, the large size of the tumour, and its great firmness, together with the absence of constitutional symptoms, rendered cancerous disease of the stomach or intestine improbable; its smooth and even surface, and the want of other indications, contraindicated disease of the lumbar glands, and there was entire absence of the symptoms, usually well marked, of disease of the pancreas. It should have been stated that the patient was not aware of having met with any accident, and that he was unable to connect the origin of his malady with any particular event.

The issue of the case demonstrates that the entire occlusion by fibrine of an aneurism of the aorta, offers but a poor chance of prolonging the life of the patient: a fatal termination being still effected, either in consequence of disease in the vessel from which it springs, or, as sometimes happens, by liquid blood gradually forming for itself a passage between the fibrine and the walls of the aneurism, and finally issuing through a rupture of the coat.

* The aneurism was not laid open, as it was desired to retain its connection uninjured, for the purpose of preparing it for the museum of Sydenham College.

KING'S COLLEGE HOSPITAL.

ANEURISM OF THE ABDOMINAL AORTA, FATAL BY SUDDEN HÆMORRHAGE.

Under the care of G. Johnson, M.D.

[*From Notes by* C. Parsons, Esq., *House-Physician.*]

W. B., aged 37, married, a carpenter, native of London, was admitted into King's College Hospital on December 31st, 1858. The only illness he could remember, was a swelling in the groin, which was opened in the Middlesex Hospital. He had never had syphilis. There was no family history of cancer, or of other malignant disease. At one time of his life, he was rather a hard drinker. He stated that, about a year before admission, he was taken with severe pains in the back, belly, and sides, which continued to increase in violence ever since, so that he had been quite unable to work. About seven weeks ago, he first perceived a small swelling beneath the margin of the left false ribs, which increased considerably in size. There was a good deal of flatulent eructation, and for the past week he had been subject to vomiting. He slept badly from constant pain; and had lately lost flesh. His bowels were very much confined. He was a thin, sallow, unhealthy looking man, having much the appearance of one labouring under some malignant disease. There was a pulsating tumour in the epigastric region, extending more to the left of the median line. No murmur was audible over it. It seemed to extend under the ribs, and downwards as low as one inch above the umbilicus, where it ended in a well-defined margin like that of the liver: it descended during a deep inspiration. There was a slight degree of resonance over the tumour on percussion. No murmur could be detected in the back, over the dorsal or lumbar spinous processes. The tongue was coated with a brown fur. Pulse 96. He was ordered to have half a drachm of laudanum at bed-time, and ten grains of cathartic pill at night.

January 1st, 1859. The bowels had not been moved. He was ordered to have an enema of two ounces of castor oil in a pint of gruel; and to take a grain of morphia in a pill at bed-time.

January 3rd. At 6.30 A.M., he was seized with a sudden attack of faintness, amounting almost to syncope. He complained of intense pain over the tumour; and his face became pallid, and covered with a cold perspiration. A drachm of sulphuric ether was given immediately, and he was ordered to have half an ounce of brandy every two hours. The following draught was ordered to be taken every six hours:—

℞ Liquoris morphiæ hydrochloratis ♏x; misturæ camphoræ ℥iss. M.

He was also directed to take fifteen minims of solution of acetate of morphia at bed-time.

January 4th. He was no better; he had no sleep at all at night. The bowels were freely opened. In the morning, he vomited a considerable quantity of "coffee-ground" matter. He was very pale.

January 6th. He felt much the same, but was somewhat improved in appearance. He did not sleep the previous night. He vomited (not "coffee-ground") once in the morning of January 5th, but not since. He was ordered ice on January 5th, which checked the vomiting. The appearance of the tumour was much the same. The tongue was brown and furred; the pulse 100. The urine was healthy in appearance, acid, and free from albumen. He was directed to take a drachm of solution of acetate of morphia every night.

January 8th. He had slept a little the last two nights. In the morning of the 7th, he vomited some dark-looking matter.

January 13th. There had been no vomiting since January 7th; and he had slept better lately. The pain in the abdomen was rather worse. The tumour apparently descended with inspiration more than it did; and there was a *bruit* distinctly audible over it, just below the margin of the ribs. He was ordered to take a drachm of laudanum at bed-time instead of the morphia solution.

January 15th. He was very restless the previous night, and slept but little. The pain was still very severe; there was no vomiting. The *bruit* was now most distinctly audible just beneath the margin of the right false ribs, but could not be heard at all over the most prominent part of the tumour.

January 20th. He was rather better. He slept badly the previous night. The *bruit* was still most plainly heard to the right of the median line, and over it, but very little to its left. The pulsation, too, was much plainer to the right of the median line than it has been. The vomiting had disappeared. A drachm of tincture of hops was added to the night draught.

January 22nd. He had no sleep the previous night; and had a good deal of pain. The *bruit* was audible in the median line, but not much on either side of it. He felt very weak.

January 27th. He slept better. The pain was less. He sat up for about an hour on January 26th. A tumour could now be detected on the left side, extending between the left false ribs and the crest of the ilium.

January 29th. The *bruit* was still audible, most plainly just below the extremity of the ensiform cartilage. Pulsation was very strong a little to the left of the median line.

February 3rd. He slept tolerably well the previous night. The *bruit* was still audible in the old situation, but not so loud. Pulsation was less strong.

February 5th. The *bruit* was much softer in character. He now sleeps well.

February 6th. This afternoon he was sitting up taking a cup of tea, when he suddenly vomited several pints of fluid blood. His face became blanched; and neither pulse nor heart's action was perceptible. Respiration, however, continued for about two minutes at long intervals. He died at 5.10 P.M. All outward signs of the tumour disappeared directly after death.

Sectio Cadaveris, forty-six hours after death. The face and the whole body were extremely pallid and emaciated. Rigor mortis was present. *Thorax.* The heart and lungs were healthy. *Abdomen.* The whole of the liver was of a pale colour, and presented much the appearance of incipient cirrhosis. The left lobe extended about four inches below the ensiform cartilage: its surface was irregularly lobulated, and much flattened from above downwards, and very pale in colour. The right lobe presented a smooth surface, and was much enlarged towards the left side. There was a well defined depression, separating the flattened portion of the lower part of the liver from the rest of its substance. In this flattened portion, on its posterior aspect, was a hard mass, which had evidently formed the most prominent part of the tumour felt during life. On section, this presented a cheesy sort of appearance, which, under the microscope, had all the characters of tubercle. Beneath this, the duodenum and upper part of the small intestine appeared distended, and of a dark colour. The liver weighed 3 lbs. 14 oz. The stomach was filled with several large clots of blood, and a pint or more of sanguineous fluid. The small intestines also, as low as the ileum, were filled with coagulated blood. At the lower end of the duodenum was a small circular orifice, about two or three lines in breadth, from which frothy blood exuded on pressure. The opening communicated with the sac of a large aneurism arising from about the centre of the abdominal aorta, extending directly forwards, and pressing the duodenum and other viscera towards the abdominal walls. The aneurism communicated with the aorta by a large opening, three inches in its vertical and one and a half in its transverse diameter, and containing numerous layers of stratified fibrine. In the lax subperitoneal tissue, on the left side of the vertebræ, a large quantity of blood had been effused, and extended as low as the brim of the pelvis; but the point of rupture could not be detected. A second incipient aneurism projected from the abdominal aorta on the left side, and laid bare the bodies of the second and third lumbar vertebræ. The spleen was large, soft, and very friable: it weighed 11¾ oz. The mesenteric glands were much enlarged, and of a pale yellow colour, filled with cheesy scrofulous matter. The kidneys were pale and mottled; the left was firmly attached to the aneurism.

Remarks. The above case was at first obscure, from the absence of *bruit*, and the peculiar nature of the tumour, which changed its position during forced respiration, thereby giving rise to the idea that the tumour was connected with some of the viscera (most probably the liver), and received its pulsation from contact with a large artery. This idea was favoured by the unhealthy appearance of the patient, which tallied very well with the hypothesis of malignant disease. Soon, however, the appearance of the *bruit* indicated the presence of an aneurism in the abdomen; and then conjecture was baffled to account for the apparent fact that the tumour was moveable in forced respiration. The fact, however, turned out to be, that the moveable tumour was really the liver, and that the aneurism itself lay behind it, but so closely adjacent to its walls that the pulsation and *bruit* were communicated directly through its solid mass, as if it had formed a portion of the tumour. The *bruit* was at first capricious, disappearing for a time, and then

again becoming audible. The probable cause of the existence of an aneurism so large as perceptibly to raise the liver, without any aneurismal *bruit*, may be sought in the large size of the opening into the artery; which is also, no doubt, the reason why so many thoracic aneurisms present no appreciable *bruit*. The subsequent appearance of a *bruit* must be referred to some change in the condition of the orifice, probably to its becoming partially obstructed by the "stratified fibrine" noticed there, and its temporary latency by some subsequent change or displacement of this clot.

The case of abdominal aneurism from the Birmingham General Hospital, which precedes this, presents several interesting points of comparison as well as of contrast.

HOSPITAL FOR SICK CHILDREN.

I. ABSCESS IN THE KNEE-JOINT: RECOVERY.

Under the care of Athol A. Johnson, Esq.

The annexed case is cited as an example of how much may be effected by patience and the expectant plan of treatment in cases of diseased joints in children, more especially when the disease does not commence in the bones, but in the surrounding soft parts. In such cases, it is, as far as our experience goes, hardly ever necessary to proceed to the resection of the joint, inasmuch as a useful (and very often a flexible) limb usually is preserved by very simple methods, which may be summed up in a few words—rest, tonics, and incisions. On the other hand, as those affections of the joints which do involve the bones in childhood usually proceed from constitutional causes, and affect the whole or a great part of the bone in question, it would follow that, in children, the operation of resection is not often indicated; and that, indeed, appears to be the opinion which gains ground more and more among those who have an opportunity of seeing much of the diseases of early life. It does, indeed, every now and then happen that circumstances prevent the long period which is necessary for the spontaneous cure being given to the case, and that an operation becomes advisable, in order to hasten its completion; but these cases are the exception, and, as a rule, our experience of the practice at this Hospital would lead us to the belief that resection will become rarer and rarer in childhood, in proportion to the advance of our knowledge of the pathology of the diseases of that period.

Alfred T., aged 2, a pale delicate looking infant, was admitted on August 21st, 1858, with great swelling of the right knee, not confined to the joint, but extending to some distance upwards and downwards. The joint was semiflexed, and any movement of the part caused great pain and violent screams. The nights were disturbed, the child was losing flesh, and the swelling was increasing in size. The skin was hot; the pulse quiet.

The knee was first perceived to be swollen in February 1858; but the child had had a fall three months previously, since which time he had appeared occasionally in pain. He was taken to another hospital, but no disease was then detected. In March he was admitted as an out-patient at this Hospital, when the limb was placed on a splint, and cod-liver oil given. Latterly, however, it had appeared to get much worse, so that it was necessary to take him into the Hospital. He was ordered quinine mixture, beef-tea, etc., and was kept quiet in bed; but the swelling increased, the skin became red, and the pain very great. A free incision was made into the joint, and a large quantity of matter let out. This was attended with some relief, but matter reaccumulated, and it was necessary to make three other incisions into different parts of the suppurating cavity.

By this time (October 1st) the child had become extremely emaciated, restless nights and frequent attacks of diarrhœa threatening to carry it off. After the last incision, however, he began to rally, and to suffer less pain; and the operation of excision of the knee, which had been contemplated, was postponed. Under the use of quinine and iron, means being taken to prevent any reaccumulation of matter, he began to gain flesh, to lose pain, sit up a little, and play with his toys.

On November 26th, he had been steadily improving, but there was still a good deal of discharge from all four openings. The knee was semiflexed, and could not be moved without pain. The appetite was good, and the pulse nearly natural.

At the commencement of the present year, he was attacked with erysipelas of the diseased leg, which extended from the toes upwards to the groin. Hot fomentations were applied locally, and salines given. The erysipelas soon subsided, and was followed by great improvement in the condition of the joint, which diminished in size, the wounds assuming a healthy appearance. There was no pain, and the boy began to gain flesh rapidly. On February 26th, the wounds were healed; the joint was still enlarged, but not much, and was stiff. It was, however, in good position, and no pain was produced by such force as it was thought proper to submit it to in examination. The child was now quite fat and healthy looking. He was made an out-patient, and was last seen on March 3rd. The knee was still kept on a splint, and cod liver oil with iron was given. It seemed doubtful whether the joint were really ankylosed, but future observation will settle this point.

II. SEBACEOUS TUMOUR CAUSING ABSORPTION AND PERFORATION OF THE CRANIUM.

Under the care of A. A. Johnson, Esq.

We have already given instances in which the bones of the skull have been found more or less deficient below sebaceous tumours apparently of the ordinary kind. One of these, reported at p. 783 of the last year's volume, also occurred under Mr. Johnson's care. It is singular that another instance of this rare affection should come from the same gentleman's practice.

Mary A., an infant six months old, was brought to Mr. Johnson on February 21st, with a small tumour, of about the size of a large pea, placed in the middle line, over the frontal bone, near the top of the forehead, and evidently a sebaceous tumour. The mother first noticed the swelling about three months previously, when it was about half the present size: it remained stationary till about a fortnight ago, when it began to increase rapidly in size. The child was apparently in good health, but was said to have become restless of late.

The tumour was cut down upon, and found to be placed in the loose cellular tissue below the tendon of the occipito-frontalis, and lodged in a well marked cup-like depression in the bone, to the periosteum covering which it was partially adherent, but especially at the bottom of the cup, where the adhesion was very firm. This was carefully dissected off; and then a small aperture or deficiency was found in the bone, at the bottom of the depression, into which the end of a probe could be passed, and where the pericranium appeared to be blended with the membranes beneath. The tumour, which was removed entire, presented nothing remarkable. The wound was brought together by strapping, and the child did well.

Original Communications.

MEDICO-LEGAL CASE: URÆMIA, OR OPIUM POISONING?

By James Weaver, Esq., Llandrinio.

In the Journal of February 5th instant, a case is reported by Dr. Mushet, so like one which has come under my notice, that I am induced to send an account of it. I should have done so earlier, but waited for the result of the *post mortem* and analysis.

On February 2nd, 1859, I visited S. B., aged 67. He was pale, cold (though sitting before a fire), and very drowsy. He answered when spoken to; but immediately lapsed into a state of sopor. The pupils were contracted; the pulse quick, small, and weak. There was slight œdema of the feet and ankles.

February 2rd. I was requested to visit S. B. immediately, and was informed that he had had a fit about three hours before. I found him in bed, very pale and anxious; the eyes were wide open; the pupils contracted; the pulse small and laboured. There were no contortions of the face or limbs. He was breathing heavily, with a good deal of rattle over the chest. He answered once incoherently. The prognosis was evidently most unfavourable: the age and nature of the case not admitting of active measures. I ordered mustard plaisters to be applied to the legs, hot water to the feet, and a blister to the nape of the neck; also a drop of croton oil to be given, and followed by a cathartic mixture. He died in convulsions about four hours after my visit.

Post-mortem Examination, February 8th. The appearance of the body was natural. There was a wound of about two

inches long, situate over the left eye, partly healed; the pupils were contracted. On opening the head, the appearance of the parts was natural. The pia mater was slightly congested; the vessels were somewhat prominent; the substance of the brain was healthy; but the vascular points were more prominent and numerous than usual. There was a small quantity of clear watery fluid in the left lateral ventricle; there was no clot, nor injury to the skull. The base of the brain was healthy. *Chest.* The heart was healthy, and of usual size; the lungs were pale anteriorly, but seriously congested at the base and posteriorly, with a good deal of mucus lining the bronchial tubes. There were no pleural adhesions. *Abdomen.* The liver was healthy; the gall bladder half full of dark thick bile. The spleen was small and firm; the stomach was distended. I removed it by ligatures, together with the intestines, for analysis. The *right kidney* was externally natural in size and appearance; it was slightly diseased internally. The *left kidney* was externally healthy; internally it was diseased, with some fat in the pelvis and surrounding parts. There was no fluid in the peritoneum; and the other organs were healthy.

In giving evidence before the coroner, on February 11th, I could not swear whether this man died of uræmia, or of poison by opium; I was not prepared to say for certain, that the amount of kidney disease found after death was sufficient to cause the former; and, as he had lived on very bad terms with his wife, and the neighbours openly said she had poisoned him, I felt, in common fairness to the woman, that an analysis was necessary. The inquest was consequently adjourned to February 25th; and in the meantime a gentleman made an analysis of the contents of stomach and bowels. His evidence proved the *non*-existence of opium, and a verdict was returned accordingly, but against the wishes of some of the jury, who wanted one nothing short of manslaughter.

Remarks. This case shews the great necessity of coroners courts of inquiry; for had not a *post mortem* examination and analysis taken place, the man's wife must to the end of her days have been content to bear the stigma of having poisoned her husband. The symptoms equally answered to those of opium-poisoning or uræmic disease.

THE NEW TREATMENT OF WATERY EYE (EPIPHORA): WITH ILLUSTRATIVE CASES.

By James Vose Solomon, Esq., F.R.C.S., Surgeon to the Birmingham Eye Infirmary.

When the efferent lacrymal canals become either narrowed, strictured, or otherwise obstructed in any part of their course, tears collect at the inner corner of the eye, and the condition technically termed epiphora, stillicidium lacrymarum, or, in simple language, watery eye, exists.

If the lining membrane of the lacrymal sac becomes irritated, either from distension of the tears or some constitutional derangement, mucus or pus, one or both, is secreted, and, unless well diluted by the tears, its escape by the natural passages is retarded; consequently the sac is prone to become dilated, and generally remains so until relieved by the formation of an abscess, which, if followed by a permanent fistulous aperture, produces a natural cure, though at the expense of much annoyance to the patient.

Denudation of the periosteum of the bony canal I have discovered in a few instances where the secretions have been pent up in the sac, or have obtained only a tardy and imperfect vent.

A carious state of the canal is, according to my experience, a disease of rare occurrence.

The *Seat of Stricture* in the lid-canals has been found, in a few instances, to be near their middle; in by far the greater number, close to the tear-sac. Lower down, a frequent site is at about the point where the latter merges into the nasal duct, also at the terminal extremity of the duct.

The cases that demand much patience on the part of the surgeon, and faith in the new method, are those of adults affected with old standing epiphora, and in whom the lid-canal is strictured close to the sac; the remainder of the excretory apparatus being so much contracted, probably from functional inactivity, that a No. 4 probe, when inserted into the duct, gives the impression of being firmly wedged.

During the eleven years I have been officially connected with the Birmingham Eye Infirmary, two cases only of epiphora, which were referrible to the presence of a nasal polypus, have come under my care. The symptoms in one of them simulated those of an incipient tear-abscess.

In some of the instances where the sac has suppurated before coming under surgical observation, considerable mischief has been done to the membranous walls of the nasal duct. This condition is discoverable by the freedom with which the probe may be moved backwards and forwards on the floor of the nose. The instrument is not tightly pressed against the brow, as in the healthy subject, but has a tendency to fall forwards. The abscess appears in some cases to soften down and destroy the stricture.

The mere fact, however, of the patient having been able, prior to the occurrence of suppuration, to press the contents of the distended sac into the nostril, is not decisive proof of the absence of stricture.

The treatment by probes passed through a slit punctum and canaliculus affords the means of ascertaining the gradual restoration of the duct to its natural dimensions. (Case viii.)

No *age* is exempted from epiphora. In a young gentleman of nine years, who was recently under my care, it had existed since his birth. I found the left lower canaliculus closely strictured at its sac extremity, which required division with the cannula-lancet before a probe could be made to enter the sac.

Dr. Mackenzie considers the congenital affection to be referrible to an imperfect development of the excreting canals—an opinion which derives support from the subsidence of the epiphora, in certain cases, about the age of puberty. The *hereditary* nature of watery eye has not been, I believe, noticed by authors, and is therefore probably of rare occurrence. I am acquainted with a family in which three of five brothers were affected in childhood, and who are still annoyed by it when exposed to the wind, though now past the meridian of life. One of them has seven sons, five of whom have manifested a similar disorder of the excreting tear-functions.

Treatment. The surgical expedients that have been devised for the relief of epiphora are numerous, and evince much ingenuity. Those that have proved the most beneficial are based upon the principle of mechanical dilatation; some likewise affording relief, as Mackenzie and Vidal suggest, by exciting capillary attraction. In certain methods, the instruments employed have been introduced by the natural, in others by artificial openings.

J. L. Petit was, I believe, the surgeon who first devised the plan of opening the sac through the integument which covers it, and then inserting a wax bougie into the duct.

Beer gradually dilated the duct with catgut bougies, of various sizes, which he introduced after the manner of J. L. Petit; but, when a tear-fistula existed, he availed himself of it, enlarging the aperture when it was necessary, as a means of ingress. As soon as the passages were believed to be free, the bougie was withdrawn, and measures taken to heal the wound. The chief objections to this plan are, that it treats a part only of the excreting apparatus; in the event of failure, it obliges the infliction of a fresh wound (*i. e.*, supposing the surgeon has succeeded in closing the first one, which was prone to become fistulous), with a repetition of the whole process *ab initio*: moreover, it is by no means easy, as I know from experience, to hit upon the direction of a much contorted canal, when the probe is introduced from the outside of the lid. It embodies, however, a very important principle—gradual dilatation of the stricture, when such existed in the path along which the bougie travelled.

The methods of Petit and Beer, there can be no doubt, suggested the employment of the silver nail-headed style. The inconveniences attendant upon it have been represented by Mr. Bowman and others; and, as he graphically describes some of the ill consequences which had led me, previously to an acquaintance with his method of treating lacrymal obstructions, to almost entirely abandon the use of the style among the labouring poor, I quote his words.

"The insertion of a style or tube through an opening made in front of the sac, below the tendo oculi, has been the last and common resource in obstinate cases, where the disease has worn out the patience of the sufferer and the surgeon. It is an expedient so objectionable in itself, as never to be resorted to till the last moment. It is unsightly, especially in females; it is painful, and the patient has constantly to wipe away the discharge escaping by the orifice. The puncture made to admit the style is also frequently followed by the formation of an abscess outside the sac, spreading under the orbicularis muscle, and apt to grow into that serious complication, a sinuous ulcer,

for the cure of which, free division, and sometimes excision of the overlying skin, is necessary."

Ponteau (*Mélanges de Chirurgie*, p. 100: Lyons, 1760), about a century since, had a young lady under his care to whom, he says, he did not dare to propose an incision in the skin of the lid. In this dilemma, the idea struck him, and he carried it into practice, that the sac might be opened from the inner side of the lower lid, near to the caruncle.

To this ingenious suggestion Lecat supplemented the introduction of a tent or mesh of charpie into the duct, which he conveyed there by means of a small, flexible, and eyed probe.

Laforest and Gensoul avoided altogether the use of the knife, and the disfigurement of an external wound, by employing curved sounds, which they introduced at the nasal orifice of the duct.

Gensoul gave particular attention to the form of his instruments, the curves of which he had worked from castings of the passages they were designed to dilate. Were it not that stricture has its seat in parts to which these sounds cannot gain access, their employment would be followed by very good results. The late Mr. Morgan bears favourable testimony to this method in his *Lectures on Diseases of the Eye*.

Anel first probed the puncta and the tear-canals in their entire length; but his instruments, being only of the diameter of a bristle, are almost ineffective as dilating agents, while their pliability and tendency to get caught in the mucous folds render them very insufficient exponents of the pathological condition of the canals.

A moment's consideration of the preceding methods will lead to the conclusion that each possesses some one or more points of advantage; namely, gradual dilatation of the strictured nasal duct; the entrance of the duct by an invisible aperture; the employment of instruments curved to the normal direction of the duct, and of sufficient strength to force an obstruction.

It was not, however, until near the close of 1857 (November), that a mode of treatment was made known to the profession which combines all the desiderated points above enumerated, and affords some others which they do not possess. The plan to which I allude was originated by my distinguished friend Mr. Bowman: it consists in the slitting up of the punctum and its canaliculus as far as the caruncle, thus allowing of a probe one-twentieth of an inch in diameter to be passed along the remaining part of the lid-canal into the sac, and down the duct to its extremity. In this way, the whole of the excretory apparatus is commanded. The larger probes are bent near their extremities in such a manner as to allow the surgeon to adapt them to the tortuous passages they have to traverse, and to make search, by the rotation of them on their long axes, for the orifice of the nasal duct. All the defects that belonged to Anel's small probes are overcome. Mr. Bowman's instruments are of sufficient size for the efficient dilatation of a stricture, wherever situated; and of sufficient strength to overcome an obstruction when it is dense, and does not yield to a slight force. Their points, being obtuse, are little liable to be caught in the mucous folds. The drawing in the margin represents Mr. Bowman's probes in four of the sizes actually used.



In addition to the mechanical treatment, which is repeated according to circumstances, Mr. Bowman employs such constitutional and local remedies as the peculiarities of each case may seem to require. He has given a full, and, as I have learned by an experience of some fifty cases, a most careful and accurate account of his mode of treatment and its results, in the first number of the *Ophthalmic Hospital Reports* (London, 1857), to which the reader is referred.

The only departure I have made from the valuable rules laid down by the author of this method is in the mode of dividing the tear-punctum and its canal. For this purpose, I use a pair of narrow-bladed scissors, instead of a grooved director and Beer's knife: the former instrument more certainly effects a perpendicular incision; it also gives less pain and alarm to the patient. The punctum should be expanded by the introduction of a probe or pin before the scissors are used. (*Medical Times and Gazette*, February 20th, 1858.) I may also here mention that, where the brow of the patient is very prominent, the passage of the probe into the sac and nasal duct will be facilitated by proportionately increasing the curve of the instrument. If this be omitted, there is a liability, in some subjects, of the posterior wall of the nasal duct being injured, which retards the progress of the case.

In some few patients, where the passages have become free by the treatment, and yet the eye has been more moist than natural, I have slit the upper lid canal; I confess, not very often with decided benefit.

It is advisable in all cases to carefully examine, both before and subsequently to the division of the lower canal, whether the punctum or the channel we have made is adapted with sufficient closeness to the globe to draw off the tears into the sac. If such be not the case, and there is thickening of the inner wall of the divided canaliculus—a result of inflammation, which commonly causes a slight eversion—I am in the habit of removing, as suggested by Critchett, a bit of the inner lip of the channel near to the caruncle.

Case I. *Epiphora of five years Duration cured in a Day.* Mrs. C. W., aged 45, a remarkably healthy person, had suffered from a watery eye (left) for five years. The tears ran over on to the cheek, and the conjunctiva of the lid was inflamed. Small print was read with difficulty. On passing a fine probe, of the diameter of a bristle, a stricture was detected in the canaliculus, near to the sac.

On March 31st, 1858, I divided the tear-punctum and canaliculus as far as the caruncle with a pair of sharp pointed Maunoir's scissors, and probed the canals (left) with No. 6. Since this, the tears have ceased to come upon the cheek, and she now reads small print and threads her needle with ease.

Case II. *Nine years Epiphora cured in a Month.* Miss C. D., 50 years of age, had suffered from a collection of tears at the inner corner of the eyes, and on the lower lids, for nine years. During the last two, the discharge from the tear-sac had been, when pressed out, of a gummy consistence. When she came under my care, there was a lake of tears in each eye. For six months, local astringents, and tonics internally, were employed.

March 30th, 1858. The largest sized probe (No. 6) was passed through a stricture in the neck of the sac on the right side, and pressed down to the floor of the nose. The instrument was tightly embraced by the walls of the canal. The left canal was also probed (No. 6): the seat of stricture in it was close to the nasal cavity.

In two days the epiphora was much relieved, and in less than a month a cure was effected. I saw this lady in November 1858, and she had not suffered a relapse.

Case III. *Epiphora of twenty years standing: Cure.* Mr. B., aged 36, a solicitor, in good health, consulted me on August 22nd, 1858, respecting a tear-abscess on the right side, which was at the time in the stage of delitescence. The eye, he said, had watered for twenty years, but had been specially troublesome during the last five.

August 27th. I divided the right lower punctum and its canal as far as the caruncle, and passed a probe (No. 6). The duct, which contained a quantity of inflammatory effects, tightly embraced the probe: it was most narrowed at its lower fourth.

The patient's profession frequently took him from town; hence his attendance was not very regular. Nevertheless, on November 26th, the coldest wind failed to excite epiphora. At this date, the canals had been probed twenty times. The secretion from the sac consisted for some time of a transparent gummy mucus. In addition to the surgical treatment, tonics and a regulated diet were prescribed.

Case IV. *Epiphora may continue for a time, notwithstanding the Excreting Apparatus is to a full sized probe normally patent.* Mrs. M., a pale healthy woman, of lax fibre, aged 29, suffered, when nine years old, an attack of small-pox, since which her left eye had been affected with an accumulation of tears, which collected at its inner angle, and streamed down the cheek.

A probe was passed through the slit canaliculus, for the first time, on August 31st, 1858; and, on its being carried into the nose, the nasal duct was found to be narrower than normal, and much constricted at its lower orifice. By September 21st, a No. 6 probe traversed the whole length of the canals with freedom. No improvement, however, took place in the epiphora till October 15th, when, for the first time, there was a diminution; and, on the 22nd, the eye was normally irrigated by the lacrymal secretion. The patient continued under observation for several weeks. No relapse occurred.

Case V. *Epiphora since Birth: Cure: Relapse from continued Crying.* Master C., a delicate fair complexioned boy, 9 years of age, diathetically strumous, had had a collection of

tears on the lower and inner corner of the left eye ever since his birth. Pressure upon the sac caused tears and mucus, mingled with a little pus, to escape by the upper punctum.

April 1st. I slit the lower canaliculus with a knife and grooved director; but, in consequence of a dense stricture close to the tear-sac, a probe could not be passed until it was divided by the cannula-lancet. This proceeding was obliged to be delayed some little time; hence the upper punctum and canaliculus were divided, and a No. 4 probe passed down to the floor of the nose.

At the end of six weeks treatment with the probes, aided by constitutional remedies, the tears were properly excreted; and, on May 29th, the patient returned to the country cured.

It is worthy of remark, that it was not until both canaliculi were free from stricture, that the slightest apparent progress was made toward recovery.

After the Midsummer holidays, the little patient was sent to a boarding school, and, being unhappy, gave way every day to floods of tears, which, by exciting irritation in the excreting passages, reproduced the epiphora. A case has recently come under my care, in whom weeping proved to be a primary cause of an epiphora followed by tear-abscess.

Case vi. *Epiphora five years: Tear-Abscesses: An occasional and slight Epiphora continues.* H. L., a widow, 35 years of age, has been subject to a watery eye (right) and flowing of the tears on to the cheek for the last five years. In February 1858, an abscess formed in the tear-sac, which discharged itself through an opening in the skin of the lid, near to the inner canthus. She says "it gathered up and broke every four or five days."

April 13th. I slit the lid-canal with scissors; at the time there was a copious muco-purulent secretion discharged through a fistula in the integuments covering the sac, which were inflamed and tumid. After a good deal of trouble, a probe was passed into the nasal duct, which was found to be contracted and blocked up with lymph, etc. The probing was repeated twice a week, and the fistula occasionally cauterised. At the expiration of a month, my notes state that the fistula is healed; the cutaneous inflammation has subsided; epiphora much diminished.

May 25th. The epiphora was slight, and only of occasional occurrence.

The patient was kept under observation for four or five months, the excreting canals doing their duty all but perfectly. A tear every now and then appeared at the corner. The duct was quite free, except at its nasal extremity, where it continued more contracted than natural.

For the relief of a chronic inflammation of the Schneiderian membrane, iodide of potassium and Plummer's pills were given with good effect. It did not, however, entirely subside, being associated, as I thought, with a specific taint.

Case viii. *Epiphora: Distension of Tear-Sac: Cure.* Mrs. B., aged 50, constitutionally healthy, had had a watery eye (the right) for four years. The discharge ceased spontaneously, and did not return for twelve months. In February 1858, it was reproduced by an attack of erysipelas (tear-abscess), which commenced at the inner corner of the weak eye.

November 12th. She came under my care at the Eye Infirmary. At this time, the sac was prominent on pressure, and a muco-purulent secretion regurgitated through the lower punctum. I performed the usual operation, and passed the largest sized probe. The examination revealed a slight stricture of the lid-canal near to the sac, and a general narrowing of the nasal duct.

The probe was passed two or three times a week; and, on December 31st, the disease was perfectly cured, the eye being dry, and the excreting canals of their normal diameters.

February 8th, 1859. There was no relapse.

Case viii. *A Case in which the New Treatment arrested the Formation of a Tear-Abscess.* E. S., aged 21, of scrofulous habit, a resident of Tanworth, came to the Eye Infirmary on November 16th of last year, with an acute abscess of the right lacrymal sac, which was pointing; and with a tumid and highly painful condition of the left, the integuments of which presented a red blush. For two years he had suffered from epiphora.

The right abscess I opened with a bistoury, in the usual manner. On the left side, I slit the punctum and its canal as far as the caruncle, and then passed a No. 6 probe through the whole length of the ducts. Pus oozed out from the side of the instrument. The patient was ordered to take quinine, to have a good diet, to poultice the abscess, and use a saturnine wash to the left side.

November 20th. The probe was again introduced, with the effect of rendering the passages free, and of curing the epiphora that had existed for two years.

November 30th. The lower punctum and canal were divided in the usual manner. At the expiration of three days, the parts were more healthy, and the epiphora diminished. A No. 6 probe was passed to the floor of the nose. The parietes of the duct were found much damaged. They were broken down, so that the instrument lay loosely in it, and fell away from the forehead.

December 14th. The eye (right) watered only when exposed to cold and wind; yet puro-mucus was regurgitated when the sac was pressed.

December 28th. The left eye continued well and dry. The discharge in the right sometimes finds its way into the nose.

January 4th, 1859. By the probe, I ascertained that the nasal duct was undergoing repair.

January 11th. To-day, for the first time, the probe was pretty firmly fixed against the brow, indicating that the sac and duct were rapidly recovering their normal dimensions. The discharge was now thin glairy mucus. The eye watered only when exposed to out-door cold.

Since December 22nd, the greater part of the sac-secretions, etc., have passed into the nose. The left eye remains quite well.

January 18th. The right duct has recovered its calibre. For the last fortnight, the epiphora has been cured.

February 8th. There is no relapse.

Case ix. *Occlusion of the Right Lower Punctum: Chronic Tinea Tarsi: Epiphora on both sides: Cure.* W. B., aged 18, of scrofulous habit, was admitted under me at the Eye Infirmary on November 5th. He had suffered from chronic inflammation of the lids (tinea tarsi) for the last nine years, which had much thinned the eye-lashes; and from epiphora on both sides for the last five or six, the disorder being most troublesome on the right side. The sight was complained of as being dim. The right lower punctum was covered over by thin integument, and the upper appeared to have closed. The course of the canaliculus of the former was indicated by a pale streak in the conjunctiva, contrasting with the vascular condition of the rest of that membrane. I divided with a scalpel the inferior lid-canal, in a transverse direction, at about two or three lines from the occluded punctum; but was unable to discover either of the cut orifices till four days afterward, when I slit the canal as far as the caruncle, and in about a week acted in the same way on the punctal end. The left canal was also slit. On each side, the excretory apparatus was throughout much narrowed, especially on the right side, which had been the more inactive. With difficulty a No. 4 probe was passed. The left nasal duct was much constricted at its nasal meatus.

This youth submitted twice a week to the process of dilatation, and in nine days the eyes watered only when exposed to cold wind; and, on December 31st, he was cured. At this date, the right canaliculus gave no evidence of the transverse incision, and the superior punctum was for the first time observed to be patent: it is exceedingly small. The "tinea" is nearly well. In addition to the means above related, cod-liver oil was given, and the usual treatment for tinea put in force.

The patient was directed to attend occasionally at the institution, that the canals might be kept free by the passage of an instrument.

February 8th. No relapse had occurred.

Case x. *Dilated Sac: Epiphora: Tear-Abscesses: Speedy Relief by the New Method.* The following case I recently attended, in consultation with my friend Mr. Yarwood, of Aston Manor.

Mrs. P., aged 61, for many years a valetudinarian, and of feeble constitutional power, suffered since six years ago from an accumulation of tears and mucus in the right lacrymal sac, which she, at my suggestion, emptied two or three times a day by pressing its contents into the nostril. For the last two or three years, tears had passed over the lid on to the cheek.

On September 30th, 1858, after walking in her garden, she felt chilly and aching pain in the sac. On the following day, the eye felt as if it would burst. On the third day, a tear-abscess discharged itself through the skin of the face. The suppuration recurred twice in December: on the last time, the abscess broke before I saw the case, which was on the first day of the present year, 1859. At this time, the lid presented three fistulous openings. The skin over the sac was elevated, pinkish and puffy. It was agreed, in consultation, that I should slit

the lower punctum and its lid-canal; and that some local application, of an astringent and alterative kind, should be used to the eyelids. A stimulating ferruginous mixture was also prescribed.

January 5th. The fistulæ were healed. A No. 4 probe was passed to the floor of the nose through a stricture near to the middle of the nasal canal. We determined to apply a small blister behind the ear, and to commence on the following morning the daily application of a weak solution of nitrate of silver.

January 8th. We were told that, since the use of the probe on the 5th, the eye had not watered. A No. 6 probe was passed, without encountering a stricture; and the same operation was repeated on the 15th, although no epiphora had occurred. On this day, the passage was free.

February 24th. No relapse.

Case xi. *Chronic Inflammation of the Tear-Sac of four months duration, in a child two years of age: Operation under Chloroform: Rapid relief.* A healthy looking fat child, aged 2 years, was brought to me at the Eye Infirmary, from Barford, near Warwick, on January 28th last. The right tear-sac discharged a purulent matter; and on the lower lid was observed a horizontal and linear cicatrix—the result of an abscess that had formed four months ago; since which, the eye had watered and moistened the cheek. Local astringents were prescribed.

February 4th. While the child was drowsy from the inhalation of chloroform, I slit the punctum and canaliculus of the affected eye, and directed the mother to press out the sac contents several times in a day. Half a drachm of cod-liver oil was ordered to be given twice a day.

February 18th. Tears alone were discharged, and those only occasionally. A No. 4 probe passed with ease through the canals, which were quite free.

The case is still under treatment, and is here related as evidence, that patients of tender years may be advantageously treated by the plan it is the object of the present paper to illustrate.

Case xii. *Right Tear-Sac distended by inspissated Mucus to the Size and Shape of a small Almond: no Regurgitation through the Lid and Nasal Canals: immediate Relief to all the Symptoms.* A young woman, whose tear-sac, from being in the state noted above, seriously marred a pretty face, was placed under my care on the 24th of February, by my friend Professor Berry. No amount of pressure sufficed to evacuate any of the contents of the tumour. In early childhood, the measles left the right eye watery, and it had so continued. Two years ago, the eye inflamed, and, at the end of a year, the deformity at the inner corner of the eye first appeared; it had gradually grown to its present dimensions. An exploration of the passages through a slit canaliculus discovered an impervious stricture of the inferior lid-canal, close to the sac; and, after this had been penetrated by a sharp pointed steel probe, the silver sound, No. 4, passed with a snap through two strictures in the nasal duct. The contents of the *mucocele* (the name given to this class of lacrymal tumours by ophthalmic writers) were readily pressed down into the nose; a small quantity regurgitated through the inferior punctal canal.

On the following day, a No. 6 probe passed easily through the excretory apparatus; it was not removed for half an hour.

On the morning of February 27th, no mucus was found to have collected in the sac during the night. The patient had carefully carried out the directions to press the sac from time to time during the day. There has not been any return of the deformity since the operation was performed.

Case xiii. *Supernumerary Punctum on the Lower Lid: Epiphora.* Mrs. R., aged 46, applied to me at the Eye Infirmary on January 25th, 1859, on account of an epiphora of the right side, of two or three years duration. While examining the inferior punctum and canaliculus with a fine probe, previous to dividing them with scissors, I discovered an orifice on the margin of the lid directly opposite the centre of the caruncle, which would just admit a probe of the diameter of a bristle, and that communicated with the canaliculus and tear-sac. The patient declared that neither inflammation nor abscess had attacked the part: of the watery state of the eye, she could afford no explanation. I conclude the supplementary punctum to have existed at birth. In dividing the punctum and canaliculus, I took care not to disturb the interesting point in the case.

February 4th. The epiphora had ceased.

February 26th. There was no epiphora.

Reviews and Notices.

The Enlarged Prostate, its Pathology and Treatment; with Observations on the Relation of this Complaint to Stone in the Bladder. By Henry Thompson, F.R.C.S., M.B.Lond. Pp. 320. London: Churchill. 1858.

The industry with which Mr. Thompson pursues his investigations, and the intelligence with which he works, fully entitle his writings to more than a cursory review.

In dealing with Enlarged Prostate, Mr. Thompson has gone far to exhaust the subject. He has been able to explode much of the traditional pathology of the organ, as well as the reputation of some of the standard *materia medica* long held in esteem in the treatment of bladder-affections. Mr. Thompson takes nothing on hearsay, and asserts nothing without giving his reader full means of judging of the reasonableness or the truth of his statement. He treats the dogmas of the fathers of the just past school of surgery, with exactly the amount of respect they are entitled to, when erroneous. Sir Everard Home's views come in for a considerable share of criticism. For example:—the English student has long been taught to believe in a third or a middle lobe to the prostate, chiefly on the authority of Sir Everard Home, who, after the dissection of five prostates, announced its discovery. Mr. Thompson dissects fifty, and disproves Sir E. Home's statements. With the five prostates, and middle lobe, borne trophy-fashion on the shaft of his pen, like the turban of an overthrown Saracen entangled in the lance of the victorious knight, Mr. Thompson proceeds to deliver another thrust through the shield of poor Sir Everard; who, in error in respect of his views of median development, is shewn to be equally infelicitous as regards lateral enlargement. Thus:—

"Sir E. Home, up to the date of publication of his first volume on the prostate gland, had never seen predominating enlargement of the right lateral lobe, and he inferred, as a rule of some importance in relation to the introduction of catheters in enlarged prostate, that such enlargement, and by consequence, that a deviation of the canal to the left either did not occur, or was extremely rare. He met with an enlarged right lobe, however, before the publication of a second volume on the same subject, but still regarded it as uncommon, and in this light it has been viewed, I observe, in the latest works on this subject. There is, however, no ground for supposing that there is any difference in the liability of either lobe to the affection, since among existing specimens the predominating lobe is to be found in nearly equal numbers to the right and left respectively." (P. 25.)

As another instance of exposure of fallacy, we quote as follows:—

"It occasionally happens, but very rarely, more so than has been supposed by some continental authors of note, that one result of prostatic enlargement is undue patency, and not obstruction of the urethro-vesical orifice; and this circumstance, regarded as it has been as not infrequent, is supposed to explain the occasional occurrence of genuine incontinence, the bladder being empty in the place of retention of the urine. Submitted to the test of extended anatomical research, the supposed fact disappears, and consequently the theory based upon it. First, it is rare to find expansion of the internal meatus; secondly, when it does occur, it is almost invariably associated with distended and hypertrophied bladder, proving incontestably that obstruction was present during life, and that retention, not incontinence, was the result." (P. 27.)

Of remedies, especially those lauded for their virtues against chronic cystitis, Mr. Thompson says, (p. 123):—

"In regard to the efficiency of each one of the principal medicinal agents which have been enumerated, it is impossible to overlook the fact that the most opposite opinions are held by experienced practical surgeons. Nor is it possible to resist the conclusion that either the virtues of these agents have been overrated, on the ground of estimates formed from the observation of some successful but exceptional cases; that is, of

cases which have progressed very favourably under the use of the medicine, but which have been in reality examples of *post hoc*, rather than of *propter hoc* improvement, or that the selection of the remedies specially adapted to each form or phase of the complaint has often not been happily made; inasmuch as the appropriate and particular indications for the use of it have not been accurately defined, or indeed discovered; so that the successes have been due in part to chance, and are capable of being multiplied by more skilful adaptation."

There is an important question in a pathological point of view:—In what does enlargement of the prostate essentially consist? It is thus answered:—In an excessive development of histological elements identical with those of the healthy gland, concentrically or eccentrically, in the form of isolated tumours or partial outgrowth. It is in consequence of the hypertrophic process being so frequently concentrated at one particular part of the gland, namely, in its "posterior median portion"—the very point at which any outgrowth can cause the greatest impediment to the free discharge of urine, that injurious results follow. In respect of the relation of age to enlargement, Mr. Thompson says:—

"It never appears but in advanced years. But it is not therefore a natural or necessary concomitant of age. It is on the other hand a complaint which the very large majority of elderly men escape. Contrary to the generally-received opinion, its occurrence is not normal, but exceptional. An analysis of various particulars given of the dissection of fifty prostates, presents an opportunity, as far as the data allow us, of determining the proportion of cases in which, after the fiftieth year has been reached, the organ is found to be enlarged." (P. 65.) Here follow the data.

"It may then be regarded as established by these facts, that enlargement of the prostate, so far from being a change invariably, or even usually, present in old age, is an exceptionable condition. And it may be further regarded as highly probable, that a slight tendency thereto, almost, if not quite unrecognisable during life, may occur in about one out of three individuals after fifty years, and that a marked enlargement may be met with in one out of eight, rarely, however, before sixty years of age." (*Ib.*)

Mr. Thompson distinguishes the hypertrophic process which produces isolated tumours, from that which produces a general outgrowth of a lobe or portion of one. The distinction between these two forms of hypertrophy he fully justifies by abundant evidence; and he further points out the analogy between the isolated imbedded tumours and fibroids of the uterus.

The enlargements of the prostate dependent on inflammatory effusions, tubercular deposits, and malignant growth, are fully and separately dealt with in chapters IX, X, and XI.

In a subsequent part, Mr. Thompson enters at length into the question of the nature and formation of Prostatic Concretions, with which, by the way, prostatic calculi are not to be confounded. As a rule, he says, concretions are not to be detected during youth and early manhood without the aid of the microscope; but in his "series of fifty prostates," they were present in every instance. Further he asks:—

"Is the presence of these concretions in the prostate to be regarded as a natural or as an abnormal circumstance? This question has been variously answered. I have examined not less than seventy prostates, at all ages over twenty years, and have detected them in every one. * * * Generally speaking, they have been considered abnormal. Wedl regards them as the *product* of enlarged prostate. From the facts just brought forward, I cannot but conclude, that their existence is a necessary result of the performance of the natural functions on the part of the prostate." (P. 263.)

In reference to the history, etc., of prostatic calculi, Mr. Thompson gives references to not fewer than twenty-two different works. In the matter of treatment, Mr. Thompson is equally elaborate.

After chapters on the treatment of Senile Enlargement of the Prostate, and Retention, the book concludes with a consideration of the Relation between Enlarged Prostate and Stone in the Bladder.

We shall here take the liberty of offering one word of advice to the author, for which we are sure we shall have the approval of those who have read or may read his instructive work, namely, that he should make his second edition an *abridgment* of the present one. Having proved his points, he can afford to abridge, with great advantage to those who require to resort to his book for practical guidance. It should not be omitted to be stated that Mr. Thompson most candidly gives every credit to his cotemporaneous observers, Adams, Hodgson, Handfield Jones, and others.

British Medical Journal.

SATURDAY, MARCH 12TH, 1859.

THE SYSTEM OF REWARDS AND RECOMPENSES.

In former times, when a regiment was considered to be sufficiently rewarded for the most eminent bravery by "an extra ration of rum",* it could not have been expected that the most important and extraordinary services of a civil nature should have received the notice of the authorities of the state: it was not the custom in either instance. This injurious state of things, while it appeared inevitable, was endured with seeming patience by both the civil and the military servants of the Crown; but so soon as some hope burst upon the army and the civil service of the country, by the institution of the civil and military divisions of the Order of the Bath, the evils of exclusion and of partiality in the distribution of honorary rewards made the position of deserving public servants, who found themselves unrewarded, to be an intolerably irksome and painful state. They felt now as men standing forth with the mark of indignity upon them; while they saw every day that persons of inferior worth and of no service had been decorated—sometimes profusely decorated. The appetite for rewards and distinctions was thus painfully sharpened, without being gratified. Numbers of educated men, especially those belonging to the Medical Department of the Army, learned the bitter and dangerous lesson of isolation; and families out of number, in the middle class of society, came to question the honesty of governments. Thus, as in greater matters, "the abuses which had been removed seemed only to lay bare those which remained, and to render the sense of them more acute. The evil had decreased, it is true; but the perception of the evil was more keen." And thus it has been with a large and daily increasing body of distinguished members of all the public services, belonging exclusively to the middle class. They feel that they have been treated with a degree of neglect, not always apportioned to colonists or aliens.

That they have managed these things better in France, where Larrey was considered worthy of the friendship of the Great Emperor, has long been matter of notoriety; and the reasons assigned there for this difference in the manner of treating the servants of the public by one of the greatest of statesmen and commanders are deserving of all notice. At the

* This was accorded by Lord Cornwallis to the 42nd Regiment, when serving in America.

Council of State held to frame the Institution of the Legion of Honour, it was proposed by Count Mathieu Dumas that the several divisions of the order should be conferred only on military men.

"Such ideas", said Napoleon, "might be well adapted to the feudal ages, when the knights combated each other man to man, and the bulk of the nation was in a state of slavery; but, when the military system changed, masses of infantry and phalanxes, constructed after the Macedonian model, were introduced; and after that it was not individual prowess, but science and skill, which determined the fate of nations.

"What is it now which constitutes a great general? It is not the mere strength of a man six feet high, but the *coup-d'œil*, the habit of foresight, the power of thought and calculation: in a word, pacific or civil qualities, not such as we find in a lawyer, but such as are founded on a knowledge of human nature, and are suited to the government of armies. The general who can now achieve great things is he who is possessed of shining civil qualities: it is the perception of the strength of his talents which makes his soldiers obey him."

In order that there may be no mistake as to the fact that the highest qualities of a commander are civil qualities, the great commander here enumerated them; and, further, he has elsewhere declared that one-half the art of war consists in civil arrangement and operation. He defined the art of war to be that of separating one's self in order to subsist, and concentrating one's self in order to fight.

"We must not", he continues, "reason from ages of barbarity to these times. France consists of thirty millions of men, united by intelligence, property, and commerce. Three or four hundred thousand soldiers are nothing in such a mass. Not only does the general preserve his ascendancy over his soldiers by civil qualities, but, when his command ceases, he becomes merely a private individual. The soldiers themselves are but the children of citizens.

"The tendency of military men is to carry everything by force; and the enlightened civilian, on the other hand, elevates his views to a perception of the general good. The first would rule only by despotic authority; the last subjects everything to the test of discussion, truth, and reason. I have no hesitation, therefore, in saying that, if a preference was to be awarded to one or the other, it belongs to the civilian. If you divide society into soldiers and citizens, you establish two orders in what should be one nation. If you confine honours to military men, you do what is still worse, for you sink the people into nothing. Justice is one only in France: the citizen precedes the soldier."

Moved by these profound observations, the Council of State agreed that the proposed honours should be extended to civil and military distinctions indiscriminately.

This was the first example in any modern European nation of the establishment of just principles, in the bestowal of rewards and recompenses; and though imitated in part in England, persons in authority are still not sufficiently alive to the necessity of acting up to the maxims of the French Emperor.

Sir John Malcolm but expresses the sentiments of all meritorious and high-minded public servants when he says: "I have been rewarded, I admit, by distinction in the service; but if a man is wished to go on, further stimulus must be found."

The stimulus of public rewards and honours is, we think, still unjustly denied to civil worth; and we venture to think that the members of our own profession have more to complain of in this respect than any other. In the law and the church, there are prizes at every step, and still in the distance a higher prize, which prevents those really worthy of distinction from giving up the race. The clergyman looks to the bench in the Upper House, and the lawyer to the woolsack. The medical man may possibly, if he be a court physician, obtain the honours of knighthood, or, still more rarely, those of a baronetage; but here he must be contented to rest. He has as little chance of ever sitting in the Upper House as the housemaid has of rising to the dignity of the drawing-room. With all our boast respecting freedom in this country, there is certainly less of it in society than in France, where the scientific man is not unjustly weighted in the struggle upwards for honours and rewards.

THE WEEK.

We do not remember ever hearing of a more disgraceful act on the part of a member of the medical profession, than that for the commission of which a person named William McHugh, a member of the Royal College of Surgeons, was tried at Durham on the 4th instant. The prisoner was indicted for the manslaughter of Martha Davis. The deceased was a married woman, in good health, who, on the 13th of August last, was taken in labour of her thirteenth child. She sent for Mr. Carnes, a surgeon, at Coxhoe; but, as he was from home, Mr. Ions, his assistant, visited her, and attended her for three days; during which time little or no progress was made. The woman, becoming impatient at the lingering nature of the labour, demanded assistance: and Mr. McHugh, who resided in the neighbourhood, was sent for. He accordingly came, and suggested that craniotomy should be performed. Mr. Ions objected to the operation; but at length, as the prisoner seemed determined, and the deceased evidently wanted some operation performed, he gave his consent, and Mr. McHugh inserted the perforator twice, apparently with no injurious result, for no blood flowed. A third time he introduced it with violence, remarking, with an oath, "I'll crucify the child." On the perforator being withdrawn for the third time, Mr. Ions saw some blood flow, and attached to the instrument was a piece of flesh. The prisoner then remarked, with an oath, "that he had broken down the wall of the uterus,"—a fact too true, for this was proved to be the case on a *post mortem* examination. The prisoner proceeded a fourth time to insert the perforator; this fourth attempt was attended by a gush of blood, which produced death in a few moments. Medical testimony was adduced to shew that the operation of craniotomy ought not to have been performed in this case; and some female witnesses, as well as Mr. Ions, expressed their opinion that the prisoner was not sober. No one, it would be imagined, could have a word to say in justification of no flagrant a case; and yet, we learn, the summing up of the learned judge was strongly in favour of the prisoner. That a judge should jealously watch against any overstraining of evidence against a person accused, is one of the most glorious principles of British justice: but his lordship carried this principle far beyond its legitimate limit, when he assumed the indictment to have risen out of what he was pleased to censure as the *odium medicum*—in plain words, professional jealousy. He said that "he ventured to hope that the prisoner would receive more justice from the jury than he would have received, had he been handed over to his professional rivals, whose steadfastness to their own theories often led them into the determination to make these appear correct, rather than to bring plain evidence and facts to bear upon the case." Notwithstanding his lordship's remarks, the jury returned a verdict of guilty; and the prisoner was sentenced to twelve months hard labour. Many of our readers have doubt-

less heard of cases, where popular ignorance and misjudgment have marred the prospects of a rising practitioner, because of the death, from unavoidable causes, of a woman in childbed under his care. Men, in this predicament are to be pitied: but we cannot express any other feeling than that of utter disgust at the conduct of Mr. McHugh, in the case which has just been related. But, apart from the reckless manner in which Mr. McHugh acted, the case affords a strong argument in favour of the denunciation of craniotomy uttered by Dr. Tyler Smith at the meeting of the Obstetrical Society on February 2nd. The application of that dangerous instrument, the perforator, is a proceeding which is, we must say, looked on with too much familiarity by the profession in England.

The London Medical Registration Association has been making a vigorous raid upon the Bennett-Watters-Colston-Singleton-etc. gang of charlatans; or rather, we should say, on the many-named brothers J. G. Bennett, and William Bennett. Saturday last, March 5th, was appointed for the hearing, in the Bow Street Police Court, of a summons against these worthies, who, however, were not present. Mr. Bower May, the solicitor to the Association, entered into the details of several cases, and produced a quantity of the "mixtures" which were sent out in packets and boxes for which £5, £50, and £100 had been charged. They were advertised as the remedies for deafness, a perfect and instantaneous cure being in each case guaranteed, the defendant and his colleagues having instituted themselves "the British and Foreign Ear Infirmary," of 32, Spring Gardens. These "mixtures" had been analysed, and were proved to be composed of urine and alum only! The defendants had been realising £4000 per annum by these frauds from a confiding public, and among the unscrupulous means employed to deceive them, sham extracts from the leading journals, highly commending their skill in the treatment of deafness, were concocted and widely circulated in almost every quarter of the globe. Among the witnesses called, was a fisherman, from St. Andrew's, Fife, who had been deaf thirteen years: he had sent a post-office order, but could never obtain benefit. A man, named Thomas Oldfield, deposed, that he had been porter to John Gibson Bennett, who practised under the name of Dr. Watters. He had assisted to make up medicines from a vessel containing urine. Claude Edwards deposed that he was factotum to the Bennetts, under the title of chief assistant. He was engaged by John Gibson Bennett, who went by the name of Dr. Watters, and in that name received from various persons sums of £57, £34, £25, etc. There was, he said, a Dr. Watters, who used to come occasionally, but very seldom, and who was very sorry for having lent himself to "these vagabonds" at all. William Alfred Bennett, the brother of J. G. Bennett, was in partnership with him. The two Bennetts made about £2,000 a year each. W. A. Bennett practised also in Tavistock Street, as "Dr. Brandon." "D. Brandon" used also to write testimonials in favour of "Dr. Watters," who had cured him of "deafness of twenty-three years standing. A person named Lewis stated that, about fourteen years ago, the Bennetts were billiard and card-sharpers: they were in no way connected with the medical profession. Mr. Henry, the sitting magistrate, granted warrants for the apprehension of both brothers; and at the Middlesex Sessions, on Monday last, the grand jury returned true bills of indictment against John Gibson Bennett, William Alfred Bennett, Henry Lee Bennett, and John Nichol Watters.

Our attention has been directed to the new by-laws of the Royal College of Physicians for the admission of University Graduates as Licentiates during the next year, with special reference to the fact, that persons holding foreign diplomas are admissible to the College for two months after the register, as provided by the Medical Act of 1858, is closed on them. In order that the matter may be understood, we will quote from the Act and from the by-laws of the College. The Act provides for the registration, *inter alios*, of any person who is a

"Doctor in medicine of any foreign or colonial university, practising as a physician in the United Kingdom, *before the first day of October*, 1858, who shall produce certificates to the satisfaction of the Council, of his having taken his degree of doctor of medicine after regular examination, or who shall satisfy the Council under Section xlvi of this Act, that there is sufficient reason for admitting him to be registered."

The College of Physicians say that, *inter alios*,

"Every person practising as a physician in England and Wales, who shall, after regular examination, have taken the degree of doctor in medicine at any foreign university approved by this College, at least *three months previously to the first day of March*, 1859, * * * may at any time within twelve months from the said first day of March, 1859, be admitted a Licentiate of the said Corporation, etc."

Thus a person who obtained a foreign diploma between the first of October and the first of December, 1858, will have easy access, through the College of Physicians, to the register, from which he would otherwise be excluded. Such an arrangement must surely be an oversight on the part of the College authorities: and we take the earliest opportunity of pointing out the error into which they have fallen, in the hope that measures will at an early period be taken to rectify it. Unless this be done, we fear that much distrust of the College will be engendered. The Medical Council, of course, must take cognisance of the matter.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, April 14th, 6 P.M.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

Social and scientific meetings of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on the undermentioned days:—

Friday, March 25th, 1859, at 3.30, at the Town Hall, Gravesend.

Friday, April 29th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

A BILL

INTITULED AN ACT TO AMEND THE MEDICAL ACT (1858.)

[*Brought from the Commons, March 3rd*, 1859.]

Whereas by an Act passed in the last Session of Piarliament, chapter ninety, "The Medical Act," provision is made for the registration of members of the medical profession, and certain disabilities are imposed, after the first day of January, one thousand eight hundred and fifty-nine, on members of that profession who are not then registered: And whereas, by reason of the time required for the collection and examination of the proper evidence on the first formation of "The Medical Register," it is expedient to amend the said Act as hereinafter mentioned: And whereas it is expedient that Schedule D of the aforesaid Act should be amended: And whereas in sections thirty-one and forty-seven of the Medical Act (1858) the terms "Fellow" and "Member" of the Royal College of Physicians are made use of, whilst in Schedule A in the same Act "Fellows," "Licentiates," and "Extra Licentiates" of the said College are alone to be registered: Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

I. The first day of July, one thousand eight hundred and fifty-nine, shall be substituted, in sections thirty-two, thirty-four, thirty-six, and thirty-seven respectively of the said Act, for the first day of January, one thousand eight hundred and fifty-nine; and the said several sections, and all provisions of the said Act having reference thereto, shall be construed and take effect as if the word July had been originally inserted in each of the said sections instead of the word January.

II. Section thirty-three of the said Act shall be repealed, and no person shall by reason of the said Act be or be deemed to have been disqualified to hold such office as mentioned in the said section thirty-three, or any appointment mentioned in the said section thirty-six, unless he shall have failed to be registered on or before the first day of July, one thousand eight hundred and fifty-nine.

III. The fourth column of Schedule D of the said Act with its heading shall be repealed and omitted.

IV. The term "Member" shall be added after the term "Fellow" to the qualifications described in the first line of Schedule A.

A BILL

TO AMEND THE LAWS CONCERNING THE PROVIDING OF LUNATIC ASYLUMS FOR COUNTIES AND BOROUGHS AND THE MAINTENANCE OF PAUPER LUNATICS.

[*Prepared and brought in by Mr. Walpole and Mr. Hardy.*]

Whereas an Act was passed in the session holden in the sixteenth and seventeenth year of Her Majesty (chapter ninety-seven), "to consolidate and amend the laws for the provision and regulation of Lunatic Asylums for counties and boroughs, and for the maintenance and care of pauper lunatics, in England," and the said Act has been amended by an Act of the session holden in the eighteenth and nineteenth years of Her Majesty, chapter one hundred and five, and an Act of the session holden in the nineteenth and twentieth years of Her Majesty, chapter eighty-seven: And whereas it is expedient to amend the firstly and secondly herein-before mentioned Acts as herein-after mentioned: Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

I. So much of section ten of the said Act of the sixteenth and seventeenth years of Her Majesty as requires the consent of the committee of visitors of an asylum, belonging wholly or in part to any county, to the annexation of any borough for the purposes of that Act to such county, shall be repealed; and the said section shall be construed as if the words "with the consent of the committee of visitors of such asylum" were omitted therein.

II. Where the Secretary of State, under section ten of the said Act of the sixteenth and seventeenh years of Her Majesty as amended by this Act, annexes any borough to a county for the purposes of the said Act, it shall be lawful for such Secretary of State to direct such payment to be made on the part of such borough in respect of the expenses already incurred in erecting or providing the asylum of such county, and of the enlargement (if any) of such asylum required in order to afford accommodation for the pauper lunatics of such borough, or in respect of any such expenses as aforesaid as to such Secretary of State may seem just; and it shall be lawful for the Secretary of State to direct within what time and to whom any money directed to be paid on the part of such borough shall be paid, and how the same shall be applied, as the circumstances of the case may appear to him to require; and the money so directed to be paid shall be paid by the treasurer of such borough out of such rates, fund, or moneys as by the said Act provided with respect to expenses payable for the purposes thereof by any borough; and all provisions of the said Act concerning the raising of money for that purpose shall be applicable for raising the money so directed to be paid; and, save as regards the expenses specially provided for under such direction of the Secretary of State, the provision in section nine of the said Act in relation to the contribution by a borough annexed to a county under that section to the expenses of the asylum of such county shall be and remain applicable to such borough so annexed under section ten of the said Act as amended by this Act.

III. And whereas by the section thirty-one of the said Act of the sixteenth and seventeenth years of Her Majesty it is provided, "that the visitors shall from time to time make their report to the general or quarter sessions of the county or borough, counties or boroughs, for which they (or such of them as have not been elected by subscribers as therein mentioned) have been elected, of the several plans, estimates, and contracts which have been agreed upon, and of the sum or sums of money necessary to be raised and levied for defraying the purchase monies and expenses thereof on the county, or borough, or, in the case of such union as therein mentioned, on each or every of the counties or boroughs; which plans, estimates, and contracts shall be subject to the approbation of the court or courts of general or quarter sessions of such county or counties, and of the justices of such borough or boroughs, before the same are completed or carried into execution" (save in the case therein mentioned):

Where a plan, estimate, or contract reported to the general or quarter sessions of a county or the justices of a borough as aforesaid is not approved by such court or justices, the said court or justices shall, within *one month* after such plan, estimate, or contract is reported to them, or where the same has been reported to them before the passing of this Act, then within *one month* after the commencement of the first court of general or quarter sessions of the county or the first meeting of the justices of the borough, after the passing of this Act, set forth their objections, with any observations they may think fit in relation thereto, in a report in writing which shall be forthwith transmitted to one of Her Majesty's principal Secretaries of State, and the Secretary of State shall cause such inquiries to be made in relation to the matter as he may deem proper, and shall by writing under his hand direct the plan, estimate, or contract in question, with or without any alteration therein, or such other plan, estimate, or contract for the like purpose as he may think fit to be proceeded with or completed and carried into execution, and in such case the decision of the Secretary of State shall be final, and shall be acted upon without further report or approval.

IV. It shall be lawful for any committee of visitors to hire or take on lease, from year to year or for any term of years, at such rent, and upon such terms, and under such covenants as the said committee of visitors think fit, any land or buildings, either for the employment or occupation of the patients in the asylum, or for the temporary accommodation of any pauper lunatics for whom the accommodation in the asylum may be inadequate; the restriction in section thirty-three of the said Act of the sixteenth and seventeenth years of Her Majesty as to the term for which the committee of visitors are thereby authorised to take a lease shall not apply to the land or buildings to be hired or taken under this provision; the land and buildings so to be hired or taken shall, while used for the purposes of this section, be deemed part of the asylum, and all existing provisions as to the asylum or part of the asylum shall be applicable thereto accordingly.

V. Together with every plan for building, or providing, or enlarging, or improving any asylum for pauper lunatics which is to be submitted to the commissioners in lunacy, under

section forty-five of the said Act of the sixteenth and seventeenth years of Her Majesty, an estimate of the cost and expense of carrying such plan into execution shall be also submitted to the said commissioners.

VI. It shall be lawful for the committee of visitors of any Lunatic Asylum to pay or contribute such sum of money as the commissioners in lunacy shall approve for or towards the enlargement of any churchyard or consecrated public burial ground in the parish wherein the asylum shall be situated, or in any other parish of the district, or for or towards the obtaining of any such consecrated burial ground; and where any such churchyard or burial ground shall be enlarged or obtained by or with the aid of such payment or contribution it shall be lawful for the committee of visitors to cause to be buried therein the body of any lunatic dying in such asylum: Provided always, that in all cases of burial under the direction of the committee as aforesaid the fees payable by the custom of the place where the burial may be, or under the provisions of any Act of Parliament, shall be paid by the said committee.

VII. So much of section one hundred and thirty-two of the said Act of the sixteenth and seventeenth years of Her Majesty as enacts that in that Act, unless there be something in the subject or context repugnant to such construction, the word "county" shall mean a county of a city or county of a town, shall be repealed, and all the provisions of the said Act and of the Acts amending the same shall be read and construed accordingly.

VIII. In any case in which the medical certificate, or, if more than one, both or either of the medical certificates upon which a patient has been received into any asylum, is deemed by the commissioners incorrect or defective, and the same is or are not duly amended to their satisfaction within fourteen days after the reception of such patient, the commissioners, or any two of them, may, if they see fit, make an order for the patient's discharge.

IX. And whereas by section fourteen of the said Act of the eighteenth and nineteenth years of Her Majesty it is enacted, "that where any pauper lunatic is not settled in the parish by which or at the instance of some officer or officiating clergyman of which he is sent to an Asylum, registered hospital, or licensed house, and it cannot be ascertained in what parish such pauper lunatic is settled, and such lunatic was found in a borough having a separate court of quarter sessions of the peace, and which is not liable, under the Act of the session holden in the fifth and sixth years of King William the Fourth, chapter seventy-six, section one hundred and seventeen, to the payment of a proportion of the sums expended out of the county rate, such lunatic may be adjudged to be chargeable to such borough by any two justices of such borough, and it shall not be lawful for any justices to adjudge such lunatic to be chargeable to any county, nor to make any order upon the treasurer of any county for the payment of any expenses whatsoever incurred or to be incurred in respect of the said lunatic:" And whereas, except in the cases provided for by the said enactment, pauper lunatics whose settlement cannot be ascertained are chargeable to the county in which they are found: And whereas, under an Act of the session holden in the twelfth and thirteenth years of Her Majesty, chapter eighty-two, a borough having a separate court of quarter sessions and a sufficient lunatic asylum is exempt from contributing to the payment of expenses incurred for maintaining pauper lunatics chargeable to the county in which such borough is situate, and it is just that such pauper lunatics as aforesaid, when found in boroughs so exempt, should be chargeable to such boroughs, and not to the counties in which such boroughs are situate: The said section fourteen of the said Act of the eighteenth and nineteenth years of Her Majesty shall be repealed, save as respects the repeal therein contained.

X. Where any pauper lunatic is not settled in the parish by which or at the instance of some officer or officiating clergyman of which he is sent to an asylum, registered hospital, or licensed house, and it cannot be ascertained in what parish such pauper lunatic is settled, and such lunatic was found in a borough having a separate court of quarter sessions of the peace, and which is not liable, under the Act of the session holden in the fifth and sixth years of King William the Fourth, chapter seventy-six, section one hundred and seventeen, to the payment of a proportion of the sums expended out of the county rate, or in any borough which under the said Act of the twelfth and thirteenth years of Her Majesty is exempted from liability to contribute to the payment of the expenses incurred for maintaining pauper lunatics chargeable to the county in which such borough is situate, such lunatic may be adjudged to be chargeable to such respective borough; and it shall not be lawful for any justices to adjudge such lunatic to be chargeable to any county, nor to make any order upon the treasurer of any county for the payment of any expenses whatsoever incurred or to be incurred in respect of such lunatic; and all the provisions in the "Lunatic Asylums Act, 1853," as to the mode of determining that a pauper lunatic is chargeable to a county, and as to the orders to be made for payment of expenses and other monies in respect of such lunatic, and for the repayment thereof to the treasurer of a county, shall extend to and in the case of such borough as if the said provisions were re-enacted in this Act, and such borough were therein mentioned or referred to instead of such county.

XI. This Act shall be construed with the said Act of the sixteenth and seventeenth years of Her Majesty, and the said Acts amending the same, as one Act.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 8th, 1859.

Sir Charles Locock, Bart., M.D., President, in the Chair.

FIVE CASES OF OVARIAN DISEASE; IN THREE OF WHICH OVARIOTOMY WAS PERFORMED SUCCESSFULLY: WITH REMARKS ON THE MEANS OF DIMINISHING THE MORTALITY AFTER THIS OPERATION. BY T. SPENCER WELLS, ESQ.

The author commenced by stating that these were the only cases in which he had adopted any operative procedure in order to obtain a radical cure of ovarian disease.

Case I. A large cystic tumour, in a single woman, aged 28, had been situated behind the intestines. An exploratory incision only was made in December 1857, nothing more being done on account of the situation of the intestines. The incision did not appear to have had any prejudicial influence, the patient dying four months afterwards from spontaneous rupture of a cyst into the peritoneal cavity. The interest of the case was chiefly in reference to diagnosis, showing that, though rarely, the intestines were occasionally observed in front of an ovarian tumour—a fact previously noticed by Piorry, Walshe, and Ballard. The case was also the first in which it was proposed to use the écraseur for the division of the peduncle—a proposal since successfully adopted by Dr. Atlee, of Philadelphia.

Case II. A multilocular ovarian cyst, in a single woman, aged 29, was removed by ovariotomy by the author, in February 1858. The principal cyst had been emptied seven times by tapping, and iodine had been injected twice. There were firm and extensive adhesions, and the peduncle had been left within the abdominal cavity. Recovery was perfect, the patient having since done a great deal of hard work as a general servant; and Dr. West, after examining her on January 25th, 1859, reported the case as a "complete success". The cyst and contents weighed twenty-six pounds.

Case III. A multilocular ovarian cyst, which had been tapped three times, in a married woman, aged 38, was removed by the author in August 1858. There were close adhesions of outgrowths from the principal cyst to the liver and gall-bladder; but these were separated, and the patient made a good recovery, leaving the hospital three weeks after the operation. Mr. Ottaway, of Dover, saw the patient on February 2nd, 1859, and wrote that she was perfectly well, "in robust health, muscular, and strong." The cyst and contents weighed thirty-one pounds. The peduncle was secured by ligature, and fixed outside the wound.

Case IV. A *pseudo*-colloid ovarian tumour, weighing twenty-one pounds, was removed, after the evacuation of fifty-seven pounds of ascitic fluid. The patient was a married woman, aged 33. The operation was performed in November 1858. The great point of interest in the case was, that a very large vein had been tied, which had given way during the separation of some adhesions, and no bad symptom had followed, the ligature separating on the ninth day. It had been placed laterally on the vein, in such a manner that the current of blood was not stopped. The peduncle was secured by a metal clamp, and fastened outside the wound. The patient made a good recovery, leaving the hospital four weeks after the operation; and when heard of through Mr. Jardine, of

Capel, on February 3rd instant, was "getting stout, and in very good health".

Case v. A *pseudo*-colloid ovarian tumour, weighing ten pounds and a half, was removed on January 21st last, from a single woman, aged 39. She went on well for twenty-four hours, and then suddenly went off into collapse, and died thirty-two hours after operation. *Post mortem* examination showed large effusion of acrid serum into the peritoneal cavity, and superficial exudation of lymph, but no blood. The peduncle was secured by a clamp outside the wound, but the clamp had slipped at one spot during the operation, and it had been also necessary to apply a ligature. The author entered at considerable length into an inquiry as to the exact cause of death in this patient. She had had two grains of morphia, in divided doses, within ten hours after the operation, and one grain in the succeeding twelve hours, but it was not till four hours after the last dose that any bad symptom appeared which could be attributed to opium. There had been no hæmorrhage of consequence; so that peritonitis, or the sudden collapse described by Dr. Simpson as sometimes occurring after any operation implicating the uterus and its appendages, were probably, one or both, the chief causes of death. The author thought that the danger of peritonitis would be lessened if the peritoneal edges of the wound were brought accurately together by passing the pins or sutures through them; for if any of the surface of the wound were unclosed internally, the pus secreted would pass into the peritoneal cavity. He thought also that the danger of collapse would be lessened by avoiding traction on the uterus; in cases of short peduncle cutting away a portion of the cyst so as to lengthen the peduncle, or even leaving the stump within the abdomen, rather than exert much traction on the uterus. He also thought it would be better to give morphia in the liquid than in the solid form, the surgeon then being less dependent on the accuracy of the druggist; and in cases of peritonitis with serous effusion, he would open the wound to permit of the escape of serum; as, if absorbed, it might poison the patient as readily as it would the surgeon who was inoculated with it, or the woman attended in labour by the surgeon who made the autopsy.

The author then made some remarks on the means of diminishing the mortality after the operation:—

1. By the selection of proper cases only for operation.
2. By the determination of the stage of the disease in which the operation is most likely to prove successful.
3. By careful preparations to avoid all unnecessary sources of danger.
4. By the use of anæsthetics to lessen the risk of shock.
5. By various precautions in the performance of the operation; and
6. By careful after-treatment.

A number of remarks on matters of practical detail were made under each of these heads; and the author, before concluding, replied to the objections of those who consider ovariotomy to be an operation so dangerous to life that it never ought to be performed under any circumstances. He urged that lithotomy in the adult and ovariotomy are operations singularly analogous. The stone in the one case, the tumour in the other, may go on for years without causing death; but, setting aside rare exceptions, the existence is miserable and the end painful in both. If the stone or tumour be removed, a perfect cure may be obtained, or death hastened; and it was proved that the mortality after ovariotomy at all ages, and after lithotomy at ages after fourteen, are about the same. After showing that palliative treatment and tapping are of little avail, and that injection of iodine can only do good in the rare cases of unilocular cyst (its effects even then being uncertain, sometimes fatal), the author quoted an eloquent passage from Dr. West's *Lectures*, to prove that in most of the cases in which the disease is left to its natural termination, a life of hopeless suffering is ended by a miserable death. He then concluded by stating that some months ago he stood at one of these death-beds in consultation with one of our highest authorities on ovarian disease. This gentleman was half convinced by the arguments urged in favour of an operation; but he felt the responsibility deeply, and said, "How dare I advise an operation we both know to be so dangerous?" The author replied, "How dare you leave this poor woman to die without an effort to save her?" And after observing that these are the anxious doubts and grave responsibilities ever recurring in the life of practitioners of medicine and surgery, he expressed his earnest hope that, by bringing this subject forward for discussion at the Royal Medical and Chirurgical Society, something might be done to solve the doubts and lighten the responsibility of those who seek for the "influence of authority in matters of opinion."

Mr. Baker Brown thought the author had not sufficiently appreciated the advantages of the clamp as suggested by Mr. Hutchinson, as in his opinion this was one of the greatest improvements yet made for perfecting the operation. He could not understand how any vessels in the pedicle could have required tying, if a proper clamp had been carefully applied. He thought the author had not felt the importance of preventing the admission of air within the cavity of the peritoneum during the operation; this should be done by two assistants carefully covering the wound with warm wet flannels, so as to prevent both the extrusion of the intestines and the admission of the air. The air in the room should be warm, not less than 66° to 70° Fahr.; and the same degree of temperature should be maintained for some days after the operation, so as to allow the skin to perspire freely. The author had made one strong recommendation which he (Mr. Brown) considered seriously objectionable,—namely, that the cut edges of the peritoneum should be caught by the sutures or pins employed in bringing the edges of the wound together. He had found, in experiments upon the lower animals, that peritonitis immediately followed the use of metallic sutures when passed through the peritoneum; and as experience proved that no necessity existed for this novel mode of bringing the edges together, he (Mr. Brown) trusted that it would be found necessary only to apply sutures through the aponeurosis of the muscle, carefully avoiding any portion of the peritoneum, just as the operator for hare-lip carefully avoided the mucous membrane in applying the pins. He had found that deep sutures alone were necessary in this operation, and he recommended that the first suture should be applied close to the pedicle, secured by the clamp, and then at every half inch upwards. By this means the chance of air getting into the peritoneal cavity during the process of healing was prevented—a point of great practical importance, as he believed that as much danger arose from the irritation of the atmospheric air within the peritoneum as from the sloughing pedicle, when allowed to remain in the pelvic cavity. He (Mr. Brown) observed that the author had not yet felt the importance of giving the patient opium and wine an hour before the operation, yet this was a point of great value, especially when preceded and followed by the free sucking of ice. He differed from the author in recommending the use of opiate suppositories in preference to the administering of opium through the mouth. He (Mr. Brown) believed that if the pure opium of commerce, made into pills direct from the mass, be used, most patients will be able to take opium who would not otherwise bear it; that suppositories were only required in exceptional cases, and then they were of real use. The author had mentioned one case where a band of adhesion extended from the cyst to the liver; these bands were peculiar, and required great care in dividing. Some years since, he (Mr. Brown) operated on a case in St. Mary's Hospital, where such a band existed, and after consultation with his colleagues, he cut through this band, which appeared to possess no bloodvessels, and yet this patient died two or three days afterwards, with all the symptoms of internal hæmorrhage; and on a *post mortem* examination it was found that this band possessed two large bloodvessels, and from them the blood had flowed which destroyed the patient. In the very next case which he operated on in private practice, the same kind of band was found, and being torn through, no bleeding followed. This led to the conclusion that all adhesions should be torn through, and never cut. The question of adhesions in this disease was one which had led many to consider their existence as opposed to the completion of the operation. He (Mr. Brown) believed, and he was borne out by the great experience of Dr. Clay, that they offered no objection to the operation; indeed, it was doubtful if the peritoneum had not been so thoroughly altered from its normal character as to the less prone to inflammation on that very account. In the second case described by the author, the adhesions were unusually many and strong, and offered such difficulties that most young operators would have been deterred from attempting to break them down; yet this very case did well. On the contrary, had the operation not been completed, there is little doubt she would have died from suppuration and formation of pus within the abdomen. Upon the general question of ovariotomy, Mr. Brown felt that a correct diagnosis was of the first and most vital importance. When the nature and character of the case was carefully made out, then the surgeon could decide on the different modes of treatment to be followed, but not till then. Supposing that extirpation was decided on, then the sooner an operation was performed the

greater would be the chances of success: in fact, the history of the operation for hernia well illustrated this part of the subject. Formerly that operation was never performed till the patient was in extreme danger and unable to bear the shock; and if the patient did live for twelve hours, the usual black or aperient dose the next morning so irritated the bowel that death rapidly followed. Whereas now, by earlier operation and the use of opium afterwards, these cases were as successful as they were formerly the contrary. In ovariotomy, a careful after-treatment is of as much importance as a correct diagnosis. Mr. Brown said he thought that the author had, on the whole, brought his experience fairly before the society; and he (Mr. Brown) only regretted that the length of the paper precluded more discussion, as the question was one of great interest to the profession and the public. Mr. Brown, in conclusion, believed that where no other treatment of a milder form was advisable, we should then give the patient the chance of recovery, if she herself chose to run the risk. Experience proved that females had borne children after extirpation of one ovary, and continued in good health for many years afterwards.

Mr. Hutchinson exhibited a clamp and a large trocar, which he had previously shown to the members of the Medical Society of London.

Mr. S. Wells, in reply, stated that in his paper he had spoken favourably of the use of Mr. Hutchinson's clamp.

MEDICAL SOCIETY OF LONDON.

Monday, January 31st, 1859.

W. H. Willshire, M.D., President, in the Chair.

DEFECTIVE LACTATION AND ITS REMEDY.

BY C. H. F. ROUTH, M.D.

Dr. Routh began by referring to the following points, previously proved:—1. That the experience of Foundling Hospitals proved that great success had followed the plan there adopted of feeding children partly artificially and partly at the breast. 2. That Drs. Merei and Whitehead had shown in their tables, that in proportion as the quantity of breast-milk provided was large as compared to artificial food, so in proportion was the number of well-developed children large. 3. That this occurred even when the food given was a slow poison, as was usually the case with aluminised pap. 4. That the mortality was greatest amongst young infants fed exclusively on artificial food during the early months of life. Therefore, he concluded it was most important to provide human milk for such cases, in as large quantities as practicable, even when artificial food was also given. To show how this could be done was the object of his paper.

1. There were three varieties usually observed of defective lactation:—*a*, that due to hyperæmia; *b*, that due to anæmia; *c*, that due to functional paralysis or inertia of the breast. *a*. The first occurred usually in gormandising hired wet-nurses, and was to be treated by a mild antiphlogistic regimen. *b*. The second occurred chiefly amongst the poor, and required good food, tonic, and chalybeate treatment. It was, however, to the third he would especially allude. *c*. Inertia of the mamma was usually present in masculine women, or those who married late in life. In these the breast might be partly atrophied, but this was by no means the general case, and was rather the result of the long-continued disuse of the female organs of generation. To remedy this state of things, four modes of treatment were necessary—1st, local or mechanical; 2nd, hygienic; 3rd, dietetic; 4th, medicinal.

1. Under this head, applications might be made—*a*, to the breast; *b*, to the sympathising genitalia. *a*. Suction was a powerful agent, inducing milk even in withered females, who no longer menstruated, and even in men. Breast-pumps were sometimes serviceable, but dangerous. Gentle titillation of the nipple, local fomentations, and imitation of milking movement, frequently induced the draught. *b*. In evidence of the genitalial sympathy, Dr. Routh adduced several physiological facts, from which he showed that the separation of man and wife during the suckling period was very prejudicial to lactation.

2. Hygienic treatment was admitted by all—cleanliness, exercise, good air, etc.

3. Dietetic treatment was that usually attended to; general good eating and drinking invariably recommended. But there were specific kinds of food especially galactagogue in their effects: lentils, beans, and peas, whiting soup, oysters and crabs, the fish called glaucisci and smarides; but Dr. Routh gave the preference to conger-eel soup. The lumbricus officinalis had amongst the ancients a very high reputation. Amongst drinks, porter, ale, milk, and fennel-tea, should be preeminent.

4. Of medicinal agents or galactagogues, Dr. Routh enumerated the following:—Echium vulgare, borago, saponaria, lactuca, sonchus, eruca sativa, ricinus communis, gaultheria procumbens, ocymum basilicum, melissa asinos, cystisus, coronilla, cicer, malva, quinquefolium, nigella sativa, anemone pratensis, pimpinella anisum, anethum fœniculum and dulce, apium sativum, daucus carota, common salt, chrystall or crystal, iron, and cod-liver oil.

Some of these he had tried. The echium leaves had failed. Saponaria and sonchus were often very effective. The leaves and stalks of ricinus were by far the most powerful, and he dwelt at length on their efficacy. The coronilla leaves were about as good as those of sonchus. The fennel was second only to ricinus, and more easily obtainable. The iron (if the non-astringent preparations were given) and cod-liver oil kept up the system at par, so as to enable the patient to bear, without loss of strength or flesh, the action of the fennel seeds or castor oil leaves, etc. By carefully administering these, and watching their effects, he had been enabled to make mothers, who had failed before, continue to nurse their children successfully to the eighth month; in some cases, indeed, produced so much milk as to render the artificial food given to the infant as an adjuvant unnecessary, so that the child was fed exclusively by the breast.

The management of the child when so assisted, he reserved for a future paper.

Editor's Letter Box.

CORONERS' INQUESTS AND MEDICAL FEES.

Letter from George Terry, Esq.

Sir,—Will you, or some of our fellow-associates, give me your opinion on the following case?

On the 13th ult., I was called up at 6 A.M. to see a man who had just been found dead in a field, about a mile from my house. I went at once to the spot, where I was soon joined by the policeman; and, after observing the appearance of the body, as to posture, dress, etc., I directed its removal to the nearest house, two fields off; and, on its arrival there, I examined the external surface of the head, neck, and chest, to see if there were any marks of violence; and then left. The inquest was held on the 18th ult., when evidence was adduced that the deceased was of intemperate habits, that he had been drinking the previous evening, and had been seen on his way home, more or less in a state of intoxication; also that the body was found stretched out on the back in the public path, and without any external marks of violence on its surface, which last point was proved by the woman who laid out the body. I believe this was the chief evidence brought forward; and, on the strength of this, a verdict was returned, as I see in the local paper of the 26th, "*Died from an unknown cause*".

What I wish to know is, Was this a case where medical evidence should have been called? and, if not, how am I to be remunerated for my attendance in the field? The latter question was put to the coroner by a friend of mine who was on the jury; and it was suggested that my fee must come from the effects of the deceased, who, it seems, had a few pounds in the savings bank. Of course, the coroner had no power to pay the fee; but I doubt whether I could enforce any claim on the effects of the deceased, unless I had been summoned, in the first instance, by some of his relatives. In all cases of sudden death, the common custom is to send for the nearest medical man at once, and not to move the body till he arrives; and I do not doubt, if any of us refused to attend, that our conduct would be severely commented on, and not without reason. But if the modern custom of dispensing with medical evidence at inquests continues, I think that some provision should be made for our remuneration in cases like the present, unless this is to swell the list of the numerous gratuitous services required from the hard-working members of our profession.

I am, etc., George Terry.

Mells, February 28th, 1859.

CORONERS' INQUESTS IN CASES OF "SUDDEN DEATH".

Letter from Henry Terry, jun., Esq.

Sir,—The following case, which has just occurred in my practice, as it has probably also in that of others, is one upon which I should like to ask for an opinion.

A. B., a currier, of temperate habits, was under my care in November 1858, on account of some trifling malady, which kept him from his usual avocation for a week or ten days. From that time to the present, I have not seen him.

On Saturday, February 26th, after returning home from his day's work, at 5 P.M., he took his spade and walked to his garden, distant about a quarter of a mile, for the purpose of working in it. However, not feeling well, he soon returned home. He had not been there long before he complained to his wife of faintness, and fell off his chair on to the ground. I was sent for, and attended immediately; but he was dead before I arrived. Under these circumstances, I declined to give a certificate of the cause of death, and concluded that the result of that would be a coroner's inquest. The coroner, however, refused to hold an inquest, on the ground, as I understood, that there was no reason to suspect his death arose from other than *natural* causes. In my opinion, it would have been more satisfactory to all parties if an inquiry had taken place, with, of course, a *post mortem* examination.

I am, etc., H. Terry, jun.

Northampton, March 1st, 1859.

BEWARE OF BAD COMPANY.

Letter from Frederick J. Brown, M.D.

Sir,—I am desirous of placing my professional brethren on their guard against the wily proceedings of the homœopathists.

An individual in this neighbourhood who is (*a*) an homœopathist, (*b*) an advertising curer of cancer of the stomach, and curer of disease in general, and (*c*) an assumer of titles, had lately the effrontery to become a candidate for the fellowship of the Obstetrical Society. The Society very properly instituted inquiries, which no doubt satisfied the Council of the ineligibility of the candidate, and so no harm ensued. But I am desirous of noticing this instance, to show the necessity for inquiries respecting the character of any candidate for admission into medical or other learned societies. It is of the highest importance to "fend off" (as the sailors say) these intruders upon the honourable practitioners of medicine. No one should permit his name to appear as referee to any assurance society that employs an homœopathist as one of its medical referees.

The same individual that I have mentioned was appointed medical referee to an assurance office a short time since, whilst one or two other practitioners were associated with him. The medical gentlemen were not aware of the appointment of the homœopathist, but, on discovering it, they most properly insisted on their names being withdrawn, as they would not be associated with a quack.

This case shows the necessity that exists for medical practitioners to be extremely particular respecting their colleagues in assurance societies. Any gentleman might easily get into an awkward position through the ignorance or quack-loving sentiments of an agent to a life office. I say advisedly "quack-loving sentiments", for the public do love quackery, as the recent exposures in the newspapers amply testify.

I am, etc., Frederick James Brown.

Chatham, Kent, March 8th, 1859.

Parliamentary Intelligence.

HOUSE OF LORDS.—Monday, March 7th, 1859.

VACCINATION.

Earl Granville, in putting a question to the President of the Council, as to whether any regulations had been issued by the Privy Council in respect to vaccination under the second clause of the Act of last session, said, that, notwithstanding the ample evidence which had been laid before Parliament and the country during the last fifty years as to the advantages of vaccination, we were yet far behind many of the smaller nations of Europe in facilities which were afforded for putting it into practice. The report of the Registrar-General showed that in ten towns in England one quarter of the deaths proceeded from small-pox, and in that very district of London there had been 228 cases of death from small-pox within the last 17 weeks, whereas in the preceding 18 months there had only been 225 cases. In 130 districts small-pox was now prevalent in a greater or less degree. There was very little doubt that the increasing number of cases of small-pox was attributable to neglect of vaccination and to bad vaccination. It was clear that after the compulsory Act passed the proportion of children vaccinated to the number of births increased very largely indeed. The percentage in 1854 was 65; but in 1855 it fell to 56; in 1856 it fell to 54; and in 1857 it fell to 52. There was no return which showed the result last year. With regard to the neglect of vaccination, it was owing to the apathy of the parish officers, to the apathy of the public vaccinators, and to the apathy of the population, of whom no penalties were demanded. With regard to the badness of vaccination, Dr. Jenner had stated that, although the art was very easy to learn, unless it was properly learnt, vaccination was absolutely good for nothing. Mr. Marsden, of the Small-Pox Hospital, stated that in the course of sixteen years, of 3,098 cases of small-pox which had been brought under his notice he found only 268 cases in which the marks of the best vaccination appeared, and of those 268 cases three only terminated fatally. It was a proof of the value of good vaccination, and, at the same time, of the prevalence of bad vaccination. He would suggest that the Privy Council should provide some means of instruction to those medical men who wished to become public vaccinators, and require from them, before being appointed public vaccinators, some proof of their being well informed of the matter with which they would have to deal. It would be of the greatest advantage if some general regulations and instructions were issued under the authority of the Privy Council as to the mode of performing the operation, and if steps were taken to insure a supply of good lymph. It would also be very desirable if the district vaccinators informed the Privy Council when cases of small-pox occurred, and if the Privy Council sent immediately to such a district a competent medical authority to examine into the mode of vaccination and to stimulate the population to avail themselves of so great a benefit. He thought that efforts should be made to apply a remedy in the best and most effective manner for so great a scourge, and that no delay should be permitted in dealing with the subject. The noble earl concluded by putting his question to the noble marquis.

The Marquis of Salisbury concurred in thinking it a most important, though almost exclusively a medical question. The Government had had their attention directed to the subject, and had taken measures to secure a supply of pure lymph and the more general practice of vaccination. He regretted that the proportion of cases of vaccination had diminished. In 1849, the number of persons vaccinated was 345,315; of persons successfully vaccinated, 333,248; of registered births, 558,102. In 1854, the number vaccinated was 698,935; of successful vaccinations, 677,886; of registered births, 623,699. In 1858, the number of persons vaccinated had diminished to 468,008; successful vaccinations, 455,004; registered births, 654,914. In November, 1858, the National Vaccine Board called the attention of the Privy Council to the increasing deficiency of the supply of vaccine lymph, stating that in 1838 the number of vaccinations performed by their establishment was 18,659; that the average number in 1850, 1851, and 1852, was 10,713; and the average of 1854, 1855, and 1856, 8,207; while in 1857 the number was only 6,327, adding that ordinarily that board distributed about 215,000 charges of lymph; but that under peculiar circumstances the demand had risen (and might again rise) to about 320,000 charges—an amount nearly 60 per cent. higher than was supplied in 1838, when the sources of supply were nearly three times as numerous as at present, and suggesting an inquiry into the state of vaccination in certain large towns. At the end of the year 1858, the medical officer of the Privy Council proceeded to Liverpool and Manchester, and made arrangements in the latter place which would ensure a supply of from 20,000 to 30,000 charges of reliable lymph. Communications subsequently addressed to the metropolitan boards of guardians would, it was hoped, enable their lordships to secure a further large increase of trustworthy lymph. As soon as the Registrar-General's returns were completed up to the end of the year their lordships directed communications to be addressed to those boards of guardians in whose unions there appeared to be a considerable disproportion between the number of births registered and the number of certificates of successful vaccination received by the registrars of districts.

One hundred and ninety-four letters were accordingly written on the 22nd of February to call attention to the disproportion, and to urge the boards to use their utmost efforts to diffuse the benefits of vaccination.

The Earl of Shaftesbury said it was matter for astonishment and alarm that one of the best remedies against one of the most grievous diseases was falling into disuse, and that the deaths by small-pox were increasing annually. The deaths by small-pox by no means measured the amount of misery, because the disease, when it was not fatal, frequently left the seeds of inherent and long-established complaints. Parliament had passed an Act making vaccination compulsory, and, to meet the prejudices which existed in many quarters against the practice, the Privy Council appointed vaccinators throughout the country rightly to perform the operation, and took other measures to secure the purity of the lymph. Penalties were imposed by the eighth section of the existing Act for the neglect of vaccination, but it was found that parties refused to allow their children to be vaccinated, and stated, as a reason, that they had no confidence in the vaccinators or in the purity of the lymph. This was an additional reason for issuing regulations on the subject as soon as possible, and for taking care that confidence should be felt in the purity of the lymph.

Lord Redesdale knew that very great prejudices existed among the lower classes, who thought that diseases were conveyed by the lymph, and who, from this circumstance, had neglected vaccination. There was no objection usually to having a child vaccinated from some other healthy child in the neighbourhood who was known, but there was a prejudice against the vaccination from the lymph sent down from London, which it was highly necessary to remove.

Earl Granville said he was glad to hear that the subject was engaging the attention of the Government.

The conversation then dropped.

HOUSE OF COMMONS.—Friday, March 4th, 1859.

THE ASSISTANT-SURGEONS AT LUCKNOW.

Mr. Ridley asked the Secretary of State for India, whether it is the intention of Her Majesty's Government now to confer any mark of distinction upon those assistant-surgeons, late in the service of the East India Company, who formed part of the garrison during the whole of the siege of Lucknow, and who were recommended in the despatch of General Inglis, of the 26th of September, 1857, to the particular attention of the Government of India; or, if the rank of assistant-surgeon does not allow such distinction to be conferred at the present time, whether he will cause that recommendation to be noted in the books, so that on their obtaining the rank of full surgeon, they may receive a corresponding distinction to that already conferred on the four surgeons named in the above-cited despatch?

Lord Stanley. The assistant-surgeons who were named in Sir John Inglis's despatch of the 26th of September, 1857, were five in number. I am glad the honourable member has given me an opportunity by his question, of paying, however tardily and casually, a tribute of respect to these gentlemen, who did their duty so well, under circumstances of very peculiar difficulty and danger. With regard to the mark of honour which the honourable member suggests should be conferred upon them, he is, I think, aware that, holding the rank of assistant-surgeon, they are not eligible, according to the existing rule, for the distinction of the Bath. This disqualification they only share with other subalterns. With respect to the recommendation that they should be noted in the books, so that on attaining the rank of full surgeon, they might receive corresponding distinctions to those already bestowed on the surgeons mentioned in Sir J. Inglis's despatch, I have to state that the practice of recording names for future distinctions which the persons in question are not at the time fully qualified to receive, is one to which great objections on general grounds are entertained, and which is very rarely followed. At any rate, it could not be adopted without a previous recommendation from the Governor-General and the Commander-in-Chief; and in the present case, we have not received any such recommendation. But though I am compelled to give the honourable member this answer, which he may deem unsatisfactory, I have no hesitation in saying, on the part of the Government of India, that they will be glad to take every opportunity which may offer of recognising, as they deserve to be recognised, the services rendered by these five gentlemen.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Budd. On March 7th, at 13, Lansdowne Place, Clifton, Bristol, the wife of *William Budd, M.D., of a daughter.

Gramshaw. On March 3rd, at Laxfield, Suffolk, the wife of *Henry Gramshaw, Esq., Surgeon, of a daughter.

Holthouse. On March 6th, at 2, Storey's Gate, the wife of *Carsten Holthouse, Esq., Surgeon, of a daughter.

Howell. On February 26th, at Wandsworth, the wife of Thomas Symonds Howell, Esq., Surgeon, of a daughter.

Livett. On March 3rd, at Wells, Somerset, the wife of H. W. Livett, Esq., Surgeon, of a son.

Noyes. On March 6th, at Lee, Kent, the wife of H. G. Noyes, M.D., of a son.

Ross. On February 28th, at 24, Farringdon Street, the wife of *George Ross, Esq., Surgeon, of a daughter.

Russell. On March 3rd, at Bawtry, Yorkshire, the wife of *George Russell, Esq., Surgeon, of a son.

Walshe. On March 4th, at Woolwich, the wife of H. C. Walshe, Esq., Surgeon Royal Artillery, of twin daughters.

Wilkinson. On February 6th, at the Venture, Barbadoes, the wife of J. Lyte Wilkinson, M.D., member of the General Assembly, of a son.

Wilkinson. On March 8th, at Greenheys, Manchester, the wife of *M. A. Eason Wilkinson, M.D., of a daughter.

MARRIAGES.

Chamberlin—Sabine. Chamberlin, Robert, Esq., of Catton House, to Anne, widow of the late William Townend Sabine, Esq., Surgeon, of Woodburn, at St. Stephen's, Norwich, on March 3rd.

Chatfield—Blair. Chatfield, Captain George Kemp, 49th Regiment, to Caroline Mary, eldest daughter of the late Daniel Blair, M.D., Surgeon-General of British Guiana, at Demerara, on January 26th.

Corner—Corner. Corner, Francis Mead, Esq., Surgeon, of London, to Ann, youngest daughter of the late John Corner, Esq., of Bagdale, Whitby, on March 8th.

Doxat—Cobb. Doxat, Edmund Theodore, Esq., of Leytonstone, Essex, to Emma, youngest daughter of Frederic Cobb, M.D., of Milbridge, Frensham, Surrey, on March 1st.

Drury—Bousfield. Drury, James S., M.D., of 13, Radnor Place, Hyde Park, to Sophia Louisa, second daughter of the late W. C. Bousfield, Esq., barrister-at-law, at St. Marylebone Church, on March 3rd.

Drury—Williams. Drury, William Vallancey, M.D., of the Crescent, Camden Road Villas, London, to Mary Eliza, second daughter of the late Thomas Williams, Esq., of Dublin, on March 5th.

Mantell—Holmes. Mantell, Alexander Houston, Esq., son of George Mantell, M.D., of Bath, to Mary, widow of the late J. R. Holmes, Esq., Surgeon, of Kidlington, Oxford, on March 3rd.

Moore—Lambert. *Moore, Edwin, Esq., Surgeon, of Preston, Lancashire, to Elizabeth Anne, eldest daughter of Arthur Lambert, Esq., of Bridgefoot, Ockham, Surrey, on March 3.

Wickham—Tomkin. Wickham, George, Esq., of Maidstone, to Mary Marchant, youngest daughter of *Thomas Tomkin, M.D., of Witham, Essex, at All Souls', Langham Place, on March 3rd.

DEATHS.

Bowen. On February 24th, at Carmarthen, Elizabeth, widow of the late John Bowen, M.D., aged 67.

Handey, James, Esq., Surgeon, at 144, High Street, Wapping, of apoplexy, aged 72, on March 2nd.

Haxby. On February 26th, at Rochdale, Mary, widow of John Haxby, M.D., of Pontefract, aged 79.

*Lyddon, James, Esq., Surgeon, at Exeter, lately.

Sheppard. On March 4th, at Knightwicke Rectory, Worcestershire, aged 34, Helen Agnes, youngest daughter of the late *James P. Sheppard, Esq., Surgeon, of Worcester.

Way. On March 4th, at St. Austle, Arthur, the infant and only child of *John Way, M.B.
Wilkinson, Charles, M.D., at Bedford, aged 60, on March 2.

APPOINTMENTS.

Cooper, W. White, Esq., appointed Surgeon-Oculist in Ordinary to Her Majesty the Queen, in the room of the late Henry Alexander, Esq.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, March 4th, 1859:—

Blunt, George Vernon, Ladywood, Birmingham
Bolton, William Thomas, Ebchester Hill, Durham
Brown, John, Oldbury, Worcestershire
Clarke, James Howard, Gerrard Street, Soho
Cooper, Richard Wiseman, Hull
Hilditch, John, St. Thomas's Hospital
Page, Alexander Howard, Corfu

Monday, March 7th:—

Alderson, John, Aslackby, Lincolnshire
Bayliffe, Charles Searle, Chippenham
Martin, George White, Rochester
Murphy, Brownell Richard, Royal Navy
Nichol, Henry, Haddenham, Cambridgeshire
O'Brien, Daniel, Piccadilly
Palatianò, George, Corfu, Ionian Islands
Pugh, Hugh Lewis, Dolgellan, North Wales
Richardson, William Henry, Clifton, York
Stewart, John Edmondstoune, Port Royal, Jamaica
Verry, George, Kilburn

Wednesday, March 9th:—

Balderston, Henry Fredk., Stonehouse, Gloucestershire
Barreau, Francis Hamptonne, St. Heliers, Jersey
Corbet, Rea, Orsett, Essex
Dawson, John, Garsdale, near Sedbergh, Yorkshire
Freer, John Henry, Rugeley, Staffordshire
Hacon, Richard Dennis, Aldborough, Norfolk
McDonough, Peter Joseph, Dublin
Metcalfe, John Augustus, Hawes, Yorkshire
Roffey, Edwin Thomas, Church Street, Woolwich
Wood, William Peacock, Ashton-under-Lyne

Apothecaries' Hall. Members admitted on Thursday, February 24th, 1859:—

Codrington, Oliver
Dowse, John, Skelmanthorpe
Lockwood, Joseph, Kirkheaton, Huddersfield
Lomas, William
Michael, David, Bath
Owen, Thomas Edward, Totnes, Devon
Ringer, Sydney, Norwich
Rogers, George Leslie, Helstone, Cornwall
Sadler, Henry George
Seccombe, John Thomas
Smith, Charles Edward, Army
Wood, Roger, Sarratt, Herts
Wood, William James, Exeter

The following gentlemen also, on the same day, passed their first examination:—

Chappell, John James, Axmouth, Devon
Trend, Theophilus William, Bridgewater, Somerset

HEALTH OF LONDON:—WEEK ENDING MARCH 5TH, 1859.

[From the Registrar-General's Report.]

The deaths registered in London in the week that ended last Saturday, were 1215, a number which shows but a trifling decrease on that of the previous week. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1199; but as the deaths included in the present return occurred in a population which has increased, they can only be compared with the average after it is raised in proportion to that increase; namely, with 1318. Hence the deaths of last week were less by about one hundred than the number which would have occurred if a mortality equal to the average rate had prevailed. At the present time the population appears to enjoy a fair amount of health, if this is measured by the experience of London itself in former seasons; sanitary defects become apparent on comparing its mortality with that of places in more favourable conditions.

Whilst the deaths were low, the births were high, and the result is an excess in the latter, as compared with the former equal to 726.

The mortality from small-pox again shows an increase, the deaths in the last four weeks having been successively 29, 13, 11, and 22. The disease seems to prevail in parts of the St. Luke and Bethnal Green districts. Last week there were 50 deaths from scarlatina, and 27 from diphtheria, being altogether 77, as compared with 68 in the previous week. Those from diphtheria occurred in sub-districts as follows:—Brompton 1, St. Paul Hammersmith 1, Chelsea North-west 1, Belgrave 1, St. John Westminster 1, St. Margaret Westminster 1, Cavendish Square 1, Regent's Park 2, Tottenham Court 1, Kentish Town 1, Islington West 2, South Hackney 1, Goswell Street 1, Old Street 1, St. Leonard Shoreditch 1, Bethnal Green 1, Ratcliff 1, Poplar 1, Kent Road 1, Lambeth Church second 1, Kennington first 1, Brixton 1, Clapham 1, and Woolwich Dockyard 2. Scarlatina was fatal in 5 cases in St. Peter Walworth.

Out of 15 deaths from all causes in Somers Town, 10 were from zymotic diseases. A child died at 12 Brand Street, Islington, from cholera, after 22 hours illness. A sewer cleanser, aged 30 years, was "poisoned by sewerage miasma." A woman died at the age of 93 years, and three men at the respective ages 94, 95, and 97 years.

Last week the births of 1001 boys and 940 girls, in all 1941 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1703.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30.101 in. The mean daily reading was above 30 in. on every day except Sunday. The barometrical readings varied from 29·57 in. at the beginning of the week to 30·20 in. on Saturday. The mean temperature of the week was 48·4°, which is 8·5° above the average of the same week in 43 years (as determined by Mr. Glaisher). On the last three days the mean daily temperature was more than 11° above the average, and this excess on Friday was as much as 14·9.° On Friday the highest temperature was 63°; the lowest 49·3°. On Monday the thermometer fell to 30·7°, the lowest temperature in the week, and rose to its highest point 63·5° on Saturday. The range of the week was therefore 32·8°. The mean daily range was 16·8°. The difference between the mean dew-point temperature and air temperature was 5·9°. The mean degree of humidity of the air was 80. The mean temperature of the water of the Thames was 45·3°. After Sunday the wind blew from the south-west or west. No rain fell.

POOR-LAW MEDICAL REFORM.

The following letter has been addressed by Mr. Griffin to the Poor-Law Medical Officers of England and Wales:—

"12, Royal Terrace, Weymouth, March 7th, 1859.

"Dear Sirs,—I have the pleasure to lay before you the accompanying letter from the Right Honourable T. Sotheron-Estcourt, in reply to one I addressed to him a few days since. I much regret he has ceased to be president of the Poor-Law Board, of which, however, he is still a member in virtue of his office as Secretary of State for the Home Department; but I am glad to find that his successor in office, Lord March, 'will attentively consider the bearings of the question with a view to a practical measure.' I expected to forward to you last week a report of the proceedings of the deputation to the Poor-Law Board. Circumstances beyond my control have delayed it, but I hope in a few days it will be in your hands. Should, however, any gentleman not receive a copy by the 15th instant, he may conclude his name has been accidentally omitted, and he shall receive one on application. It is my intention to forward a copy to each of the members of both Houses of the Legislature, as the pamphlet contains the materials for future legislation.

"I am, etc. Richard Griffin.

"To the Poor-Law Medical Officers."

(Copy.) "Home Office, 4th March, 1859.

"Dear Sir,—I assure you that it is a matter of regret to me, that I should be transplanted to a new office from one where I had gradually become exceedingly interested in the management, and where I was engaged in watching the progress of certain proposed improvements, and hoped to have been permitted to bring them to maturity. Amongst those, I need not tell you the scheme for an alteration of the method of medical

relief holds a chief place, and I am anxious to lose no time in informing you, and through you, the gentlemen with whom you are associated in this matter, that my successor, Lord March, expresses to me a wish to identify himself with me in the course which I have hitherto followed in this business; that it will not be necessary to reproduce before him the papers and documents, or to restate the arguments which you have already furnished to me, and that he will, at as early a period as other business will allow, attentively consider the bearings of the question with a view to a practical measure.

"I am, dear sir, yours very truly,

"T. Sotheron-Estcourt.

"R. Griffin, Esq., Weymouth."

PUNCH ON HOMŒOPATHY AND "ALLOPATHY".

Our facetious contemporary *Punch* not unfrequently does good service to medicine, by his well directed hits at charlatans of various grades and denominations. His number for Saturday, February 26th, contains an article which we transfer with much pleasure to the pages of this Journal.

"*Mr. Punch* is accustomed to receive letters and treatises, imploring him not to call homœopathy fudge, and some of them attempting to assign reasons why he should not. In all these communications, the medical opponents of homœopathy are called 'allopathists.' 'Allopathist,' as contradistinguished from 'homœopathist,' of course means a person who treats diseases with other medicines than those which produce similar diseases, that is, who endeavours to cure unlike with unlike, instead of endeavouring to cure like with like. Who are the allopathists? *Mr. Punch* has an extensive medical acquaintance, but he does not know any. No intelligent medical practitioner attempts to cure diseases in general with specific medicines of any kind. There are very few of such medicines known to the medical profession. The principle on which diseases, for the most part, are treated by rational and scientific physicians and surgeons, is that of removing impediments to the natural process of recovery, or that of assisting the curative efforts of nature, not necessarily, and not always, by causing people to swallow drugs. When drugs are given by such practitioners, they are generally given with a view to their indirect influence on disorders. For instance, the combination popularly known as the 'black and blue reviver,' which directly affects internal parts of the trunk, may be, 'exhibited' for the relief of a headache, or for the removal of an inflammation of the great toe.

"Professor Holloway is perhaps an allopathist; however, he does not tell us on what principle his pills and ointment cure all diseases. The various doctors who advertise their patent medicines in the quacks' corners of newspapers of the baser sort, may be allopathists also; and likewise the medical profession possibly contains a few fools or imposters who are so describable. But the few specifics used in the ordinary practice of physic may absolutely even act on the homœopathic principle, that 'like cures like;' thus differing from homœopathic doses only in not being infinitesimal, and, *Mr. Punch* supposes, in being efficacious.

"In none of the communications about homœopathy received by *Mr. Punch* is there anything like scientific proof that infinitesimal globules produce any other than infinitesimal effects. Cases of alleged cures, subsequent to the swallowing of those globules, prove nothing, until they amount to enormous numbers. Professor Holloway, and Messrs. Du Barry and Co., adduce plenty of such proofs; perhaps not fictitious. Mere swallowing and cure can be connected as cause and effect only by immense clouds of cases in which the cure is almost the invariable sequence of the swallowing. It does not signify whether the thing swallowed is a great bolus or a pill of the size of a pin's head, containing an invisible dose.

"Quinine is acknowledged, on the strength of a vast accumulation of evidence, as a remedy for ague. It cures ague in one grain, two grain, three grain doses. Will quinine, or anything else, in infinitesimal doses, cure ague as obviously in an equal number out of a vast multitude of cases? Will an infinitesimal quantity of sulphur exert any curative influence on that cutaneous affection which delicacy expresses by the euphemism of the Caledonian Violin?

"*Mr. Punch's* homœopathic friends seem to forget that statements of facts which are contradictory to common sense and received science, require rigid proof. None of them propose any method by which the active properties of an infinitesimal globule can be demonstrated. Neither homœopathists, nor mesmerists, nor spiritualists, either offer or accept the test of any *experimentum crucis;* and when *Mr. Punch* asks for it, they answer by abuse, and the comparison of themselves to Galileo, and those who laugh at them to the Inquisition."

Mr. Punch may, we are sure, assume that he has the thanks of the British Medical Association for his active aid in trying to drive some amount of common sense into the heads of the votaries of homœopathy and such like absurdities.

Professorship of Military Surgery in Dublin. On Wednesday, March 2, a deputation consisting of the vice president and several members of the council of the Royal College of Surgeons of Ireland waited on his Excellency, the Lord Lieutenant, in reference to the proposed withdrawal of the Regius Professorship of Military Surgery from Ireland, in accordance with the scheme of the army sanitary commissioners. The deputation disclaimed being actuated by local feeling in their opposition to the projected change. They would desire to see the means of teaching sanitary science in each of the great central schools of London, Edinburgh, and Glasgow, as well as Dublin. The deputation trusted that his Excellency would oppose the weight of his high position against the withdrawal of the chair of Military Surgery. His Excellency, in reply, stated that he felt much pleasure in receiving a body of men, such as the Irish College of Surgeons were. The welfare of the College, in its every bearing, was a matter of the deepest interest to him, and whatever emanated from the council of the College of Surgeons would receive his full consideration. As to expressing an opinion upon medical matters and medical teaching, he, of course, did not feel himself capable of doing so; and, therefore, he could only say, that he would at once communicate to the Minister of War, and to Lord Naas, the sentiments in reference to the withdrawal of the chair of Military Surgery from Dublin, which had been laid before him by those who were fully competent to express an opinion. If those who advocated the withdrawal of that chair could not show sufficient counter reasons why it should be abstracted, he would willingly lend the weight of his influence against the withdrawal upon the plea of centralisation. Upon that point he did feel capable of expressing an opinion, and he would communicate with Her Majesty's government, expressing his opinion of the desirableness of retaining the medical educational system of Dublin in its present high efficiency, and also upon the desirability of affording to all students the means of general and unrestricted instruction upon so important a question to the public as that of sanitary science. The deputation then thanked his Excellency, and withdrew.

North London Medical Society. At the last meeting of this Society the following gentlemen were elected officers for the ensuing session:—*President:* J. Copland, M.D., F.R.S. *Vice-Presidents:* J. R. Reynolds, M.D., W. A. N. Cattlin, Esq., R. Greenhalgh, M.D., and E. Cousins, Esq. *Treasurer:* W. Adams, Esq. *Hon. Secretary:* R. C. Croft, Esq. *Council:* S. S. Alford, Esq., H. C. Andrews, M.D., C. C. Claremont, Esq., J. Hainworth, Esq., John Havers, Esq., T. C. Jackson, Esq., W. E. Jefferys, Esq., C. F. J. Lord, Esq., J. Part, Esq., and H. Pointer, Esq.

Royal College of Physicians. The lectures commence this season on Wednesday next, the 16th instant, at 4 P.M., and will be continued, at the same hour, every succeeding Friday and Wednesday till the 13th of April. Members of the profession are admitted on presenting their cards.

TO CORRESPONDENTS.

The Indian Medical Service. Two correspondents have forwarded to us documents on this important subject. One, an "Indian Medical Officer", has sent an elaborate paper on the "Constitution of the Indian Medical Service"; the other sends a draft memoral from the Assistant-Surgeons of the Bombay Army, with other papers. The matter shall receive our careful attention on an early occasion.

The Deputation of Poor-Law Medical Officers. We have neither received nor seen an account of a deputation of Poor-Law Medical Officers to Mr. Sotheron-Estcourt on February 24th: nor did we know that such a deputation was to take place, or we should have noticed it. The intentions of the late—and we believe of the present—President of the Poor-Law Board may be learned from the account of the deputation of the City and Metropolitan Unions, which was inserted in the Journal of February 19.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXVI.] LONDON: SATURDAY, MARCH 19, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

FEMORAL HERNIA: OBSTRUCTION OF THE BOWELS FROM ADHESION WITHIN THE PERITONEAL CAVITY.

Under the care of W. BOWMAN, Esq.

[*From Notes by* J. WALTERS, ESQ., *House-Surgeon.*]

IT may be interesting to compare the two following cases together, in each of which a hernia existed together with such symptoms as might have been produced by its strangulation. It was not difficult in either to arrive at the conclusion that the hernia was not the cause of the symptoms of obstruction, though, in Mr. Johnson's case, as the swelling was irreducible, it was thought better to make an exploratory incision. This having shown that the disease was not accessible without a more formidable operation than, in her weak state, she would have survived, it seemed unjustifiable to proceed further, or to trouble her by a more elaborate examination; otherwise, the situation of the disease, just below the hernial tumour, was such that a slight extension of the incision would have brought it within reach, and the gut might have been opened above the tumour. The case offered a good example of the fact that the peritoneal coat of the intestines is the least extensible of their tunics, and gives way to a much greater extent than, or even before, the muscular structure. It is also the only instance we have met with of an appendix epiploica being so large and prominent as to cause a distinct hernial tumour.

Mary D., aged 74, was admitted in the evening of January 19th, under the care of Mr. Bowman. Some years ago, she had two inguinal ruptures, on which account she wore a double truss. One week before admission, a lump appeared in the right femoral region, attended with pain and uneasiness. During this week, the bowels were open three times, pain and nausea being constant. She was seen by a medical man the day before admission, who recommended her to go to a hospital, for the purpose of having an operation performed. On her way thither, the swelling (which was supposed to be a strangulated hernia) nearly disappeared; and, on her admission, a small tumour, about the size of a walnut, was all that was left, situated over the right femoral ring. This evidently contained no gut. It was easily reduced, and as readily returned, when the pressure was removed. Still, however, vomiting continued, though she said she had no pain.

Next day, the pulse was weak, and the stomach so irritable that even a teaspoonful of brandy caused vomiting. She took no food, and did not sleep. She had an enema in the morning, and one again in the evening; and the bowels were open slightly after each.

On February 21st, the vomiting ceased. She lay almost insensible, sank rapidly, and died in the evening.

On *post mortem* examination, the body was found to be well nourished. In the upper lobe of the left lung was a small circumscribed mass of tubercle, of long standing; and the lung was here adherent to the walls of the chest: otherwise, the thoracic viscera were healthy. The left kidney was natural; the right was surrounded by a quantity of pus, apparently formed originally in the renal structure. The kidney itself was infiltrated with purulent matter, and little or none of the secreting structure could be found. Much of the matter had become solid, like cheese, forming pellets about the size of a mustard-seed. The intestines were in many parts congested, but did not present anywhere marks of constriction. There was, however, a small portion of omentum which entered the right femoral ring, but was not strangulated. The uterus presented upon its surface and in its substance several tumours of a fibrous nature, with spiculæ of false osseous matter. The ovaries were also enlarged, and, upon section, presented a number of small masses of ossification, probably spurious. They were surrounded by firm fibrous tissue. This diseased condition had probably set up a local inflammation; for closely connected to the ovaries were several coils of intestine, both large and small, bound down by firm bands of lymph, which had so contracted their canals that water would scarcely pass through them; yet, upon carefully dividing the strictures, the intestine was found healthy in every respect. No great amount of distension of the intestines by flatus above the points of constriction appeared, but their contents were quite fluid.

ST. GEORGE'S HOSPITAL.

I. UMBILICAL HERNIA: OBSTRUCTION OF THE BOWELS FROM MALIGNANT DISEASE.

Under the care of H. C. JOHNSON, Esq.

[*From the Hospital Case-Book.*]

REBECCA P., aged 56, was admitted on December 15th, 1858, under Mr. Johnson's care, with symptoms of obstruction of the bowels, which had lasted about ten days, though she had taken all kinds of purgative medicines. She had had constant vomiting for several days. She complained of great pain over the abdomen, principally around the umbilicus; at which part was a small hard tumour, about the size of a marble, which was rather tender on pressure. She was in an excessively low state; the pulse small and quick; the tongue much coated. An incision was made down to the tumour, and the peritoneal cavity was opened, when a small piece of fat was found lying in the ring of an old umbilical hernia. This was cut off, and no further examination of the abdomen made. Ten grains of calomel were placed upon her tongue, and half a drachm of laudanum given in the evening; but she continued to vomit everything she took, and died next morning.

The abdomen was examined after death. The incision made during life was found to extend into a small moveable lump of fat, situated just below the skin. On opening the peritoneum, a quantity of offensive gas escaped. A large quantity of fæcal fluid was found in the peritoneal cavity. The peritoneum was not vascular. This fluid had escaped from a perforation in the gut near the commencement of the transverse colon. The cæcum was enormously distended, and was raised up from the iliac fossa, so as to lie across the middle line, in the right lumbar and umbilical regions. The mass of fat which projected into the wound was found to have been a long appendix epiploica, which was growing from a part of the gut near the part perforated. All the appendices epiploicæ were unusually long. At the seat of the perforation, the intestine was enormously distended, and its peritoneal coat had been torn for a long distance. The perforation, in its natural condition, was only of small size; but, in injecting water into the gut, it gave way readily. No extra vascularity seemed to exist around it. Immediately below this part, the colon was compressed by a large tumour, apparently of the hard encephaloid nature, which united it firmly to the liver, and projected beneath its mucous membrane as a ring of tubercular elevation, closing the gut so completely that water would not pass through it.

II. VESICO-VAGINAL FISTULA: TWO OPERATIONS: DEATH FROM ANOTHER CAUSE.

Under the care of G. D. POLLOCK, Esq.

Eliza Fuller, aged 36, was admitted into St. George's Hospital, originally, in June 1858, under Mr. Pollock's care, on account of vesico-vaginal fistula. She was said to have been

married at the age of 14, but never to have had a child till twenty-two months before admission. She was left in labour on that occasion for four days and nights, and ultimately delivered by craniotomy. Ever since that time, she had had complete incontinence of urine, and had suffered occasionally from attacks of inflammation of the bladder. She was kept under treatment on this account for some weeks after her admission, and also from the loss of appetite and constitutional weakness under which she laboured; and, when she was somewhat improved in these respects, the first operation was performed on August 12th. The cleft, having been exposed, was seen to be of very large size, so as to allow the protrusion of a portion of the mucous membrane of the bladder as large as a walnut. It was situated at the anterior part of the base of the bladder, extending forward nearly to the urethra. The urethra itself was considerably constricted; but, after some little difficulty, a full sized catheter was forced into the bladder. The edges were then pared, and the cleft brought together in the usual way with Bozeman's button and six silver sutures, longitudinally. The operation was necessarily a protracted one, and she was left under chloroform for an hour, but seemed to bear it tolerably well.

The cleft was examined for the last time on September 16th. It was then found to have united by first intention in front to some extent, but an orifice remained behind, through which the mucous membrane of the bladder protruded.

She was sent out of the Hospital on October 17th, for the benefit of her health; and was readmitted in January 1859. She then reported that her condition had not been improved by the operation, as all the urine still ran away. On examining the opening, it was found much larger than after the operation, measuring about an inch and a half in length, and rather more than that in breadth.

The operation was repeated on January 13th; eight silver sutures being used, and the line of union made transverse. She was kept under chloroform for more than an hour.

January 15th. It is noted that she was low and weak, and had no appetite. She did not complain of pain in the abdomen.

January 24th. She still remained in a low state, drowsy, and disinclined to answer questions. The tongue was dry and red; the urine copious, alkaline, containing some mucus, but no albumen. The plate was in position, and everything looking well about the wound. No cause was discovered for her symptoms.

January 29th. She had rigors, and there was said to be a purulent discharge from the rectum. The urine was fœtid and alkaline. The catheter was removed, the shots cut from the sutures, and the shield taken away. A small part of the cleft was found ununited. She gradually sank into a half-unconscious state, without any more prominent symptoms; and died, comatose, on February 4th.

On *post mortem* examination, it was found that the peritoneal cavity was perfectly healthy. The fatal disease appeared to be situated in the kidneys, one of which was much atrophied, and the pelvis of the kidney on one side occupied by a number of renal calculi. One of these calculi had passed down into the bladder.

The parts concerned in the operation presented the following appearance: The bladder was small and healthy in structure, except at the fundus. Here was a small cleft, about half an inch in length, which extended into the vagina, and on either side of which there was a transverse cicatrix—the trace of the second operation. No traces of the first operation were visible in the bladder. The bladder contained a small oval calculus, which might have easily passed through the cleft, and which, therefore, was supposed to have been in the bladder for no very long period. In the vagina, the traces of the operation were more perceptible. Extending forwards longitudinally from the cleft to about a quarter of an inch from the urethra was a linear cicatrix about three quarters of an inch in length, which was, in all probability, the result of the first operation. The line of union from the second operation was marked both by an irregular transverse scar, and by the presence of four of the silver sutures, which had not been interfered with since the operation, and which remained in the mucous membrane of the vagina, without appearing to produce any irritation, at least there was no trace of ulceration around them, although the whole surface of the vagina for some distance around the cleft was covered with a leathery exudation, easily removed. One of the silver sutures had very nearly cut itself out, but the line of its ulceration had been closed as rapidly as it had been formed, and was quite imperceptible.

Remarks. The above case is not adduced as a fatal case of operation for vesico-vaginal fistula, inasmuch as death was the result exclusively of the visceral disease, and could only have had a remote, if any, connection with the operation and its accompaniments. In fact, as far as the case bears upon the prognosis of the operation, it is favourable to it; as showing how great an amount of union may be procured, by the method of operating now adopted for this distressing malady, even under the most unfavourable circumstances, where the cleft is of extraordinarily large size, and the patient in the worst condition of health. The case is also of interest as showing the great advantage of the metallic over vegetable sutures. There can be little doubt of the advantage, in cases where union by the first intention is sought, of a method which holds the parts is close apposition without producing any excessive amount of inflammation along their edges; while in less favourable cases, where fluids have insinuated themselves between the edges of the wound, and union by the first intention has failed, it may still be possible for the cleft to granulate up and become closed by a process of cicatrisation when kept in close union. Too many instances of this have been seen in operation for vesico-vaginal fistula to allow of any doubt on the subject.

Original Communications.

THE STOMACH AND ITS AILMENTS PRACTICALLY ARRANGED.

By W. S. Oke, M.D., Senior Physician of the Royal South Hants Infirmary.

[*Read before the Southampton Medical Society, Nov. 7th*, 1858.]

[*Concluded from page* 192.]

VIII.—Hæmorrhagic Condition of the Stomach.

Hæmorrhage from the stomach may be the result of several causes, viz.: 1. Ulceration, simple or carcinomatous; 2. A cachectic state of the system, evidenced by a pale aspect, petechial spots on the skin, foul breath, loss of appetite, and great debility; 3. Gastric plethora, produced in females by a deficiency of the uterine monthly secretion, or in other cases, by an obstruction of the portal veins as they pass through the liver. In the hæmorrhagic condition from deficient menstruation, the blood is often thrown up monthly in moderate quantities when the catamenia should appear; it is fluid, and of the colour of port wine and water: when the hæmorrhage arises from portal obstruction, the quantity lost is profuse, sometimes amounting to a quart at a time. The blood is venous and coagulated, and the hæmorrhage may take place at any time. This kind of gastric hæmorrhage may be produced either directly or indirectly: directly, when the gastric capillaries are overcharged with blood and weakened by the constant application of strong stimuli in excessive drinking; indirectly, by such stimuli setting up an increased and morbid action of the hepatic artery, which eventually produces an organic disease in the parenchyma of the liver, obstructing the portal trunks, and by consequence the gastric veins, which in part enter into their formation. As the gastric veins become more and more distended, they pour their contents into the cavity of the stomach sometimes to the large amount of blood above stated. The plethoric state of the stomach, before the gastric veins have disgorged their contents, may be diagnosed with tolerable accuracy. There will be a diffused, but not *hard* enlargement of the epigastrium, painful under firm pressure; the diaphragmatic breathing will be short and impeded; and the heart's action irregular, with a sense of weight in the region of the stomach. If, along with these symptoms, there should take place a sudden feeling of giddiness, faintness, falling of the pulse, and a pallor of the countenance, we may be assured that hæmorrhage is going on into the stomach, and that vomiting will presently follow, bringing up a large quantity of blood, of a dark colour, and more or less coagulated. Considerable relief will now be felt at the region of the stomach; but the patient will become pale, debilitated, and greatly alarmed. Gastric hæmorrhage from this cause is profuse, not only from the internal heat of the body, but from the blood issuing from veins that have no valves to modify the quantity lost. When the extravasated blood finds its way also into the intestinal canal, which it usually does, it appears in the stools in considerable quantities, and when mixed with bile is sometimes the

colour and consistence of tar, which has caused the disease under such circumstances to be termed melæna.

1. Gastric hæmorrhage from simple ulceration may occur in very early life. I saw one instance in an infant under six months old, which resisted all treatment and terminated fatally. On examining the stomach after death, the hæmorrhage was ascertained to have issued from a small superficial ulcer of the mucous coat. The treatment of this case is very difficult, even in the adult, from the ulcer being kept open by the constant digestive actions of the stomach. It may be sufficient to treat the ulcer with a light and soothing diet, such as dilute milk and barley water, panada, whey, and the like. If this should not succeed, and the patient be an adult, small doses of calomel may be given with opium as in (*a*).

a. ℞ Hydrargyri chloridi gr. vj; pulveris opii gr. ij; confectionis rosæ ℈ij. Misce, et divide in pilulas xij quarum capiat i ter die.

Should the hæmorrhage not yield to this treatment, a dose of (*b*) may be given with each pill.

b. ℞ Argenti nitratis gr. iij; acidi nitrici diluti ℥j; aquæ rosæ ad ʒvi; syrupi rosæ ʒiii. M. Sumat ʒss cum quâque pilulâ.

2. When the hæmorrhage arises from debility, the indication is simply to strengthen the vitality of the blood; and this will best be done by mineral acids and other tonics, as in (*c*).

c. ℞ Acidi hydrochlorici diluti ʒiss; syrupi zingiberis ʒiii; infusi cascarillæ ad ʒviii. M. Sumat ʒi ter quotidie.

Should (*c*) not be retained, (*d* or *e*) may be substituted.

d. ℞ Acidi nitrici diluti ʒiss; syrupi aurantii ʒi; tincturæ opii ʒss; aquæ destillatæ ʒviii. M. Capiat cochlearia larga ij ter quotidie.

e. ℞ Acidi gallici ʒss; confectionis rosæ q. s. M. Divide in pilulas vj, quarum capiat i ter die.

The diet must be generous: strong beef-tea and a pint of port wine daily. Should aperients be required, small doses of castor oil are to be preferred.

3. When gastric hæmorrhage arises from a deficiency of the uterine secretion at the monthly periods, it must be considered as vicarious, and looked upon more as a remedy than a disease; nevertheless, if profuse, the indications are first to restrain the gastric hæmorrhage, and then to restore the uterine discharge. The first will best be fulfilled by (*f*), and the second by (*g*).

f. ℞ Magnesiæ sulphatis ʒvj; acidi sulphurici diluti ℥j; syrupi aurantii ʒss; infusi rosæ compositi ad ʒvj. M. Sumat ʒj mane et meridie.

g. ℞ Misturæ ferri compositæ ʒviii; decocti aloës compositi ʒiv. M. Capiat ʒi bis terve die.

The mixture (*g*) should be continued till the uterine secretion is restored.

In hæmorrhage from obstruction of the portal veins in the liver, which is most commonly the cause, it will always be best, if possible, to treat it in the plethoric stage before any hæmorrhage has taken place; the symptoms of which have been described, but the success of the treatment will in great measure depend upon the structural change which has taken place in the liver. If this organ be enlarged or shrunk from a long established practice of excessive drinking, especially of ardent spirits, the disease will be incurable in a large majority of cases from the obstruction to the portal system being permanent; but if the symptoms be those of gastric plethora antecedent to hæmorrhage, the first indication is to relieve the turgid state of the gastric veins; and as these form a considerable part of the portal veins, they will best be relieved by bleeding the hæmorrhoidal veins in the following manner: as many leeches as may be deemed necessary (say six) having been applied to the margin of the gut, the patient is to be seated on a night-table over a pan two-thirds full of almost boiling water, with a pint bason, containing a tea-spoonful of salt steadily floating upon the centre, to receive and empty the leeches as they fall off, and to catch the blood as it distils from their bites. The vapour of the hot water will encourage the bites to bleed, whilst the contents of the bason will show the exact quantity lost. This is, perhaps, the most satisfactory method of bleeding the hæmorrhoidal veins by leeches, to relieve the plethora of the portal and gastric veins. When hæmorrhage has taken place, all warm fluids should be avoided, and all fluids that are drank are to be iced, such as currant jelly and water, lemonade, or orangeade; fruit ices also may be eaten in small quantities till the hæmorrhage has ceased, after which the mixture (*h*) may be commenced, and repeated every four hours till the bowels are acted upon.

h. ℞ Confectionis rosæ ʒi; infusi rosæ compositi ʒvj. Misce et cola: dein adde magnesiæ sulphatis ʒvj; acidi sulphurici diluti ʒi. M. Capiat ʒi quartâ quâque horâ.

And, with the view of clearing the liver, four grains of blue pill may be given every night.

After the hæmorrhage has completely ceased, an attempt should be made to remove that condition of the liver which has obstructed the portal veins, and with this view the pills (*i*) may be commenced.

i. ℞ Pilulæ hydrargyri gr. xviij; extracti conii gr. xviij. Misce, et divide in pilulas xij, quarum capiat unam ter quotidie.

And subsequently the mixture (*j*).

j. ℞ Hydrargyri bichloridi gr. ij; ammoniæ hydrochloratis gr. xxx; tincturæ cardamomi compositæ ʒi; aquæ menthæ piperitæ ad ʒvj. Misce. Capiat ʒi ex aquæ menthæ piperitæ pauxillo ter die.

At the same time, a blister may be applied to the epigastrium, and kept open with the following epispastic ointment.

℞ Emplastri lyttæ ℈ij; unguenti resinæ flavæ ʒj. Misce.

The savine ointment is not sufficient for this purpose.

IX.—Inflamed Condition of the Stomach.

Inflammation of the stomach is not of frequent occurrence, and may be practically divided into peritoneal gastritis and endogastritis. In the former, the disease attacks the outer or serous, in the later, the internal or mucous coat; but it must be admitted that it is scarcely possible for one coat to be attacked without the others being involved in the disease. Nevertheless, in a practical point of view, it is important that the membrane primarily affected should be correctly diagnosed.

In peritoneal gastritis, the disease is ushered in by rigors, either associated with or quickly followed by acute pain of the epigastric region, vomiting, and the ordinary symptoms of sthenic pyrexia. In a few hours, the pain is greatly increased, and the tenderness is so exquisite as to be aggravated by the slightest pressure, or any movement of the trunk of the body, especially in rising from the horizontal to the sitting posture. The febrile heat now increases with the disease; the pulse rises to 120 in the minute; the tongue is furred; there is great thirst; and frequent vomiting, which is most distressing to the patient. Should the disease increase, the abdomen becomes tympanitic, and the area of the tender surface is rapidly extended. There is also serous fluid, mingled with shreds of plastic lymph effused into the peritoneal cavity; and the abdomen becomes dull under percussion, and intolerant of pressure throughout: in short, the case becomes that of peritonitis, and, if the symptoms be not relieved, the patient often succumbs on the seventh or eighth day.

Endogastritis is characterised by the pain being of a less acute kind, by constant vomiting, and by the mucous surface being as intolerant of ingesta as in external gastritis the peritoneal membrane is intolerant of pressure. There is also sometimes frequent hiccough, and the patient complains of intense gastric acidity when anything is brought up from the stomach.

The diagnostic features between external and internal gastritis are, intolerance of pressure in the former, and a morbid sensibility of the mucous surface in the latter; in the former less, and in the latter more vomiting; in both, the pyrexia is equal. The causes of external gastritis are those which produce inflammation of the serous membranes, and the principal of these is cold. Those of endogastritis are more frequently errors in diet, such as eating ices when the body is overheated, or any food that may greatly excite the mucous membrane; but the most frequent causes are to be found in the swallowing of irritant poisons, such as arsenic, oxalic acid, and the like.

Treatment. The indication of cure is simply to subdue inflammation. In peritoneal gastritis, reliance is to be placed in one full bleeding, especially if the pulse be small, hard, and frequent; after which, the blood-letting should be local, by leeches applied to the *epigastric region*, and repeated at intervals as long as pain and tenderness may require them. After this symptom has been for the most part subdued, the vomiting may be combated by open blisters, and by calomel and opium, as in (*a*).

a. ℞ Hydrargyri chloridi gra. xii; pulveris opii gra. vj; confectionis rosæ q. s. Misce, et divide in pilulas xii, quarum sumatur una secundâ vel tertiâ quâque horâ, urgente dolore aut vomitu.

The diet should be farinaceous, and the trunk of the body in perfect rest upon the back, with the knees flexed towards the

pubes: the patient being able to resume the sitting posture is a most favourable sign.

In the treatment of endogastritis, there should be also one full bleeding from the arm; but, with regard to local bleeding, it will be best, in my judgment, to bleed the portal veins by the application of eight or ten leeches to the rectum, in the manner above recommended, to which the reader is referred. I have recommended one full bleeding only in this disease, because I have observed repeated *full* bleedings rapidly to produce exhaustion and death.

In the treatment of endogastritis, the less the mucous coat of the stomach, whilst the inflammation is high, is disturbed by food, the better; and even when the stomach is in a fit state to bear it, the most bland aliment is to be administered, such as barley-water, arrow-root, gruel, or sago. The best beverage will be soda-water, with a small proportion of milk or whey. Calomel and opium, as in (*a*), together with an open blister to the epigastrium, will be highly beneficial in this case also. In one well marked case of peritoneal gastritis that came under my care, the symptoms rapidly yielded to the frequent application of leeches and the internal adhibition of calomel and opium. When gastritis is caused by an irritant poison, the case is to be treated primarily according to the nature of the poison swallowed, and afterwards by such means as shall best subdue the inflammation produced, and which have been already recommended.

X.—Cancerous Condition of the Stomach.

The stomach, as well as many other parts of the alimentary canal, is liable to the ravages of this terrible disease. The parts of the viscus most subject to it are its orifices of ingress and egress: the later is most frequently attacked. The cardiac orifice is also occasionally affected by it, but far less frequently: indeed, cardiac cancer is of rare occurrence. When it does occur, it is more rapid in its progress than the pyloric, because the food, from the extreme intolerance of the œsophageal membrane, is rejected before it reaches the stomach for the purposes of nutrition.

The principal symptoms of gastric cancer are constant severe pain in the epigastric region, of a burning character; intolerance of food, which is rejected soon after it has reached the stomach; independently of food, there is frequent vomiting of mucus also, streaked with blood, and containing shreds of morbid tissue; atrophy and extreme emaciation; the eyes are remarkably bright, and their conjunctival membrane bloodless and transparent. But, instead of detailing the symptoms of the disease, I will at once proceed to describe two cases that came under my care in the Royal South Hants Infirmary, one of cardiac, and one of pyloric cancer, in which the symptoms of both will be respectively manifested.

Case xvi. *Cardiac Cancer.* The notes of this case were kindly taken for me by Dr. Lake in 1852, whilst he was resident surgeon of the institution.

Michael Lemen, aged 42, single, a native of Ireland, had worked for the last few years as coal porter in the Southampton docks, and always considered himself healthy till three months ago, before he came under my care. Since that time, he had been constantly troubled with vomiting and purging, and a pain in the stomach. During this time, he had become rapidly and *greatly* emaciated. He was admitted into the South Hants Infirmary, June 21st, 1852. The pain was referred to the epigastrium and *left* hypochondriac region. The vomiting and purging were of a dark grumous-looking matter. The body was very much emaciated. The eyes were prominent; and the conjunctival membranes were bloodless, and white as porcelain. The abdomen was greatly retracted, and the anterior surface of the spinal column could be easily felt through the abdominal parietes; but no tumour could be felt. The treatment consisted first of chalk, and laudanum, and bismuth; and then calomel and opium were tried: but, though by these means the purging was lessened, the vomiting continued. At length the hydrocyanic acid relieved it, and for ten days he seemed better; but then the vomiting and purging returned, and continued till his death. The vomiting took place always immediately after anything was swallowed, and it hardly appeared to reach the stomach before it was up again. For the last few days, he had slight cough. He died gradually August 29th, 1852, ten weeks after his admission, and rather more than five months from the commencement of the disease.

On examining the abdomen after death, the cardiac end of the stomach was found drawn high up under the ribs. A soft cancer occupied that end of the stomach projecting into the œsophagus. The stomach was adherent to the diaphragm, as was also the left lung, which was much inflamed and congested.

Case xvii. *Pyloric Cancer.* Anne F., aged 34, the wife of a traveller, became ill in April 1849, with pain in the epigastric region and sickness, which always took place after eating, and continued till the stomach was emptied by vomiting. She was costive, and sometimes for a fortnight she had no stool. The pain was of an aching and burning character; and, during the night, half a pint of clear watery fluid, having a bitter taste, would come off the stomach. She had not menstruated since the commencement of her illness. On June 17th, she was admitted into the Royal South Hants Infirmary. She was greatly emaciated; her skin was rough and of a dark colour; the abdomen was retracted and concave; and, in the locality of the pylorus, a small hard tumour could be felt, very tender under pressure, showing that it consisted of a scirrhous state of the pyloric orifice. It was at once evident that nothing beyond palliation could be effected in the way of treatment. She was ordered half a grain of the oxide of silver three times a day, in the form of a pill, with an occasional dose of rhubarb, and a fluid diet. This allayed the morbid sensibility of the stomach; the vomiting ceased; and the pain returned only when the bowels were confined. Notwithstanding this, she emaciated rapidly, and died, a perfect skeleton, on August 11th.

The body was examined the following day. The large curvature of the stomach was thickened, and the pylorus scirrhous and ulcerated; its orifice was so filled up as only to permit the size of a goosequill to pass through it.

In studying attentively these two cases, we are at once enabled to form an accurate diagnosis as to which of the gastric orifices is involved in the disease. If there be vomiting immediately after the deglutition of food, showing great intolerance of the œsophageal mucous membrane; if the pain be referred to the *left* hypochondriac region, a little below the ensiform cartilage; if deep pressure near the scrobiculus cordis produce pain and vomiting; if there be cough, shortness of breathing, and *rapid emaciation*,—the disease is cardiac cancer.

If the pain and vomiting do not take place till some little time after food has been swallowed; if the pain is referred to the lower part of the epigastric region, about midway between the inferior margin of the ribs on the right side of the thorax and the umbilicus; if a hard tumour be found at this spot by deep manipulation; if the manipulation produce great pain and a tendency to vomiting,—the tumour is the pylorus, and the disease is pyloric cancer, especially if there be great atrophy and emaciation.

With regard to the treatment of this disease, alleviation by opiates is the only benefit that can be effected; and oftentimes even this is impracticable.

THE METEOROLOGY OF 1858.

By J. A. Hingeston, Esq., M.R.C.S., L.S.A., L.M., (formerly Assistant-Surgeon to the Royal Maternity Charity, London), Brighton.

The year 1858 was a remarkable one both in a meteorological and sanitary point of view. There was an eclipse of the sun and moon in the spring, and a brilliant comet in the autumn; the mortality of the year was above, and the marriages and births were below the average. Indeed, during the last two weeks of November, the deaths were in excess of the births, and the natural increase of the population, which has been constantly progressive for so many years past, was, during this short interval, suddenly reduced below its steady and customary ratio. The natural increase of the population for the United Kingdom in 1858, was not more than six hundred and forty-two daily (*Quarterly Return*, 40, December 1858, page 2), whereas it had been throughout the preceding year 1857 as high as one thousand and twenty-one a day (*Quarterly Report*, 38, July 1858, page 2). The last three months of the year 1858 were particularly unhealthy; and the Registrar-General declares (*Quarterly Return*, 40, page 1), "that it has never before happened that so many deaths were registered in any autumn quarter, as in this last.") The mean mortality for 1857 was less than twenty-two in a thousand (*Annual Summary of* 1857, page 4), but the mean mortality of 1858 was twenty-three in a thousand (*Quarterly Return*, 40, December 1858, page 5). The year 1858 may, therefore, be regarded as a very unhealthy one.

The year began at the usual temperature of the month of January, the first and third weeks of which were as much as from three to four degrees below the average of the season.

February was cold nearly throughout. Snow fell on the 2nd, and lay upon the ground; and it continued to fall occasionally till the end of the month. On the night of the 26th, there was a partial eclipse of the moon, and the thermometer sank as low as 23° Fah.; the frost was severe, and the ice two inches thick. March was still colder than February, and the temperature of the first fortnight was as much as 8° Fah. below the average. Snow fell, and lay upon the ground, from the 1st to the 6th of the month. The frost then gave way to a partial thaw, with hail, rain, and sleet, followed by a heavy snow storm; and the ground was again white from the 11th to the 13th. This hard weather again ended in hail, rain, and sleet, and, finally, in a complete thaw. On the 15th, there was an almost total eclipse of the sun at 1.10 o'clock, p.m., of which I published a scientific account in the British Medical Journal, lxviii, *New Series*, April 17th, page 308. Previous to the eclipse, the electricity had been positive, and the weather cold, but subsequently it became negative, and the air warm, the temperature averaging about 3° in excess. The mean reading of the barometer throughout the first three months of the year was nearly half an inch in excess; and for the first fortnight after the eclipse, it stood above thirty inches, and, on the 22nd, rose as high as 30.422 inches. April and May were both of them cold, perhaps about 1° lower than the average; but June was hot throughout, and was said to be hotter than any month of June since 1771, except the June of 1846. The barometer stood unusually high, being scarcely less than thirty inches all the month. The weather was bright and pleasant. July was cold, and it was in the middle of the month about 5° in defect. August was fine, and September warm, and at one time 4° in excess. The air was remarkably dry, clear, and luminous. The harvest began early. Wheat was cut on July 17th, or nearly three weeks earlier than usual, although the yield of corn was not so very great. There were severe thunderstorms in July and August; and the aurora was seen at Liverpool on July the 16th.

A singularly brilliant comet appeared in the N.W. in September and October. Its right ascension, September 28th, was 12h. 46m. 30s.; its declination 32° 19' 9" N.; and its time of setting in London, 9.53 p.m. On October 10th, when it was nearest the earth, its right ascension was 15h. 7m. 5s.; its declination 4° 38' 2" N.; and its time of setting in London 8.15 p.m. In a letter to the editor of the *Times*, dated September 28th, Mr. Hinds calculates its distance from the earth, on October 10th, at 51,000,000 of miles, and the apparent length of its tail about 12°, corresponding to a real length of 16,000,000 of miles. Arcturus was visible through it. In the transparent atmosphere of the continent, I had an opportunity, not often met with, of enjoying the splendid sight of this inexplicable meteor or eccentric planet, as I travelled from Montpellier to Dijon, and from thence to Fontainebleau, Paris, Dieppe, and home.

October was fine. It began with the aurora, and strong gales. A few cold, fresh days excepted, it was nearly 2° above the average. November, on the contrary, was extremely cold; the mean temperature of the 23rd and 24th was reported at Greenwich to have been lower than any two consecutive days in November during the last forty-five years. On the 24th, the thermometer sank 12° below the freezing point of water. The mean temperature of the month was not more than 39·6° Fah. In Paris the thermometer was 10° lower than in England, and in Austria it was reported 10° lower than that. There were heavy falls of snow in the north of Great Britain, and also in Belgium and France. At Lyons the streets were nearly blocked up with it. The same weather occurred in Italy. In England, thick mists prevailed throughout the quarter, and November was particularly remarkable for several very dark fogs. On the 15th of this month, there was a severe storm of wind that did great damage to life and property, both by sea and land; and, then, the weather suddenly became warmer, and was nearly 6° in excess of the season. December was likewise warm; there was thunder on the 18th; and the year closed at a temperature of 1° warmer than usual. There was a great deal of illness everywhere; and the death-rate was higher than in any autumn quarter upon record. It is very remarkable, that, during this sickly period, from November 14th to December the 31st, little or no terrestrial electricity was exhibited by the electrometer, and that what little showed itself was, with the exception of December the 22nd, uniformly weak and negative. At the same time, the humidity of the air was almost *plus*, as it was denoted by the figures 81 or 92, complete saturation being 100. No state of atmosphere could be more adverse to health and life than this.

The wind blew from the S.W. for about two hundred days; all the rest of the year, it was from the N.E., with some few exceptions from the N.W., and still fewer from the S.E. The mean horizontal force of the wind was about five hundred and fifteen miles a week, according to Whewell's anemometer, Greenwich; which is considerably stronger than in the preceding year, 1857, which averaged scarcely more than two hundred miles a week. The first week in December was the calmest of the year; and the third week in December, and the second in May, the most blustering. The vernal equinox was calm; the autumnal, tempestuous.

The amount of rainfall in the twelvemonth did not exceed eighteen inches, the annual amount being about twenty-four or twenty-seven inches. It was a dry summer; and, in many parts of the country, the wells were exhausted, and the pasturage burnt up. It was a good season for wall-fruit, and the orchards were very productive. I am old enough to remember the comet of 1811, and can distinctly recollect the parched state of the ground in the autumn of that year. This summer I was in the south of France, and can bear testimony to the universal satisfaction expressed at the excellence and abundance of what is called a *comet-vintage*.

While travelling, I noted the weather; and, in comparing notes on my return, I found that the wet and the fine days on the continent corresponded almost exactly with those in England. Thus, the 24th of July, which was wet in London, was the same in Paris. The 28th was wet at Poitiers, and also in London. On Sunday, August 5th—a very hot day at Angoulême—the thermometer stood at 100° Fah. in the sun; at Greenwich, and at Bordeaux, it was 80° in the shade. Between August 8th and 16th, I was at St. Nicolas, near Sarlat, in the Dordogne, while the weather, which was so hot here, was the same there; and on the 14th, as I was looking at a sketch just drawn from Nature, "a great and unusual darkness", to quote the very words of the Greenwich reporter in the Registrar-General's *Weekly Returns*, under that date, p. 264, "prevailed about 4 P.M.; the wind changed from N. to W.; rain fell heavily; lightning was seen; and thunder frequently heard." On the 18th of August, it was rainy at London, as well as at Bayonne; and, while we were exposed to the *mistral*, that "scourge of the south", at Nimes, a strong gale was blowing from the E. at Greenwich at the same time—viz., September 23rd. The apophthegm, "Cœlum, non animum, mutant qui trans mare currunt" (Hor., lib. i, epis. xi, 27), is, as far as my experience goes, just the reverse of truth.

Shortly after my visit to Bayonne, that fortress was shaken in the autumn by an earthquake, which extended as far as Biarritz on the coast, and St. Jean de Luz at the foot of the Pyrenees. In October, there was a severe shock of an earthquake at Lisbon and its neighbourhood, the most violent since the great one of 1775. Five persons lost their lives, and many were injured by it. At the close of the year, a third was reported from Venice and the coasts of the Adriatic. Most likely shocks are always happening, although not always reported. Strabo, who, in his day, considered Vesuvius as an extinct volcano, and describes the vines and flourishing verdure that reached almost to its top (Lib. v, c. iv, § 8), gives a long catalogue of the volcanic eruptions that had repeatedly altered the face of Nature, in the Archipelago, in the old times before him (Lib. i, c. iii, § 16, *et seq.*); and the venerable Humboldt has recently treated of the same subject in a more masterly and scientific manner, though certainly not in a more emphatic and pleasing style, than that of the celebrated Greek naturalist and geographer, eighteen centuries before him. (*Cosmos*, vol. i, p. 199, *et seq.*; vol v, *passim.*)

The inner life of the earth affects the health, happiness, and prosperity of mankind, as intimately as the external agencies of light, heat, and electricity, as well as the more dazzling meteoric phenomena, such as lightning, solar or lunar eclipses, volcanic fires, mephitic emanations, and those enigmas of astronomy, comets and candescent aërolites, are supposed to do. Their noxious influence on both mind and body is ancient and proverbial. The past year is a case in point. They are electro-galvanic operations, increasing or intercepting the solar beam, the degrees of heat, and the several combinations of the air we breathe, on so extensive a scale that they cannot fail in modifying the highly sensitive nervous structure of the human frame, whose delicate machinery is set in motion by a current of chemico-vital dynamics, that excite, suspend, or abolish animal existence, at a touch as fine and decisive as it is permanent and gigantic.

HIP-JOINT DISEASE: ITS SYMPTOMATOLOGY AND DIAGNOSIS.

By J. Zachariah Laurence, F.R.C.S., M.B.Lond., Surgeon to the St. Marylebone General Dispensary, and the South London Ophthalmic Hospital.

The following essay is partly the result of a perusal of a variety of works on the subject of which it treats, partly of observations made at the bedside. In it I purpose giving a *resumé* of the pathological phenomena presented to us during life, in one of the most important joints of the human frame—important, not only for its magnitude and functions, but also for the variety of diseases to which it is subject.

By far the most common disease of the hip is of a scrofulous nature. It has been known under a variety of denominations—in this country, most commonly as the morbus coxæ, a name wrong in itself, implying tacitly, as it does, that that is the only disease to which the hip-joint is liable, which is far from being the case. The disease in question was not unknown to the ancients, amongst whom may be mentioned more especially Hippocrates, Galen, and the Arabian writers.

The first scientific memoir on the subject, however, was that of Petit, in a paper, entitled *Observations Anatomiques et Pathologiques sur les Chûtes qui causent une Luxation dont les auteurs n'ont point écrit*, read before the Academie Royale des Sciences, on February 25th, 1772. Here we find what appears to me to be a very meagre and unsatisfactory account of the disease. Overlooking the constitutional nature of the affection, Petit thought the head of the femur was displaced gradually from its socket by a hypersecretion of fluid into the joint, consequent upon some severe contusion that this had sustained, and that after a certain lapse of time, the bone was dislocated upwards by the action of the muscles, so that the limb was shortened. It is surprising that he should have overlooked the preceding elongation, although he, evidently feeling a difficulty on this point, explained it away, by the peculiar conformation of the osseous structures entering into the composition of the joint.

The first really good description of the disease was that given by Boyer in his *Leçons*, published in 1803. In an article on the spontaneous or consecutive luxations of the femur, we find a very excellent account of the subject illustrated by cases and autopsies. He recognised the elongation of the limb prior to its shortening; regarding it, however, as *real*, and depending on an engorgement of the so-called synovial gland and cartilages of the joint. He recognised the sympathetic pain in the knee, the final shortening of the limb, which he viewed as exclusively due to a consecutive luxation, a fact, we now know, of nothing like that universal occurrence that Boyer would have led us to believe, and lastly, what was very important, he recognises the *constitutional nature of the affection*.

A few years after an exceedingly good account of the disease in question appeared in England in a work by Mr. Edward Ford, entitled, *Observations on the Disease of the Hip-joint;* where he has given us a very faithful description of some of the principal phenomena of the morbus coxæ. And since his time, the subject has been variously illustrated by Brodie, Coulson, and many of the French writers.

No age is said to be exempt from this disease, but at the same time, it has a remarkable tendency to fix itself upon young persons. The youngest age I have observed it in is 2 years, and the oldest 32. Albers mentions three cases of congenital morbus coxæ; Morgagni a case in an infant a few months old; Coulson, a case in a child a month old. On the other hand, cases are recorded by authors at ages of from 30 to 50; and Coulson states that he has seen many cases in persons advanced in years.

In all the cases that have come under my notice I have not been able to trace any hereditary predisposition to tuberculosis, although it must be acknowledged that it is often a matter of considerable difficulty to obtain sufficiently precise data on this point; whilst, on the other hand, cases are recorded of the affection occurring in two or more members of the same family. But a marked predisposition may be observed in the patient's own constitution, which in most cases is highly scrofulous, or, at any rate, of a delicate susceptible nature. Rheumatism is sometimes the precursor of the disease. I have seen a well marked instance of this. It was in a girl named Sheen, who was admitted into University College Hospital, under Dr. Garrod, some years ago, with an attack of acute rheumatism in the right shoulder, wrist, and hip; subsequently the left shoulder became affected; and, lastly, the right thigh and knee became painful on movements of the limb. All the joints got ultimately cured, though very slowly, excepting those of the right lower extremity; this was subsequently found to present the signs of genuine morbus coxæ of a very acute form. She was then transferred to the surgical wards. I then found an apparent shortening of the limb to the extent of two inches, a real one, of about three quarters of an inch, a certain amount of pain at the hip, on pressing the femur firmly upwards; most intense pain on rotating the limb. She was also much troubled with painful startings. Here, then, was a case of indubitable acute rheumatism merging into a case of indubitable morbus coxæ. Coulson records a case of its following gonorrhœa, and mentions, as does Boyer, that it may be a sequel of the exanthemata.

It is curious to observe how, in the majority of cases, patients date the first commencement of the affection of the joint from some trifling local injury, generally from a fall on the hip, sometimes from some over-exertion of the joint in running, etc. This fact is not only curious, but of the highest practical importance, warning us to treat any injury of the hip that may come before us in a decided and cautious manner, especially when it occurs to young subjects, lest the at first slight local lesion develope itself into a disease of the joint, always difficult to treat, often of a most intractable, and, in some cases, of a fatal nature.

It is in the minority of cases only that the disease commences spontaneously without any previous exciting cause. The first symptoms observed are often apparently of a trivial character, although generally, if the exciting cause has been an injury, the symptoms may for the first two or three days be of a tolerably acute nature. The patient may in the first instance complain only of slight and transient pains about the hip and knee, which become aggravated by any extra exertion on his part; whilst, at the same time, he has habitually a slight limp in his walk, and has a tendency to keep the knee stiff. Very often these symptoms are accompanied by a certain amount of listlessness in the patient's manner, inaptitude for much exertion, and other slight impairments of his general health. These symptoms may go on increasing gradually till the patient is rendered totally incapable of getting about, or this crisis may be arrived at in a sudden and acute manner by some additional slight injury to, or over exertion of the joint.

Supposing, now, we are called to a patient at this stage of the disease (adverted to by Coulson as the second stage), what are the chief local phenomena observed? The first thing that strikes the attention of even the most superficial observer, looking at the patient, as he lies in bed, is a remarkable difference in the length of the two lower extremities. In the majority of cases, the diseased limb appears to be longer than the sound one, as evinced by the relative positions of the two knees and inner ankles. I say "appears," because a more careful examination shows this difference in length of the two limbs to be nothing but an *apparent* difference; for, on directing our attention to the relative positions of the two iliac spines, it becomes obvious, that this apparent difference in length is dependant upon the tilting downwards of the pelvis towards the diseased side, and the explanation of this distorted position of the pelvis is readily found by studying the posture which a patient spontaneously assumes on requesting him to stand erect, and this posture is *per se* a very excellent indication, as to the nature of the affection, to the eye of a person who has seen many of these cases. The patient stands with the sound limb firmly extended, receiving obviously as it does by far the greater share of the weight of the body; whilst, on the other hand, the thigh and leg of the diseased limb are in a state of semiflexion, the whole limb in advance of the other, the foot slightly everted, the heel raised from the ground, receiving but a small share of the weight of the body on the toes. This very remarkable contrast in the position of the two limbs is very faithfully delineated by Ford, in the first plate of his work on the hip-joint, already alluded to in an early part of my paper. And when we come to consider the pain which any pressure of the head of the thigh bone against the acetabulum causes the patient, the assumption of the peculiar posture just described becomes at once evident.

No symptom has given rise to more discussion as to its cause than this one. The above is the common explanation, and is that adopted by Sir C. Bell, Brodie, Coulson, Malgaigne, and Parise. But it has always struck me, that, although the general statement that the apparent alterations in length of the limb depend upon corresponding alterations of the level of the iliac spines is correct, still, that it will not account *fully* for all the

facts observed, and I see that M. Parise is of the same opinion. He very justly asks, how are these apparent deviations in length to be accounted for in patients who have kept their bed during the whole of their illness? In the case of a girl under my notice, she had an apparent shortening of two inches, notwithstanding she never once left her bed from the commencement of her attack up to the time I made this observation.

What is it again that causes patients to preserve obstinately such a distorted position in bed, as they are often seen to do, giving rise to a corresponding apparent difference in the length of the two limbs? How is it, too, that an apparent lengthening may ultimately be succeeded by an apparent shortening, a fact, rather the rule than the exception? M. Parise gives, to my ideas, an equally unsatisfactory account of it. I think the subject requires, and is worthy of further investigation. Coulson thinks that there is also a *real* lengthening at this stage of the disease, produced by the diseased limb's weight stretching the ligamentum teres, a fact more especially adverted to by Palletta. Mr. S. Cooper has, I think, very justly objected that Weber has shown the head of the femur will not leave the acetabulum unless the atmospheric pressure on it be in a state of equilibrium.

In three cases, however, of well marked diseased hip that came under my observation, I have met with an apparent shortening of the limb.

In the early stages of the disease, no real difference is discoverable in the length of the two limbs; but at a later period (in the third stage of the disease of Coulson,) the diseased limb undergoes a real and palpable shortening. And this shortening is dependent on some organic change in the structures entering into the composition of the joint.

It was formerly the prevalent idea that this always depended on some consecutive luxation of the head of the femur. Later observation has shewn these dislocations to be comparatively rare, and that the real shortening depends on carious absorption of the head and neck of the thigh-bone and deepening of the cotyloid cavity, the femur being drawn up by the muscles in proportion as these destructive changes take place. It occasionally, however, does happen, that the femur becomes dislocated in the last stages of the disease. The dislocation is generally on to the dorsum of the ilium, producing a shortening of the limb, nearly to the extent of four inches; and in very rare cases it has been known to be dislocated down into the foramen ovale, producing a corresponding elongation of the limb.

Another obvious phenomenon that the diseased limb presents, is the general wasting of the muscles consequent upon their disuse; and this muscular atrophy has acquired a special significance with reference to the large gluteal muscle, giving rise to a very characteristic appearance of the nates. These become flattened, and hang loose on the diseased side, and the contour of the lower border is very much less prominent and distinct than on the sound side, amounting in some instances nearly to an absolute obliteration, while at the same time it slopes more downwards. In the last stages of the disease, this flattening of the nates is succeeded by a preternatural fullness and tension; this is due to the inflammatory action induced by the formation of abscess in the joint.

The parts about the groin, on the contrary, are fuller than natural, obscuring in many instances in a marked degree the inguinal fold. These appearances depend probably on some inflammatory swelling about the tissues of the joint. It is also by no means uncommon to find the inguinal glands preternaturally engorged; rarely, however, the seat of pain.

I come now to speak of one of the most distressing symptoms of this serious affection of the joint. I mean the pain to which it gives rise; and if any person would wish to form a just estimate of the importance of an accurate knowledge of the symptomatology of the disease, he would only have to contemplate for one moment the acute sufferings and utter helplessness of a patient, in whom the malady has made any progress, rendering him so totally dependant, as it does, upon the assistance of those around him. The pain induced by the slightest movements of the joint, has been in most of the cases that I have witnessed, of so intense a description, as to force the patient to absolutely shriek out, and bring tears into his eyes. And this, not only in children, but even in persons who have arrived at years of discretion.

As regards its seat:—At the hip it is always present, and in the majority of instances also in the knee: the pain at this latter part being often more severe, and the most permanent feature of the patient's sufferings, although this joint is unimplicated in any organic disease; and at the first periods of the commencement of the disease, you will commonly find this pain at the knee the only thing the patient complains of; and oftentimes have careless practitioners thus been led to treat the knee affection as an independent disease, whereas it is to be regarded merely as a symptom, the true organic disease being in the hip. The *rationale* of this symptom has been the subject of much disputation. The best known and most widely propagated explanation of the fact is that of Sir C. Bell, founded on the anatomical disposition of the obturator nerve, which supplies the hip-joint and partly the knee—the inflammatory pains being referred to its centrifugal extremities. An objection to this explanation is, that the same phenomena are not observed in white-swellings of the elbow-joint, where one might reasonably in the same way expect a sympathetic pain in the wrist depending upon an implication of the ulnar nerve. Another solution of the problem has been sought in the supposition, that inflammatory action of the thigh bone from its upper end, was propagated downwards to its lower end. In this case, however, we should expect to find intermediate points of the femur the seats of pain; and though the patient sometimes complains of pain in the thigh, it is often limited strictly to the hip and knee; besides which, on this supposition, we should expect the knee-joint to offer some palpable physical indications of disease, which it does not. The same objections may be raised against Mr. Coulson's supposition, that it depends on an inflammatory implication of the rectus femoris, which is closely connected with both hip- and knee-joints.

Another very common symptom of the disease is what the patients call "jumpings" of the leg. This consists in violent spasmodic action of the flexor muscles of the thigh, and occurs when the patient is dropping off to sleep, causing severe pain at the two joints. It often, however, awakens the patient when he is asleep, disturbing and breaking his night's rest to a distressing and harassing degree. In one remarkable case, that of a girl, named Rebecca Jones, this spasmodic action of the muscles was constant day and night, and involved not only the muscles of the thigh, but also those of the leg. I cannot do better, perhaps, than transcribe my notes of this condition. "The whole of the thigh is in one constant state of quivering, both at its outer and inner aspects; and the spasm of the quadriceps extensor muscle is such as to raise and depress the patella in a rapid succession of jerks, causing a distinct tumour to appear and disappear alternately in this position, the hand placed on the knee-cap thus experiencing a rapid series of succussions, and in the same way the toes are the subject of a continual agitating tremor." A case of the same description is mentioned by Sir B. Brodie, in his work on the joints. In this instance, however, the spasms were limited to the muscles of the thigh; and appear from his account to have required some slight motion of the limb for their production. In this case, there was found, after death, a deep-seated abscess among the muscles of the thigh below the hip-joint beneath the anterior crural nerve, and bound down by the femoral fasciæ. During life, an abscess presented itself on the fore part of the thigh, after the appearance of which the spasmodic affection gradually subsided. From these facts, Brodie concludes that the peculiar symptoms arose from the deep-seated abscess pent up among unyielding parts, thus pressing on and irritating the anterior crural and obturator nerves, and that the abatement of them arose from the removal of the pressure on the nerves by the abscess making its way externally. I have observed something like this spasm of the muscles in another case of joint affection of a different nature, in a young man, who was some years back in University College Hospital. In him, on flexing the toes of his left foot, they at once became the subject of a constant tremor, which he could not restrain; this phenomenon disappeared during his stay in the hospital.

In the last stages of the disease, matter forming within the joint comes to the surface either on the nates, the groin, or upper and outer part of the thigh. Cases have been known in which it has passed by the pelvis into the rectum, and voided by this channel. I have seen one such case myself. Small portions of bone are often found in the discharge; and in two cases mentioned by Hoffman, and one by Mr. Chalk, nearly the whole of the head of the femur came away entire in this manner. In some cases, the patient sinks in a hectic state, induced by the profuse suppuration. In other more fortunate cases, he escapes with an anchylosed joint.

I now come to speak of a very important point; viz., of the diagnosis of true morbus coxæ, from other affections to which the hip-joint is liable. Elizabeth C., aged 54, was admitted

seven years ago into University College Hospital, for an affection of the right hip-joint. She first began to feel pain in walking in the right hip-joint three months before admission; and for the last two months she had been absolutely lame; but had always slept well. There was a real shortening of the limb of three-quarters of an inch; firm pressure from the foot did not seem to cause much pain; she experienced pain at the hip from flexing the thigh, and likewise slight pain from flexing the thigh of the unaffected limb.

This was a case of rheumatic affection of the joint, and not one of morbus coxæ; and for these reasons:—1. The age of the patient. 2. There was no evidence of pain on pressing the articular surfaces of the affected joint together, which would certainly have been present with a real shortening of three-quarters of an inch. 3. The absence of any special pain in the knee. 4. The fact that she slept well during her illness, not having had any startings of the limb. 5. The pain evinced on flexing the left limb.

I shall now, in the same way, illustrate the diagnosis from another affection of the joint, by the recital of a case.

Jane F., aged 24, was admitted into University College Hospital, on June 1st, 1853. There was no evidence of rheumatism, but some of phthisis, in her family. She menstruated at about the age of 15 or 16, but only once or twice in the year, and that scantily. At the age of 21, she began to be troubled with leucorrhœa between the intervals of the catamenia, which now became regular. Her present affection dated from two years back. There was an apparent shortening of an inch of the left limb, dependent upon a distorted position of the pelvis. There was no real difference in the length of the two limbs; firm pressure upwards from the heel caused slight pain at the hip; rotation, especially inwards, caused more pain; succussion caused acute pain in the hip and spine. Succussion of the spinal region, especially of the right vertebral groove of the lower half of the spine, caused acute pain. Some pain was produced on firmly pinching the soft parts about the spine. The pain produced in all these cases appeared to be of a very transient though acute nature; and I cannot better express what the nature of the patient's feelings seemed to be, than by saying the pain made her wince. Ever since a child, this patient had had difficulty in passing her urine; and during her stay in the hospital, it became a question at one time whether the catheter should not be used. Her bowels also had habitually been costive; so much so, that even on one occasion two doses of a drop of croton oil failed to produce any effect. She was much troubled with painful startings of the limb. This was a case of so called hysterical affection of the joint.

The diagnosis depended on the following points:—1. The general derangement of the urinary, generative and alimentary functions, above adverted to. 2. The absence of any real difference of length in the limbs. 3. The presence of the spinal irritation. 4. The fact that the disease had lasted for two years, without producing any deviation in the length of the limb. And lastly, the peculiar character of the pain induced by manipulation.

This case disproves a circumstance mentioned by Brodie, who states that in these cases, whatever the pain may be during the day, it does not awaken them during their sleep. A curious fact is mentioned by this last author, in reference to these cases. He states, that often in the morning the limb will become cold, pale, and shrunk; but that towards evening, the surface of the skin becomes hot, red, and shining, and that these alterations are as regular as the paroxysms of an ague, and like these are much benefited by the administration of quinine.

Children at the time of dentition are subject to a disease of the hip, closely simulating morbus coxæ. In these cases, the child in attempting to walk, drags the affected limb after him, and in standing, assumes much the position I have adverted to as characteristic of true scrofulous disease of the hip; wasting of the whole limb and nates, and slight lengthening, are observed. The diagnosis of this disease depends mainly on the absence of any pain on manipulating the joint, and on the period of life at which it occurs.

I trust that I have now given as comprehensive a view of the subject as my experience has allowed me, with a view of establishing the diagnosis from other affections of the joint to which I have adverted; and I cannot too strongly impress the necessity of forming a correct opinion of the nature of any given affection of this joint, than by stating that the *treatment* of these cases invariably depends on this point. What would one say, for instance, to the application of splints, issues, moxas, and the like, to a patient labouring under mere neuralgia of the joint; which, as Brodie in his work on the urinary organs, remarks is an error that is as discreditable to the practitioner as it is mischievous to society. And further, I have seen several other cases where an accurate knowledge of the symptomatology of these affections was of very material aid in coming to a conclusion as to the nature of the one under consideration. Mr. Abernethy states that pains in the hip and knee, and even wasting of the limb, will occur from mere derangements of the digestive organs; as Sir C. Bell says, they will from those of the urinary apparatus: and it is only by correct and precise information on these matters that a surgeon is enabled to do his patient good, and himself credit.

Reviews and Notices.

A Treatise on the Human Skeleton (including the Joints.) By George Murray Humphry, M.B.Cantab., F.R.C.S., Surgeon to Addenbrooke's Hospital; Lecturer on Surgery and Anatomy in the Cambridge University Medical School. With numerous plates. Pp. 620. Cambridge and London: Macmillan and Co. 1859.

We almost feel that an apology is due to the members of the British Medical Association for our tardiness; but it may be received as an additional testimony in favour of the work before us, that we have felt it impossible to do justice to it without making a more careful examination, than is sufficient for the vast majority of the books that are issued from the medical press in the present day.

It is with more than ordinary pleasure that we now draw the attention of our associates to this work. Every page of it is replete with information, which is oftentimes original in matter, and always new in the manner in which the facts are stated. We speak from experience when we say that the work will fully bear the test given in Todd's *Student's Guide*—"The book that is worth reading once will bear reading twice."

We welcome this work, not merely on account of its intrinsic excellence, but also because we perceive in it an attempt, which we hope and believe will be successful, to introduce into our schools a more philosophic and better mode of teaching human anatomy, than is at present usually adopted.

Since the days of John Bell, little or no real advance has been made in this branch of medical education. Many books, it is true, have appeared, containing somewhat more concise accounts and more beautiful representations of parts. They have the merit of putting the student more quickly in possession of the names of the processes, the points of attachment of the muscles, etc.; but, as regards attempts to convey a more scientific knowledge of anatomy, the writers and teachers of the present generation are, we fear, on the whole rather behind their predecessors. Minute anatomy seems to have engrossed the attention of the ablest teachers of modern times; and little progress has been made in descriptive anatomy.

Mr. Humphry has made a very successful effort to supply what was wanted, and has done much to advance the study of the human skeleton to its proper rank as a science. He is not content that the student should merely know the name and shape of a bone, a process, and a ligament; but he enters into the rationale of its form and construction. He tells us (page 485), *why* the leg is made so small just above the ankle, and points out certain disadvantages that result from it; *why* (page 482) the outer articular facet of the patella is larger than the inner, which, by the way, he informs us, is a peculiarity of the human patella; *why* (page 414) the tendon of the biceps plays chiefly upon the *lesser* tubercle of the humerus; *why* (page 94) the fœtal brain and skull are so large; *why* (page 206) the inner table of the adult skull is denser than the outer; *why* it is thrown up into so many ridges, which project in a seemingly

awkward manner into the cavity, and *why* the tough processes of the dura mater are attached to these ridges.

We recommend this work, *first*, to all teachers of practical anatomy, who wish to teach their pupils to think, and would help them to remember the facts that they learn; *secondly*, to all students who desire to know something beyond the mere facts of anatomy; and, *thirdly*, to physicians and surgeons who have not lost all interest in the study of the human frame; who would like to renew their acquaintance with an old friend in a new dress, and who wish to cultivate the habit of comparing the facts of surgery with the facts of anatomy, and of enlivening and elucidating the one by the other.

The account of the structure and movements of the joints forms perhaps the most important part of the book, in consequence of the great pains which have evidently been bestowed upon it, and the many points in which it differs from the descriptions usually given. Mr. Humphry states (page 166) that rotation of the spine is not practicable in the loins, and that it is most free in the back; that the ligamentum teres of the hip cannot be made tense in the extended position, and cannot, therefore, as Weber and others have supposed, be of service when we stand upright. We find also a description of a *short* internal ligament of the temporo-maxillary joint, "which seems to have escaped the observation of anatomists, though it is a well defined structure."

We feel sure that every earnest teacher of anatomy will, before the commencement of next session, make himself acquainted with the many new facts, of which the foregoing are examples; and we hope that lecturers will take the trouble to test the accuracy of the descriptions which are given. Following in the steps of Mr. Humphry, they will quickly find how to make the usually dry details of their course intensely interesting.

We advise medical students to resort to this volume, with the firm conviction that, in spite of the great amount of the information that it contains, it will be found to lighten and not to add to their labours. We fully sympathise with this class of our readers, and view, with as much distrust as themselves, every addition to the almost innumerable subjects which are now required of them. But it is because we believe that the present work supplies that which is wanted in other elementary departments of his studies, that we do not hesitate to introduce him to one who will teach him the anatomy of the bones as part of one comprehensive science of medicine, and not as an isolated subject—a drudgery to which every one must submit.

Mr. Humphry makes the reader feel that he has the subject before him. His style of teaching is peculiarly happy. He takes advantage of the knowledge with which even the unscientific reader is familiar; and, proceeding from things known to things unknown—the true and philosophic way of teaching—every additional fact serves to impress on the mind that which has been previously acquired, and it is made the stepping-stone to the next discovery. The range of motion of a joint being matter of every day experience, the shape of the articulating surfaces is accurately noted and compared with it; and the length, strength, and position of the ligaments, become stages in a process of inductive reasoning. In this way, the student is encouraged, his scattered thoughts are collected, and even the most minute differences and relations of the parts are remembered with comparative ease. We need hardly say that our remarks are not addressed to those who care only "how to pass", but we have in view first class students who wish to have an intelligent knowledge of their profession. To the men who rely on what Sir James Clark justly calls "the demoralising system of cramming", we would only say, beware how you present yourself before an examiner, without having one or two of Humphry's new dodges stowed in "your literary lumber-room".

Of the pleasant way in which the author lightens the subject in hand, we select the paragraph on the adaptation of the skull to the office of protecting the brain.

"It is the office of the skull to protect the important nervous centres contained within it; and when we reflect how large a mass the brain is, and that its delicate vascular structure renders it peculiarly liable to suffer from contusion and jars, we perceive that it must be no easy matter to secure it from injury during the rapid movements of the body, and the collisions to which we are often exposed. Yet so admirably suited to this purpose are its coverings, and so nicely adapted to one another are the brain and the skull, that we very seldom find any serious mischief occurring to the brain, except it be from a fall upon the head, or a blow, sufficiently severe to fracture the skull. If, therefore, in any case of injury to the head, we can assure ourselves that the skull remains entire, we may be pretty certain that the brain is not lacerated or shaken beyond recovery. The patient may be stunned; but he will probably recover his consciousness after a time, and eventually do well. A few instances are on record in which concussion has proved fatal without fracture; they are, however, very few, so few that they may be regarded as rare exceptions to the rule. On the other hand, if the symptoms of cerebral lesion be so severe as to preclude the hope of recovery, that alone is tolerably conclusive evidence of fracture of the skull. In short, the skull is constituted in such a manner that, so long as it retains its integrity, it is able to protect its contents from serious lesion; and nothing short of a blow, which breaks it, will succeed in contusing or tearing the brain." (P. 200.)

We would willingly give a more elaborate commendation of the admirable plates, and of the practical value of the work, but we must now conclude by saying, briefly but in all sincerity, that it seldom falls to our lot to review a volume so instructive, and that sooner or later every member of the medical profession should acquaint himself with 'Humphry on the Skeleton.'

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, MARCH 19th, 1859.

OUR ILLUSTRIOUS DEAD.

An order in Council for the removal of all coffins from the vaults under the church of St. Martin-in-the-Fields, has led to the discovery of the remains of the celebrated surgeon and physiologist, John Hunter. Mr. F. T. Buckland, of the 2nd Life Guards, son of the late distinguished geologist, and Mr. Quekett, curator of the museum of the College Museum, were kindly permitted by the authorities of the church to be present during the removal, with the object of discovering the coffin of Hunter. A coffin, containing the remains of a John Hunter, was speedily found, but this turned out not to be the illustrious dust these gentlemen were in search of; they were, indeed, guided to the exact spot in which the body was deposited, by the entry in the Parish Register, which was as follows:—

October 22nd, 1793.

Apoplexy.	M. John Hunter, Esq.	£6 10*s.* 2*d.*
Leicester Square.	No candles.	¼ past 4 o'clock.
V. N. 3.	Duty 3*d.*	

The entry, therefore, signified that he was buried in vault No. 3 (under the Church). "And this vault," says Mr. Buck-

land, "I found to be quite full of coffins, from the ground to the roof." On the afternoon of Tuesday, February 22nd, Mr. Buckland was rewarded by finding the coffin of John Hunter, underneath several others, and towards the back of the vault—being, in fact, almost one of the last to be removed. He describes it as being in excellent preservation, the cloth only upon it having decayed in places; the handsome brass plate as perfect as when originally engraved; the coat of arms uninjured; and the inscription clear and distinct. The latter runs as follows:—"John Hunter, Esq., died October 16, 1793, aged 64 years."

In a letter dated March 3rd, Mr. Belfour, the Secretary to the Royal College of Surgeons, writes to the *Times* that "the Council of the College, feeling it their duty to obtain for the remains of this illustrious man a resting place worthy of them, have asked permission of the Dean and Chapter to deposit them in Westminster Abbey, which has been most readily accorded, these authorities stating also that 'they shall be proud to be the guardians there of the ashes of so great a man.'"

The College has appointed the 28th instant for the re-interment of this most illustrious surgeon, and have intimated their intention to issue tickets, procurable at the College, until the 25th instant, to those medical men who would wish to see the grave close finally over the great surgeon. We rejoice to find the Council has at least more respect for Hunter's ashes than they had for his old chairs, which, including his favourite arm-chair, were sold for an old song, some years since, to the first bidder. We think, however, that they might have made more of the occasion. The profession might have been called upon to follow the remains of this great medical philosopher from his first to his last resting-place—from St. Martin's-in-the-Fields to the Old Abbey whose very foundations are rooted among illustrious dust, and which, amid its silent city of long-departed poets, painters, statesmen, divines, and philosophers, contains no medical inscription, at least, comparable with the *Hic Jacet Johannes Hunter*, which, ere long, will direct the footsteps of the living to his grave. It would be well, we think, now and then to draw public attention to the departed great ones of our profession, who have left, like John Hunter, such deep "impressions on the sands of time"; and a solemn procession of the followers of our art, bearing, amid the ceaseless stream of life that flows along Charing Cross, the remains of one who, "being dead, yet liveth" in the memory of all civilised nations, would, we think, be no ungraceful or impolitic act. The statue which is to be erected may come afterwards, but we want some warmer living testimony of our appreciation of the genius which filled the College of Surgeons with priceless intellectual treasures.

And we may ask, Should not Harvey, as well as Hunter, sleep with kings and princes beneath the solemn vault of St. Peter's? If the latter was the typical surgeon, the former was the typical physician. The remains of the great Harvey lie entirely neglected at Hempstead in Essex, in the family vault, the brickwork of which is so dilapidated that any thief may enter and carry off the leaden coffin, philosopher, and all; for a friend informs us it is so small and light that a strong man can easily lift it in his arms. It surely is a reproach to us all, that so little public honour has been done to the remains of the discoverer of the circulation of the blood; and we trust the College of Physicians will not be behind the College of Surgeons in rescuing from an obscure grave the ashes of their illustrious Fellow, which should lie side by side with those of Hunter.

POOR-LAW MEDICAL REFORM.

Within the last week, we have received, in the form of a pamphlet issued by Mr. Griffin, an account of the proceedings of a deputation of Mr. Griffin and other Poor-Law Medical Officers, who waited on Mr. Sotheron-Estcourt, the then President of the Poor-Law Board, on the 24th of last month. In another page, we give a copy of the proposals made by Mr. Griffin; and, believing that the information, though late, will be of interest, we give *verbatim* the reply of Mr. Sotheron-Estcourt:—

"If it may be said that the medical officer is at the mercy of the guardians because it is in their power to diminish the number of paupers in January and July, he is still more in their power under the per-case system, because they would have nothing to do but to direct the relieving officer to diminish the number of orders. But if the total amount is to be provided out of the consolidated fund, then there would be no individual interest to reduce the amount. But if this were done, the treasury would take the place of the guardians and provide some sort of check on the number of cases. I do not think you can ever expect Parliament to consent that it should be simply at the discretion of the party—I may say, without offence, the interested party. I am glad to have had this opportunity of meeting so many of you, and I am obliged to you for the information you have communicated. I will take this opportunity of saying, that in the correspondence I have had with Mr. Griffin, who has been the most prominent member of your body, I have been pleased and gratified at the business-like way in which he has dealt with the subject. This is not a mere question of feeling, for if we went into that we should never get out of it; but the question is, how we can best provide an improved system of medical relief for the poor? We want a scheme which will by its justice overcome opposition. That is my object. I do not, however, pretend to say that what I have heard has not very much modified the opinion which I entertained in regard to my own scheme, but still there are several points to which objections have been started, but with respect to which I still entertain my own opinions. Looking at the question practically, I think we have made some progress. Last May there was almost a doubt as to whether there was a grievance, but now the existence of the grievance is admitted, and considerable ingenuity has been displayed in devising a remedy for it. I do not think it would be well for me to say off-hand what is the impression which Mr. Griffin has made upon my mind, as I am only one of the Board, and must consult with my colleagues; but I may say this, that first with my own scheme, and next by the suggestions which have been offered, I think we have made such progress that I do not despair of justice being done. On the previous occasion I was represented by some of the papers as postponing my scheme, *sine die*. I did not say that. I do not think it right to lay any bill on the table of the House until we can get a far greater amount of unanimity of opinion on the part of those concerned than up to this moment has been obtained. There are, Parliament, the guardians, and yourselves to be consulted. In order satisfactorily to settle this question, we must agree upon some fair elements upon which the computation could be based. I will now say one word about my scheme, not to press it, but to show what I think it was desirable to take into consideration. I proposed a triple basis on which to settle the salary. First, the amount of the pauper population; secondly, the number of cases; and thirdly, a margin which could cover mileage and other local circumstances which should be taken into consideration. You will see by Mr. Griffin's table that the present amount of salaries is £150,000. Two of the elements which I take into consideration give £141,000. If, therefore, this scheme were worked out, it is impossible but that some improvement must take place in the total amount of salaries, if any attention whatever is paid to the third basis. I think any

basis of calculation should increase the present amount of the salaries. I think the third element of mileage has been left out of sight, and people have argued as if I suggested only the two other bases of computation, which would produce a sum rather less than you at present receive. Out of the 3,300 medical officers, not more than one-third have as yet sent me in their answers, and I think the papers put in to-day bring it up to one-half, leaving half the medical officers of the kingdom who have not yet replied. From the boards of guardians I have received four hundred and nine answers, that is not two-thirds, and of those we have only three giving a distinct approval, one hundred and fifty-one gave their partial approval, and two hundred and fifty-five say they are satisfied on the whole with the present system. Now no man can say that that is a state of things which would justify the President of the Poor-Law Board in bringing a scheme before Parliament. But a still further agitation of the question may produce a much greater unanimity even in the course of a few months; for, as I understand, you are much more unanimous now than you have ever been. I do not think there will be any chance of obtaining the whole amount from the Consolidated Fund. I think it is much more likely that the half which you now receive from that fund may be withdrawn, than the other half paid. As to the permanency of tenure, I must bring forward a measure which will be beneficial to all parties, and not beneficial merely to the medical officers; and I must say that I think that permanency of appointment would tend to produce negligence. There should, therefore, be some period at which his contract should cease as a matter of course, when, if found negligent, his services might be dispensed with without the annoyance and discredit of forcibly putting an end to it. Since Mr. Pigott's committee, there is nothing but absolute misconduct which can lead to the displacement of a medical officer. Let the period of appointment, therefore, be five, seven, or ten years. The appointment of two medical men in a district is objected to; but my object will be to introduce amongst you a certain amount of competition, which is the moving principle of private practice. Mr. Griffin says truly, there ought not to be two medical men in a district where there is not work enough for one; but my scheme contemplated nothing more than this, that each of these gentlemen should (where there is at present a medical gentleman for each of two small districts) circulate over the whole. The result would be, on the part of each of them, a more careful attention to the duties of the office. I know that it has been thought an imputation on your profession that I should introduce this; but all that can be said of it is, that I desire to introduce into the administration of medical relief to the poor exactly the same principle which is in existence with respect to private practice, and I do not wish to carry it one step further. It has been suggested that acreage should be substituted for mileage; and that is a suggestion which I will carefully consider. I shall be glad to receive any further suggestions, and, before I attempt to concoct any Bill, I shall give you the fullest notice. What I hope to do is, in the course of the present session to prepare a Bill (if we can arrive at a fair solution of the difficulty), lay it on the table of the House—without any intention, however, of attempting it this year. It may thus be printed and circulated in the shape of a Bill towards the end of the session; and, if it is duly considered during the recess, there will, next session, be no difficulty in carrying it. But if we attempt to do anything of the kind now, we shall, I feel sure, do more harm than good. The matter ought not to continue in its present state; and, if I continue in office, I shall use the best means in my power to put this question on a better footing, and to make such arrangements as will be satisfactory both to you and to the public."

The subsequent removal of Mr. Estcourt to another office in Her Majesty's Ministry has somewhat modified the aspect of affairs; yet, probably, not much, if we may draw inferences from the correspondence between the right honourable gentleman and Mr. Griffin, which was given in last week's Journal.

In regard to the principle on which the payment of Poor-law Medical Officers should be founded, some difference of opinion exists; but a plan has been proposed, which has to some extent at least received the approval both of Mr. Estcourt and Mr. Griffin. It was described by Dr. Wynn Williams, of Carnarvon, in the Journal for January 29; and, at the deputation, he brought it under the notice of Mr. Estcourt. The plan which he proposes is, to pay according to *acreage*, not according to *mileage*.

"Every medical officer should be paid a fixed salary (of not less than 5*s*. per case,) on an average of the number of cases attended during the last three years. Whenever a patient's name appears in two or more successive quarters, it should count as two or more cases. This should be the fixed salary for every union in England and Wales where the district does not exceed in extent 1,000 acres; and should be paid out of the consolidated fund. Whenever the population is spread over more than 1,000 acres and less than 2,000, an additional sum should be paid (not less than 2*d*. per case; it may have to be 3*d*. or even 4*d*., but that is a matter to be decided by the Poor-Law Board). When the extent is more than 2,000 acres and less than 3,000, a further sum (2*d*.) should be paid; and so on for every additional 1,000 acres up to 15,000. Beyond this only half the sum (1*d*. per case) should be paid for every additional 1,000 acres. This latter charge will apply more particularly to unions situated in mountainous districts, or where, from other causes, the population is spread over a very large extent of country, and yet chiefly collected together in small hamlets. The acreage charge should be paid out of the funds of the different unions; in fact, it should be an union charge."

The advantages of this plan, as contrasted with that of payment by mileage, are said to include the following. It will relieve the medical officer, as well as other officers, of the labour of keeping an account of the distance of each patient from the residence of the medical officer. It is more fair than the mileage system; because, under the latter, a medical officer residing in the centre of his district would receive a smaller amount of salary than one living at an extremity, and still less than one living out of it altogether. The mileage system, too, it is urged, would be unfair toward the ratepayers, inasmuch as they would have to pay more to a surgeon living out of his district than to one living in it.

Mr. Griffin, in the pamphlet to which we have alluded, thus expresses his opinion of the plan of charging by acreage:—

"In consequence of the remarks recorded in a subsequent part of this report by Dr. Williams, and the reply of the president, I have been led to consider the subject of acreage, which, if calculated at one penny per acre, will realise the sum of £146,210, and remove the pecuniary objection to Mr. Estcourt's scheme, so far as districts are concerned. The question of acreage *versus* mileage is well worth considering, as it will entirely remove any cause of dispute relative to distance, which mileage or non-residence in a district may entail. A mileage or some other mode of computation will, however, be necessary for union houses."

The principle proposed by Dr. Williams has received the almost unanimous approval of the union surgeons in that part of the country in which he practises; and it certainly appears calculated to remove much of the difficulty which stands in the way of settling the question of payment. We place the matter before our readers for their consideration, and for the expression of their opinions; but we are sure they will join us in giving our best thanks to Dr. Williams for the interest he has shewn in the subject of the remuneration of the Poor-law medical officers, and for the trouble he has taken to endeavour to remove one of the great difficulties in the way of a settlement of the question.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 22nd, 1859.

Sir Charles Locock, Bart., M.D., President, in the Chair.

THE CAUSES OF DEATH AFTER AMPUTATION.

BY THOMAS BRYANT, ESQ.

Mr. Bryant stated that his paper was based upon an analysis of 300 cases of amputation, collected from the records of Guy's Hospital. He had divided them into four classes; and although he had not thought it necessary to alter the ordinary division of traumatic amputations into primary and secondary, he had made some change in the division of the other forms; for it became evident, in the analysis, that the classing together of such cases as amputations for talipes, tumours, elephantiasis, deformity, and others of a like character, with those of diseases of the joints, a wrong result must ensue; and, practically, this was found to be the case. He therefore divided these cases into *pathological amputations* and *amputations of expediency;* choosing the latter term as more accurately expressing the reason for the operation, as limbs are removed for tumour, talipes, elephantiasis, and deformity, more from expediency than from necessity; and he therefore suggested the use of such a term until a better was proposed. The author then proceeded to an analysis of the table of amputations, including 167 pathological amputations, 33 amputations of expediency, 76 primary amputations, 24 secondary amputations. Having given in detail the analysis of each division, he summed up the whole in the following general conclusions:—1. In amputations of the extremities, taken altogether, 25 per cent. are fatal; 30 per cent. in the lower extremity, and 10 per cent. in the upper. 2. Amputations, as a whole, are fatal in the following order:—Secondary, 50 per cent.; primary, 43 per cent.; amputations of expediency, 30 per cent.; pathological amputations, 12·5 per cent. 3. In pathological amputations of the thigh, 18 per cent. are fatal, or 1 in 5·5; of the leg, 7·7 per cent. are fatal, or 1 in 13·0; in those of the foot and upper extremity, success generally follows. 4. In amputations of expediency of the thigh, 31·5 per cent. are fatal, or 1 case in 3·16; of the leg, 66·6 per cent. are fatal, or 1 case in 1·5; in those of the upper extremity, fatal cases are exceptional. 5. In traumatic amputations of the lower extremity, 60 per cent. are fatal; of the upper, 18 per cent.; and traumatic amputations of the leg are, at least, as fatal as those of the thigh. 6. Secondary amputations are more fatal than primary. 7. In amputations of the thigh for chronic disease of the knee-joint, 1 case only out of 7 proves fatal,* or about 14·5 per cent.; but for acute suppuration, a fatal termination is the rule. 8. In amputations of the lower extremity for tumours, 36 per cent. are fatal; in those of the upper, recovery may generally be expected. Having then given two tables, showing the different causes of death, and their proportions or percentages both to the fatal cases and the whole number of amputations, the author went on to the analysis of each division, and condensed the whole into the following conclusions:—

General Conclusions upon the Causes of Death in Amputations generally. 1. 25 per cent. are fatal; 30 per cent. of the lower extremity, 10 per cent. of the upper. 2. Pyæmia is the cause of death in 42 per cent. of the fatal cases, and in 10 per cent. of the whole number of amputations. 3. Exhaustion is the cause of death in 33 per cent. of the fatal cases, and in 8 per cent. of the entire amputations. 4. The following causes of death are fatal in the annexed proportions:—

	Of Fatal Cases.		Of Whole Number.	
Secondary hæmorrhage	7·	per cent.	or 1·66	per cent.
Thoracic complications	5·6	,,	1·33	,,
Cerebral do.	3·	,,	·66	,,
Abdominal do.	1·4	,,	·33	,,
Renal do.	3·	,,	·66	,,
Hectic do.	3·	,,	·66	,,
Traumatic do.	7·	,,	1·66	,,

Pathological Amputations. 1. Pathological are by far the most successful amputations; 12·5 per cent. proving fatal. Such amputations of the upper extremity are generally followed by success. Of those of the lower extremity, 15 per cent. terminated fatally. 2. Pyæmia is the chief cause of death, proving fatal in 43 per cent. of the fatal cases, and in 5·4 per cent. of all pathological amputations; and when fatal, as a rule, it causes death within fourteen days of the operation. 3. Exhaustion, either from the shock of the accident or of the operation, from hæmorrhage, or all three causes combined, is the cause of death in 33 per cent. of the fatal cases, or 4 per cent. of all amputations. 4. Secondary hæmorrhage is the fatal cause in only 9 per cent. of the fatal cases, and in 1·4 per cent. of all amputations. 5. Hectic, abdominal, and thoracic complications act equally as causes of death in 13 per cent. of the fatal cases, and in 2 per cent. of all amputations.

Amputations of Expediency: 1. 30 per cent. are fatal; but as amputations of the upper extremity are, as a rule, successful, the percentage of this operation upon the lower is much increased, 40 per cent. proving fatal. 2. Pyæmia is the chief cause of death, proving fatal in 60 per cent. of the fatal cases, and in 18 per cent. of all such amputations; and when fatal, as a rule, death takes place within fourteen days of the operation. 3. Death from exhaustion occurs in but 10 per cent. of the fatal cases; and some thoracic or renal complication, or carcinomatous infiltration, are fatal causes in the same proportion.

Primary Amputations: 1. 43 per cent. are fatal; 60 per cent. in amputations of the lower extremity, and 30 per cent. of the upper. 2. Primary amputations are more successful than secondary. 3. Pyæmia is the cause of death in 43 per cent. of the fatal cases, and in 16 per cent. of the whole number; and, when fatal, the symptoms appear, as a rule, between the seventh and fourteenth days after the operation, and cause death in the third or fourth week, and not during the first two weeks, as in pathological amputations and those of expediency. 4. Exhaustion is the cause of death in 32 per cent. of the fatal cases, and in 12 per cent. of the whole number. 5. Traumatic complications prove fatal in 15 per cent. of the fatal cases, and secondary hæmorrhage, cerebral or thoracic complications, about 7 per cent. each; renal disease proving a cause of death in 3·5 per cent.

Secondary Amputations: 1. 50 per cent. are fatal; 68 per cent. in those of the lower extremity, and 12·5 per cent of the upper. 2. Secondary amputations are more fatal than primary, by about 8 per cent. 3. Exhaustion is the chief cause of death, proving the cause in 60 per cent. of the fatal cases. 4. Pyæmia is the cause in 25 per cent. of the fatal cases; secondary hæmorrhage and hectic in the remaining 15 per cent.

Conclusions upon Pyæmia as a Cause of Death. 1. It is the cause of death in 42 per cent., of all fatal cases of amputations, and in 10 per cent. of all amputations. 2. It is the cause of death in the different forms of amputation in the following order:—*a*, in 70 per cent. of all fatal amputations of expediency; *b*, in 43 per cent. of all fatal primary amputations; *c*, in 43 per cent. of all fatal pathological amputations; *d*, in 25 per cent. of all fatal secondary amputations. In amputations of expediency it is the most frequent cause, and in secondary amputations the least. 3. In amputations for acute suppuration of the knee-joint, whether the result of an abscess discharging into the joint or otherwise, pyæmia is a more frequent cause of death than in amputations for chronic disease. 4. It is the general cause of death in amputations for talipes, elephantiasis, and tumours. 5. In primary amputations, and in amputations of expediency of the leg, it is a more frequent cause of death than in the same operations upon the thigh. 6. Upon the whole, pyæmia appears to be a more frequent cause of death in amputations through limbs the tissues of which are in a normal condition, and where a large surface of healthy bone is exposed. 7. In pathological amputations, and in amputations of expediency, pyæmia, as a rule, proves fatal within fourteen days; but, after traumatic amputations, the period of death is about the twenty-fifth or twenty-sixth day.

General Conclusions upon Amputations of the Thigh: 1. That 27 per cent. are fatal; of pathological amputations, 18 per cent.; amputations of expediency, 31 per cent.; primary amputations, 60 per cent.; secondary, 75 per cent. 2. In amputations of the thigh for chronic diseases of the knee-joint, about 15 per cent. are fatal, or 1 case in 7. 3. Amputations of the thigh for acute suppuration in the joint are generally fatal; pyæmia is the chief cause of death in these cases. 4. Exhaustion and pyæmia are causes of death in equal proportions, or in about 40 per cent. of the fatal cases; and in 10 per cent. of all amputations of the thigh. 5. Exhaustion is most fatal in primary amputations, and the least so in amputations of expediency. 6. Pyæmia is most fatal in amputations

* The fatality of the excision of the knee, according to Butcher, is at least 1 case in 5.

of expediency, and the least so in primary. 7. Primary amputations are, for the most part, fatal from exhaustion, 35 per cent. of the cases sinking from this cause, 15 per cent. from pyæmia, and secondary hæmorrhage and traumatic complications 5 per cent. each. 8. Exhaustion, pyæmia, and hectic are equally fatal causes in secondary amputations, proving fatal in 25 per cent. each.

Amputations of the Leg: 1. 37 per cent. are fatal; pathological amputations, 7·7 per cent.; amputations of expediency, 66·6 per cent.; primary amputations, 62·5 per cent.; secondary amputations, 66·6 per cent. 2. Amputations of the leg are 10 per cent. more fatal than of the thigh; the amputations of expediency and traumatic amputations being more fatal, and the latter more frequent. 3. Amputations of expediency of the leg are generally fatal, being twice as fatal as those of the thigh; pyæmia is the chief cause of death in 75 per cent. of the fatal cases, and in 50 per cent. of all such amputations. 4. In primary amputations, pyæmia is the cause of death in half the fatal cases, or in 32 per cent. of all such operations; exhaustion and visceral complications in about 8 per cent. each. 5. Comparing primary amputations of the thigh and leg together, they are equally fatal; but pyæmia is twice as fatal in amputations of the leg as in amputations of the thigh. 6. Half the cases of secondary amputations die from exhaustion; pyæmia and secondary hæmorrhage being fatal in 8 per cent. each. 7. Taking all amputations of the leg together, 42 per cent. of the fatal cases die from pyæmia, and 32 per cent. from exhaustion.

Amputations of the Upper Extremities: 1. 10 per cent. are fatal. 2. Pathological amputations and those of expediency are, as a rule, successful. 3. About 20 per cent. of traumatic amputations are fatal; 22 per cent. of the arm, and 16 per cent. of the forearm. 4. One-third of these fatal cases die from pyæmia; one-third from some traumatic complication; and the remaining third from secondary hæmorrhage or visceral disease.

Mr. Solly thought no one would dispute the utility of the paper. The statistics contained in it, however, extended over a great length of time, and referred more to the treatment of our ancestors than of the present generation. It must be borne in mind that many of those cases which were said to be fatal after amputation, would be fatal independently of that operation; and, although the amputation gave the patient a chance of life, yet that was all that could be said for it in such cases. It had been the rule in the hospitals with which he had been connected, never to make an amputation during an acute condition of the joint; as, unless that could be subdued, a fatal result might be expected. Some of the author's facts appeared to indicate that resection of the joint might often be adopted in preference to amputation.

Mr. Spencer Wells observed that, in a large proportion of the cases reported by the author, pyæmia appeared to have been the cause of death. He would like to ask whether in Guy's Hospital the deaths from this cause were more frequent in the new than in the old buildings. The method of ventilation in the new portion of that Hospital was not one which he should like to see generally carried out. The Hospital smell was very oppressive, and the air was hot and dry,—conditions which he considered likely to favour the increase of pyæmia. In Paris, at the Necker Hospital, there were some old-fashioned buildings, with small rooms, dark, and not well ventilated; not at all the kind of buildings one would think desirable for an Hospital. Subsequently some new buildings had been erected in connection with that Hospital, constructed on the most approved modern principles, as regards ventilation, heating, lighting, etc., and with much larger wards, similar to the new rooms at Guy's. But it was shown a few years ago, by M. Trousseau, that the mortality was greater in the new buildings than in the old. This was explained partly by the artificial system of ventilation, and partly by the fact of so many patients being in the same ward. He (Mr. Wells) would like to know if that was the case in the new portion of Guy's Hospital. He did not know whether operation cases had been put into the new building or not; but he thought the old buildings preferable to the new. He would like to know, too, how far the modes of wet and dry cleaning could be brought to bear upon the number of deaths from pyæmia, and what influence was produced by proximity to the dissecting rooms. He had been informed when at Strasburg, a few months ago, that at the Hospital there, the mortality from pyæmia was very considerable in those wards which were immediately over the dissecting room; and that after removing all operation cases to the opposite side of the building, pyæmia had almost disappeared. This fact, he believed, might throw some light upon the same class of cases in English hospitals, and might justify the objection which the governors of our old hospitals had to the proximity of the dissecting rooms to hospitals.

Mr. Birkett said that they had had no surgical cases in the new wards at Guy's Hospital at present, except some trifling operations: and pyæmia cases were almost unknown in them. Death had certainly taken place from pyæmia in one or two cases, but they were cases of simple wounds. It was a great pity, he observed, that the authorities of the different hospitals in London did not come to some arrangement to prevent the putting of surgical cases in the same ward where pyæmia cases had been placed. He wished that they had better sanitary arrangements in the metropolitan hospitals, and that the governors of hospitals would consult their medical officers more frequently upon such arrangements.

Dr. Barclay, in referring to the circulars issued from the Hospital Committee of the Epidemiological Society, for the purpose of securing returns as to causes of mortality from various medical officers in the different hospitals, etc., remarked that the returns actually furnished were so scanty and incomplete that they were practically of no value.

OBSTETRICAL SOCIETY OF LONDON.

Thursday, March 3rd, 1859.

Edward Rigby, M.D., President, in the Chair.

The minutes of the last meeting having been read and confirmed, the names and qualifications of fifty-nine practitioners were read as candidates for the Fellowship. At a later period of the evening, the ballot was taken, and these gentlemen were afterwards declared to be unanimously elected.

CASE OF MEMBRANOUS CROUP. BY R. U. WEST, M.D.

One evening, Dr. West was sent for to see a child, aged 8 years, suffering from advanced croup. He ordered an antimonial emetic mixture, and a blister to the throat. The vomiting which resulted, caused the expulsion of a large quantity of shreds of membrane, and a large piece which was evidently a cast of the trachea.

ON A NEW METHOD OF EXAMINATION OF THE TUMOUR IN CASES OF SUSPECTED CYSTIC DISEASE OF THE OVARY; WITH THE DESCRIPTION OF AN INSTRUMENT FOR EFFECTING THE SAME. BY GRAILY HEWITT, M.D.

The author commenced by showing the many questions which the physician or surgeon anxiously puts to himself when called upon to administer relief in cases of presumed ovarian cystic disease, and more especially the question which he has to consider as to the particular method of treatment to be adopted. Thus, a case of considerable enlargement of the abdomen may come before us in which the shape of the abdomen, the nature of the visceral displacement, the general symptoms and previous history of the patient, render it tolerably certain that a tumour connected with the ovaries is present. But it is extremely desirable that we should also be able to learn the exact nature of the ovarian tumour, and the presence or absence of complications, more especially if we have to decide whether ovariotomy or simply paracentesis and injection should be resorted to. Dr. Hewitt proposed, by means of an instrument which he names the "ovarian sound," to probe the interior of the cavity in which the fluid is contained. The instrument to be thus used consists of an ordinary cannula and trocar; but the cannula is provided with an India-rubber diaphragm, having a small perforation in its centre through which the trocar passes. The sound is a slender rod, composed of the same metal as the ordinary uterine sound, and, therefore, flexible, graduated in inches, and fourteen inches long. It is provided with a smoothly-rounded extremity, and is fixed in a handle of convenient size. The trocar and cannula having been passed through the abdominal wall, the trocar is withdrawn; the sound is then introduced through the cannula before the contents of the cyst have been allowed to escape, and the operator examines the interior of the cavity leisurely and safely.

ON TRANSFUSION OF BLOOD: ITS HISTORY AND APPLICATION IN CASES OF SEVERE HÆMORRHAGE. BY CHAS. WALLER, M.D.

Having given a historical introduction, Dr. Waller went on to relate a case in which he seems to have saved life by the operation of transfusion. The patient had a severe attack of flooding after labour, and when seen by the author was in-

sensible, the extremities and general surface were cold, the respiration was laborious, the eyelids closed, and no pulsations could be felt in the radial or carotid arteries. The first injection of two ounces of blood rendered the beat of the artery discernible; and after the introduction of an additional six ounces the patient rallied, and recognised her medical attendant. A little brandy was then given, and recovery gradually took place. The author concluded with a few remarks on the best mode of performing the operation.

In reply to some questions by Dr. Tanner, the author stated that he had resorted to transfusion altogether in five cases and that four had recovered. He also explained that though careful not to allow any air to pass into the vein, yet he did not think this occurrence would be always attended with those formidable results usually predicted.

Dr. Barnes observed that every one who had seen a woman perish from flooding must have been haunted by the regret that he had not been prepared with the means of transfusing. It was much to be desired that this operation should be brought to a state of practical perfection. There were yet, however, several points which required investigation. He was glad to learn from a letter from M. Brown-Séquard, that that distinguished physiologist contemplated delivering in London a series of lectures on the means of preventing death from asphyxia, in the course of which he (Dr. Barnes) trusted that the whole question of transfusion would receive a thorough elucidation. The experiments related in his *Journal de Physiologie* were replete with interest. The leading facts established were, that all the contractile and nervous tissues may recover their functions under the influence of blood charged with oxygen, and that the success of transfusion depended upon supplying blood-globules, charged with oxygen. It appeared that venous blood, bearing an excess of carbonic acid and less oxygen, was not so useful. The fibrine was of no use; and in order to obviate the risk of coagulation, it was better to remove it by whipping it out. By this process the red globules would also become charged with oxygen, and fitted for transfusion. Thus the objection to using venous blood, which was much more convenient to obtain, was removed. Amongst many deeply-interesting experiments, M. Brown-Séquard had shown, that by transfusing blood, the function of irritability in the muscles of an amputated arm might be restored many hours after separation from the body. In illustration of these views, Dr. Barnes cited seven cases of transfusion, related by Mr. Higginson, of Liverpool, in 1857. Two of these cases were perfectly successful, and it could not be said that the others died from the operation. In one, however, the operation was impeded by coagulation of the blood, and in two others it was stated that the blood was dark and sluggish. It was highly probable, then, that the mode adopted by Dr. Waller, of injecting venous blood direct was not the best, and he looked forward with extreme interest for the further researches of M. Brown-Séquard.

ON A CASE OF EMOTIONAL MONOMANIA RECURRING DURING SUCCESSIVE PREGNANCIES.

BY ROBERT DUNN, ESQ., F.R.C.S.

After making some general observations on the effect of bodily states upon mental manifestations, Mr. Dunn proceeded in the detail of a striking instance of the dominant power of emotional apprehension—the sheer dread of bodily pain—in upsetting the balance of the mind, in the case of an intelligent but highly impulsive and excitable lady, during the parturient state in several successive pregnancies. The patient was under Mr. Dunn's observation from 1848 until 1854, when she left London. She died eighteen months afterwards, and unfortunately no *post mortem* examination was made. In her first labour she underwent severe bodily pain and suffering; and the great fear of pain in prospect embittered the period of gestation in her four subsequent pregnancies, the dominant and depressing feeling of her mind constituting a kind of monomania. After the birth of her last child, favourably accomplished while under the influence of chloroform, the fear of death took possession of her, and she tortured herself with thinking of the pain and agony of the act of dying. It was in vain to attempt to reason with her; she became violent and excited at times, and it was necessary to have a female attendant from an asylum to take care of her. For the rest of her life she remained an invalid; her fears continued undiminished; and she became exhausted and attenuated to the last degree, until at length she sank, her perceptions remaining acute until the last hour of her existence.

MEDICAL SOCIETY OF LONDON.

Monday, February 14th, 1859.

W. H. Willshire, M.D., President, in the Chair.

HYSTERIA, CONSIDERED AS A CONNECTING LINK BETWEEN MENTAL AND BODILY DISEASE. BY W. CAMPS, M.D.

Dr. Camps's object was to draw attention to such forms of hysteria as present marked evidence of *psychical*, in addition to, or complication with, *somatic* affection. Until within a comparatively recent date, it had been the custom to consider mental disease, and apart from bodily disease, as unconnected with or independent of each other. But insanity is far more a bodily disease than has been hitherto considered; and in cases of this malady there is mostly, if not always, impairment of the proper healthy cerebral structure.

Dr. Camps gave a brief account of the hysterical paroxysm, which is almost, though not exclusively, confined to the female sex. It is, however, in the moral state and motives, that not unfrequently attend or accompany the severer forms of hysteria, that we may recognise without difficulty the approximation of this disease to some of the forms of mental disease. In severe cases of hysteria, amidst considerable general disorder, the nervous system being chiefly involved, the proper functions of the brain often become deeply affected. There is observed in such an increased susceptibility to impressions, a great rapidity of movements, together with a capriciousness of motives; the countenance indicates the alterations that take place in the feelings of the patient; and in the worst cases, the most amiable sentiments are observed to be converted into the most unamiable and repulsive. In some, there appears to be, at times, a complete metamorphosis of the whole moral character. This state of the disease becomes a subject of the deepest importance, more especially in regard to its moral treatment, so far as regards the imposition of personal restraint, or confinement of the patient; for nothing would be more injurious to a hysterical patient in this condition than undue interference with personal liberty. The functional activity of the spinal cord, as well as of the brain, may be morbidly diminished, or augmented, or perverted; and this latter state is especially the condition in hysteria. The perversion of the functional activity of the spinal cord is most marked in some cases, in which there is an extreme irritability of the cord at least, if not of the entire cerebro-spinal axis; and in the severer forms of the disease there doubtless exists an excessive irritability of the whole nervous centres; and it may be, of the entire nervous system, including even the nerves themselves. It might be assumed, that the irregular, convulsive, and impulsive actions of hysterical patients, depend rather upon some state of the blood, which alters its healthy relation to the nervous tissue, than upon any structural alteration of the proper nervous tissue itself.

During the last nine months, Dr. Camps had had under his care a somewhat severe and remarkable case of hysteria, which, he thought, was one that afforded him good reasons to conclude that it, and similar cases, present phenomena that clearly show a connection between mental and bodily disease. The subject of this affection was a lady, above 50 years of age, of a highly nervous temperament, who first came under his notice, presenting many of the ordinary characters of hysteria; but, as the disease gradually developed itself, this patient presented, in addition, many of the characters of a very protracted and aggravated case of this disease. There were paroxysms of choreic movements; at first, chiefly confined to the lower extremities, and to the left side of the trunk; these gradually affected, in a slighter degree, the upper extremities; being attended then with considerable paroxysmic palpitation of the heart, and heavy, laboured respiration. There supervened excessive restlessness of the body generally, so that, when out of bed, the patient was almost always in bodily action, seldom or never sitting, frequently not even when at meals; in motion whilst standing, and very frequently walking hurriedly about in various apartments of the house. This was followed by, and accompanied with, excessive talkativeness, so as to fatigue her companions. When remonstrated with, and requested to be silent, her reply was, "I must talk, for I cannot help it". The subject of her conversation was almost invariably herself, and her peculiar ailment and condition, and this ultimately assumed the form of intense selfishness or egotism. There was no derangement of the special senses, nor of the general cuticular sensation. The disease appeared to ascend gradually higher along the cerebro-spinal axis, and at length to reach the sensory ganglia, and the cerebrum itself; for certain *psy-*

chical phenomena presented themselves at times, bearing the closest affinity to those exhibited in some forms of mental disease. Commonly, the patient slept well during the earlier part of the night, and seldom or never complained of pain in any part of the frame. The faculties of perception and memory were unimpaired, as was the judgment also, in relation to all matters of business demanding close attention; the imagination was in too lively exercise at times, but the will appeared to have lost its controlling power over the current of the thoughts. The patient would frequently remark, "My thoughts master me; I cannot help thinking about myself; I seem at times to have lost the power to think of anything, or of anybody, besides myself." Frequently, but not always, there was great irritability of temper; and this would sometimes be expressed in words, and sometimes in actions. The will having lost its controlling power, the impulses arising from this state of excessive emotional sensibility, were occasionally expressed in very irregular and extraordinary phrases and actions of the body.

The view the author took of this case was, that it was mainly connected with the cessation of the menstrual function. Moreover, in this case, there was excessive irritation, possibly congestion, of the greater part of the cerebro-spinal axis, including at least the sensory ganglia at the base of the brain—a condition of parts sufficient to account for most if not for all the symptoms connected with the nervous system.

Dr. Camps concluded by a brief reference to the treatment of hysteria. The measures recommended were: 1. The use of such agents as improve the general health, and especially the general state of nutrition of the nervous tissue; 2. Of such agents as remove the exciting causes of the paroxysms; and lastly, of all such agents as are likely to act beneficially upon the mental state and condition of the patient.

Monday, February 21st.

E. Canton, Esq., in the Chair.

THE NATURE OF THE SYPHILITIC VIRUS, AND THE MODE IN WHICH IT ACTS. BY J. L. MILTON, ESQ.

The author began by remarking upon the peculiar tendency to ulceration which characterised syphilis, more than any other disease, there being no tissue capable of taking on this action in which it was not occasionally manifested. He objected to the forced comparisons between syphilis and the exanthemata, these being much more rapid in their evolution, and marked by a very different course; they ran through different stages, while, at the outset, no one could foretell the exact type a given case would assume. Neither did syphilis resemble poisoned wounds, which ran a still more erratic course, and always tended to assume a dangerous, uncertain, asthenic form of inflammation, over which art had considerable influence. He therefore argued that, in syphilis, there was a peculiar action set up; and then the question came, By what agent is this effected? The invariable answer was, a blood-poison—a term which had not even been defined, and which, so far as palpable proofs were concerned, was as purely a supposition, a symbol, as any of the old doctrines of the virus being an acid, an alkali, a ferment, worms, the result of a disagreement between the naturals and non-naturals, or any of the countless conditions with which vanity and dogmatism had ever encumbered medicine. It was difficult to understand what most authors meant when they used the term. Mr. Milton therefore proposed to take for discussion the doctrine of Professor Miller, who had at least spoken clearly on the subject. This author distinctly says that "the virus enters the system through the circulation", and that "in the system a second zymotic process is established". He (Mr. Milton) reduced this doctrine to three propositions—1. That a diseased secretion, which might be called a virus, is conveyed from one person to some part of the surface of another; 2. That this results in the formation of an ulcer, which possesses the wonderful faculty of discharging its secretion two ways at once, out of the system, and into the blood; 3. That this secretion accumulates in the system till some accident conducts it up by the skin. The theories of its being a ferment or parasite received their due meed of attention. To this he (Mr. Milton) objected that, as the ulcer discharges from its surface, in the most harmless way, an infinitely larger quantity of the virus than is ever taken up into the system, absorption would be about the greatest blunder in such a case that we could attribute to Nature—an express arrangement, indeed, on her part, for the production of secondary symptoms. Absorption of the virus could only take place through the agency of the veins or lymphatics; and it was a question how far this was possible, without solution and digestion of the pus. An amount of pus, such as a very small chancre will yield, produces, when introduced into the veins, depression, anxiety, prostration, serious suppuration, and even death. The hypothesis, that the virus lurks in the blood, simply meant, in plain English, that a few globules of pus, or a few drops of serum, reside for months or years in the midst of an immense body of fluid undergoing such ceaseless change that perhaps one-fifth of its entire bulk is thrown off every twenty-four hours; that a poison fructifies for years in a highly vitalised fluid; and that, while the organism can throw off daily pounds of secretion by a natural process, it cannot get rid of a few drops of pus without disturbing the whole group of animal functions. There was no necessity to invent any such machinery as a blood-poison: small-pox and vaccination, while they did not communicate any lasting changes to the blood, impressed such alterations on the organism as to make it incapable of taking on the disease again. In hydrophobia, the poison had been considered to lurk in the same way as in syphilis; yet, though we had the most exhausting convulsions of the system, no specific change in the blood had ever been traced. Syphilitic chlorosis, often viewed as a proof that the virus had taken up its abode in the system, was simply a coincident effect of the action of the virus: moreover, it was not an inevitable result when no mercury was given. The author submitted that there was no proof that the secondary symptoms expend a virus; nor would such a fact, if granted, affect the question now mooted. If the virus were thrown off in this way, the most rational plan would be not to interfere with the efforts of Nature to eliminate it. When once domiciled in the blood, how did the mercury get at the virus? for the metal was insoluble; and experience had shown that, if forcibly introduced into the veins, it could not pass the capillaries in the lungs. All the experiments made by injecting foreign matters into the veins proved that the resistance of the organism commenced at once; that Nature's efforts tended to bar the passage against their entrance—not to absorb and eliminate them. Finally, he contended that it was possible to explain the phenomena of disease without resorting to the gross mechanical theories of humoralism.

Anniversary Meeting, Tuesday, March 8th, 1859.

W. H. Willshire, M.D., President, in the Chair.

The Eighty-sixth Anniversary Meeting of the Society was held at the Thatched House Tavern, 12, St. James's Street.

ELECTION OF OFFICERS AND COUNCIL.

The following gentlemen were elected officers and Council for the ensuing year:—*President:* John Hilton, F.R.S. *Vice-Presidents:* R. Greenhalgh, M.D.; G. Owen Rees, M.D., F.R.S.; Sir John Fisher; R. Wade. *Treasurer:* James Bird, M.D. *Librarian:* W. A. Harrison. *Secretaries in Ordinary:* Thomas Bryant; F. W. Mackenzie, M.D. *Secretary for Foreign Correspondence:* T. Davidson, M.D. *Other Members of Council:* R. Barnes, M.D.; J. Birkett; I. B. Brown; John Cockle, M.D.; Victor De Méric; Thiselton Dyer; Francis Hird; G. Johnson, M.D.; J. Marshall; P. Marshall; W. V. Pettigrew, M.D.; P. C. Price; George Ross; C. H. F. Routh, M.D.; H. H. Salter, M.D.; J. L. Siordet, M.D.; R. Taylor; E. J. Tilt, M.D.; H. Walton; W. H. Willshire, M.D. *Orator for* 1860: John Gay.

THE ANNUAL ORATION

Was delivered by C. H. F. Routh, M.D., in the place of Dr. Lankester, who had been elected last year to the office of orator, but who was prevented by indisposition from performing the duty. Dr. Routh gave an interesting sketch of the origin and progress of medical societies in the metropolis, and concluded with calling on the members to emulate the example of Fothergill, Lettsom, and the other founders of the Medical Society of London.

THE FOTHERGILLIAN GOLD MEDAL

Was delivered by the President to A. T. H. Waters, Esq., of Liverpool, for his Essay on the Anatomy of the Human Lung.

THE DINNER.

About forty of the members dined together at half-past six o'clock. Dr. Willshire occupied the chair. Among the guests were the President of the Royal College of Physicians, Professor Owen, Mr. Wentworth Dilke, etc.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, April 14th, 6 P.M.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

Social and scientific meetings of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on the undermentioned days:—

Friday, March 25th, 1859, at 3.30, at the Town Hall, Gravesend.

Friday, April 29th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

Parliamentary Intelligence.

HOUSE OF LORDS.—Tuesday, March 15th, 1859.

MEDICAL ACT (1858) AMENDMENT BILL.

This Bill was read a second time.

HOUSE OF COMMONS.—Thursday, March 10th, 1859.

LUNACY.

The Solicitor General gave notice that he would move for leave to bring in a Bill to amend the law on Commissions of Lunacy.

Friday, March 11th, 1859.

VACCINATION.

Mr. Monsell wished to put a question to the Vice-President of the Committee of Privy Council of Education, with reference to the exercise of the powers vested in that Council for the protection of health. He must express a doubt as to whether proper precautions to prevent the spread of small-pox had been carried out; for he found by the returns that during the last sixteen weeks there had been more deaths from small-pox than there had been during the preceding eighteen months; and that, too, in the metropolis alone. It appeared from the return of the Registrar-General, that in twenty-seven counties of England and in the whole of Wales, this epidemic prevailed; and he wished to know if the powers given to the Government by the Act of last year had been carried out. It had been stated in another place, that something had been done to secure an efficient supply of lymph, and that certain recommendations had been issued to the poor-law unions; but he believed that the important power given of framing regulations which should ascertain the qualification of the public vaccinators in the different unions, and secure the services of the best, had not been carried into effect. The returns showed that out of 1,000 properly vaccinated, only three died from attacks of small-pox; but 150 out of 1,000 died of those who were improperly vaccinated. It was most important, therefore, that the best vaccinators should be obtained; and he wished to know what steps the Government had taken to secure that result.

Mr. Adderley said that the right honourable gentlemen was quite right in saying that small-pox had been exceedingly rife lately, and that the Act of last session had been introduced for the purpose of checking that disease; but he thought he could prove that the Committee of Privy Council had exercised to the utmost all the powers they had obtained under that Act. With respect to the issue of regulations to the boards of guardians, with the view of raising the qualification of the public vaccinators, he might mention that the Government were now issuing such regulations as could be enforced. There had been some little delay, because in the first instance it was necessary that some correspondence should take place between the Committee of Privy Council and the Poor-Law Board, in respect to the regulations which could be enforced by them. It was in the next place hoped that they could better carry out the regulations through the machinery of the Medical Council, called into existence by the Medical Practitioners' Act; but finding they could not very well carry out their object by means of that Council, they were now issuing the necessary regulations by which the Poor-Law Board insist that all future contracts which shall be made, should be made only with those whose names appear on the Register provided by the Medical Practitioners' Act, as having passed an examination before the proper authorities. They had also stipulated for returns of successful vaccinations, which would be made from time to time; and by comparing these returns with the number of births, they would be able to see where the deficiencies arose; and they would then send inspectors round to enforce the compulsory powers given under the Act. The reason why the Compulsory Vaccination Act was inadequate, was more from the want of persons whose duty it was to put the law in operation than from any other cause, and that had been remedied. There was another thing he might mention. In had been determined to establish ten depôts of lymph in the kingdom, and thus a constant supply would be always at hand. They had exercised the power of inspecting all the unhealthy towns—such as Conway and others—in which complaints had been made of the prevalence of epidemics, and the results of the inquiry had been very beneficial. When the report was presented to the House, he thought that it would show that the Government had done all that it was possible for them to do to provide for the efficient working of the Act. [*Hear, hear.*]

Monday, March 14th.

METROPOLITAN DRAINAGE.

Mr. Williams asked the honourable member for Bath, as a member of the Metropolitan Board, what steps had been taken by that Board with reference to the main drainage of the metropolis, particularly on the south side of the river.

Mr. Tite had very recently joined the Board, but he had obtained from the Chairman what he believed was a correct account of the present state of the works. On the south side of the river there were two systems of sewers—the high level and the low level. The high level sewer began at Clapham, and ended at Deptford; it was ten miles in length, and its estimated cost was £203,000. The contracts for this sewer had been concluded last week. The lower level sewer began at Putney, and ended at the same point as the higher one—Deptford; it was eleven miles long, and the contracts for it would be advertised in June next. The two systems of drainage on the south side of the river would end at the same point at Deptford Creek, where the contents of the lower sewer would be pumped into the higher one, and flow into the estuary of the Thames at Erith. On the north or city side of the river, there were three systems of sewers; one began at Hampstead, and ran for seven miles and a quarter to a terminating point on the river Lea. The cost of this sewer was estimated at £252,000, and it would probably be finished in twelve months. The second sewer began at Kilburn, and ended at the same point on the river Lea as the first—a distance of ten miles; it would be contracted for at the end of the year. The third system, being involved with the embankment of the Thames, would require a longer time in construction. All these systems meeting at one point on the Lea, the water would there be raised from the lower to the higher level, and run in a common conduit to the sea at Barking Creek. The works would, it was hoped, be completed in four years; the whole of the money, £3,000,000, had been advanced by the Bank of England, at 3¾ per cent. It was estimated it would all be paid off in forty years by a 3*d.* rate on the metropolis, amounting to £150,000 in the present year; this was £10,000 more than the original estimate of the amount of the rate; and if it continued to increase in the same ratio, it was believed the £3,000,000 would be paid off in thirty, instead of forty years.

Wednesday, March 16th.

LUNATIC POOR (IRELAND) BILL.

On the order for going into Committee upon the Lunatic Poor (Ireland) Bill,

Colonel Greville, after urging various objections to the machinery and provisions of the Bill, moved to defer the Committee for six months.

Lord Naas said the objections had been discussed fully on the second reading of the Bill, which was founded upon the recommendations of a Commission. He reviewed these recommendations, showing the extent to which they had been adopted in the Bill, and stating the reasons for the non-adoption of one of the suggestions of the Commissioners.

Mr. J. Fitzgerald could not support Colonel Greville's motion, which would put an end to the Bill, being of opinion that there ought to be legislation upon the subject; and he recommended its withdrawal, in order that he might move that the Bill be referred to a select Committee, to be empowered to introduce a provision that the expenses of maintaining the lunatic poor in Ireland shall be raised by rates levied in the same manner as rates for the relief of the destitute poor under the Irish Poor Relief Acts. He argued at some length in defence of this proposition, and against certain portions of the machinery of the Bill.

Colonel Greville withdrew his motion; and Mr. Fitzgerald thereupon moved his amendment.

After considerable discussion, in which the amendment was strongly pressed by Irish members, Lord Naas reluctantly gave way; and the Bill was ordered to be referred to a Select Committee without any special instruction.

RECREATION GROUNDS BILL.

This Bill was read a third time, and passed.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Hanks. On March 15th, at Mile End Road, the wife of *Henry Hanks, Esq., Surgeon, of a son.

Kearney. On March 12th, at Long Ditton, Kingston, Surrey, the wife of Edward Kearney, Esq., Surgeon, of a son.

King. On March 13th, at 7, Thurlow Place, Hackney Road, the wife of Wm. Talbot King, Esq., Surgeon, of a daughter, stillborn.

Ormerod. On March 15th, at Brighton, the wife of *Edward Latham Ormerod, M.D., of a daughter.

MARRIAGES.

Corbould—Wilson. *Corbould, George G., Esq., Surgeon to the Bristol Dispensary, to Elizabeth, youngest daughter of *John Grant Wilson, Esq., Surgeon, of Clifton, Bristol, on March 8th.

DEATHS.

De Mierre. On March 11th, at St. Leonard's-on-Sea, aged 18, Albert Turner, younger son of *Albert De Mierre, M.D.

De Morgan. On March 13th, at 51, Upper Seymour Street, aged 41, the wife of Campbell De Morgan, Esq., Surgeon.

Haliday. On March 5th, in Dublin, Marian Emily, eldest and last surviving daughter of the late William Haliday, M.D., of Clifton, county Down, Ireland.

Humble. On March 10th, Edward Charles, son of William E. Humble, M.D., of London Road, Southwark, aged 10.

Irwin. On March 9th, at 5, Ardenga Terrace, Monkstown, Ireland, Isabella, widow of Henry Irwin, M.D., Deputy Inspector-General of Army Hospitals.

Monro, Alexander, M.D., F.R.C.P.E., F.R.S.E., Emeritus Professor of Anatomy in the University of Edinburgh, at Craiglockhart, aged 85, on March 10th.

APPOINTMENTS.

*Rendle, E. M. Russel, Esq., elected one of the Surgeons to the Royal Eye Infirmary, Plymouth.

HEALTH OF LONDON:—WEEK ENDING MARCH 12th, 1859.

[*From the Registrar-General's Report.*]

The deaths registered in London in the week ending last Saturday, declined to 1174, having been in the previous week 1215. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1228; but as the deaths included in the present return occurred in an increased population, they should be compared with the average raised in proportion to that increase; namely, with 1351. Therefore the number of persons who died last week is less by 177 than the number that would have died if the average rate of mortality had prevailed.

The deaths referred to diseases of the zymotic class in the aggregate do not exceed the corrected average at the present time, while those caused by affections of the respiratory organs, chiefly bronchitis, pneumonia, and asthma, are 209, being 100 less than the average. On the other hand, though scarlatina (including diphtheria) has become less fatal, the deaths from it are still very numerous, those of last week having been 79, against 32, the average number of corresponding weeks. Nineteen of the 79 were from diphtheria, and occurred in sub-districts as follows:—Kensington Town sub-district, 1; Belgrave, 1; Cavendish Square sub-district, 1; Tottenham Court, 1; Islington East, 2; Hackney, 1; St. Clement Danes, 1; Goswell Street, 1; Finsbury, 1; Haggerstone East, 1; Bethnal Green, 1; St. Mary Magdalen, Bermondsey, 1; Leather Market, 1; St. Peter, Walworth, 1; Peckham, 1; Rotherhithe, 1; Plumstead, 1; and Lee, 1. Fourteen women died after childbearing. A labourer, aged 40 years, found in the public road in Paddington, died from destitution. One person died of intemperance, besides three of delirium tremens. Five nonagenarians died in the week, all widows, the oldest of whom was 95 years.

Last week the births of 970 boys and 894 girls, in all 1864 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1736.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29.881 in. On three days, the mean daily reading was above 30 in. The barometrical readings varied from 29·55 in. to 30·35 in. The mean temperature of the week was 45·7°, which is 5·4° above the average of the same week in 43 years (as determined by Mr. Glaisher). On Saturday, the mean temperature was 53·5°, which is 12·9° above the average of the same day. On that day, the highest reading in the shade was 58°, and the lowest was as high as 50°. The thermometer in the shade attained its highest point both on Sunday and Monday, viz., 59°, and it fell to its lowest on Thursday, 29·7°. The range of the week was therefore 29·3°; the mean daily range was 16°. The difference between the mean dew-point temperature and air temperature was 6·6°. The mean degree of humidity of the air was 78. The mean temperature of the water of the Thames was 47·9°. The wind blew on six days from the south-west. The rain-fall was 0·09 in.

SALE OF POISONS BILL.

The following petition has been sent from the Royal College of Physicians of Edinburgh:—

Unto the Honourable the Commons of Great Britain and Ireland in Parliament assembled,

The humble petition of the Royal College of Physicians of Edinburgh, incorporated by Royal Charter,

Humbly Sheweth,—

That your petitioners, the Royal College of Physicians of Edinburgh, have had under their consideration "A Bill to Regulate the Keeping and Sale of Poisons", presently before your Honourable House.

That your petitioners are of opinion that the numerous fatal cases of accidental poisoning render some such Bill very desirable.

That your petitioners are of opinion that the Bill now before your Honourable House will not check the evils it is intended to remedy.

That your petitioners are of opinion that persons who know nothing of the nature and effects of poisons, should not be allowed to sell them in small quantities; and they would therefore beg leave to recommend that no one, with the exception of wholesale dealers, colourmen, and drysalters, who

might be specially licensed for the purpose, should be allowed to retail poisons, unless they are druggists or apothecaries.

That your petitioners, observing that very many of the cases of poisoning, especially in the manufacturing districts, occur from the use of patent medicines containing poisonous substances, especially opium, are of opinion that the whole system of patent medicines requires revision; and that those which contain poisons should be subject to the same regulations as any other preparations of that poison.

Your petitioners therefore humbly pray your Honourable House to take the premises into consideration, and to amend the said Bill, so as to restrict the sale of poisons by retail to druggists or apothecaries, and to wholesale dealers, colourmen, and drysalters, specially licensed; and also to place the sale of patent medicines, containing poisons, under similar regulations.

And your petitioners will ever pray.

Signed and sealed in name, and by authority of the College. (Signed),

Alex. Wood, M.D., *President.*

POOR-LAW MEDICAL REFORM.

DEPUTATION TO THE LATE PRESIDENT OF THE POOR-LAW BOARD.

On February 24th, a Deputation of Poor-law Medical Officers, headed by Mr. Griffin, and accompanied by several members of Parliament, waited on the Right Honourable T. Sotheron-Estcourt, M.P., then President of the Poor-law Board, for the purpose of laying before him certain requests for an amendment of the law regulating Poor-law medical relief. From seventy to eighty medical officers of Unions were present. Mr. Griffin, having been introduced by Mr. Pigott, M.P., stated that he appeared as the Chairman of the Poor-law Medical Reform Association, on the lists of which 1648 members were enrolled. He then stated the requests of the Poor-law medical officers in the following order, commenting on each as he proceeded.

1. That the appointments of present and future medical officers, whether of the workhouse, district, or parish, shall be permanent, subject only to the general order of the Poor-Law Board, dated May 25th, 1857, (art. 5), and to the rules now in force as to good conduct, but they shall have power to resign on giving a reasonable notice, as is the case at present.

2. The qualification of future medical officers shall be double (medical and surgical) and of the class laid down in the 21st and 22nd Vict. cap. 90, but none of the present medical officers shall be removed for want of those qualifications, provided they be registered, as is now required by law.

3. That a uniform scale of payment shall be adopted throughout the entire kingdom.

4. That the salaries of the medical officers of workhouses, districts, and parishes shall be annually fixed at not less than five shillings and sixpence per head upon the average number of paupers in the receipt of relief in the first week of January, and the first week of July of the preceding year, where the guardians find the medicines, and six shillings and sixpence per head where the medical officer finds the medicines. That an additional sum per head shall be added to the salaries of not less than one shilling for each mile beyond the first mile, and two shillings for each mile beyond the first five miles a patient lives from the medical officer's residence. The mileage to be annually so computed that one rate of payment shall be made for all who reside in a workhouse, district, or parish, as the Poor-Law Board may decide.

That all patients annually attended by the medical officer, whose names are not included in the list of those in receipt of relief for the preceding year, shall be added to the average number recorded on that list, and the salary fixed for the succeeding year at the same rate as if they had been so recorded.

5. *For Workhouses.* A salary shall be fixed on a uniform and definite system, with mileage, where the distance of the house is above one mile from the residence of the medical officer.

6. *For Districts and Parishes.* A salary shall be fixed by the guardians, with the sanction of the Poor-Law Board, upon the following basis:—Not less than one shilling and sixpence per head upon the average number of persons in the parish in receipt of relief, in the first week of January and the first week of July in each year, upon an average of the last three years; and in addition to this, not less than one shilling and sixpence per case upon the number of cases attended in the district or parish, upon an average of the last three years, where the guardians find the medicines, and two shillings and sixpence per case where the medical officer finds the medicines.

7. That a fixed salary, founded on the average number of cases attended during the last three years, be adopted; the sum to be calculated at not less than 5*s.* per case.

8. In all the foregoing cases, whether of the house, district, or parish, an additional sum per case to be fixed by the guardians, with the sanction of the Poor-Law Board, shall be paid, of not less than one shilling for each mile beyond the first mile, and two shillings for each mile beyond the first five miles the patient resides from the medical officer's house; one journey in a quarter only to be charged for, if the per case payment be adopted.

9. The mileage to be so computed that one rate of payment shall be made for all who reside in a workhouse, parish, or district, as the Poor-Law Board may decide.

10. That a revision of salaries take place triennially in each union, if desired, either by the Poor-Law Boards of guardians, or medical officers.

11. A table of fees for midwifery and surgical operations, and a list of more expensive drugs and appliances, shall be drawn up by the Poor Law Board, with the advice of the General Council of Medical Education and Registration of the United Kingdom. Every medical officer appointed to attend any workhouse, district, or parish, shall, in addition to his salary or other remuneration, be entitled to his fee according to such table, after attending a case included in it; and any such medical officer shall be at liberty to direct any drug or surgical appliance included in such list, to be made up and supplied by some druggist, approved by the guardians, or their own dispensary, if they shall have established one.

12. In cases of attendance upon continuous sickness extending beyond three months, if payments be made by the case, each of such cases shall be considered, after every three months attendance, as a fresh case.

13. Orders for medical relief shall be given by the relieving officer in all cases where a poor person resides within two miles of his house, and by the overseer where the poor reside beyond that distance, and in all urgent cases, as now provided by law.

14. If the medical officer shall have attended a case represented to be of emergency and the person too poor to procure medical aid, and the guardians shall afterwards determine that the further attendance of the medical officer at the charge of the parish or union, ought not to be given, such case shall, notwithstanding, be reckoned and paid for according to the scale laid down.

15. That a medical man conversant with union practice, should have a seat at the Poor-Law Board, and especial control over the medical department.

16. That any medical officer who desires to remain under the present regulations may do so, if the Board of Guardians of his union and the Poor-Law Board are agreeable, but his successor in office shall come under the new regulations.

17. That should the salaries be fixed on the number of paupers attended, it is respectfully submitted that the same should be paid from the consolidated fund, in order that the whole kingdom may bear the burden equally; all other payments to be a union, and not a parochial charge.

Mr. Estcourt, in his reply, admitted the necessity for reform; and stated it to be his intention, if possible, to introduce a Bill which might be printed and considered during the recess.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Mr. E. M. R. Rendle; Dr. F. J. Brown; Mr. W. B. Wall; Dr. Markham; Mr. G. Greaves; Dr. A. W. Williams; Dr. Brittan; Dr. W. Hinds; Mr. A. Prichard; Mr. H. W. Rumsey; Dr. S. M. Bemiss; Mr. H. Hanks; Dr. P. H. Williams; Dr. Styrap; Mr. J. C. S. Jennings; Dr. Russell; Mr. Milton: Mr. T. Holmes; Mr. T. M. Stone; Mr. Stevens; Mr. Howkins; Mr. Griffin; Messrs. Savory and Moore; Dr. E. Bennett; and Mr. J. Z. Laurence.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

MEDULLARY CANCER OF THE PERITONEUM.

Under the care of JAMES RUSSELL, M.D.

(E. RYLAND, Esq., *Clinical Clerk.*)

SUSAN J., aged 70, was admitted on February 18th, 1859. At her admission, she was in a state of great exhaustion, and from this state she never rallied. The few particulars of her illness which could be gained, were as follow:—She had fever a fortnight before last Christmas, but she returned to her usual occupation in a month's time. During the fever, she had neither pain in her bowels nor diarrhœa; but three weeks ago she was suddenly seized in the night with severe pain in the upper part of her abdomen, and in the course of a week she began to suffer from vomiting; the bowels became much enlarged. At the commencement of this illness, anasarca appeared in the left lower extremity. Her previous health had been very good. She had never suffered from any abdominal symptoms. She had worked very hard for the last ten years, and had suffered much from anxiety.

On admission, there was advanced emaciation. The abdomen was much distended, but free from tenderness; the flanks were dull on percussion, and there was evident fluctuation in both these regions. Marked induration, of limited extent, existed in the hypochondriac region, and extended into each iliac region. On the left side it terminated by a well defined but irregular margin; on the right side its limits were less distinct to the touch. The indurated body was quite superficial, and appeared to be intimately connected with the abdominal parietes. There was considerable œdema of the left lower extremity, as high as the knee, and to a much less extent of the right also. There was no indication of disease in the femoral vein, nor any venous distension in either limb. Nothing worthy of note was discovered in any other organ.

During the short remainder of her life, she had considerable irritation in her bowels, frequent but ineffectual calls to use the bed-pan, with much movement of flatus; the small quantity of fæcal matter which was passed was in part solid, in part fluid. A small dose of castor oil produced several liquid stools, but without much relief; and she afterwards suffered for two or three days from diarrhœa. She died on March 4th, of gradual exhaustion. Her features became sunken; her voice faint; and her tongue dry and glazed. She was supported mainly by brandy.

EXAMINATION OF THE BODY twenty-four hours after death. *Chest.* The heart was small; it weighed only six ounces and a half. Its fascicles were in an early stage of degeneration; their transverse striæ were faintly marked, and the sarcous elements were confused and indistinct, and presented rows of bright globules. Many fascicles were reduced to one-half their normal diameter. The left lung was collapsed, though crepitant; the lower lobe of the right was solidified, and its tissue was soft; it was abundantly infiltrated with serous fluid. The left pulmonary artery was entirely occluded at its origin by a homogeneous plug of fibrine, moderately adherent to the interior of the vessel, from which coagula of more recent formation projected into the primary branches. A recent coagulum existed also in the primary branches of the right pulmonary artery, especially in those passing to the lower lobe of the lung, and extended into their smaller subdivisions, without, however, entirely occupying the cavity of any of the vessels. The arteries themselves were healthy. *Abdomen.* The great omentum was converted into a firm roll, lying across the lower region of the abdomen, and closely adherent to the parietes on the left side; the transverse arch of the colon was drawn downwards, so as to remain in contact with the contracted omentum. The outer surface of the intestines, throughout their length, was closely sprinkled with small raised firm spots, of a brownish white matter, about the size of miliary tubercles, scarce any attaining the diameter of a split-pea. Many portions of the small intestines were of a deep blood colour; for the larger portion of their extent, the convolutions were entirely free, but the lower coils were so closely united to one another, and to the sigmoid flexure of the colon, and also to the uterus, as to form one mass, from which it was impossible to separate the several component elements without a long and tedious dissection. The coils of intestine, from their close mutual adhesion, effected such sharp and rapid turns, that it was no easy matter even to trace the continuity of their canal. The coats of all the small intestines were remarkably thickened, resembling soft leather; the mucous membrane, from the stomach to the anus, was loose, and appeared quite healthy. The lower part of the ilium and the colon contained yellow fæces. The liver was pale; the hepatic duct, both in its trunk and its branches in the substance of the liver, was remarkably dilated. The gall-bladder was small; it contained no bile, but its cavity was nearly occupied by a single large calculus. The spleen was small. The kidneys were healthy. The uterus, which was discovered with difficulty amongst the mass of adherent intestines, was healthy, excepting that the tissue of the fundus presented a deep sanguineous stain. The mesenteric and lumbar glands were healthy. The abdomen contained a considerable quantity of straw-coloured fluid, in which floated stringy masses and flakes of fibrine. The right femoral vein, together with the external and common iliac, was quite filled with a soft recent coagulum, slightly adherent. The left common iliac vein was completely occupied by a mass of soft brownish fibrine, entirely without any laminated arrangement, but very closely adherent to the lining membrane; the coats of the vein were considerably thickened; the external iliac vein was filled by a recent blood-clot. The vena cava was healthy, and its lower part was empty of blood. The contracted omentum on section was found to be composed of semitransparent tissue enclosing numerous small lobules of fat; many spots of blood welled up to the surface of the section. An opaque "juice" was readily expressed from all parts of the mass, containing abundance of nuclei, with one, two, or three nucleoli within them; the nuclei had a medium diameter of 1-2000 inch. Only a small number of nucleated cells were discovered. The basement tissue presented imperfect indications of fibrous striæ. Many minute vessels were seen ramifying through the specimens which were examined, especially in the neighbourhood of the lobules of fat.

REMARKS. This case affords an instance of a rare form of disease—primary medullary cancer of the omentum and visceral peritoneum. All the other viscera, both of the thorax and abdomen, together with the glandular system, were free from the disease. The morbid change probably originated in the great omentum, and extended thence over the intestines. The abundance of a thick opaque "cancer-juice", the presence of nuclei to the exclusion of nucleated cells in any important proportion, together with the vascularity of the cancerous tissue, indicated the disease to be of the medullary character.

The previous history of the patient is unfortunately very imperfect, but it appears to indicate immunity from any important symptoms referrible to the abdominal viscera until three weeks before admission, and she continued to follow her usual occupation. The symptoms which then attacked her were probably produced by obstruction to the passage of the contents of the bowels, occasioned by the firm mutual adhesions of the lower coils of the ileum described in the report.

GUY'S HOSPITAL.

A SERIES OF CASES OF INJURY OF THE SPINE.

Under the care of J. Birkett, Esq.

The series of cases appended illustrate many of the points connected with fracture and other injuries of the spinal column, and the effects of those injuries on the cord.

The first case presents the interesting peculiarity of an extensive lesion of the bones above the origin of the phrenic nerves, in which, however, those nerves seem to have been not immediately implicated, and the injury did not prove fatal until after the lapse of thirty-six hours, although the spinal marrow was found after death nearly torn across opposite the junction of the third and fourth vertebra.

The second case is an instance of a pure dislocation in the cervical region, an injury which occurs more frequently in this than in any other portion of the cord. It will be observed, that in this case, although the injury was situated lower down, and the spinal marrow was not directly in contact with the injured bones (the sheath of the cord being uninjured), the nervous matter was irreparably injured, and death followed even sooner than in the former case. In both, the injuries seem to have taken place while the muscular system was in a state of relaxation; in one instance from intoxication; in the other, after great exertion and consequent fatigue. In the latter, the reduction of the dislocation, even had such treatment been possible, obviously could have had no influence on the progress of the case.

In the third case, where the injury was much lower down, an attempt was made to replace the bones; but it did no good, and gave great pain. Still such an attempt is certainly quite justifiable in this region, as there is no probability of producing further injury to the cord; while in the cervical vertebræ it might possibly lead to further pressure on the spinal marrow and to sudden death. Our readers will remember a case which we lately reported (Journal, December 11th, 1858, p. 1022), in which the injury was simple dislocation of the first lumbar from the last dorsal vertebra, and in which reduction was accomplished, though the progress of the case was not apparently affected, the cord having sustained irreparable damage.

In the fourth case, the spinal cord was also damaged beyond the hope of repair; and here the fragments of bone were so moveable, that no permanent change in their position could reasonably be hoped from extension.

The fifth case is interesting, as showing an example of injury to the spine, in which the occurrence of fracture was proved by the displacement of one of the spinous processes; but in which the cord, although so much injured as to produce serious functional disturbance, was not so far disorganised as to lead to organic mischief, and in which the patient recovered. In this case also, evidence of the importance of muscular action in the displacement of the bones is found. The injury occurred while the man was attempting to lift a sack in a stooping position, in which effort the extensor muscles of the spine would be in violent action, while a heavy weight falling on the loins would drive the lumbar vertebræ in an opposite direction to that which the extensor muscles would produce. Hence, perhaps, the occurrence of the fracture, while the fragments would be restrained from that extreme displacement on to the nervous matter, which might have occurred had the muscles been in a state of exhaustion or relaxation. Another instance of recovery after a similar injury, also under Mr. Birkett's care, will be found in this Journal for June 26, 1858, p. 512.

Case I. *Dislocation of the Third Cervical Vertebra, with Fracture.* Richard J., aged 32, was admitted in the evening of November, 28th, 1858, under Mr. Birkett's care. It seems that he fell down stairs, when intoxicated on the previous night about twelve o'clock, and was put to bed in a helpless condition. He was not seen by a medical man till just before admission.

On admission, he was collapsed; his body was completely paralysed and devoid of sensation below the neck; but there was believed to be some sensation in the course of the superficial cervical nerves over the clavicle. His bladder was full. There was great difficulty in breathing. A slight reaction occurred after his admission, and he struggled on till nearly noon on the following day, when he died, having survived the injury about thirty-six hours.

On *post mortem* examination, the muscles of the back of the neck were found contused. The body of the third cervical vertebra was forcibly separated from that of the fourth, and the anterior common ligament ruptured, the body of the third overlapping the one below. The laminæ of the second and third vertebræ were broken on each side, and were moveable. The right lamina of the first vertebra was broken across at its root and near the spinous tubercle. It was probable, from the great amount of movement between them, that one of the joints between the atlas and axis had been opened. The spinal marrow was crushed and nearly torn across opposite the dislocation. The lungs were extremely congested, and the bronchial tubes contained blood and mucus. The other organs were healthy. The body was that of a strong muscular man.

Case II. *Dislocation of the Fourth Cervical Vertebra.* George M'D., aged 17, was admitted, under the care of Mr. Birkett, on November 29th, 1858. He had been fighting with another man for about two hours, and was then thrown to the ground in a struggle. This occurred at about 2.30 P.M. He was found by a policeman some hours afterwards, and brought to the hospital. On admission, he was sensible. The whole body below the neck was paralysed. The breathing was diaphragmatic. Sensation was present at the upper part of the chest, and over the shoulder in the course of the descending branches of the cervical plexus. He was quite sensible, but gradually sank (his breathing becoming more and more embarrassed), and died about thirteen hours after the accident.

On *post mortem* examination, the body was that of a strong young man. The muscles at the back of the neck were much contused and full of blood. The fourth and fifth vertebræ were separated from each other, the ligaments and muscles being torn, but there was no fracture. The sheath of the cord was uninjured, but the medulla was quite soft and full of blood —crushed into a red diffluent mass. The lungs were extremely congested, blood was effused into the tissues, and the bronchial tubes contained blood. The other organs were healthy.

Case III. *Fracture and Dislocation of the Eleventh and Twelfth Dorsal Vertebræ.* Patrick D., aged 31, a stout muscular Irishman, was admitted, under Mr. Birkett's care, on October 2nd, 1857. He had fallen down the hold of a ship. A ladder broke his fall, and he came down on to the flat of his back. He was unable to move after the accident, and had entire loss of power and sensation in both lower extremities.

The seat of injury was found to be the eleventh or twelfth dorsal vertebra. The fascia was completely torn off several of the dorsal spines. He was suffering intense agony, and quite unable to move his legs. He was seen shortly after admission by Mr. Birkett, who ordered him to have extending force applied under the influence of chloroform. This, however, had no immediate effect on the paralysis, and gave great pain. Laudanum was given, but he passed a very restless night. On the 5th, he was found to have slight sensation in the lower extremities, but could not move either. He suffered intense pain on the slightest movement, but was cheerful and had a good appetite. The bowels had not been open since the accident. The urine was drawn off night and morning.

During the next few days, he complained of burning sensation in the legs, and was very restless and uneasy, so that it was necessary to give him three grains of opium on the 13th. This afforded much relief, but the bowels were obstinately costive till relieved by croton oil. He was then free from the costiveness, but during the next month bedsores formed, he became weaker, and lost his appetite. The urine was highly ammoniacal. He continued to sink during the month of January, principally, as it seemed, from the discharge of the bedsore, and died on February 13th, having survived the injury four months and a half.

On *post mortem* examination, the bodies of the eleventh and twelfth dorsal vertebræ were completely separated; and the spinal cord opposite this region was soft, broken up, and of a brown tint. There was no fracture of the bodies of the vertebræ, but the articular processes were fractured. The displacement was not very great. There was a large sore over the sacrum exposing the bone, and at this part the canal was laid open, but there was no evidence of disease having extended upwards from this spot. The kidneys were both found to be in a state of extensive suppuration.

Case IV. *Fracture and Dislocation of the Twelfth Dorsal Vertebra.* Frederick S., aged 20, a labourer, was admitted on May 20th, 1858. He had fallen from a ladder through a trap-door; and, on being raised, he found that he had no use in either leg, and, on attempting to walk, it caused him great pain in the back. When admitted, both legs were paralysed, and the sensitive nerves below the knees, except on the calves. He had great pain in the lumbar region, and there was much constitutional disturbance. He could not pass his urine. He

had no sleep that night; the tongue next day was moist, but inclined to be brown; the pulse was regular, but feeble; he perspired freely. He complained of great pain, extending from the back down to the hip, which he described as "like a knife stabbing him".

May 22nd. He had had no sleep, and had vomited several times during the night. The bowels had not acted. Soda water and brandy was given. He continued to get worse during the next four days. The countenance became haggard; he was half insensible; the tongue brown and dry; the skin hot and parched; the breathing somewhat hurried. He complained of pain in the region of the kidneys, and the water contained blood. He could get no sleep without large doses of opium. Nourishment was freely given, and his sufferings were somewhat alleviated by opium; but he sank from day to day, and died on May 31st, the eleventh day after the accident.

On *post mortem* examination, the body of the twelfth dorsal vertebra was found crushed, separated into two parts, and torn away from that of the eleventh. The arches also were broken. The parts were quite moveable; but there was not much displacement, as the anterior common ligament was still entire. The medulla was crushed, inflamed, and soft opposite the injured vertebra. The lungs, kidneys, and peritoneum, were healthy. The bladder was much inflamed, ulcerated in parts, and covered with phosphates.

Case v. *Fracture of the Spine about the Eleventh Dorsal Vertebra: Recovery.* John P., aged 29, a labourer, was admitted under the care of Mr. Birkett on November 26th, 1858. He was a healthy man, and not addicted to drinking. He was working in the hold of a ship, and, while in a stooping position, and attempting to lift a sack, another heavy sack, weighing about 2½ cwt., fell from a height of eight or nine feet, striking him on the loins, and throwing him down. The head was not struck. On attempting to rise, he found that he had no use of his lower extremities, and could not feel his legs at all. On admission, he was perfectly paralysed in the lower extremities, and complained of pain in the loins and nates. The right knee was contused, swollen, and painful on pressure. There was either absolute or comparative hyperæsthesia in the whole of the right leg, it being very sensitive to the least irritation, such as slightly pulling the hair upon it. The left leg had no sensation in it. He was obliged to have his water drawn off, but could retain his motions. He was quite sensible. Goulard lotion was applied to the knee. Beef-tea and arrow-root were given. Next day, there was a little more sensation in the left leg, and the right was not quite so sensitive: indeed, the injury to the knee seemed quite sufficient to account for any excess in sensation. He had not slept during the night. The pulse was quiet; the tongue clean. There was much thirst. He was conscious of the bladder being full, but unable to pass water. The urine was ammoniacal, and rather thick from admixture of mucus. The calf of the right leg was very tender, owing to a varicose vein.

November 29th (third day). Sensation was quite perfect in both legs. The bowels were costive, so that purgatives had to be given.

December 1st. The bowels were still costive; the bladder was injected with tepid water twice a day.

December 4th. It is noted that he felt pain in the loins when the bladder was quite full, and that the right knee was somewhat painful. The pulse was firm and good. He lay on a spring bed. The back was quite comfortable.

December 10th. Sarsaparilla with bichloride of mercury was ordered.

December 14th. He felt occasionally "a shooting and starting" in the legs, and the knees were sometimes drawn up suddenly.

On the following evening, when the bladder was full, he succeeded in passing some water by his own exertions; and, on December 17th, it is noted that the water was passed quite voluntarily. The treatment consisted in tonics (steel, quinine, and calumba), with opium at night. He complained occasionally of pain in the belly and loins, which was relieved by aperient pills; but on the 28th, as he still had a good deal of pain in the loins, he was ordered calomel and opium every six hours.

January 2nd, 1859. It was first noticed that he was able to move his toes slightly; those of the left foot the most; and on January 7th (fifth to sixth week), this movement was found to be improving. He was now turned on his face, to examine the back. The spinous process of the eleventh dorsal vertebra was found to be much displaced, and drawn upwards to the one above it, and considerably to the right side. This was the only deformity to be detected.

January 12th. He was able to move the left instep, and the movements in the toes of the right foot were stronger. He had still much pain in the loins. The bowels continued to be costive. Two grains of opium at night were required to produce sleep.

January 17th. He could move both insteps freely. He was ordered quinine mixture, full diet, four ounces of sherry, and two pints of porter, daily.

January 21st. He could bend his left knee, and draw the limb up to the body; but he could not straighten it again. Soap liniment was ordered.

February 5th. It is reported that, for the last two or three nights, he had been disturbed by the left leg jumping just as he was going off to sleep. The right leg did not move much. He still suffered a good deal of pain in the back.

After this date, he slowly improved; but, as he did not progress so rapidly as he could wish, he left the Hospital, in ill temper, March 5th, 1859.

Original Communications.

THE VEGETABLE PARASITES OF THE HUMAN SKIN.

By Jabez Hogg, Esq.

[*Read before the Medical Society of London, January 24th*, 1859.]

I propose on the present occasion—*first*, to offer a hasty sketch of the history of parasitic vegetable growths in diseases of the human skin; *secondly*, to inquire into the truth of the theory founded on the observations of foreign physicians, which attributes certain forms of skin-disease to the ravages of a vegetable parasite, as their origin, cause, and pathognomonic character; and *thirdly*, to offer a few remarks on the natural history of vegetable parasites, with a view to illustrate the subject by analogy.

It is now more than twenty years since Bassi of Milan discovered the vegetable character of a disease which caused great devastation among silkworms; and, about the same time, Schönlein of Berlin was led to the detection of certain cryptogamic vegetable formations belonging to the order *Fungi*, accompanying the development of certain diseases of the skin. The observations of this distinguished man have been confirmed by Gruby, Remak, Langenbeck, Robin, Küchenmeister, and other continental writers; as well as by Dr. Hughes Bennett of Edinburgh, and Drs. Jenner, Gull, and other English physicians, most of whom have attempted to identify the fungus with the disease believed to be produced by it, and in this way to separate and detach some four or five of the most common chronic skin-diseases from the rest, and to regard them simply and exclusively as *fungoid* or *parasitic diseases*. Thus the parasite supposed to be peculiar to and productive of each disease has been minutely described, and honoured with a name derived generally from the name of the disease which it is supposed to have originated, as appears in the following table.

Willan.	Basin.	Wilson.	Parasite.
Porrigo favosa and lupinosa.	Tinea favosa.	Favus.	Achorion Schönleinii.*
Porrigo scutulata.	Tinea tonsurans.	Trichosis furfuracea.	Tricophyton tonsurans.
Porrigo decalvans.	Tinea decalvans.	Alopecia.	Microsporon Audouini.
Mentagra	Tinea sycosa.	Sycosis.	Microsporon mentagrophytes.
Pityriasis versicolor.	Pityriasis.	Chloasma.	Microsporon furfur.

* From *achor*, the old term given to a favus crust by Willan, and the name of the discoverer Schönlein, and so on with all the rest.

This very tempting theory involves an important principle of pathology, inasmuch as it places the pathological fungi above described in a category by themselves, and invests them with characteristics entirely at variance with those of the natural history of the family of fungi, whose leading feature appears to be that of selecting disease and decay as the soil which is essential to their existence; whereas this hypothesis describes them as preying upon healthy organised matter, and thereby establishing specific diseases.

In examining into the truth or fallacy of this theory by the light of physiology, we must bear in mind that the surface of the human body is supplied with a delicate covering, one office of which is to excrete, and another to eliminate or exude, effete matter from the blood. The excretion consists chiefly of microscopic epithelial scales; and the exudation is composed of gaseous matter, which sometimes becomes condensed and dried on the surface of the epidermis. The scales are friable and separable under very slight friction during health; and the transpired fluid makes its free escape, under ordinary circumstances, without any assistance from without. But want of cleanliness, deficient exercise, and, much more frequently, a cachectic condition of the fluids of the body, interfere with the natural processes of elimination; and then the skin becomes diseased, and in this diseased condition is often infested with parasitic fungi, the filaments and spores of which are found imbedded in the epithelial scales of the epidermis, enveloping the hair-bulbs, and often traversing the hair itself, which is then more or less abnormally secreted, and deficient in organic matter.

Is this diseased condition the result of the ravages of the parasite? or is the parasitic vegetation the result of disease? This is the question into which I now propose to enter, and the question is one of some practical importance; for, if the disease is produced by the parasite, we have only to destroy the latter, and the disease will be perfectly eradicated, and cease. If, on the other hand, the parasite only acts the part of a scavenger, whose effect it is to remove the *materies morbi*, then we have to rectify the condition on which the disease depends, and the parasite will starve for want of nourishment.

Authorities are not wanting on either side of the question. Dr. Hughes Bennett maintains that all such vegetable formations are secondary, and always arise in living animals previously diseased. Dr. Gull contends, on the contrary, that the parasite is the sole cause of the disease; and Dr. Jenner has committed himself to the same opinion. Mr. Wilson differs again, and entirely ignores the existence of vegetable parasitic growths in skin diseases; and endeavours to prove—somewhat imperfectly, I think—that the cylindrical tubes "seen under the microscope are nothing more than a splitting up of the middle or fibrous layer of the hair, and its oval shaped cells, closely packed together, and arranged in a linear order." Had Mr. Wilson submitted his specimens of disease to a closer examination, and employed polarised light with the microscope, I have no doubt he would have convinced himself that his view of the diseased hairs was not quite correct.

The question, however, must be determined, not by authorities, but by further observations.

During the last two years, with a special view to this question, I have been engaged, with my friend Mr. Hunt, in making microscopical examinations of the products of cutaneous diseases appearing in the patients attending his practice at the Western Dispensary for Diseases of the Skin; and the result is, that I feel strongly inclined to the opinion that the vegetation found on the skin and hair is not primarily the cause, but rather the result, of disease.

I will now endeavour to show on what grounds this conclusion has been arrived at.

1. If there be any exceptions to the general law, that parasites select the subjects of debility and decay, such exceptions are not found among vegetations belonging to the order *fungi*, which invariably derive their nutriment only from matter in a state of lowered vitality, passing into decomposition, or wherein decomposition has already proceeded to some extent.

2. That the growth of these fungi is not necessarily pathognomonic of a special disease, is obvious from the fact of their having been observed in nearly all kinds of chronic skin-disease. Thus, out of twenty cases of lepra and psoriasis, in which the products were examined, evident traces of fungoid vegetation were observed in ten. The same growth was noted in two out of three cases of lichen, also in four out of six cases of eczema, in one case of ichthyosis, and in one of spilus. None of these diseases have been supposed to be caused by fungi; and yet fungi were present in the greater number of the specimens examined.

3. Others observers, some of them highly competent, have not been able to find them in the diseases they are believed to engender. Thus Malherba, Cazenave, and Wilson, deny the existence of a vegetable fungus in porrigo scutulata (the common ringworm), although this is described and depicted under the name of *tricophyton tonsurans* by trustworthy observers. Cazenave, Didot, and Wilson, deny the existence of the *archorion Schönleinii* in favus or cupped ringworm. Wilson and Cazenave deny the existence of the *microsporon Audouini* in porrigo decalvans. In reference to the statements of the latter observer, Cazenave, it must be borne in mind that he candidly acknowledges his ignorance of the microscope; and, not to make an unfair use of this negative argument, I must confess that I have seldom been disappointed in finding some kind of fungoid growth in all the diseases supposed to be produced by them. Nevertheless, such is the general similarity of form and growth of the fungi in the specimens examined, that I have failed to make out any relation between the special variety of parasite and the particular disease whose name it bears. Thus, in a case of porrigo in a girl of 16, which had existed for nine years, from neglect and dirt, I found, not a porriginous variety, but the fungus described by Robin and Küchenmeister as peculiar to plica Polonica—a disease almost unknown in this country. Again, in a case of *tinea tarsi*, I found sporules of the fungus described by Ardsten as the *puccinia favi*. Robin also found in favus the puccinia occurring together with the *Achorion Schönleinii*; the latter presenting itself as a constituent of the cups or crusts, while the puccinia occurs afterwards on the desquamation of the epidermis. And this is thought by some to warrant the opinion that the *achorion* is only the spermagonial form of the *puccinia favi*. But, further, it is broadly asserted by others that the several morbid conditions observed in chronic diseases of the skin are mutually convertible; and that lichen, eczema, impetigo, psoriasis, lepra, mentagra, etc., are but modifications of one and the same disease, resulting from accidental conditions, and not always found perfectly distinct: nay, so often are they combined and complicated with each other, that dermatologists have assigned special names to some, indicative of their mixed character, such as eczema *impetiginodes*, eczema *leproides*, lichen *urticatus*, erythema *papulatum*, etc.

It may be said, that most of the cases examined by Mr. Hunt and myself should be referred to the last named forms of disease; and, therefore, the finding of parasitic fungi might have been, *à priori*, expected; indeed, ought to have been found. Having had this contingency in view, Mr. Hunt gave me specimens taken only from well marked cases; and the morbid products of these were conjointly examined and sketched under the microscope; well executed drawings from which were made by Mr. Arthur Hunt, for the purpose of illustrating this paper.

The objects were examined both wet and dry, with reflected and with transmitted light, rendered achromatic and carefully arranged to avoid error by distortion, etc., and with a magnifying power of from two hundred to four hundred diameters in almost every case. The products were obtained, in scaly diseases, by gently removing the half-detached scales; in most eruptions, by simply placing the discharge on a slip of glass; in diseases of the hair, either of scalp or beard, by uprooting the hairs, and examining with as little disturbance as possible.

I will now enter on a short analysis of the cases examined.

Favus. At the head of my list stands favus—a disease better known to continental writers than to us, and said by them to be caused by the *achorion Schönleinii*. In this country it is so rarely seen, that neither at Mr. Hunt's Dispensary nor in private practice have I been able to meet with a case for examination; so that this disease, which we find most carefully described, and the vegetable nature of which Schönlein has the merit of having been the discoverer, as also of exhibiting the fungus in the form of mycelium filaments and granulated stroma,—I am compelled to dismiss with this brief notice.

Alopecia (*Porrigo Decalvans*). In eleven cases of alopecia, the hair on the margin of the bald patch was submitted to examination under the microscope. In three of these cases, one of which was the product of syphilis, no fungoid growth could be found. In the other eight cases, filaments and sporules were most unmistakably present.

Porrigo Scutulata (*Tinea Tonsurans*). In nine cases of porrigo scutulata, the hair was examined. Fungoid vegetations, or vestiges of them, sometimes with sporules, sometimes without, were observable in each of these cases, but in three of them they were imperfectly developed.

It may here be observed, that the filaments of the *trycophyton tonsurans*, said to be the cause of this disease, are described as found in the substance of the roots of the hair, and spreading longitudinally upwards; whereas the *microsporon Audouini*, the supposed source of the porrigo decalvans, forms a tube round each hair *outside* the follicle, not in the substance of the hair. I have not been able to verify these distinctions. On the contrary, on comparing many specimens of these diseases with each other, I have always found filaments springing up from the bulb, and then growing up around or along the hair, sometimes longitudinally in bifurcating branches nearly straight, sometimes in tortuous or spiral forms, with or without spores. In both diseases, the bulbs of the hairs and the hair itself were variously decayed and deformed.

Pityriasis Versicolor (*Chloasma*). Seventeen cases of this disease contributed specimens for examination, in *all* of which vegetations were observed, and in several of them the fungus named *microsporon furfur*, supposed to be the cause of the disease, was clearly identified. This fungus is said to have been discovered by Eichstädt in 1846, and is described as exhibiting spores piled up in groups or heaps; and, although Robin himself could not find this parasite, I acknowledge that the characteristic grouping of the spores has been distinctly marked in most of the specimens I have examined. But, although this piling up of the spores may be in some measure identified with the disease, it does not follow that the disease is caused by the fungus, which may merely find in this form of disease a suitable soil for its growth and fructification. The fungus may be destroyed again and again by soaking the skin with a nitrous acid or mercurial lotion; but, unless attention is paid to the state of the blood, no lotions will cure the disease.

Mentagra (*Sycosis Menti*). The hairs were examined in six cases of this disease, and in all were broken or bent, and covered by fungoid growths. The roots of the hairs were closely invested with spores and filaments, sprouting longitudinally outwards and upwards. Both the filaments and spores are described as larger than those of the *microsporon furfur*, and they are said to form a sort of vegetable sheath to the hair below the skin only. This latter description is graphic and true; but I should hesitate to admit that the mere *size* of a vegetation can entitle it to be considered a separate species; for it may depend on the age, the growth, or on some peculiarity of the soil, just as the *polypodium filix mas*, or common male-fern, may appear in a dry barren soil as a delicate plant, and yet, in a damp and shaded situation, with a congenial soil, it may assume the appearance of a gigantic shrub, several feet in height. Moreover, the hair itself, as well as its follicles and root, was found in several instances, exhibiting tufts of fungi growing on its surface.

Psoriasis. Thirteen specimens were examined. In seven of them, filaments and sporules were clearly discernible; in the other six, epithelial scales only. These filaments and sporules were in no respect distinguishable from those found in the various diseases already described, and to which they have been said to be peculiar.

Lepra. Seven specimens were examined: there were found filaments and sporules in five of them, and in two of them epithelial scales only. These vegetations also were similar to those found in psoriasis—another name, in fact, for the same disease.

Ichthyosis. In one case of this disease, filaments were found, clearly showing that a congenital disease or malformation may, under certain circumstances, prepare a soil for fungoid growths.

Lichen. In two cases out of three, fungoid growths were visible, similar in character to those already described.

Spilus. In two cases examined, one exhibited very fine hairs, with peculiar masses of a fine pigment surrounding the shaft of the hair, and others were covered by granular matter; another had filaments of a fungus, with a few spores scattered over the masses of epithelial scales.

Eczema. In four out of six cases, fungoid appearances were observable; in one of them also were masses of spores; and in another a cast of a hair was observable, the hair having escaped, and the cast being composed of beautiful filaments, which had embraced and encircled the hair precisely after the fashion described in porrigo decalvans, although there was here no baldness. In fact, the arms, and not the scalp, were the seat of the disease.

Tinea Tarsi. In five cases of tinea tarsi, two out of which were associated with eczema in children, in three were found mycelia, filaments, and spores, associated with epithelial scales and granular matter; in one, an isolated spore of a fungus, described by Ardsten as that of *puccinia favi*, the spores of which are almost if not quite identical with those caught on my glass slides suspended in the air.

As to the growth of these parasites on the *healthy skin*, most conclusive experiments have been made, the results of which go far to prove that the skin of persons in health and vigour does not afford the required conditions for them to take root in it; that inoculation succeeds only in those places where pustules have been previously formed. Remak and others repeated the experiment of inoculation over and over again, and found that it always failed in the healthy; but that in certain exudations, in peculiar states of the constitution, or where disintegrated matters existed which had undergone particular chemical changes, the *achorion* might be made to germinate, and produce a further growth of that identical fungi.

Seeing, then, that the fungi are characterised throughout nature by feeding on effete or decayed matter; that the fungi supposed to be peculiar to certain diseases of the skin, are also found in many other diseases of the cutaneous surface; that competent observers have not been able to find them in these peculiar diseases; that sporules and filaments described as the cause of one definite disease, have been found in the products of another definite disease supposed to have a peculiar and distinct parasite of its own; and that attempts have been made in vain to implant these parasites in a healthy skin; one cannot but conclude that special parasites, peculiar to, and productive of, special diseases, *do not exist*. And in this opinion we are, at least, confirmed by the therapeutical fact, that the alleged parasitical affections are rarely, if ever, cured by destroying the parasite; and that they *can* be cured by the due administration of appropriate alteratives and tonics which are capable of correcting the blood dyscrasia, which, in fact, originates the disease.

These views are countenanced by distinguished pathologists. Professor Bennett writes of favus: "I believe that the pathology of favus is best understood by considering it essentially to be a form of abnormal nutrition, with exudation of a matter analogous to, if not identical with, that of tubercle, which constitutes a soil for the germination of cryptogamic plants, the presence of which is pathognomonic of the disease. Hence is explained the frequency of its occurrence in scrofulous persons, and among cachectic or ill-fed children; the impossibility of inoculating the disease in healthy tissues, or the necessity for there being scaly, pustular, or vesicular eruptions on the integuments previous to contagion." And in some few experiments wherein it has been said that inoculation has succeeded in healthy persons, the following explanation may be offered, "that the material in which the vegetations grow, may at the commencement, in a molecular exudation, be formed either primarily or secondarily. That is, there may be want of vital power from the first, as occurs in scrofulous cases; or there may have been production of cell forms, such as those of pus, or epidermis, which, when disintegrated and reduced to a like molecular and granular material, secondarily constitute the necessary ground from which the parasite derives its nourishment, and in which it grows." (*Principles and Practice of Medicine*, page 807.)

Very nearly the same conclusions have been arrived at with regard to the propagation of the moulds among the vegetable tribes, which at one time it was said were originated by fungi. Mr. Henfrey, writing of the development and progress of vine-fungus, says, "that it is the cause and not the consequence of the *murrain*"; nevertheless, with some caution or suspicion of the truth, he adds, "there are various curious circumstances connected with it not at all understood, and it is very probable that peculiar atmospheric conditions induce predisposing states of the plants."

It scarcely admits of a doubt, that all the diseases observed of late years on plants, have been produced by a peculiar atmospheric condition, not yet understood, but which, when combined with want of vigour, or, in other words, unhealthy growth, arising from the loss of some chemical elements in the soil, that this has been the cause of the various "murrains", of which we have heard so much. It is a fact, now well known to microscopists, that during heavy moist, and other uncomfortable atmospheric conditions, the spores of various fungi can be caught by merely exposing a slip of glass in a current of air; but when the air is fine and dry, in that state usually recognised as bracing, in other words, favourable to health and life, then the fungi and their spores are very difficult to collect, and, perhaps, are not then floating about. Similar causes may, doubtless affect the microscopic characters of the products found in skin diseases; and so similar in appearance are the fungi

taken in the air to those found among plants and decaying vegetable matter, that with a power of three hundred diameters we readily detect a striking analogy between them. The *achorion Schönleinii* in particular, and many of the vegetable moulds recognised under the generic terms of *penicillium* and *aspergillus*, very closely resemble each other—in fact, are forms of the same family of fungi. The botanical characters of the *penicillium*, one of the commonest of the fungi forming and spreading itself as a greenish mould on decaying vegetable substances of all kinds, may be summed up in a few words. It simply consists of a mycelium of interwoven filaments, articulated and terminating in a plume-like head of minute globular spores, yellowish or bluish in colour according to age. The *aspergillus* of Greville differs only in some slight particular, the form of its spores, which are ovoid. These are borne in erect filaments, and terminate in irregular tufts. If the spores of either are sown on a glass slide and kept slightly moist, they quickly germinate, and their habits may be readily studied. On living plants they are more familiarly recognised by such names as *smut*, *brand*, *bunt*, etc. I have seen them converted into algæ, and grow in distilled water; and the mushroom spores differ only in size, being larger.

"Wonderful is the minuteness of the origin of these cryptogams; and when their spores find a proper nidus, wonderful is their development. The old sawn stump of a tree after a warm rainy night and showery day in autumn, will be found covered with agarics. We have seen a spotless verdant meadow in Glamorganshire covered within forty-eight hours with puff-balls, most of the individuals were as large as a man's head, and none were smaller than that of a child. Think of the power of cellular development able to produce such monsters in so short a space of time, from invisible particles of 'puff-snuff.' Such a development of this fungus is by no means unusual." (*Frazer's Magazine*, January, 1859.) We are told of snow covered countries being changed in a night from white to red by a *gory dew*, the *protococcus nivalis*, (red snow) of the northern regions. The muscardine of the silkworm is precisely similar to the species of fungus which infests the potatoe, the mycelium and sporules of which appear on the respiratory surfaces, when its fluids become acid. Again, the *mycophyton Cohnii*, found in the blood of the house-fly, appears externally as a mould; the first symptom observed is a milky appearance of the blood, and there is no doubt that an acid condition precedes or accompanies the production and growth of the *oidium* in muguet or thrush, as well as of vegetable parasites in skin-diseases.

The parasitic fungi found on animal structures resemble these and each other so closely, that it would be sufficient for my purpose to say that these also consist of cylindrical or flattened filaments, terminating in sporangia enclosing spores. But, to be more accurate, the following are the botanical characters of the *achorion Schönleinii* given by Robin. "The mycelium is soft, pellucid, floccose, filaments very slender, not jointed, very much branched, mostly fixed in a granular stroma; receptacle formed of thicker filaments composed of elongated cells somewhat branched, distinctly articulated, joints unequal, irregular, terminating in a sporidium; sporidia, round, oval, or irregular, germinating at one or several joints. It is closely allied to the *oidium*." The *microsporon mentagrophytes*, he says, differs from the *microsporon Audouini* only in the size of its filaments, and their ramifications; and the spores are somewhat larger. So that, whether we turn to animal or vegetable produced fungi, we are struck with the great resemblance they bear to each other. Another fact, which may in a degree account for the ravages of the fungi (a fact of great interest to the naturalist), is that the whole tribe give out carbonic acid and absorb oxygen, and they all contain a large proportion of nitrogen.

It cannot be denied that the single fact of the universality of distribution of the fungi, is of itself a very strong argument in my favour, and leads to the belief that they are ever ready to fix themselves where disease has set up disorganisation, or where, from other circumstances, the powers of life have become enfeebled. Should it not be as I have stated; then I maintain it still remains to be ascertained, how great a share these microscopic parasitic organisms have in the causation of disease.

But if we now turn to the etiology of cutaneous diseases, we find this simple fact; that when the spores of the fungi have become fixed, they take their food from the tissues (soil) which surround them, and perhaps extrinsically from the surrounding medium (the air); and the fitness of the soil is doubtless increased by humidity, which greatly assists in their germination, and is particularly favourable to all parasitic growths. Do we not find here also, an example of the law which must be obeyed, in the lowest forms of vegetable life as in the highest, whenever plants are to prosper; viz., "the choice of the locality depends upon the peculiar properties of the soil sought for or avoided by the various species of plants"? The species to which our attention has been particularly directed, make choice of the animal cutaneous surfaces; and a knowledge of all the circumstances which favour their growth, may enable us to arrive at some general theory of the treatment to be adopted. It appears that we have chiefly to look to a change in the soil in which they grow, and to bring that to a state in which they cannot thrive, to ensure the destruction of these parasites. What, may I ask, has been already done to effect so desirable an object?

Mr. Hunt's experience—and this has been very large—proves that, as a rule, we must not rely upon local applications to effect the cure, or even arrest the disease, without at the same time endeavouring to produce a blood-change. To improve the general health is also of the very utmost importance, and this can only be done slowly and by the most judicious application of our remedies. Perhaps, the best of all our therapeutic agents to employ in these diseases, one indeed based upon scientific data, both pathological and chemical, and for the safe and effective administration of which we are indebted to the researches of Mr. Hunt, is arsenic and its preparations. This drug appears to be a specific for most of the forms of skin-disease of which I have been speaking, although it is not always essential; for some cases of porrigo, mentagra, etc., even when infested with their parasites, have yielded to cod-liver oil, preparations of iron, with purgatives or alteratives, as the case may require, without any topical application whatsoever.

In conclusion, I have to call attention to the fact that there is no natural phenomenon more curious than that of parasitic life, both animal and vegetable. We find even the earth-worm haunted by a parasite (*gregarina*) living within and upon it; and numerous mollusks and insects with entozoa pertaining to each. It is not an anomaly we look upon, but a part of creative intent; an expression of that great design which makes organised life in one form everywhere subserve to the maintenance of another. Minute though these objects are, and inaccessible to all unaided sense, there is no part of natural history which strikes deeper roots into the secrets of the living creation.

Their universal distribution over the face of earth, air, and water, undoubtedly points to design; and it will be found that the fungi have a purpose to fulfil in the economy of life; and so far from being parasitic pests, as some look upon them, these, the lowest and earliest forms of life in the vegetable kingdom, have been from the beginning designedly intended to be what they certainly are, useful scavengers in creation: and thus ever are they to be found growing among disease and death, for no other purpose than that of removing all festering matters from the presence of the living, which if allowed longer to remain, must prove alike destructive to health and life.

Here also is presented for our admiration, a striking and curious example of the ever varying phases of life, and its resurrection from the ashes of decay and death. Nothing is allowed to remain idle, useless, or uncared for, in all the wonderful changes which are ever at work around us for the good of the whole, and for the purpose of maintaining this spot of earth in a state fit for the whole families of God's creatures. "All things indeed work together for their good"—and yet is the one fact constantly obtruding itself to our gaze; "that life is inseparably linked with change, and that every arrest is temporary death; and that only through incessant destruction and reconstruction can vital phenomena emerge;—an ebb and flow of being."

CASE OF PLACENTA PRÆVIA.

By Charles P. Stevens, F.R.C.S., Biggleswade.

I was requested to see Mrs. Davis on February 26th, four miles distant, and arrived there at 2 P.M. She is the mother of four children. She told me that, for six weeks past, she had suffered more or less from sudden and great losses of blood, and for that period had not been free from hæmorrhagic discharge at any time. The full term of gestation was expired. Pains came on an hour before I arrived. They were now slight, and occurring about every ten minutes, with profuse hæmorrhage going on. The vagina was full of clots; the os uteri was

dilated to the size of a florin; the placenta was *centrally* presenting; and the posterior portion was *partly* detached from the cervix. The fœtal presentation was unknown. I plugged the vagina with lint saturated with cold vinegar and water, and applied napkins dipped in cold water to the vulva; and gave directions to the nurse to use pressure with her hand on the perinæum, especially during a pain. Six hours afterwards, at 8 P.M., I removed the napkins: there was no hæmorrhage. I administered a stimulant, and proceeded to remove the plug. Little or no hæmorrhage occurred, and very few small coagula followed. The os uteri was now dilated to the size of a small teacup, and very dilatable; the whole circumference was covered with placenta. I then adopted Dr. Barnes's method, by separating the *whole* circumference of the placenta from its uterine attachment as high up as I could reach with my index and middle fingers, having found it necessary to pass my hand gently into the vagina, from the os being highly situated. I did not resort to the plug after this, but waited. Pains continued regularly; there was no more hæmorrhage. On my next examination, I felt a portion of the posterior part of the placenta protruding through the os. I then felt for the presentation, but could not detect it until, by further separating the posterior portion of the placenta, I reached the membranes, and found it a footling case. I then immediately ruptured the membranes (a great quantity of liquor amnii escaping); and, pushing the posterior part of the placenta towards the anterior surface of the uterine cavity, I succeeded in seizing one foot, which proved to be the right; and with gentle traction secured it at the external orifice, though with the toes to the mother's abdomen. The strength of the mother and her good pulse induced me to attempt to save the child by delivering with one foot, as recommended by a certain high authority. Pains continued regularly; and, gentle traction being used, I gradually rectified the position of the child *in utero*, by rotating the thighs and pelvis so as to bring the toes towards the sacrum of the mother. Presently, the breech and the other leg were delivered: the umbilical cord still pulsated, and I, acting a little more briskly; the trunk, arms, and shoulders, were expelled, and, by depressing the chin and elevating the occiput, the head quickly followed, quite unattended with any amount of hæmorrhage. During this period, external pressure was kept up. The child sobbed slightly; and, on pursuing Dr. Marshall Hall's plan for resuscitation, it very soon gave auricular demonstration that it was alive: I then separated the funis. The mother's pulse flagging, I administered another small quantity of brandy; and, on passing my finger along the funis, I found the placenta detached, and lying in the vagina. By moderate traction, and making her use slight expulsive efforts, it came away with the membranes entire, and little or no hæmorrhage. On removing a few coagula from the vagina, I found the mouth of the uterus firmly and securely closed. The placenta was of the usual size; about a fourth of its maternal surface was dark coloured, with clots adhering, indicating where premature separation had taken place. I then proceeded to bind up the abdomen, and administered a drachm of tincture of opium, and left her to repose. In an hour's time, she complained of feeling faint. I administered a dose of ether and sal volatile, and saw her again before I left, when she was comfortable.

February 27th. I found the patient comfortable. She had passed urine twice. The lochia were going on, and not in excess. No further hæmorrhage had occurred. She complained of feeling light headed, and wanted sleep. I repeated the laudanum.

February 28th. She was going on favourably.

March 1st. She was going on favourably, except complaining of want of sleep. I ordered her to take ten minims of liquor opii sedativus at bed-time, and a dose of castor oil in the morning.

March 2nd. The pulse was quiet. The bowels had acted. The opiate procured rest. Light and nutritious diet was ordered. The mother and infant were doing well.

March 3rd. In every respect, the patient was going on satisfactorily. She had suffered very little from after pains. There was a good secretion of milk. The lochia were normal in quantity. Beef-tea was ordered.

Remarks. By the use of the plug in the first instance, to gain time for more full dilatation, and then employing the means recommended by Dr. Barnes, there was much less hæmorrhage than I have witnessed in most cases of ordinary labours. The loss from the introduction of the plug to the completion of the labour, I can assert did not exceed eight ounces, if so much.

Transactions of Branches.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE VITALITY OF THE TEETH, AND ITS RELATION TO CARIES.

By Thomas Howkins, Esq., Birmingham.

[*Read February 10th*, 1859.]

Mr. President,—I feel somewhat diffident in bringing before the notice of your Society any remarks connected with the physiology and pathology of the teeth. Not that the subject is by any means a barren or uninteresting one, but because, from some reason or other, it seems virtually to have been shelved by the great majority of medical men, or consigned over *in toto* to the care of the practitioners of dental surgery. It has often been a matter of regret to me that such should be the case; and frequently in practice I have seen the ill effects resulting from this neglect of the subject by medical men, in a want of that general knowledge of the various symptoms and effects to which certain diseases of the teeth are liable to give rise. It is no part, however, of my intention to bring before you anything relating to the diagnosis or therapeutics of the diseases coming within the domain of dental surgery, but rather to present for your consideration some thoughts relating to the vitality of the teeth, and the part this plays in that pathological condition known as dental caries. This question of the vitality of the teeth has been a more fertile source of controversy than has perhaps any other in dental physiology, and certainly there is none which has given rise to more erroneous theories of dental caries. Perhaps, at the outset, you will just allow me to recall to your recollection the three component elements of the teeth—the enamel, cement, and dentine, each of which differs from the others in structure, vitality, and function.

The *Enamel*, or outer covering, which is the least organised of the three, contains only about 3½ per cent. of animal matter, which is built up with the calcareous salts into the form of parallel prismatic fibres, arranged vertically to the surface of the tooth. It appears to be totally devoid of sensibility; and no provision, so far as the microscope has yet revealed, is made for its nutrition; and whether, when once fully formed, it remains so to the end of its existence, or, like the more vital structures, has its component molecules removed from time to time, and their places supplied by fresh matter, is a point we cannot at present determine.

The *Cement*. This is the structure which forms the outer covering of the fang, and is the most highly organised of the three. In intimate structure, it very nearly resembles bone: in fact, the cement from the tooth of an animal, according to Tomes, bears a pretty constant relation to the bone of the same animal, especially in the shape of the corpuscles or cells. Whenever found in sufficient thickness, it is, like bone, traversed by vascular canals. It forms the bond of vital union between the denser unvascular constituents of the tooth and the bone in which it is implanted.

We come now to the *Dentine*, or proper tooth-substance, which makes up the great bulk and body of the tooth, giving to it its peculiar shape and size. It is composed of a mass of tubules, united together by an "intertubular substance"; the tubules radiate from the central pulp-cavity, have an undulating course, and in general direction are vertical to the surface of the tooth. The walls of these minute tubules are composed of organic incorporated with calcareous matter; the tubules themselves, in the healthy state, are usually empty, though sometimes they may contain minute granules. With regard to the vascularity of the dentine, using this term in the ordinary sense, as signifying the permeation of a structure by vessels carrying red blood, we must pronounce it unvascular, though the opposite of this view was maintained by Fox, Bell, and others, and is at the present time the opinion of writers of the highest repute on the subject in America. Undoubtedly, there are specimens in which vascular canals can be traced in the dentine; but, though these may have been seen in some few instances, they are undoubtedly exceptional cases, and the teeth may fairly be said to be,—as Owen, Tomes, and Nasmyth, say they are,—extravascular bodies.

Such is just a general outline of the structure of the component elements of the tooth. What evidences have we, then, of

their vitality? And are these sufficient to disprove the theory still maintained by some at the present time, that the various structures composing the tooth are, to all intents and purposes, inorganic bodies; and, when once formed, no change, such as occurs in more vital structures, takes place in them, but that they are as little dependent upon nutriment for their future support, as stone, brick, and plaster, used in the erection of a building? That the vitality of the teeth, if it exist at all, does so in a very low degree, must be conceded. In an adult, tooth growth and development are completed; and the vital changes, if any, which take place in it in the healthy state, are limited to the assimilation of that small amount of matter required for the maintenance of the ordinary state. Even this assimilating power is denied by some, on the ground that the teeth are extravascular: but, even this being conceded, it does not preclude the possibility of nutrition being carried on. All that is necessary for the due nutrition of a part is, that there should be a regular supply of appropriate blood near that part. We cannot say how near it must be. All that appears necessary is, that the nutritive material admits of being imbibed in sufficient quantity. It is by such imbibition that all parts of the body supply themselves with nutriment, and there is but little difference in this respect between the so-called vascular and non-vascular parts. In the former case, vessels pass through the interior; in the latter, on the surface. Sometimes even the same tissue is in one case vascular, and in another case non-vascular, as in bone. This, when in thick layers, has vessels running into it; but when thin, as in the lacrymal and turbinate bones, it has not; and, in these latter, the material is derived from the vessels of the mucous membrane covering it. We know nothing of the vessels except as carriers of nutriment to and fro. This may, indeed, undergo some change in passing through the walls of the vessels; but the change is not in assuming any definite shape, so that the formation of all tissues is really extravascular. Now, there is evidently in the tubular structure of dentine a possible means whereby the blood-plasma may be conveyed to every part of the dentine from the abundant capillary meshes upon the surface of the dental pulp. And in the cement, even when vessels do not permeate it, by means of the lacunæ and canaliculi, plasma may be conveyed from the vessels of the periodontal membrane; so that no argument against the vitality of these two structures, at least, can be drawn from their want of vascularity.

But further: we know that changes do take place in the dentine itself. As the teeth become older, they, like the bones, become denser in structure, and contain a greater proportion of earthy to organic matter than in the young; and the very interesting fact, too, first observed by Tomes, of the complete or partial obliteration of the dental tubes by a deposit of calcareous matter in their cavities around that part of a tooth attacked by caries, demonstrates that there is a certain amount of vitality in the dentine, which, though it is insufficient for the reparation of that part after it has become disintegrated by disease, is yet exerted to form a barrier, though an imperfect one, to check or retard its further ravages.

One other fact may be noticed here, which bears upon the subject; and that is the increased and extreme sensibility sometimes manifested in the half-disorganised and softened dentine. If an attempt be made to excavate this, as a preliminary operation to filling the tooth, the pain is often so acute as to compel the operator to desist. It is true, it is not always so, but it frequently occurs. Now, on what principle this can be explained, if we assert that the teeth are in the condition of inorganic bodies, I am at a loss to imagine. True it is, we cannot yet offer a satisfactory reason, as no nerves have hitherto been detected penetrating the tubules; and on this point we have not advanced since the days of Hunter. He fully recognised the great sensibility which carious teeth sometimes manifest, though he professed himself wholly unable to explain the cause.

With regard to the reparative power capable of being exerted by the teeth, there are on record some few cases in which a fracture of these organs through the fang has become united by a deposit of new dentine. I have never, however, had an opportunity of observing a case of this kind; and there appears to be little known on the subject, beyond the fact of its occasionally taking place.

I think, then, from a due consideration of these various points—that the tubular structure of the teeth affords an easy method whereby the plasma of the blood may find access to every part, and ensure its nutrition; the undoubted fact that changes do take place in the dentine and cement, the latter also frequently becoming hypertrophied; the power which the broken fangs of a tooth have under certain favourable circumstances of becoming united; and the extreme sensibility the teeth often manifest when the subjects of disease;—that we are fully justified in maintaining the doctrine of the vitality of the teeth.

We have now to consider what part this vitality of the teeth plays in caries, or, in other words, to define the pathology of this disease. It would, perhaps, have contributed to greater accuracy, and a better appreciation of this subject, had some other name been chosen by which to designate it; at least we should have avoided the risk of constantly confounding it with caries of bones, a disease to which it bears not the slightest analogy in origin, progress, or principle of cure. Since, however, the term is universally employed, it is, perhaps, better to continue to use it than to undergo the confusion consequent upon change of nomenclature. And, perhaps, here it will be advisable just briefly to state the phenomena observed in a tooth attacked by caries.

The first indication we have is an alteration of appearance in the enamel or in the dentine immediately subjacent; the enamel becomes either more opaque or chalky in appearance, and losing to some extent its subcrystalline character, becomes softer and more friable, or a black speck may be observed on the tooth; in this case, the enamel appears to suffer very little in hardness, the discoloration being principally due to the blackness of the layer of dentine immediately beneath the enamel. These are the two chief forms in which caries manifests itself: the after progress of the disease in the two cases is essentially the same, though varying in rapidity; this progress consists of a gradual removal of the earthy constituents of the dentine, and a subsequent disintegration of the animal matter; the disease attacking the dentine much more readily than the enamel, it is usual to find the internal cavity formed much larger than the external opening would lead one to suspect: as the disintegration progresses, it more or less rapidly approaches the pulp cavity, until this at last is reached. In the earlier stages there is but little pain, and in the majority of cases none at all, until the disease has made considerable progress; in some few, however, as soon as the tooth is attacked, slight symptoms of uneasiness are felt in it: but this usually lasts but a short time, and is not productive of much inconvenience. As the cavity increases in size, and the layers of dentine intervening between this and the pulp cavity become softened, so as to allow the passage of the fluids of the mouth to the highly delicate and sensitive pulp; and, moreover, by its diminished thickness allowing the pulp more easily to be affected by changes of temperature, severe pain is often felt. The brittle enamel now frequently breaks away, having lost the support of the subjacent dentine, and thus allows portions of food to enter, which, during mastication, frequently cause such pain as to compel the unfortunate possessor of the tooth to desist from using that side. With the exposure of the pulp, a new train of evils set in; this frequently becomes highly inflamed, sometimes suppurating; the inflammation extending downwards, attacks the periodontal membrane, whence arises alveolar abscess, and its concomitant results. It is not however with these ulterior evils that we are so much concerned at present, as with the disease in the bony part of the tooth. To account for this, two principal theories have been propounded. The first we may call the inflammatory theory; it supposes caries to be the result of inflammation in the bony structure of the tooth. Hunter, who was the first to write a scientific treatise on the diseases of the teeth, compares it to mortification; and though he states that he cannot define the real cause, he thinks it may be occasionally attributed to disease originating in the tooth itself. Fox, in his *Natural History and Diseases of the Teeth*, published at the commencement of the present century, refers it to inflammation of the lining membrane of the pulp-cavity, which, separating from the tooth, causes death of it, just in the same way as a separation of the periosteum will cause death of a part of the tibia, or of that of the pericranium caries of some portion of the skull. Mr. Bell believes it to be caused by inflammation set up in the substance of the tooth itself, the vitality of which being low, it is unable to recover from the effect of the inflammation. According to these writers, then, caries of the teeth is analogous to disease of the same name in bones; but I think it is not difficult to shew that there is nothing in common between them. Caries of bone is always attended by inflammation, is accompanied by the exudation of corpuscular or a plastic lymph, giving rise to the granulations and pus found at the diseased part. Caries of the teeth is not necessarily accompanied by inflammation; in the earlier stages it seldom is; in fact, it is doubtful if inflammation of the true

substance of the tooth ever takes place, or can do so. It is unvascular, and being so, is not liable to the changes manifest in inflamed vascular parts. There is sometimes observed an increase in the sensibility of the tooth, but hyperæsthesia, though an accompaniment of inflammation, is not of itself a sign, as it may, and frequently does exist independently of it. Nor must we confound the red colour we sometimes see teeth possess, with the colour produced in bone by inflammation, as the two have not a similar signification. The increased colour in bone is caused by the dilatation of the vessels in the Haversian canals which carry on the blood circulation in the bone; the red colour of teeth is caused by permeation of the dentinal tubules, by a fluid holding in solution the hæmatin of the blood-cells, and pathologically more resembles the staining of tissues by extravasations and exudations.

In carious teeth, again, there is no evidence of attempt at repair; the cavity once formed remains so, and is never filled up by osseous or fibrous matter. Nature does, indeed, seem to make some effort to prevent the evil result of exposure of the nerve, by consolidating the part of the tooth intervening between the disease and the pulp cavity; this she does by the deposition of more calcareous matter in their tubules, obliterating their cavities, and rendering them solid. Sometimes, too, this is effected by the deposition of new layers of osteodentine within the pulp cavity, as we see in cases where the teeth are worn down to the original site of this; but layers of a yellowish substance now close it up. Nor are the methods of treatment in the two cases less strikingly dissimilar; the surgical treatment of dental caries is purely manual; nature is passive, and neither hinders nor assists the operation. In caries of bone, the most we can do is to assist nature, which herself must heal and repair the breach: in dental caries, the operation of filling the teeth at once arrests the disease, and remedies the effects of its ravages.

We will now turn to the theory which maintains that caries is the result of a chemical action, a disintegration caused by application to the teeth or contact with them of some solvent menstruum. Of course this theory assumes that caries always commences externally; and I believe this to be the case, at least there is a want of any satisfactory evidence to the contrary, while in the great majority of cases it must be admitted that it does so commence. On the chemical hypothesis, then, some change takes place in the fluids of the mouth, rendering them capable of dissolving and disintegrating the teeth. This abnormal condition of the buccal fluids may be owing to a depravation of the fluids themselves when secreted; or, after being normally secreted, they may become vitiated by admixture with ingested solids or fluids, or by gastric eructation.

That the fluids of the mouth, under certain conditions, are capable of producing a carious condition of the teeth, is shown by the fact of natural teeth, artificially applied, being attacked in precisely the same manner, and the disease can almost be exactly imitated out of the mouth, by the application of nitric and other acids to the teeth. The earthy matters of the teeth being composed of carbonate and phosphate of lime, we are led to suspect that the solvent power of the oral fluids is due to the presence of an acid. Now in the normal state the saliva is alkaline; but there are certain states of the body, and in certain diseases, in which the saliva is said to be acid. According to Donné, the saliva is acid in inflammatory affections of the primæ viæ in pleuritis, encephalitis, acute rheumatism, intermittent fever, and uterine affections. Wright assumes that there are four varieties of acid saliva, viz., (*a*) that which occurs in idiopathic affections of the salivary glands; (*b*) that which presents itself where there is a predominance of acid in the organism generally from constitutional or other causes, amongst which he enumerates, scrofula, phthisis, rachitis, amenorrhœa, inflammatory rheumatism, etc.; (*c*) that form presenting itself in subacute inflammations of the mucous membranes of the stomach and intestines; and (*d*) that form occurring in dyspepsia—a somewhat vague mode of expression. Lehmann states that, in catarrhal affections of the gastric and intestinal mucous membranes, and in the round perforating form of ulceration of the stomach, he has very often, but not invariably, found the saliva acid. In cancer of the stomach and in diabetes, he says he has always found it acid. According to Donné and Frerichs, this acid reaction always depends on the buccal mucous membrane, which, when in a state of abnormal irritation, invariably yields an acid secretion. Now this alteration in character of the buccal fluids, is quite sufficient to account for the general and rapid decay the teeth sometimes undergo after certain diseases, and though our knowledge of the conditions under which this fluid becomes acid is still very defective, enough is known to give adequate reason for attributing to this cause some of those extraordinary instances which now and then occur, of all the teeth being simultaneously attacked with caries. But I apprehend it is not to this cause that ordinary cases of caries are so much owing as to the accidental vitiation of the normal fluids, by the lodgment of particles of food between the teeth, and remaining there until becoming decomposed. In the majority of cases caries does occur just in those situations where particles of food can obtain such lodgment, viz., in the fissures of the grinding surfaces of the molars, and between the approximal sides of the teeth; and we can, on this principle, easily account for the common occurrence of two adjoining teeth simultaneously decaying on their approximal sides; which fact has given rise to the very general popular belief, that a tooth when decaying causes its neighbour to decay. The true solution is, that both being subject to the same chemical agency, and both being similarly susceptible, both, as a necessary consequence, become diseased. But in addition to this alteration of the normal constitution of the salivary fluid, there may be some auxiliary cause at work resulting from inherent defects of structure in the teeth themselves. There may be *local* defect, such as fissures and cracks in the enamel, resulting from injury or mutual pressure one against the other, or from continued abrasion, or from imperfect development of the enamel, giving rise to the pits and grooves often seen on the anterior surfaces of the teeth, and where decay is very apt to commence, unless the teeth are carefully kept clean.

There may be a *general* defect of structure, consisting of a want of hardness and density in the teeth; according to Marchand, due to an excess of carbonate of lime: and this may be conjoined with a deficient vitality, and depending upon some morbid influence at work during their development. Under this head, too, perhaps we ought to class those obscure influences known as hereditary predisposition so often manifest in children's teeth, when those of their parents are deficient; frequently, even the corresponding teeth of the children decay exactly in the same place that their parents' did before them.

This chemical theory of dental caries has also the great merit of explaining the *rationale* of the treatment at present adopted for arresting its progress. By the removal of the decayed part, and filling the cavity with an indestructible material, the contact of those agents, upon the chemical action of which the disease depends, is prevented, and the further progress of the decay is arrested. I think, then, the evidence in favour of the chemical theory of caries, is pretty nearly conclusive. I can scarcely see how it can be designated a vital act, or brought under the category of inflammations. The vital power of the tooth seems rather, in certain conditions of these organs, or when they become subject to certain influences, to be inadequate to prevent decomposition; the power of chemical affinity overcomes the low degree of vitality they possess, and disintegration of their substance ensues.

Mr. Tomes is of opinion that the decay does not commence until the part of the tooth attacked is already dead; but I think the fact of the diseased softened part being often extremely sensitive to the touch, is quite incompatible with his opinion on the subject. To sum up, then, briefly, I think it appears that the teeth do undoubtedly possess vitality, though in a low degree; but this vitality plays no part, either in originating or modifying caries, or in repairing the effects of its ravages.

Testimonial to Messrs. Pritchard of Stratford-on-Avon. A testimonial has been presented by the Guardians of the Stratford-on-Avon Poor-law Union to Mr. Pritchard and his son, Mr. Frederick Pritchard, on the occasion of the former resigning the office of Surgeon to the Union House and the district attached thereto, an appointment which he has held since the formation of the Union in 1836, having been previously Surgeon to the poor of the borough for thirty-five years.

Testimonial to J. Wylie, Esq. A few days ago, Mr. Wylie, of Errol, Perthshire, through the hands of John Murray Drummond, Esq., of Megginch, and in presence of a large assemblage in Errol, was presented by a wide circle of his friends in every parish on the braes and in the Carse of Gowrie, with a handsome silver tea service, bearing an appropriate inscription, and with 150 sovereigns, as a mark of the esteem and regard in which he is held, both publicly and privately, during a residence of upwards of a quarter of a century in the district.

Reviews and Notices.

Outlines of Physiology. By John Hughes Bennett, M.D., F.R.S.E., Professor of the Institutes of Medicine, etc., in the University of Edinburgh, etc. Pp. 247. Edinburgh: 1859.

Virchow, in his *éloge* of the late Professor Müller, tells us that in the *Archiv* for 1834 and 1836, Müller attacks vigorously those physicians who do nothing themselves for the advancement of physiology, and yet expect everything from it. "May the genius soon appear," he exclaims, "who himself an investigator in the chemical, pathological, and microscopical analysis of morbid forms, will establish a system of general pathology worthy of the medical and natural sciences, securely based upon a more earnest foundation of philosophical examples of natural science, history, medicine, and physiology. From the pure physiologist we cannot expect this achievement; it is a problem for physicians, and one worthy of the highest talents." Thus wrote Müller some four and twenty years ago. He then saw clearly enough the right path opening for the advance of medicine, and the right method of pursuing out the journey along it. That physicians have long hesitated to trust themselves to the guidance of physiology and pathology, is what we all well know; but in these last days a great change has come upon us in this respect, and even Müller would be satisfied with the direction medical science has taken.

Few men have laboured harder or more perseveringly in the path pointed out by Müller, than the author of these *Outlines*, in the attempt of making modern pathology and modern physiology subservient to practical medicine. We last year spoke of his lately published work on the *Practice of Medicine*, as being the marked forerunner of a new life in medicine; and the eagerness with which the first edition of this work has been received by the profession assures us that the profession is itself participating widely in the revival.

The work before us is the very antithesis of the large book, which is called a large evil. It is a little book, and it is a good book. It treats of subjects of profound importance to the medical man, of physiology and pathology; and its chief utility lies in this particular, that it reduces the facts and the present theoretical condition of these sciences into a form readable and facile of comprehension to the general practitioner and the student of medicine. The author's object evidently is to show how histology, physiology, and pathology, may be made to form an harmonising whole; that they, indeed, must form a harmonising whole if used as a groundwork for practice. Now, if there be one proof greater than another, that a man is master of the business he takes in hand, it is this: that he can bring the abstruse things of a high science down to the comprehension of common-place and every day intelligences. We fancy that men who have hitherto (and not without reason) shuddered at the idea of blastemata, nucleoli, and cells, may, on the perusal of these few pages, be led to see some soul of virtue in them. It is not necessary because a weapon or a tool is used badly, that the weapon or tool should be bad. And, besides this, men really have not time to peruse large treatises on special subjects. A summary like this, from the hand of a master, is absolutely requisite for the purposes of the man engaged in business. If the practitioner is to peruse Schleiden in order to come at a knowledge of cells and nuclei, the fact is, he will assuredly die in ignorance of the world of microscopic entities. And how, again, is a man steeped in the daily business of earning his bread to face those ponderous tomes of Rokitansky? He wants all the pith of the thing in a nutshell, made ready to his purposes, as he will find it in this Handy Book of Professor Bennett.

The book is divided into three parts, viz.: histological physiology, normal physiology, and pathological physiology; and one great point, the end and prime object of our art, is well kept in view in their description, viz., the cure of disease.

From what we have here written, we need not say that we highly recommend these *Outlines* to our readers. They do justice to the author's high reputation.

Familiar Letters on Chemistry, in its Relations to Physiology, Dietetics, Agriculture, Commerce, and Political Economy. By Justus Von Liebig. Fourth Edition, revised and enlarged. Edited by John Blyth, M.D., Professor of Chemistry in Queen's College, Cork. Pp. 536. London: Walton and Maberly. 1859.

It would be an act of supererogation on our part to undertake an elaborate recommendation of the soundly philosophical, though "familiar," *Letters* of Baron Von Liebig. In this, the fourth edition, the editing of which has been ably performed by Dr. Blyth, there are several additions made, among which are chapters on the following subjects: the study of the Natural Sciences; the Correlation of the Forces of Inorganic Nature; the Alteration of Properties in Bodies; and Materialism in connection with Natural Inquiries. The last named chapter contains an able exposition of the opposing views of the vitalists and the materialists—those who have referred the performance of the functions of the living body entirely to the vital principle, and those who recognise merely the action of physical or chemical forces. The author holds the *juste milieu*.

"To do justice to the materialists, we must take into consideration that their views are in reality but the consequence of an extreme reaction against the prevailing doctrines of a few years ago. The physiology of that period did not possess the firm foundation of exact inquiry, viz., experiment. All the processes of nutrition, respiration, and motion, were referred by it to a single imaginary cause: viz., the vital force. In the organic frame, physical and chemical forces had no part. The organism produced, in its own peculiar way, the iron and other materials which it required, just as it produced heat. Exact inquiry has, however, proved that all material laws are actually in operation in the various organic processes; and the consequence has been, that the extreme reaction against the earlier views has led to the opinion, that no forces but those of chemistry and physics preside over the phenomena of life. Incapable as the natural philosophers of a former period were to prove the operation of a vital force in every process of the organism, the materialists of a later period are equally unable to shew that their inorganic forces take the place of the vital force, and even give rise to the manifestations of mind. The assertions of both parties are equally without foundation, and arise from the want of a true knowledge of the processes of the living body. Between these extremes lies the truth, which rises above all partial speculations, and recognises in the living frame, in addition to the physical and chemical forces, another cause which presides over and determines the forms of organic structures." (P. 295.)

This work of Baron Von Liebig is one of those books from which the mind desiring healthy philosophical instruction can receive it in a most pleasant and yet most perfect form. There is no necessity for an acquaintance with all the intricacies of scientific nomenclature and terminology: with a moderate amount of chemical knowledge as a basis, no man of ordinary intellect will rise from the perusal of these Letters without the feeling that he has partaken of a wholesome intellectual feast.

An Essay on the Action of Medicines in the System; or, "On the Mode in which Therapeutic Agents introduced into the Stomach produce their Peculiar Effects on the Animal Economy". Being the Prize Essay to which the Medical Society of London awarded the Fothergillian Gold Medal for 1852. By Frederick William Headland, M.D., B.A., F.L.S.; Licentiate of the Royal College of Physicians, etc. Third Edition, revised and enlarged. Pp. 447. London: John Churchill. Edinburgh: Maclachlan and Stewart. Dublin: Fannin and Co. 1859.

In this, the third edition of his valuable work, Dr. Headland has made such alterations and additions as have been de-

rivable from extended opportunities of personal investigation, as well as from a knowledge of what has been done by others in the same field.

Inventions and Appliances
IN
MEDICINE AND SURGERY.

SAVORY AND MOORE'S PATENT BOTTLE FOR THE PREVENTION OF ACCIDENTAL POISONING.

There has been forwarded to us for inspection, by the patentees, Messrs. Savory and Moore, a bottle constructed with the praiseworthy object of rendering accidental poisoning as difficult as possible. The use of bottles of peculiar shape, or the affixing the word "Poison" in legible characters, may even be ineffectual to awaken some to the fact that a deadly poison is being mistaken for a wholesome drug. Messrs. Savory and Moore, therefore, have contrived a receptacle for liquid poisons, with which the most careless or sleepy individual cannot do harm. The contrivance is very simple: it consists in the insertion of a diaphragm with a narrow aperture across the inner part of the mouth of the bottle. The effect of this, as we have proved by experiment, is, that it is impossible for fluid to escape from the bottle otherwise than by drops. This phenomenon, occurring where it was not intended to use a bottle containing poison, would at once point out that there was something wrong. We learn that the bottles of Messrs. Savory and Moore have been tried in the principal military hospitals; and that the Director-General of the Army Medical Department has given instructions "that all poisonous and potent medicines for the use of the army be in future contained in these bottles". We think that, if the bottle which we have described were introduced into general use, many cases of accidental poisoning by fluid substances would be prevented.

British Medical Journal.

SATURDAY, MARCH 26th, 1859.

DIPHTHERIA: STATISTICAL RETURNS.

We propose to publish a collection of cases of this disease in a tabular form, embracing the principal points in the experience of the London and country hospitals, and of our associates in general.

The points to which we propose to direct principal attention, are the following:—

1. The *Age* and *Sex* of the Patient.
2. The *Hygienic Conditions* under which he had been living; *e.g.*, occupation, supply of food and clothing, purity or impurity of atmosphere, etc.
3. The *Meteorological Conditions* prevailing in connection with the spread of the disease, in its increase or decline.
4. Evidence of the presence or absence of *Contagion*.
5. Had the patient had *Scarlatina* or not? Was scarlatina prevalent in the neighbourhood?
6. *Appearances* and *Symptoms* when first seen.
7. Time at which the *Leathery Membrane* appeared; and its situation.
8. Presence or absence of *Fungus* in the membrane, as shewn by microscopic examination.
9. Presence or absence of *Affections of Internal Organs; e.g.*, of *Kidneys*, as denoted by albumen in the urine.
10. *Treatment* and *Progress* of the disease. Under the latter head, special attention to be directed to the state of the trachea; and, as a part of this subject—
11. The indications for and success of *Tracheotomy*.
12. *Duration* and *Event* of the case.
13. *Post Mortem Appearances* in the fatal cases.

The experience of many of our country associates, whether derived from their position as medical officers of hospitals, or from private practice, has doubtless furnished them with the means of replying to the foregoing queries. We shall feel greatly obliged if the members of the Association, who have met with cases of diphtheria, will forward abstracts of them in the course of the next ten days to the Editor of this Journal, at the office, 37, Great Queen Street, London. It is not expected that every man will be able to funish a large collection of cases: but we would impress on our friends not to withhold their individual contributions because they are small. Each single case from a single observer will help to swell the mass of facts which we are desirous of collecting.

AN IRISH BRANCH OF THE ASSOCIATION.

When the Medical Reform Act was carried, mainly through the long continued exertions of this Association, it was by some persons prognosticated that our task was done, and that henceforth our numbers would gradually melt away. The Association, it was confidently asserted, had been mainly nourished by its continued opposition to Colleges and Corporations; and when these gave way, we were pithily told that we should die of inanition, like the Anti-Corn Law League and a score of others of a like nature, which, having fulfilled the end for which they were created, speedily ceased to be. Some of these prophets, it is true, would have been only too glad if they could have brought about this consummation—

"The wish was father to the thought."

But the last year has shown how entirely they have miscalculated the depth to which the British Medical Association has struck its roots in the mind of the profession. For many years we have counted within our ranks the cream of all the professional ability of England and Wales, and last year the great meeting at Edinburgh enabled us to strike firm root in Scottish soil. Our muster roll will be found to contain nearly every name that has thrown any lustre upon medicine in the northern seat of medical learning; and in all the great Scottish towns the power and influence of the Association is rapidly spreading. It has been a source of regret to us, however, that hitherto we have not crossed the channel and formed any permanent connexion among our Irish medical brethren. At the Edinburgh meeting, we rejoiced in one Irish member of the Association; we are glad to say, however, that we have it in our power to congratulate the Association upon a far different state of things. The one grain of mustard seed (if Dr. Mahood will forgive us the figure) has suddenly expanded into the goodly tree, which will in time, we trust, spread its branches over the whole Emerald Isle.

At the Annual Meeting of the Association of General Practitioners of Ireland, held in Dublin, on the 17th instant, the President, Dr. Moore, intimated that henceforth that body would be merged into the British Medical Association, and form its Dublin Branch. We trust and believe this union will be of essential service to both parties. The Parent Association cannot henceforth but profit by the intelligent support of a strong central Branch, having its head-quarters in a city con-

taining one of the most renowned medical schools in Europe; and this Journal, we have no doubt, will be benefited by the new blood which the intelligent class of general practitioners of Ireland will bring into its pages. Scottish practice is from time to time reflected in the pages of this Journal; but the quick wit of Ireland, so capable in emergencies and so acute in diagnosis, has hitherto found no exponent in the London press. We hope we may be able in some measure to give our aid in this direction. On the other hand, the Irish Branch will find that, by extending their relations, they will open to themselves a wider sphere of usefulness.

And while we record our high gratification at the establishment of a Dublin Branch, and our belief in the benefits that must result therefrom, we must not omit to say that we hope to see Branch Associations formed in other parts of the Emerald Isle. Belfast, Cork, Limerick, Waterford, and Galway, are among places which might be made centres of important combinations of the profession, under the wing of our Association.

We are already beginning to reap the fruits of widening the grasp of the Association. Since we have become "British", Scotland has given us a more kindly grip; and now Ireland shakes hands with us across the Channel. We hope that, before long, the new union will be cemented by the presence of the Parent Association in the Irish metropolis; and that there a bond of professional unity and brotherhood, firmer than any that Acts of Parliament can make, will be established at once and for all time between the members of our profession in the three countries.

THE WEEK.

We are glad to be able to state that notice has been taken in the proper quarter of the discrepancy, to which we alluded in the Journal for March 12th, as existing between the new by-laws of the Royal College of Physicians and certain clauses of the Medical Act: and that steps have been taken by the College for the purpose of correcting the error. With a view to correct the difference in the periods fixed on by the Act and the by-law respectively, the College, at a meeting of the Fellows held on Thursday, March 17th, repealed the latter, in order to enact one in accordance with the Act of Parliament. The mistake committed by the College was without doubt merely an oversight; but it might have led to evasions of the Act by a certain class of persons, and perhaps to other mischievous results.

We publish this week some important documents regarding the medical service of Her Majesty's Indian Army. They shew distinctly, in our opinion, that India is not the *El Dorado* for the medical man that it has been imagined to be; and especially that, since the issue of the Royal Warrant of October 1858, the medical officers of the Indian Army are altogether, both as regards rank and pay, in an inferior position to their brethren in the British Army. Considering the services rendered to the empire of this country in India by members of the medical profession, in the earlier years of its establishment; the labours of some members of the Indian medical service in the promotion of medicine, military hygiene, and science; and the nature of the service which the surgeon of the Indian Army is called on to perform, and the circumstances under which he acts,—it cannot surely be just that men of so meritorious a class should be left neglected in any improvements made in the condition of the medical officers of the public services. Their claims to consideration at the hands of the authorities rest, *mutatis mutandis*, on grounds equally strong with those of the naval and Poor-law surgeons. At present, political affairs seem to threaten delay in the reforms which are called for in the public medical services; but surely the remonstrances made by the members of each and all of these services, backed up by the voice of the profession beyond them, cannot fail to procure for them a boon similar to that which has been conceded to the medical officers of the British Army.

Among the illustrious Neapolitan exiles who have just arrived in London, we find the names of Aniello Ventre and Michael Angelo Colafiore, *physicians*. We know that those victims of the tyranny of King Bomba have expressed their disinclination to be lionised in the metropolis. Nevertheless, we do not think there could be any objection, on the part of the two gentlemen named above, to receive the sympathy and congratulations of the members of their own profession. It would be but a graceful act if the Colleges of Physicians and Surgeons were to take upon themselves to express, in the name of English medicine, their abhorrence of the treatment to which the Signori Ventre and Colafiore have been subjected; and if the Colleges should think the matter without their province, we trust that the profession generally will not neglect the opportunity.

THE LATE ALEXANDER MONRO, M.D.

We last week recorded the death of Dr. Alexander Monro, Emeritus Professor of Anatomy in the University of Edinburgh, which took place on Thursday, the 10th instant, at his seat, Craiglockhart House, near Edinburgh.

The deceased was the third of his family who, in direct succession, ably filled the Anatomical Chair in the University of Edinburgh for upwards of a century. He was born November 5th, 1773; was educated at the High School, and studied at the University under the late Professors James Gregory, Cullen, Black, Duncan, etc. After having passed through a full course of medical education, and obtained the degree of M.D., he went to London, to prosecute the study of anatomy and surgery under the famous Wilson; and thence he repaired for a short time to Paris. In 1800, he was appointed conjoint Professor with his father, at whose death, in 1817, he became sole Professor of Anatomy and Surgery, and continued to lecture till 1846, when he resigned the Chair.

Among his numerous pupils, there are not a few who have risen to the highest eminence in medical science; such as Professors Alison, Traill, Christison, Syme, Simpson, Liston, Miller, Edward Forbes, etc., and Drs. Abercromby, Hope, Holland, Bright, Marshall Hall, and Sir Humphry Davy, are of world-wide reputation.

He was the author of several anatomical, medical, and surgical treatises, of which the following are the principal: *Elements of Anatomy; Morbid Anatomy of the Brain; Morbid Anatomy of the Stomach, Gullet, and Intestines; Anatomy of the Perinæum; Anatomy of Crural Hernia;* etc.

Dr. Monro was twice married; first, in 1800, to the eldest daughter of Dr. Carmichael Smyth, by whom he had six sons and six daughters, one of whom, a boy, died in infancy; secondly, in 1836, to a daughter of David Hunter, Esq., of London, who survives him.

Association Intelligence.

FORMATION OF A DUBLIN BRANCH.

The Annual Meeting of the Association of General Medical Practitioners of Ireland was held at the Apothecaries' Hall, Dublin, on Thursday, March 17th, W. D. Moore, M.B., President, in the chair.

The minutes of the last Annual Meeting having been read, the President delivered the following

ADDRESS.

Gentlemen,—Owing to your kindness, it has been my lot to have had the honour of presiding over this Association during the most eventful period of its existence. In the course of the past year, as you are all aware, the long-agitated question of medical reform received its adjustment, and though the measure which, on the 2nd of August last, received the royal assent, may not have satisfied the expectations of all, and though it must be admitted that some of the imperfections to which every human institution is liable, attach to it, still the Medical Act of 1858 is, in my opinion, to be considered as a gain, inasmuch as it unites into one body all the members of the profession, confers on them rights and privileges in common, and, if it be honestly worked, will afford the means of raising the education and status of the medical community. And when I look at the constitution of the Medical Council, I cannot doubt that the measure will be carried out, in the present day at least, with an earnest desire to advance the best interests of medical science, and of society at large. Among our representatives we have some of the most distinguished ornaments of the medical profession, men of enlarged and liberal minds, who have already, in their several spheres, done much in raising the tone of medical education. Already, it appears to me, the recent change has borne fruit; the several licensing bodies are giving a more practical character to their examinations; the hospital, the dissecting-room, the laboratory, the field, will henceforward, I trust, be found to afford the true preparation for the ordeal through which the student must pass previously to his entrance on the active duties of his profession. I shall be much disappointed if the important subject of the preliminary and general education of the medical student do not receive a marked impulse from the operation of the recent Act. Here, as in every wise and enlightened measure, our venerable *alma mater* takes the lead. The education of the graduates in medicine of the University of Dublin has long been of the highest possible stamp. The attention of the governing body of the University has now been directed to conferring upon surgery a status it has never had before. The ordinance of the Board of Trinity College, establishing the full degree of Master in Surgery, to be taken only by students who are Bachelors of Arts, has just been promulgated. This is, I believe, the first time such a degree has been given, under similar conditions, in any university, and the regulation is one which must tend to elevate surgery as a branch of a learned profession. I shall not dwell longer upon the benefits which, I anticipate, will flow from the Medical Act of 1858, in the obtaining of which measure the value of such an association as ours was so eminently shown; but I will remind you, that there is one among us to whose long, unswerving, and well directed efforts, much that is good in that enactment, as it affects the general practitioners of Ireland, is mainly due. From his first entrance on the professional life, Dr. Leet has been the able and unflinching champion of the rights of the general practitioners of Ireland, and their unanimous voice has placed him in the honourable position in the Medical Senate of the United Kingdom, which he now fills with equal ability and courtesy. To him your thanks, as they were justly due, have been already tendered, and it was my pleasing duty to be, as your president, the medium through which they were conveyed.

Most of you are aware, gentlemen, that it is intended that this shall be the last annual meeting of the Association of General Medical Practitioners of Ireland as such. We are about, as will just now be more fully explained to you, to merge our comparatively limited society in the British Medical Association, and with more extended relations, a wider sphere of action, and increased means of doing good, to labour, I trust, more zealously and more efficiently for the advancement and elevation of our profession. But in taking leave of our old association, I hope we shall never cease to be influenced by, and to act in accordance with, the excellent code of ethics contained in its fundamental rules. A most valuable institution connected with the old association, which has during the past year enabled us to assist several widows of our deceased brethren, and in one or two instances, to aid members of the profession who had experienced reverses of fortune, should also, I think, be kept up—I allude to the Benevolent Fund. There are, moreover, questions respecting public appointments and the equitable remuneration of medical officers which must engage the attention of the new branch of the British Medical Association. In dealing with such questions, we shall, I confidently hope, find, in our new relation, that union is strength; and, if we be only true to ourselves, the result cannot be doubtful. In conclusion, it only remains for me to thank you sincerely for the honour you did me, on this day twelvemonth, in placing me in this chair, and to crave your kind indulgence for the very imperfect manner in which I have discharged the duties of my office.

RESOLUTIONS.

Dr. Moore having left the chair, and William Gorman, Esq., Vice-President of the Association, having taken the same, the following resolutions were unanimously adopted.

1. That the President's address be entered on the minutes.

2. That the cordial thanks of the Association are due to Dr. Moore for his dignified conduct in the chair, and for the great interest he manifested in the affairs of the Association during the past year.

3. A letter from Sir Charles Hastings, the President of the Council of the British Medical Association, expressing a wish for the institution of an Irish Branch in connexion with the British Medical Association, having been read, and several members having already been enrolled among its associates, it was unanimously resolved, that a Branch, to be called "the Dublin Branch of the British Medical Association" be now formed.

4. That William Daniel Moore, Esq., M.B., L.R.C.S.Edin., M.A.H.I., be elected the President of the Branch Association for the ensuing year.

5. That William Gorman, Esq., be elected Vice-President and Secretary.

6. That, while the Irish Association shall be merged in the British, it shall continue to hold and be actuated by the rules and principles of conduct which were adopted at its original formation, and agreed to by each member; viz.:

   a. To endeavour to attain the highest knowledge and skill in his profession of which he is capable, and to provide himself with all means and appliances requisite for its successful promotion.
   b. To continue to hold inviolate every trust imposed in him in a professional capacity.
   c. To regard as of one brotherhood all honourable members of the medical profession, and to be true to their reputation and interests.
   d. To repudiate and refrain from every species of professional charlatanism, whether it be homœopathy, hydropathy, Mesmerism, drugging, quack advertisements, or puffing.
   e. To seek professional remuneration by charges for advice and attendance in every instance, when it can be effected.

7. That in future the meetings of the Branch Association shall be held quarterly, and that the days of meeting shall be the 17th of June, of September, of December, and of March, unless any of those days shall happen to fall upon Sunday, when the meeting shall be deferred to the Monday next following.

8. That this Association regards the present mode of appointing medical officers to the charities in Ireland as unjust to the great mass of legally qualified practitioners, and as fraught with serious injury to the sick poor; and that the Association will not cease to urge upon the Poor-law authorities and electing boards the requirement of a *double* qualification from all candidates for medical offices under their jurisdiction in accordance with the law of the new Medical Act, and with the rule which obtains in England.

9. That a copy of the President's address and of the proceedings of the day be forwarded to Dr. Wynter, with a request that they be published in the Journal.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, April 21st, 6 P.M.

MEDICAL REGISTRATION.

PUBLICATION OF THE REGISTER.

We have been requested by Dr. Hawkins to give notice that all persons who desire their names to appear in the Register printed for 1859, should apply to be registered before the 1st day of May, 1859.

THE MEDICAL COUNCIL.

EXECUTIVE COMMITTEE OF THE GENERAL COUNCIL.

32, Soho Square, London, W., 28th February, 1859.

Present:—Sir Benjamin C. Brodie, Bart., *President*, in the Chair; Sir James Clark, Bart., Mr. Lawrence, Mr. Nussey, Mr. Green, Dr. Storrar; Dr. Francis Hawkins, *Registrar*.

The minutes of the last meeting were read and confirmed.

The resolution passed by the Branch Council for Ireland, respecting the General Register, was read.

There was also read a memorial from the Royal College of Surgeons in Ireland, in support of that resolution.

A letter was read from the Committee of the London Medical Registration Association, inquiring whether the Medical Council purpose undertaking the prosecution of illegal practitioners.

The Registrar was directed to reply, that until the Medical Register is completed, it cannot be determined who are, and who are not, illegal practitioners.

BRANCH COUNCIL FOR IRELAND.

Monday, January 31st, 1859.

Applications for Registration under the 46th Clause of the Medical Act were then considered, under the provisions of the resolution of the General Council of January 25th, 1859; and special orders were made for the Registration of the following applicants; viz.—

Richard Graves, of Ringville, as Medical Officer of a Dispensary District, by appointment, under the Act 14 and 15 Vic., c. 68, sec. 14; James Hamilton, of Newtown-Stewart, ditto, and as Surgeon Royal Navy; Robert M. Barr, of Maghera, ditto, and as Surgeon Royal Navy; Charles Patterson, M.D., of Rathkeale, ditto; John O'Donnell, of Ballyshannon, as Assistant-Surgeon in the Army; Hans Lloyde, of Malahide, as Assistant-Surgeon of a Regiment of Militia.

It was then resolved—

"That the proposal of Mr. Francis Morgan, to let the parlours of his house, 35, Dawson Street, for a Council room and office, at a rent of £50 a-year, be accepted; and Dr. Smith and the Registrar were requested to procure the necessary furniture." D. J. Corrigan.

Wednesday, February 23rd, 1859.

Present:—Dr. Corrigan, in the Chair; Dr. Leet, Dr. Smith, Dr. Apjohn, Dr. Stokes; Dr. Maunsell, *Registrar*.

The minutes of last meeting were approved and signed.

An application for Registration, under the 46th Clause of the Medical Act, was considered, and a special order was made to register John Musgrove, of Fintona, as Surgeon of the Royal Navy.

Several accounts were examined, and ordered to be paid.

An agreement for the tenancy of the offices, 35, Dawson Street, was read, and the Registrar was authorised to sign the same.

The Medical Act Amendment Bill was read.

The subject of the construction of the General Register, and of the mode of its publication, having been considered, it was moved by Dr. Apjohn, seconded by Dr. Stokes, and unanimously resolved—

"That it is the opinion of this Council that there should be a separate Register, in alphabetical order, for England and Wales, for Scotland, and for Ireland, respectively; as in such form the Register will be more easy of reference, more correct, and more saleable, than if there be only one continuous alphabetical Register for all; and that such Registers may be bound together, or sold in separate parts, as required."

Ordered—That the foregoing resolution be transmitted forthwith to the Executive Committee, and to the Branch Councils for England and Scotland.

It was then resolved—

"That the Registrar be directed to write a letter of thanks to the President and Council of the Royal College of Surgeons, for the accommodation kindly afforded to this Council from the commencement of its operations, in the beginning of December, up to the 22nd inst."

Wednesday, March 2nd, 1859.

Present:—Dr. Leet, in the Chair; Dr. Williams, Dr. Smith, Dr. Apjohn, Dr. Corrigan, and Dr. Stokes; Dr. Mauusell, *Registrar*.

The minutes of last meeting were approved and signed.

A letter was read from the Registrar for England, in reference to the resolution adopted by this Council on the 23rd of February, in regard to the mode of publication of the General Register, stating that the Executive Committee met on the 28th ultimo, and adopted the following resolutions:—

1. "That the Executive Committee, to whom the superintendence of the publication of the Medical Register has been confided by the General Council, have acted, and must continue to act, in strict conformity with Sections 25 and 27 of the Medical Act."

2. "That the Registrar be directed to inform the Registrar of the Branch Council for Ireland, that the printing of a single General Register, in alphabetical order, according to the surnames, has been commenced; that the Registrar of the Branch Council for Scotland has continued from time to time to send entries, as directed in Section 25 of the Act, to the Registrar of the General Council; and that no entries, which are not so sent, can appear in the Medical Register for the present year."

On the motion of Dr. Corrigan, seconded by Dr. Smith, it was resolved—

"That the Registrar be directed to write to the Executive Committee to the following effect:—to inform them that the Branch Council for Ireland feel themselves called upon to enter their protest against the resolution of the Executive Committee of meeting of 19th February, proposing to print the General Register 'with the adoption, in the column for 'qualifications', of such abbreviations as are in ordinary use.'

"The Branch Council for Ireland desire to observe, that they do not consider the Executive Committee are empowered to depart from the form of registry set forth in Schedule D, and referred to in Clause xvi, which latter empowers the General Council alone to make any variation in the form of registry set forth in Schedule D; that the only alteration authorised by the General Council is the omission of titles in Column 4, by resolution of General Council of the 27th of November, 1858; and that the power given to the Executive Committee authorises them to superintend the publication of a registry, as then approved of, but does not give them power to make any alteration in its form."

It was ordered, that Messrs. Woodlock and O'Donnell be directed to invest £3,000 in New Three Per Cent. Stock, in the names of Drs. Stokes, Smith, Corrigan, and Williams; and that the Chairman of this day and Dr. Smith be empowered to sign a cheque for the amount when the stock shall be transferred.

Reports of Societies.

ROYAL SOCIETY.

January 20th, 1859.

Sir Benjamin Brodie, Bart., President, in the Chair.

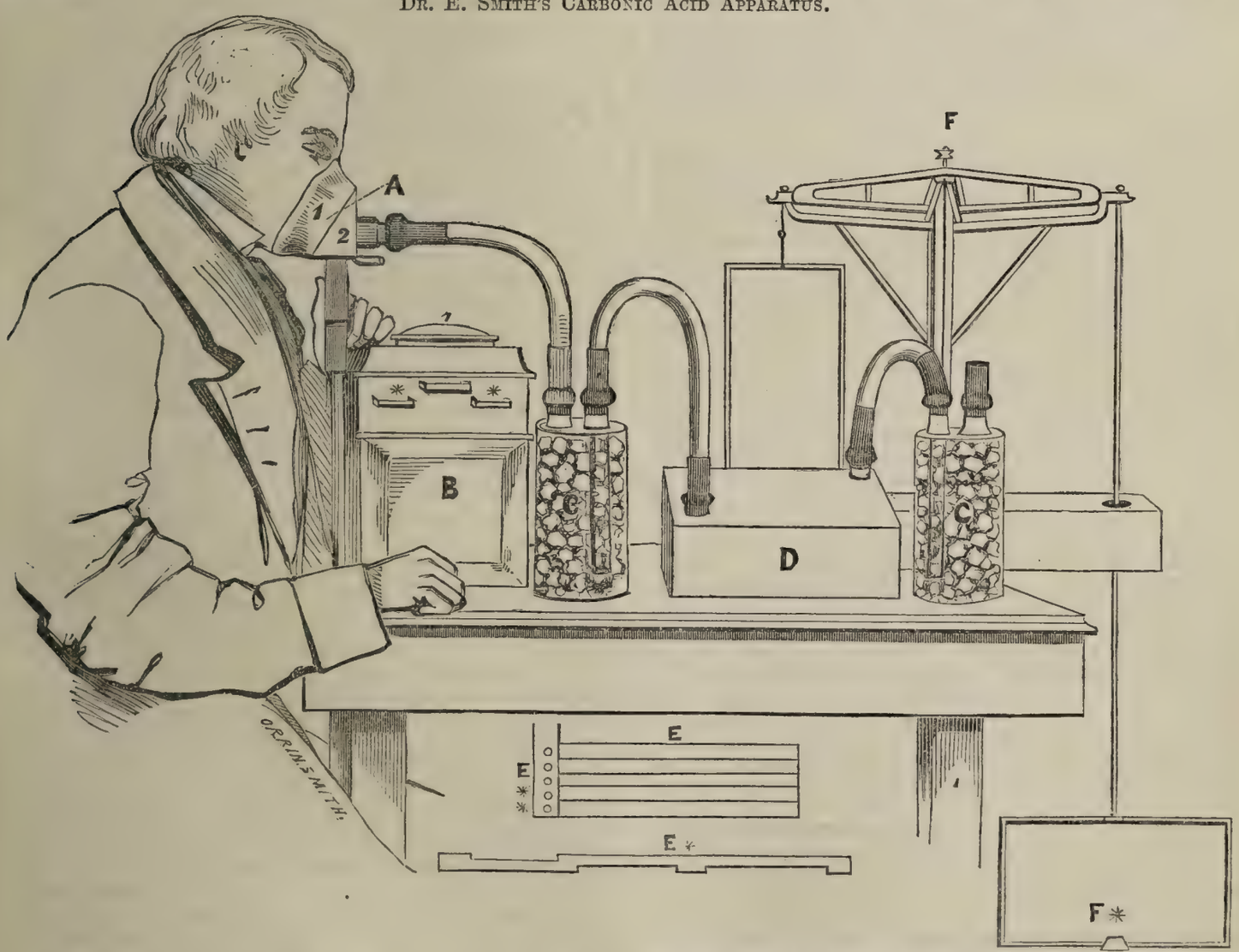
EXPERIMENTS ON SOME OF THE PHENOMENA OF RESPIRATION.

BY E. SMITH, M.D., LL.B.

The Apparatus which the author has employed in all his experiments may be described as follows:—There is, first, a Mask (A) which covers the nose, mouth, and chin, connected by a caoutchouc tube with a small spirometer (B), which measures and registers the air inspired. The mask fits the features so closely that no air can enter the mouth except through the spirometer; and it is composed of tolerably thick sheet lead, lined with sheet India rubber. There are valves so arranged that the expired air cannot pass back into the spirometer, but is directed through other tubes into the analytical apparatus; and, during inspiration, this expired air cannot re-enter the mask. Hence all the air which enters the mask is inspired, and none is respired twice. The Spirometer is a small one-light dry gas-meter, of improved manufacture, and registers from one to a million cubic inches. The motor power being the inspiration, it is that of a suction, and not a forcing pump; and hence the spirometer moves in a reverse manner from that which occurs when it is used as a gas-meter. (It will be observed, that it is not a *gas-holder*, such as Hutchinson's spirometer, but a *gas-meter;* and, by frequent testing, it was found to register with uniform accuracy.)

There is also an Analytical Apparatus, in which the carbonic acid is absorbed by caustic potass. This has two peculiarities, viz., that the exposed air does not pass *into*, but only *over* the solution of potass, so that no impediment is offered to free expiration; and that the whole of the carbonic acid is absorbed during the period of expiration. Hence, when the experiment is over, the carbonic acid can be immediately weighed in one of Oertling's balances, which weigh to the one-hundredth of a grain with seven pounds in each pan; and the experiment can be renewed in a very few minutes. The apparatus consists of three parts: *first*, a desiccator of sulphuric acid and pumice stone (C), of a capacity of seventy cubic inches, into which the expired air is immediately received from the mask, and from which the dry air is passed into a potass-box (D), which is the *second* and the novel part of the apparatus. This is made of gutta percha, one-eighth to one-tenth of an inch thick, with dimensions of 12 in. × 12 in. × 5 inches, the edges being well fastened together by the hot iron, and by a sealing of strips of gutta percha melted and fixed upon the joints by the hot iron. There are five chambers (E), each occupying the whole superficies of the box, and five-eighths of an inch in depth; and, being placed over each other, there is a communication from one to the other by an opening somewhat larger than the area of the trachea. Around this opening, on the upper surface of each floor, is a ring of gutta percha, one-fourth of an inch in depth, to prevent the fluid lying upon each floor from passing through into the chambers beneath. Each chamber is subdivided, by strips of gutta percha (E*), into six cells. The strips are fastened by the hot iron to both the floors, and are made imperfect in the lower edge, so as to allow the fluid to pass freely over the whole chamber, and also at the upper edge at each end alternately, so as to permit the column of air to traverse the cells one after another, and therefore in two directions al-

Dr. E. Smith's Carbonic Acid Apparatus.



A. Mask. 1, 2. Brass part to support the valves and tubes. Tolerably thick sheet lead to be moulded to the features.
B. Spirometer. 1. Index. ** Loops for knapsack straps.
C C. Desiccators containing sulphuric acid and pumice-stone.
D. Potass-box, with five chambers, as shewn in section E.
E **. Tubes, with holes, inserted in the corner of the box, through which the fluid is introduced and removed. The openings are closed by turning the inner tube half round.
E. Partition in the chambers of the potass-box.
F. Oertling's balance, with long arm and pan. F* to receive the potass-box.

ternately, and at length to be passed through the opening in the floor to the chamber above. There are thus five chambers, having a total superficies of upwards of seven hundred inches, which communicate with each other, into each of which the fluid potass is passed by means of gutta percha tubes three-eighths of an inch in diameter, or by two sliding tubes, as represented in (E**). Thirty fluid-ounces of solution of caustic potass, of specific gravity 1·27, are introduced, and are found by experiment to absorb upwards of six hundred grains of carbonic acid, without permitting the smallest trace to pass over, as tested by baryta water. The expired air is passed to the bottom chamber by a gutta percha tube (E**), of the size of the trachea; and, having passed through each cell of each chamber in succession, escapes from the upper chamber, and is carried to the third part of the apparatus. The tubes are closed with corks when the potass has been introduced, and the corks are not removed until the contained potass must be discharged and replaced. The same potass may be allowed to remain in the box for many days; and the box itself, after having been used for nearly twelve months, will still be uninjured by the fluid, provided it was at first very securely made; but, should a leak have occurred, the surface must be neutralised with acid before the hot iron will again secure it. The *third* part of the apparatus is a desiccator (C) similar to the first, which absorbs the watery vapour which the dried expired air had carried off from the fluid potass. The addition to the weight of the first drying apparatus with the mask and tubes gives the amount of vapour in the known volume of expired air, and the increase in weight of the second and third parts of the apparatus gives the amount of carbonic acid in the expired air. When the expired air is passed with the rapidity of ordinary expiration, this apparatus is sufficient; but when the rapidity is increased, as in voluntary efforts or during exertion, it is needful to use a double set. When, during a continuous experiment, it is desirable to weigh the carbonic acid at intervals, this may be effected by having two sets of the apparatus, since one may then be detached from the mask, and another be attached, without the loss of an expiration. The apparatus, including even the balances, is portable, and may be placed in two boxes, and carried to any distance without injury.

The author in this paper described the quantity of carbonic acid exhaled, and of air inhaled, with the rate of respiration and pulsation during the whole day and night at rest; also the variations of the day, with and without food and exertion; and those occurring from day to day and season to season. The peculiarities of his method of inquiry are—1. The collection of the whole of the carbonic acid evolved in the above conditions; and 2. The continuance of an experiment during the whole day, or its repetition at short and regular intervals during that period.

The total quantity of carbonic acid exhaled in the twenty-four hours was determined on four gentlemen in eight experiments, some of which were continued for eighteen hours, with short intervals for meals only, and others were made at the beginning of each hour and half-hour during that period. The quantity of carbonic acid exhaled in the six hours of the night was 1950 grains, and the total amount of carbon exhaled in the twenty-four hours at rest, varied as follows in the persons experimented on: in a person aged 39, 7·85 ounces avoirdupois; in a person aged 48, 6·768 ounces; in a person aged 27, 6·536 ounces; in a person aged 36, 5·676 ounces; or a total average, in eight experiments, of 7·144 ounces. The effect of walking at two and three miles per hour was found to be equal to 1 4-5th and 2 3-5th times that of rest; and, by making a computation of the amount of exertion made by different classes of the community, he found that in the non-laborious class the carbon was increased from 7·144 ounces to 8·68 ounces, and in the laborious class to 12·19 ounces daily. These quantities were contrasted with those obtained by previous observers. During profound sleep, the amount was reduced one-half from that of the average of the day, and increased gradually after 3 P.M. The variations during the day with food were so great that the maximum was one-half more than the minimum, the greatest occurring after each meal, but particularly after breakfast and tea, and the least immediately before the meals. During a fast of twenty-seven hours, the minimum quantity was maintained almost without change during the whole period whilst awake, and the quantity of carbon evolved in twenty-four hours without food was 5·923 ounces, instead of 7·84 ounces with food—a quantity equal to that in 20 ounces of bread. The blood and the excretions became very alkaline. The variations from day to day were due to temperature and the state of the system. Sudden increase of temperature caused a sudden decline in the respiratory changes, which continued until the temperature fell. This was an ever-acting cause of variation, but was the greatest after the cold of the winter. The state of the system caused by changes in the proportion of want and supply varied the quantity of carbonic acid evolved on the following morning. A good night's rest, a feeling of health, good supply of food, and not too much exertion, gave an increase on the following morning (therefore there was usually a high state of system on Monday), and the reverse under the contrary conditions. As these conditions vary from day to day, the amount of carbonic acid evolved varies every day. The variations which were due to seasons are very remarkable and important, since it was shown that the respiratory changes vary from season to season in a definite and periodic manner, so that the greatest changes occurred in the cold seasons, and the least in the hot seasons, and with definite periods at which this variation begins.

Dr. Smith also showed the amount of carbonic acid evolved with the exertion of the treadwheel.

All the above results were delineated upon an extensive series of diagrams.

Professors Williamson and Frankland bore testimony to the great accuracy of the method employed by Dr. Smith in a chemical point of view, the latter distinguished chemist stating that, having been himself one of the subjects of experiment for a whole day, he was convinced that the determination of the amount of carbonic acid was at least as accurate as could be obtained by the chemist in the laboratory when operating upon small quantities. Dr. Frankland also bore testimony to the very laborious nature of the inquiry.

Thursday, February 10th, 1859.

Sir Benjamin Brodie, Bart., President, in the Chair.

EXPERIMENTS ON THE ACTION OF FOOD UPON THE RESPIRATION. BY E. SMITH, M.D., LL.B.

The method adopted by Dr. Smith was as follows:—First, to take the food under examination apart from the influence of other food, and therefore before any meal had been taken; secondly, to take about the quantity usually taken by mankind; thirdly, to ascertain the amount of carbonic acid expired and of air inspired, with the rate of respiration and pulsation, in a state of perfect rest and in the sitting posture, immediately before the food for examination was taken, and to compare all results obtained during the action of the food with this basis quantity; and, fourthly, to make an inquiry in from three to ten minutes after taking the food, and to repeat it every twelve or fifteen minutes until the maximum influence was obtained, the conditions as to posture and quietude remaining unbroken. He showed, from the hourly variations of these phenomena of respiration, that such an inquiry could not be made correctly between the meals, on account of the incessant variations then occurring from the meals (a source of error in the results obtained by Böcker and other observers); nor in the evening, since at that period all the phenomena declined; and that only in the morning, before breakfast, and before the usual breakfast hour, could trustworthy results be obtained. He also showed that the influence of food is evident soon after its introduction into the system, and attains its maximum within about two hours. The persons experimented upon were chiefly himself and Mr. Moul; but Professor Frankland, F.R.S., Mr. Hoffman, of Margate, and Mr. Reid, of Canterbury, had also submitted themselves to the inquiry.

The substances investigated were very numerous, and the experiments exceeded two thousand. The following is a list of the foods described in this communication:—

1. *Starch series:* arrowroot, arrowroot and butter, arrowroot and sugar, commercial starch, wheat starch, gluten, bread, oatmeal, rice, rice and butter, potato and gum. 2. *Fats:* butter, olive oil, cod-liver oil. 3. *Sugars:* cane sugar, grape and milk sugars, cane sugar with acids and alkalies. 4. The *milk series* (cows): new milk, skimmed milk, casein, casein and lactic acid, lactic acid, cream, sugar of milk and lactic acid. 5. *Alcohols:* spirits of wine, brandy, whisky, gin, rum, sherry and port wine, stout, ale. 6. The *tea series:* tea, green and black, hot and cold, in different quantities, and with acids and alkalies, coffee, coffee-leaves, chicory, and cocoa. 7. *Other nitrogenous substances:* gelatin, albumen, fibrine, almond emulsion.

The following are a few of the principal results:—

1. Pure starch and fats do not increase the quantity of car-

bonic acid evolved; but, on the contrary, the latter somewhat lessen it.

2. These substances are either not found alone in nature, or they are not used alone as food, but are associated with other substances which tend to call them into action, and which constitute a class which the author has termed "respiratory excitants".

3. The cereals—viz., wheat-flour, oatmeal, and rice, containing besides, starch, albuminous products, gluten, and sugar, have a great and enduring power in increasing the production of carbonic acid, an increase exceeding two grains per minute, and continuing upwards of two hours.

4. Milk in its natural combination, and in each of its elements, excites the respiration to an extent from new milk of nearly two grains of carbonic acid per minute. Lactic acid had the least influence, and then cream, but cream had more influence than butter. No artificial combination of the elements of milk produced the effect of the natural milk. Milk produces its effects in different degrees in those who like and those who do not like it.

5. Sugars are most rapid and powerful respiratory excitants, so that an ounce and a half of cane-sugar gave an increase of about two grains of carbonic acid per minute in less than half an hour. The addition of acid usually increased the maximum, whilst that of alkalies increased the duration of its influence. Milk sugar had less influence than cane sugar, and grape sugar less than either; but the latter still produced an increase of more than one grain of carbonic acid per minute. Thus of the hydro-carbons, sugar must be classed apart from starch and fat.

6. Tea and coffee are powerful respiratory excitants, producing an increase of from one and a half to three grains of carbonic acid per minute, and an effect which endured upwards of one hour. Acids added to tea rendered it more stimulating, and alkalies made it more soothing, but a fixed alkali destroyed its influence. Chicory and cocoa have a similar but less powerful action, whilst coffee-leaves caused a diminution in the exhalation of carbonic acid of one grain per minute.

7. Alcohols differ in effect both in the different members of the class and in different specimens of the same kind. Alcohol always increased the evolution of carbonic acid to the extent of less than one grain per minute. Rum, also, commonly had the same result; and good malt liquors produced an increase sometimes exceeding one grain per minute, and enduring more than two hours. Sherry wine commonly gave a small and sustained increase. Brandy and gin, and particularly the latter, lessened the quantity of carbonic acid evolved, whilst whisky varied with the different specimens. The inhalation of the volatile elements of alcohol and spirits and wines caused a diminution in the quantity of carbonic acid, and an increase in the vapour exhaled by the lungs. These various members of this heterogeneous class differ greatly in the amount of alcohol which they contain, as well as in their other elements—as sugar, gluten, acids, salts and volatile oils, and ethers—and, in the author's opinion, should not be classed together.

8. Gelatin, albumen, and fibrine, also increased the production of carbonic acid to a maximum quantity less than one grain per minute.

9. Thus nearly all nitrogenous foods are respiratory excitants.

10. Foods may be thus classed in reference to this latter quality: *Non-excitants*—starch, fat, some alcohols, coffee-leaves; *Excitants*—sugar, milk, cereals, potato, gluten, casein, gelatin, fibrine, albumen, tea, coffee, cocoa, chicory, alcohol, rum, ales, and some wines.

The author did not discuss the mode in which they produce these effects; but he adduced several facts which may aid in forming an opinion upon the subject. He also stated that whenever there was an increase in the quantity of carbonic acid evolved, there was also an increase in the quantity of air inspired; but that these were not due to increased *rate*, but to increased *depth* of respiration. He also found that the same food produced effects differing in *degree* in different persons, and in the same person at different periods; and such was also the case with the action of acids and alkalies upon the human system.

Professor Frankland bore testimony to the efficiency of the apparatus and the method employed by the author; and stated the great exactitude with which an observer could make inquiries after a little practice. He thought that the time had not arrived when we could determine with certainty the mode of action of foods; but he was of opinion that the author, by his very extensive and laborious inquiries, had greatly facilitated the efforts of future observers, and had done good service to physiological chemistry.

Dr. Carpenter expressed an opinion as to the cause of the inaction of starch, when taken alone, in accordance with the results obtained by the author on the action of gluten; and, referring to the large amount of hydrogen and oxygen contained in fats, explained that when the author had used the term "respiratory phenomena" in describing the results, he meant to limit himself to the carbonic acid, and not to include the formation of water.

Professor Sharpey stated that the author intended to determine the whole amount of oxygen consumed; but had not at present decided upon the most suitable kind of apparatus for that purpose. He also referred to the corroboration which this paper affords of the results obtained two years ago on the quantity of air inspired in reference to the different action of brandy and rum, which were read before the Royal Society; and showed that we are all conscious of difference in the effects of alcohols, whilst the chemical differences had not been hitherto well ascertained by chemists. He also showed the great importance of attending to minute differences, and illustrated his remarks by a reference to the recent brilliant experiments in electricity by Mr. Gassiot. He thought that, as physiologists, they were under obligation to the author for having given his results to the Society; and, in answer to Dr. Carpenter's observation, that experiments were required upon a larger number of persons, stated that the Society would be glad to learn, in a future communication, that that learned physiologist had submitted himself for experiment.

After a few observations by the President, and the thanks of the meeting given to the author, the Society adjourned.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 22nd, 1859.

Sir Charles Locock, Bart., M.D., President, in the Chair.

SOME OF THE CYCLICAL CHANGES IN THE HUMAN SYSTEM CONNECTED WITH SEASON. BY EDWARD SMITH, M.D., LL.B.

Dr. Smith had occupied the last four years in determining the cyclical changes in the respiratory function, and referred to the two papers already published by him in the *Transactions* of the Society, and to very recent researches into the quantity of carbonic acid expired, and of air inspired, with the rate of pulsation and respiration in the cycle of the twenty-four hours, and then showed that the daily cycle is not the same at all times, but varies from day to day and month to month through the cycle of the seasons. He showed from the literature of the subject that, while the cyclical changes in any of the functions of the body had not been hitherto investigated, a large amount of knowledge had been gained in reference to respiration, but which was lacking in extent and demonstration. He particularly quoted the results obtained by Mr. Milner, surgeon to the Wakefield Convict Prison, which showed that the prisoners gain weight from April to October, and lose weight in the other months of the year. The author had made experiments upon himself, aged 39, and upon Mr. Moul, a gentleman aged 48, and had continued them upon himself from March 31, 1858 to the present time. Both gentlemen were without hereditary or acquired disease, in robust health, capable of, and accustomed to much mental and bodily exertion, above the middle height, and of very regular and moderate habits. The author takes every kind of food heartily, while Mr. Moul dislikes many. The time of experiment was from 7 to 8 A.M. before breakfast, with the body sitting and in perfect rest. His apparatus and method were then described and exhibited (see p. 253). The results of the experiments showed that as the season advanced from spring to the end of summer all the above-mentioned respiratory phenomena declined. The highest period was in the spring, the decline occurred at the beginning of summer, the lowest period was the end of summer, and the period of increase was the autumn. The extreme difference in the author was 30 per cent. in carbonic acid from the beginning of June to the beginning of September, and on the average of a month to the middle of August, was 17 per cent. in the carbonic acid, 30 per cent. in the air, and 32 per cent. in the rate of respiration. In Mr. Moul the loss at the middle of June was 27 per cent. in the carbonic acid and the air, and 28 per cent. in the rate. The author bears heat well, while Mr. Moul suffers much from it, and the results bear out a former observation by the author, viz. that those who bear heat badly have an excess of all the seasonal changes. The author then averaged

the months according to these seasonal changes, and showed that there are two tolerably fixed periods (maximum and minimum), and two periods of change (increasing and decreasing), and tabulated them as follows:—

Fixed ..	Maximum.—Jan. Feb. March, April, and May (sometimes Dec.)
	Minimum.—July, August, part of Sept.
Variable	Decreasing.—June (sometimes May.)
	Increasing.—Oct. Nov. Dec. (sometimes Sept.)

He then showed the relation which these changes have to temperature, pressure of the atmosphere, and vapour in the air, and proved that the latter do not altogether account for them. The relation of temperature and pressure is an inverse one, and the former is very marked in sudden accessions, and is therefore a frequent cause of variation; but a medium degree of temperature at 55° to 60°, and a medium height of the barometer, at 29 to 30 inches, are accompanied by all the degrees of respiratory change. He then quoted Barrall's experiments, showing the influence of season upon the ingesta and egesta, both of carbon and nitrogen, to prove that within certain limits variations in the amount of carbon exhaled indicate also similar variations in the nitrogen excreted. He also showed that as the skin had exhaled in July only six grains of carbonic acid per hour, in experiments upon himself, it was not important for him to refer to it. The author then applied this discovery to the production of disease, and showed that the dangers of the fixed periods are from excess in both directions, *i.e.* excess and defect, and increase with the duration; while those of the variable periods result from the want of ready adaptation of the system to the variation of the external influences, and particularly of temperature and food, and would be the greatest at the commencement. He had abstracted the deaths in each season in the five non-epidemic years in London (1850-4) from diseases having periods of seasonal increase, and determined the excess or defect in each quarter of the year from that which would have occurred if the deaths had been equally distributed over the year, and showed that there was a close correspondence between the states of the human system at different seasons and the type of disease then prevalent. Thus diarrhœa, cholera, plague, yellow fever, and asthenic diseases, with diseases of the bowels, prevail with the decreasing and lowest states of system, while diseases of the lungs and sthenic diseases, prevail with the maximum state. He also showed, further, that the advancing type of disease is that of the advancing season, so that in epidemics of scarlatina occurring after the minimum period the most asthenic type is observed at first, while in measles occurring with or after the maximum period, the most inflammatory cases occur early. Scarlatina is checked by the increasing state of the system and measles by the decreasing. Hence in every disease it is important to bear in mind the season of the year as indicative of the state of the human system, and in every epidemic it is necessary to consider the nature of the advancing season. The author had also investigated (by the kindness of the Registrar-General and Dr. Farr) the viability of children born at different seasons in reference to the period of procreation and of birth, the former illustrating the state of system in the parents, and the latter in the child, and found that it referred only to the latter. Of all the children who died under the age of one year in the northern district, from Newcastle to Kendal, in 1857, and whose age in months was recorded, the largest percentage was born in the summer months, the period of decreasing and minimum vital action of the human system. Animals which procreate once a-year have their sexual appetites excited in the hot season, but they bring forth their young in the cold season.

The author concluded the paper, with four following deductions:—

1. Seasonal diseases must now be referred directly to the state of the system, and only indirectly to meteorological conditions. This does not affect the fashionable search after poisons.

2. The type of a seasonal disease varies with the advancing season.

3. The cyclical rotation of the seasonal changes in the system explains in great part the cessation of seasonal diseases; for while such diseases may increase as the state of system increases in which they arise, they must decline and cease as the state of system changes into its opposite. This was illustrated by comparing the march of a cholera epidemic from June to November, with the variations then proceeding in the system, and also the cessation of an epidemic of scarlatina and measles.

4. These cyclical changes are a part of the *vis medicatrix naturæ*.

The author having thus proved the great importance to health of this rotation of changes, exposed the folly of endeavouring to maintain in our hopitals, public offices, and houses, an unvarying condition throughout the year, and stated that the contrary plan had been of incalculable value in the treatment of phthisis. He trusted that these results would afford a glimpse at some of the fundamental laws of the system.

Editor's Letter Box.

CONSTITUTION OF THE INDIAN MEDICAL SERVICE.

Sir,—Having been brought into contact at hospitals and elsewhere with a very large number of medical students, I have been repeatedly asked for information regarding the Indian Medical Service. These inquiries have been particularly numerous since the issue of the new Army Medical Regulations; and the inducements offered by the two services are being very closely scanned and compared. Finding very erroneous ideas prevalent with regard to the Indian service, it has occurred to me, that a portion of the space of the British Medical Journal might be advantageously allotted for the purpose of placing before the rising generation of practitioners, their relatives and friends, a fair and true statement of what the Indian service really is.

Previously to the year 1795, the service was composed (for the most part) of adventurers who went out to India as surgeons of ships, etc., and were admitted on the Company's army list by virtue of passing an examination before the Medical Boards of the Presidencies. About this time the Court of Directors placed the service on a more respectable footing; and, previously to the admission of any gentlemen, required diplomas from one of the colleges, London, Edinburgh, Glasgow, or Dublin, to be produced.

Simultaneously, the local government gave to regimental surgeons contracts for the purveying of hospital stores and the supplying of European and bazaar medicines. In consequence of this, medical officers found themselves in the receipt of enormous sums. This intelligence was not slow in reaching England; and the service was soon filled with accomplished surgeons—Wade, Balfour, MacLean, Fleming, and others.

In 1815, however, the contract system ceased, and an allowance was granted in lieu thereof; the government undertaking to find medicines and stores.

The large fortunes made during this period have surrounded the East India Medical Service with a false pecuniary halo; and the idea still lingers in the minds of many that the East is the place for the surgeon to realise a rapid fortune.

In 1828, by some further alterations, a blow was given to the prospects of all; and, although some favourable modifications were made in 1830, and again in 1858, still the junior members of the service were generally left on a rate of pay barely sufficient for expenses.

Admission to the service is now, as every one knows, by competitive examination. The Rules and Regulations may be found in the *East India Army Register*.

The medical establishments are three: those of Madras, Calcutta, and Bombay. They each consist of a director-general, inspector-general, superintending surgeons, surgeons, and assistant-surgeons.

The assistant-surgeon, having gained his appointment, *must pay his passage out* to Calcutta, Madras, or Bombay, according to the presidency to which he may be appointed. He must also purchase uniform and outfit. These expenses will not be covered by less than £200. He does not receive, as the civil servant does, any allowance before reaching India.

Arrived at the presidency, a few days sees him attached to the European hospital there, or to an European corps at an up country station. Here he remains some months (if the exigencies of the service do not require his removal), and has the care of a considerable number of patients, under the watchful eye of some senior officer. On his first arrival in India, he will require saddle, bridle, horse, tent, some small amount of furniture, and a host of minor articles, which will entail an expense of not less than £120. Having thus got rid of about £320, he now begins to receive pay at the rate of £270 per annum, or

£22:10 per month; three pounds being added when actually seeing patients (conveyance allowance), per month.

We shall now see how far this is likely to meet his expenses; and for this purpose we will suppose him located at a station some distance from the presidency, where living is less expensive; and we will also suppose him to share the rent and occupation of a bungalow, or house, with a friend. The payments are calculated at the lowest possible amount, allowing that he lives in tolerable comfort; a certain degree of which is necessary in India for the preservation of health.

Receipts per month.	£25	10	0
Expenditure per month.			
Fund payments	2	10	0
Rent	3	0	0
Servants	5	0	0
Food, wine, beer, etc.	12	0	0
Clothes	2	0	0
Horse-keep	3	0	0
Repair of tent, etc.; and petty expenses	2	0	0
Mess, band, and station subscriptions	3	0	0
	32	10	0

The expenditure is thus £7 more than the receipts.

Lest these expense should be considered exaggerated, it must be borne in mind that, in India, all European articles are double or more in price what they are at home. Owing to "caste" several servants must be entertained; the man who spreads a cloth declining to do little else than that laborious duty. All the servants are males, and they often have with them not only their wives and children, but their parents and other relatives, all of whom, more or less, depend on the officer for support. The wear of tents, and destruction of the same, together with other articles, such as trunks, boots, etc., by ants, damp, and marching, is also considerable; and it not unfrequently happens that a horse dies from bowel-complaint, or the sting of some venomous reptile, or, if he does not die, becomes useless for a longer or shorter period.

After the lapse of a variable time, the longer the better, the assistant-surgeon finds himself "in orders" to proceed to some distant station, hundreds of miles away, there to take charge of some detachment, and march with it hundreds of miles elsewhere. From the day he leaves his station, not having patients to see, he ceases to draw his extra £3 per month. This reduces his pay to £22:10, as before stated; until he arrives at more than two hundred miles from the presidency, when he again receives an addition of £3 under the term of "extra batta."

With marching come extra expenses. To get along comfortably, he should have another horse, or at least a pony; suppose the latter. His head servant will probably ask him for some kind of conveyance. He will require to advance money to pay his servants' debts; for he cannot march through jungles without servants. He must sell (of course at a loss) his small amount of furniture; £30 certainly will not more than cover these expenses, *making in all spent* £350. Arrived at the termination of the first portion of his journey, he takes charge of some detachment—say a battery of artillery; which brings him an addition to his income of £1:4 if native; and £2 if European. His pay therefore will stand thus while he holds this charge; pay and allowances, £22:10; conveyance allowance and extra batta as long as he is two hundred miles distant from the presidency, £6; charge allowance, £1:5 or £2—say the latter; total, £30:10. The expenses of marching, however, are so great, that he will be lucky, when he is again resident in a cantonment, if he does not find that he has spent somewhat more than he received.

He may now again be attached to some corps on his £22:10 per month; and may again repeat, after a very short time, a march of the same description; or, some officer going away sick, he may be lucky enough to fall in for the temporary charge of a native regiment. For the first few years, however, he will not get permanent charge, but will oscillate from station to station; sometimes with a small charge, sometimes without; finding, at the end of three or four years, that he has saved *nil* towards coming home on furlough.

The fact is, that a medical man, when he enters the service, is situated differently from any other officer. A cadet joins a regiment, and becomes a portion of such regiment, and does not again leave it; but the medical man is so often moved from station to station, that his expenses must inevitably exceed those enumerated. Of course the career of each assistant-surgeon differs; some are lucky in dropping in for temporary charges; others are in the country five or six years without holding anything worth having.

At last, after about five years, the assistant-surgeon is posted permanently to a regiment, or, if he has interest, and passes an examination in the language, he may obtain a vaccinatorship or civil surgeoncy. His pay with a regiment will now be £39:10 if within, and £42 per month if more than two hundred miles from the presidency.

Before this, however, his subscriptions to the funds have been considerably increased; he has also to pay a donation of £10 to the regimental mess, with other incidental expenses. He can live, however, very well *as a bachelor*, and may, probably, pay off a little of what he has previously spent above his pay.

Let us, however, examine his circumstances. Passage money, outfit, and equipment in India have been seen to be at least £350. The interest of this for five years at five per cent. will be £87:10. It has also been seen that, in the majority of instances, expenses exceed income. £7 per month for five years amounts to £420, which, added to the previously mentioned sum, is £857:10, representing the amount of capital invested, before he attains a post giving him sufficient for a comfortable subsistence.

Having attained the charge of a regiment, he there remains, and waits for his promotion; and his senior having died or retired he becomes *full surgeon, a post of dignity ranking with, but after a captain!* Any one would naturally suppose that he reached this rank in six or seven years; but, alas! it is not until he has served from *fifteen to sixteen years* that promotion comes. If he enters the service at the average age, twenty-four or twenty-five, *he numbers forty years before he becomes full surgeon!*

The Marquis of Dalhousie, in his memorable minute on the Indian Medical Service, presented to the Court of Directors in 1855, showed himself well aware of this slowness of promotion. Anxious to improve the service, that enlightened nobleman recommended (with the concurrence of the Commander-in-Chief,) that an assistant-surgeon, after seven years service, instead of drawing the charge pay of £16 a month, should draw that of full surgeon, viz., £30; but the honourable Court considered it would be sufficient to allow the increase after ten years service. This much was a boon, and as such was received, though a feeling of regret remains, that the Governor General's proposal did not meet with more liberal sanction.

The pay, then, of an assistant-surgeon in charge of a regiment after ten years service, if *recommended* for the extra allowance, will be £642 *per annum*. Supposing, however, he is removed from one charge to another, or vacates his appointment from sickness, the charge pay ceases, and he only receives, as at first, £270 *per annum*.

Having been gazetted as full surgeon, he pays several donations; one to his regimental mess; others to the funds, military or medical. His monthly subscriptions are also increased. The regulations require him to have a larger sized tent, and his pay is now £440 without charge, and £804 with charge, (infantry).

In the regulations regarding pay latterly published, the pay of an assistant-surgeon in charge of a cavalry regiment (regular), or horse-artillery, is set down as £514:9. These *regular* cavalry corps, and artillery battalions, however, happening to be surgeon's charges, an assistant cannot hold them. In the absence, from sickness, of a full surgeon, it occasionally happens that an assistant-surgeon may hold one of these charges temporarily; but a surgeon is always immediately appointed to fill up the vacancy. Moreover, there are but three cavalry regiments in Bombay and Madras; and prior to the mutinies, there were but ten in Bengal.

Between the higher grade of superintending surgeon and that of assistant surgeon, there is no intermediate substantive rank, similar to that of surgeon-major in the royal army. All are surgeons *ranking as captains until they have served for thirty years*, and are then classed as majors *without any additional pay*. The average interval thus passed as full surgeon is not less than fifteen years! fifteen of the best years of a surgeon's life in India; and it is during this period that the majority of the most efficient retire. Some inducement is necessary to tempt men in the prime of life and usefulness to remain in the service. Few are inclined to pass another fifteen years waiting for promotion. Hence the greater number leave at the very time their experience renders their services most valuable, particularly if they have any private means to add to the scanty pittance of £190 *per annum* less income tax,

which they receive from the government, after seventeen years service.

In the majority of cases it is too true that, up to his obtaining a full surgeoncy, the medical man has not received more than a bare sustenance; and, so far from being paid liberally for the service he has rendered to the state, considering the capital he has sunk in the attainment of his profession, and his outfit and passage to India, the clerk in the India House is more amply remunerated. Had the surgeon gone out as a cadet, the expenses of his education would have been saved, and his gradations to rank and pensions would have been more numerous, honourable, and lucrative.

The period of promotion to a superintending surgeoncy, from the time the medical man enters the service, has been hitherto thirty years, and upwards. Few men can realise the hope of living thirty years in an uncongenial climate, or, if they live so long, of retaining their mental and bodily energies. Yet the attainment of this grade affords almost the only prospect of saving, or perhaps of reimbursement. One in twenty of those entering the service are supposed to reach this rank, and about one in fifty the higher ranks of inspector and director-general, or, formerly, that of members of the medical boards.

The salary of the director-general of Bengal is £3,600 *per annum;* of the inspector-general, £2,400; of the superintending surgeons, £2,100. The corresponding ranks in the other presidencies are paid considerably less.

Nothing has been yet said about sick leave or furlough. The officer throughout his career has been supposed to enjoy good health. Few surgeons, however, are thus blessed in a country where there are so many climates inimical to human constitutions. Most men suffer from severe illness at one time or other, and, in consequence, are compelled to proceed to the hills, or to Europe. Then they are not only deprived of their higher allowances, but have many extra expenses to incur. The charge resigned into the hands of some expectant junior, the sick man wends his way to the presidency, where, if he remains sick, he is allowed a furlough to Europe for eighteen months or longer, as the case may be. On the old furlough regulations, he draws while in England £128 *per annum*, less income tax; on the new, something additional during the first six months; not a very magnificent sum on which to support himself and, perhaps, a family. If he comes home as a surgeon he receives higher furlough pay; viz., £190.

Unless he comes home on sick certificate, he is not entitled to revisit Europe until he has served ten years. He is then allowed two years furlough on the same rate of pay just quoted. There are few, however, who are not forced to return on sick certificate long before the completion of their ten years service.

It is a subject of just complaint, promotion being so slow, that an assistant-surgeon of fifteen or sixteen years service, when on furlough, or a surgeon of thirty years service, draws no higher rate of pay than he would if he came to Europe after holding either of the said offices a year or a month!

Having renovated his health, and renewed his professional knowledge, he returns to the East; and, on arrival, may perhaps be troubled with a little detachment duty, if the service require his attention in that manner; otherwise he will again take charge of a regiment, or resume, perhaps, his former appointment.

The preceding remarks have referred more particularly to officers employed on military duty, and, as such, receiving military pay and allowances. There are, however, a number of civil, or so-called staff-appointments, of which about fifty belong to the Bengal Presidency. Some of these can only be held by full surgeons; others are considered as belonging to assistant-surgeons. They are chiefly in the gift of the Governor of the Presidency, and are mostly obtained by interest exerted in one way or other; a certificate of having obtained a knowledge of the native language being also required. The Bengal medical service, however, consisting of 129 surgeons and 230 assistant-surgeons, total 359,—it will easily be seen that every one cannot hold a staff-appointment. Most of these offices are very well paid; others little better, if so well as those in the charge of a regiment. The residency surgeoncy of Lucknow was formerly worth £130 a month; that of Nagpore almost as much. The opium examinerships of Ghazeepore and Patna are excellent appointments. The civil surgeoncy at Indore, the assay-mastership at the Mint, the charge of the Botanical Gardens, Simla, Mussoorie, Delhi, Agra, Benares, etc., vary in value from £700 to £1000 *per annum*. In Madras and Bombay, there are also a certain number of good civil appointments distributed (rather few and far between) through the service.

The charge of irregular cavalry *corps* is chiefly held by assistant-surgeons, and is rather sought after, in consequence of horse allowance being given in addition to charge allowance and military pay; but as the medical officer, on joining such *corps*, is obliged to invest a considerable sum in the purchase of chargers, it is questionable if his extra pay will cause his riches to increase to any very considerable amount. The amount is £514 *per annum*.

Formerly, medical officers used to draw allowances for acting as assistant-magistrates, having charge of the post office, registry of deeds, registration of births, deaths, and marriages, etc. Now, however, it may be said, none of these offices are held by medical men. (*Calcutta Review*, No. 45, Surgeons in India, Past and Present.)

Surgeons in charge of the regular cavalry *corps*, and of battalions of artillery, receive horse allowance extra; viz., £6 per month. Surgeons in charge of the Company's European regiments also draw £2 per month extra for every hundred men they have under care. All, however, cannot hold either cavalry *corps*, artillery battalions, or European regiments.

We now come to the subject of pensions, and shall consider those only under the new regulations of 1856. After seventeen years service, the medical officer may retire on £190, less income tax; after twenty-one years service, on £250; after twenty-five, on £300; after twenty-nine, on £365; after thirty-two, on £500.

These sums not being sufficient to enable men to retire and support a family at home, medical retiring funds were instituted to aid this desirable event. There is one of like nature at each of the presidencies, to which every medical officer entering the service is obliged, as a condition of his appointment, to subscribe. There is some difference regarding the constitution of the funds at each of the presidencies; but it will be sufficient if one is described, say that of Bombay. To this fund a medical officer pays, on entrance, for the first two years, £18 *per annum;* afterwards, £30 *per annum*. On promotion to full surgeon, he gives a donation of £10, and afterwards subscribes £48 *per annum*. On promotion to superintending surgeon, he makes another donation of £20, and subscribes £120. The fund gives off three annuities of £112, £140, and £128, each year; but, as there are more retirements than annuities, a person has to wait some years after leaving the service before an annuity falls to his lot. Thus a person retiring, after seventeen years service, on the government pension of £190, becomes entitled to the pension of £112 from the fund after the completion of twenty years membership with the fund, but often has to wait still longer before he actually receives the annuity; and so on with the higher rates.

This fund is, however, in a very enfeebled condition; and the Bengal fund is not so flourishing as the one established on different principles at Madras.

It will be seen that these payments to the funds constitute a considerable item drawn from the monthly pay. Besides the medical fund, there are subscriptions of 13*s.* a month to be paid to the military fund; also a donation of £30 on entering the service; and the benefits derived from this are allowances of passage-money to England, if obliged to return on sick certificate. There are also mess, band, and station subscriptions, all of which tend to lessen materially the sum total received. Subscriptions to all the funds increase according to rank and length of service. Married men also pay additional.

Hitherto the medical man has been considered only as a bachelor. If he chance to marry, and have a family, his expenses will be most materially increased. There are extra donations and subscriptions to the different funds, and the expense of moving about is nearly doubled. The wife will require, sooner or later, to revisit England for her health; and children, at an early age, must be sent to England, or at least to Europe; otherwise, they suffer both morally and physically. Thus, in many instances, the officer has to support a family at home and himself in the East; while the loss of domestic comfort entailed is worthy of some consideration. The expenses of a family may be considered as at least double in India of what they would be in England.

The amount of professional labour falling to the medical officer is not, as a general rule, very great. Occasionally, however, when an epidemic of cholera or dysentery occurs, he has quite enough or too much to attend to. The work, however, which he has to perform, depends on the appointment he holds; some appointments entailing a good deal of labour, others not nearly so much.

In this sketch of the assistant-surgeon's career, his duties have been supposed to be on the peace establishment. I need not say that, if hostilities break out, and he is sent on actual service, he will, in all probability, suffer not only in health, but also in pocket, both as regards his receipts and expenses.

Each assistant-surgeon entering the Bombay Presidency is required to serve, during the first three or four years, a period of two on board the cruisers of the Indian Navy This is considered by many as a very unpleasant duty, and is certainly one entailing at the onset a considerable loss. The officer ordered for this duty may be stationed hundreds of miles up country, have to sell his horse, furniture, etc., and make a long march to Bombay, for the purpose of going on board ship. There, however much he may be troubled with sea-sickness, or dislike a naval life, he has no resource but to endure, and linger out his time as best he can in the Red Sea or Persian Gulf. Here his position is perhaps better than that of the assistant-surgeon in the Royal Navy, as he is always sure of the worst cabin in the ship; but some of the vessels are so very small, that it is impossible to live in them with any degree of comfort. If the officer like a sea-life, and can get into a large ship, he may pass these two years not unpleasantly. According to the regulations regarding assistant-surgeons, it is stated, "The medical is considered a branch of the military department". It is therefore, in most cases, considered a grievance when the assistant-surgeon finds he is obliged to become a naval officer.

An idea very prevalent and very erroneous is, that the medical officer makes a considerable sum over and above his pay from private practice. This can only happen to the three or four lucky men who have permanent appointments in the presidency; the natives up country having little or no faith in European doctors, and the European residents out of the service being none. On this point, read what Mr. Ranald-Martin says, in his evidence before the Select Committee of the Army Medical Department, July 3rd, 1856.

Question (by Sir J. Trollope, one of the Committee). "Have you not the further advantage of being allowed private practice, if you have an opportunity of obtaining it?"

Answer. "That can happen to few men; that was my own position. Holding a staff-appointment at Calcutta, I was in private practice."

Question. "Was not this a very lucrative practice?"

Answer. "It was a very lucrative practice; but the government pay did not pay for my horses!"

In Madras and Bombay, there not being nearly the number of European residents, there are not the same facilities for forming a practice enjoyed by those permanently stationed in the presidency cities.

With regard to the frequently asked question, Which is the best service, the Indian or the Queen's?—it seems certain that, under the new warrant, the latter bears scrutiny much the best. This question has been latterly ably considered by the Dublin Professor of Military Surgery; and I cannot do better than quote his remarks.

"Where can you get the best and surest return for your professional talents—the best market, in fact, to which you can carry your diploma? Under the new warrant, I do not hesitate to tell you, the Army Medical Department, 'What,' you will say, before the East Indian, or what was formerly called the Company's service?' Yes! The Company's service is the secondary position; and my reasons for asserting this are as follows. In the first place, it is complete expatriation; in the next, it entails, of necessity, the whole period being passed in tropical service, from which, if the heat disagrees with the individual, he has no power to extricate himself. *He cannot, as in the Queen's Army, get removed to a cold or temperate climate;* and must either drag out his existence in the East, or resign his commission. Such is no imaginary case; for now, even whilst I am speaking, my eye rests on a gentleman who exactly bears me out. His health was broken down in India; and, after striving to the utmost to remain there, he has been compelled to retire with too short service for a pension, yet too old to enter Her Majesty's service; and he has now to start anew in life, and with shattered strength to seek his fortune in private practice. The pay, too, of the Queen's medical officer, if called upon to serve in the East, is assimilated to that of the Company in the different grades; while the emolument of a surgeon of an European regiment is far beyond that of any native corps. Promotion, too, is *infinitely more rapid*, and retirement certain; whereas, in the Company's service, the real ability of retiring depends on the state of the military fund (and medical); for, unless this is capable of affording the extra gratuity, he cannot well do so on the Company's pension alone." (*Dublin Medical Press*, December 1st, 1858.)

In the Queen's service, the assistant-surgeon has no passage out to pay, and thus saves £110 or £120.

A writer in the *Medical Times*, February 25th, 1858, gives the following comparison between the Queen's and the Indian services.

An assistant-surgeon of sixteen years standing in the Indian service, on furlough in Europe, draws 6*s.* 6*d. per diem.* An officer of the same standing in the Queen's service would probably draw three times that amount in Europe.

Queen's Service Medical Officer attains rank of	Indian Medical Officer attains rank of
Captain in 6 years; may do so in 5.	*Captain* in 13 to 15 years.
Major in 10 years at most; may do so in 5.	*Major* not under 30 years.
Lieutenant-Colonel, at any time after 10 years' service.	*Lieutenant-Colonel* not under 30 years, when he is superintending surgeon, selected from the seniors; and then he gets only the prize money of a captain when on the field.
Higher grades, by selection.	*Higher grades*, by selection.

Moreover, it seems probable that the transfer of the Indian forces to the Crown will pave the way for the Queen's officers holding staff-appointments in India, civil surgeoncies, and the like, which hitherto have always been looked upon as belonging to the Indian services.

There is probably no department of the Indian public service which has produced a greater proportion of distinguished men than the medical. To the patriotism of two of their number, Broughton and Hamilton, the foundation of the empire, "the brightest jewel of the British crown", may fairly be traced. The professional skill of the former, successfully exercised upon the daughter of Shah Jehan, procured the long desired privilege of establishing trading factories in Bengal, free of taxation; and, when this privilege was on the point of expiring, it was renewed by the surgical success of the latter upon the person of the Emperor Farukshere. The names of Annesley, Allan Webb, Twining, M'Lennan, and a host of others, are familiar. To one now in India, O'Shaughnessy, that country owes the successful introduction of the electric telegraph. To others, working with equal zeal, is in a great measure due the progress of civilisation, which we may hope will sweep away the superstition of ages. Where shall we find men who have done more for the advance of medicine and military hygiene than the accomplished physician Morehead, and the indefatigable Martin?

To a medical officer loving his profession, unless he holds a civil appointment, India presents few opportunities for practice and investigation. The duties are chiefly those of a general practitioner at home; but, in charge of a native corps, the surgeon may be months without anything to treat of a surgical nature; the chief of his cases being liver-disease, fever, and dysentery. He must, however, be "well up", as he knows not at what hour he may be placed in positions of the greatest responsibility, and have to perform operations single-handed which would be deemed formidable if in the hands of the whole surgical staff of St. Thomas's or Guy's, with all means and appliances at hand. Instances have been known where medical officers, not feeling equal to such performances, have been rash enough to commit suicide, preferring death to exposure. It is, therefore, incumbent on every one proposing to enter the Indian service, to become an eminently practical man. The soldier has no choice in his medical attendant, and must submit. It is lamentable to reflect upon the amount of mischief that must ensue from incompetency in a military surgeon, and particularly one stationed in India. Does the examination instituted for the Indian service sufficiently test the practical knowledge of the candidate for that service? I have no means of knowing, not having been present at an examination; but, as far as I can understand, too much appears to be thought of the candidate's knowledge, or the reverse, of botany and other collateral sciences.

I should not fulfil the intention of this letter if I omitted to say a few words on the subject of climate, for that is a point on which I am always questioned. Many places in India are undoubtedly unhealthy, and particularly inimical to European

constitutions; but at many stations there is no reason why an European should not enjoy *tolerable* health, at least for a time. He cannot, however, from the heat and its attendant annoyances, enjoy the comfort he would in a temperate clime. Much, however, will depend on the kind of duty the assistant-surgeon has to perform. If marched about a very great deal, if sent on active service, and exposed to the sun, night air, and miasm, if sent into the navy, and obliged to serve in one of the small brigs or schooners, he will most probably find his health suffer. Much depends on himself, his habits, diet, temperance, and care in not unduly exposing himself to the midday sun or miasmatous night air. In India, there is no climatisation. As a rule, persons seem to enjoy the best health during the first few years of residence, and gradually the constitution seems to deteriorate and break down.

I have now endeavoured to give a faithful account of the Indian service, as it affects the majority of those who enter it. I trust those now hesitating regarding their course in life may thus be enabled to arrive at a right conclusion. Let no one, however, enter the service with the idea of returning if they do not like it. Many do so enter, but few realise the idea. Home associations and opportunities are lost; their capital is invested in the East; and possibly they have insensibly adopted habits consequent on a roving life, which will not aid them in forming a practice.

The following is not overdrawn regarding a medical man's vocation in any part of the world, and certainly is applicable to life in India:—"When it is considered how much a surgeon must necessarily be exposed to the inclemencies of climate; how many comforts he is compelled to renounce; how many dangers, both by night and day, he must encounter; how many hardships he must endure; how soon his constitution is liable to be impaired by the fatigue and sudden changes which are inseparably connected with his employment,—it must be confessed that many situations are superior to that which he fills."

I am, etc.,

An Indian Officer.

London, March 1859.

INDIA MEDICAL SERVICE.

Sir,—In relation to the condition of the medical service of the Indian Army, letters have appeared lately in journals both medical and non-medical, all betraying a spirit of discontent. Will you permit me, through the medium of your columns, to express my opinion that, unfortunately, there is but too good ground for complaint?

Many years ago, a young medical officer joining the Indian Army was believed to be entering a lucrative service, with easy work to perform, and with the certainty of a good retiring allowance after the expiry of a short number of years. These advantages will not be found to belong to the service of the present day. With regard to pay, excepting in the case of a few very fortunate individuals, it is barely sufficient to cover the expenses of living in the most moderate manner. The work, considering the long distances to travel between the different stations, and the bad climate of India, is, I fancy, more laborious than that in most occupations in this country. The retiring allowances from Government are very small indeed: those obtained from the funds are all paid for; and, considering the high rate of mortality in India, are paid for, excepting in the case of Madras, at most exorbitant rates. In addition, promotion is very slow; and the number of those honorary rewards so highly prized in military services is very small indeed. Medical appointments in the English service are at present, in my humble opinion, far, very far, preferable to those in the Indian Army.

I am, etc., Indian.

London, March 1859.

CASE OF MEDICAL ETIQUETTE.

Sir,—Will you excuse the liberty I take in asking your opinion, and that of my fellow-associates, upon the following circumstance?

A and B are two surgeons residing in the same village. A is called at night to an accident. He dresses the wounds of the injured man, and sends him home in a carriage, promising to attend at his request on the following morning. The person injured is in the employ of a family to whom B is the medical attendant. B, hearing of the accident, drives to the residence of the family unsolicited, and awaits the arrival of the casualty. He removes the dressings A has applied, knowing that he has applied them, and takes charge of the case, calling upon A as he returns home, to say that he has done so, and that he considers the case his.

Should B have acted in this manner without first consulting with A? Has he acted in an unprofessional and ungentlemanly way?—or does the fact of his being the usual attendant on the family shield him from blame?

I have only to add that, as I am not personally interested in this matter, I enclose my card.

I am, etc., Medicus.

March 22nd, 1859.

[It seems to us that the nature of B's connection with the family rendered it his duty to ascertain, on hearing of the accident, whether his professional services would be required; and that he acted quite correctly in repairing to the residence of the patient. But, beyond this, the report of his conduct, as given to us, wears an aspect of *hauteur* towards A, which we cannot commend. Unless A had been a man utterly unworthy of confidence, we scarcely see what necessity there was for removing at so early a period the dressings which he had applied. B's course should have been, to leave A's work alone, unless for urgent reasons; to call on A, thank him for his assistance, and explain to him his (B's) position as the medical attendant of the family. A would then, of course, have relinquished the case into the hands of B. Editor.]

POOR-LAW MEDICAL REFORM.

Letter from R. Griffin, Esq.

Sir,—May I ask the favour of being allowed, through the medium of the Journal, to correct a mistake in the pamphlet (No. 3) recently issued, on the *Grievances of the Poor-law Medical Officers?*

On looking over the pamphlet, I find there is an error throughout the column No. 41, page 17; Nos. 34, 35, 36, and 40, having been added together, instead of Nos. 36 and 40 only. Any gentleman desirous of having a printed slip to paste over the incorrect number, has only to forward a postage stamp and his direction, and he shall have one. In all other respects, I believe the tables to be correct.

I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, March 17th, 1859.

CORONERS' INQUESTS AND MEDICAL FEES.

Letter from J. Ness, Esq.

Sir,—In the British Medical Journal of March 12th are two letters respecting coroners' inquests. Being one of the few coroners who are of the medical profession, I think it right to answer the inquiries therein contained, as far as I am able.

In Mr. George Terry's case, I am decidedly of opinion that medical evidence ought to have been obtained. The practice of coroners generally, before the passing of the Registration Act, was to inquire only whether the deceased came to his death from violence, or "by the visitation of God" from natural causes. The Registration Act made it imperative to inquire into the particular cause of death. The twenty-fifth section provides "that, in every case in which an inquest shall be held on any dead body, the jury shall inquire of the particulars required to be registered concerning the death", one of which particulars is the immediate cause of it. To enable the jury to arrive at a correct conclusion, medical evidence is often absolutely necessary; and it is the usual practice of coroners, when a medical man has been called in to see the deceased, to summon him to the inquest. The remuneration of the medical practitioner for his attendance upon the deceased is altogether distinct from his fee for evidence, and certainly ought, if the deceased has any effects, to be paid by his representatives. Whether such payment can legally be enforced, I do not undertake to decide; but I should much regret to hear that any medical man had refused to attend in a case of emergency until he was quite sure of being paid for it.

In the case stated by Mr. H. Terry, I think an inquest ought to have been held. The statute, *De Officio Coronatoris*, 4th Edward I, Sec. 2, enacts that "the coroner shall make inquiry of them that be suddenly dead". The rule generally acted on is, to hold inquests in all cases where persons, in their usual state of health, die suddenly, without medical aid. The danger of departing from this rule is sufficiently shown by the numerous cases of poisoning in Essex and Norfolk, and the

systematic poisonings of Palmer, which were long undetected, no inquests having been held, in consequence of the magistrates of those counties having issued instructions to the constables not to give notice to the coroners, except when crime was suspected; and the coroners were informed that, if they held inquests in such cases, their fees would be disallowed. Perhaps the coroner had the fear of such disallowance before his eyes in Mr. H. Terry's case. The power assumed by the magistrates of disallowing the coroner's fees is exercised arbitrarily, and upon no settled principles; it operates injuriously on the public weal and the utility of the coroner's office; and leads to unseemly disputes, from the assumption that he has held inquests unnecessarily, for the sake of putting a fee into his pocket. A Government Commission is now sitting to take evidence respecting coroners' fees; and I have reason to believe they have come to the conclusion to recommend that the coroners be paid by salary. If this mode of payment be sanctioned by the legislature, and the cases in which inquests should be held are more particularly defined, it will be a great improvement upon the present system, and will necessarily raise the office of coroner to its proper dignity, and greatly increase its public utility. I am, etc., J. Ness.

Helmsley, Yorkshire, March 15th, 1859.

Parliamentary Intelligence.

HOUSE OF LORDS.—Friday, March 18th, 1859.

SALE OF POISONS BILL.

This Bill was committed *pro forma*, and ordered to be reprinted.

HOUSE OF COMMONS.—Friday, March 18th, 1859.

POOR RELIEF (IRELAND).

Lord Naas obtained leave to bring in a Bill to amend the laws in force for the relief of the destitute poor in Ireland, and to amend an Act of the 14th and 15th years of Her Majesty, providing for the better distribution, support, and management of medical charities in Ireland. His object was to prevent children under five years of age being relieved in workhouses.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Dill. On March 19th, at Brighton, the wife of *R. Dill, M.D., of a son.

Heffernan. On March 9th, at Sandgate, the wife of Dr. Heffernan, Surgeon 1st Battalion 11th Regiment, of a daughter.

Hubbard. On March 19th, at Market Bosworth, the wife of John W. Hubbard, Esq., Surgeon, of a son.

Llewellyn. On March 8th, at 9, Mount Place, London Hospital, the wife of Evan Llewellyn, Esq., Surgeon, of a son.

Meadows. On March 18th, at 9, Cavendish Place, Cavendish Square, the wife of A. Meadows, M.D., of a son, still-born.

Reid. On March 17th, at Hazelwood, Banffshire, the wife of Daniel Reid, M.D., of a son.

Williamson. On March 22nd, at Rochester, the wife of George Williamson, M.D., Staff-Surgeon, Fort Pitt, of a son.

MARRIAGES.

Heathcote—Thompson. Heathcote, Alfred Spencer, Esq., 60th Royal Rifles, to Mary Harriet, third daughter of *Charles M. Thompson, Esq., Surgeon, of Westerham, at Dehrah, North West Provinces, on February 5th.

Skinner—Hilton. *Skinner, Thomas, M.D., of Liverpool, to Hannah, eldest daughter of Henry Hilton, Esq., of Harpurhey, Manchester, at Harpurhey Church, on March 17th.

DEATHS.

Hine, John, Esq., late of the Bombay Medical Establishment, at Budleigh Salterton, aged 82, on March 18th.

Knox, Alexander, M.D., late Surgeon of the Military Prison, Aldershot, at 4, Derwent Villas, Hammersmith, on March 5.

Milton, William Mayler, Esq., Assistant-Surgeon Royal Artillery, at 3, Wells Street, Gray's Inn Road, on March 10th.

Moore. On March 21st, at 35, Montague Place, Russell Square, aged 31, Henrietta George, wife of Charles H. Moore, Esq., Surgeon.

Riach. On March 13th, at Plymouth, Margaret, wife of J. P. Riach, Esq., K.L.S., late of the Bombay Medical Service.

Scott, William, Esq., Surgeon, of Thornely, Durham, from concussion of the brain in consequence of being thrown from his carriage, on March 13th.

Snape. On March 20th, at Middleton Road, Dalston, aged 31, Eliza, wife of William H. Snape, Esq., Surgeon.

Terry. On March 19th, at Woodchurch, near Tenterden, Kent, Catherine, the wife of Edward Bacheler Terry, Esq., Surgeon.

Wilkins, H., Esq., Surgeon, of Bristol, aged 59, on March 16.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, March 11th, 1859:—

Bridger, John, Cottenham, Cambridgeshire
Clark, George, Newcastle
Cox, Henry, Gray's Inn Lane
Cuthbertson, Wm. Harrison, Lower Dorset Street, Dublin
Duke, Stephen, Chichester
Fletcher, Joseph Lyon, Manchester
Hamilton, John Butler, Lower Mount Street, Dublin
Hemphill, James Patton, Myroe, co. Derry, Ireland
Hooper, Clarence, Wootton Bassett, Wiltshire
Ilderton, Frederick, St. John's Street, Manchester
Roberts, Anthony Tucker, Old Cavendish Street
Savile, Robert, Nafferton, near Duffield, Yorkshire
Stewart, Charles John, Montague Place, Kentish Town

Monday, March 14th:—

Brigstocke, Richard Whish, Milford, Pembrokeshire
Carter, Robert, Dublin
Cookson, John Fowler, Preston, Lancashire
Gibb, Robert Cummings, Newcastle-on-Tyne
Lyel, Benjamin Bell, White Horse Lane, Stepney
Mahony, John, Sandymount, co. Tipperary
M'Dermott, James Lemesney, Kinsale, Cork
Mordue, Robert Dixon, Newcastle-on-Tyne
Nell, George Michael, Negapalam, East Indies
O'Hara, Daniel Murray, Hannalistown, near Belfast
Read, Reginald Bligh, Jewin Street, City

Wednesday, March 16th:—

Geoghegan, George Edward, Rathmines, Dublin
McKeever, John, Cape of Good Hope
Owen, George, Machynlleth, Montgomeryshire
Ringer, Sydney, Norwich
Roberts, Francis, Nelson Street, Dublin
Scott, John Alexander, Baymount, Clontarf, Dublin
Will, George Elmsley, Friendville, Aberdeen

At the same meeting of the Court—

Palmer, John Linton, of H.M.S. *James Watt*, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date February 5th, 1847.

Friday, March 18th:—

Bloomenthal, Theodore, Newington Place, Kennington Park
Cæsar, Richard Thompson, Cork
Carnell, Clement John, Tunbridge
Rivington, Walter, Upper Holloway
Starling, Edward Augustus, Bishops Stortford, Herts
Winning, Robert, Bedford
Winslow, Henry Forbes, Montague Place, Russell Square

Monday, March 21st:—

Angus, John, Greek Street, Soho
Blakeley, Thomas, St. James's Place, Bermondsey
Blower, William, Bedford
Burrows, William Adcock, Islington
Davies, David, Ashby Street, Northampton Square
Eve, Richard Wafford, High Street, Deptford
Fennell, Edward Henry, High Street, Southampton
Gell, Alfred Scott, Felling, near Newcastle-on-Tyne

Graham, George Young, Stockport, Cheshire
Hawke, Charles John, Quebec
Healey, Edward, Hull
Hughes, Thomas John, Woolwich
James, Alfred, Sydenham
Ley, Richard, South Molton, Devon
Meldala, Eleazar, Great Ailie Street, Goodmans Fields
Menzies, Robert, Stamford Street, Blackfriars
Middleditch, H. Arthur, Brunswick Street, Dover Road
Morley, Thomas, Oldham, near Manchester
Sargant, William Thomas, Bletchingley, Surrey
Sequeira, Henry Little, Aldgate
Tomes, John, Cavendish Square
Wallis, William, Hartfield, near Tunbridge Wells

Apothecaries' Hall. Members admitted on Thursday, March 3rd, 1859:—

Ash, Thomas Linnington, Straton, Cornwall
Cardell, George, St. Columb
Carver, Frederick Charles, Royston
Davies, David, Aberdare
Donne, Jeremiah Moulton, Castle Carey, Somerset
Goddard, Robert Walker
Finegan, James, Liverpool
Newman, Augustus, Oxford
Watson, James, Loughborough
Wright, Joseph Hiles, Evesham, Worcestershire

The following gentlemen also, on the same day, passed their first examination:—

Illingworth, John Alfred, Mainder, Newport, Monmouth
Kennard, David, Lambourne
Kirby, Thomas Charles, Bodicote, Oxfordshire

Thursday, March 10th:—

Brend, William, Bideford, Devon
Dyson, Alexander, Honley, Huddersfield
Evans, Maurice Bibby, Glasgoed, Oswestry
Garnham, Richard William, Peninsular and Oriental Company
Harrison, Alfred James, Belper, Derbyshire
Medcalf, George, Royal West India Mail Steam Packet Company
Stedman, James Henry, Norwich
Walker, John Harrison, Yorkshire
Wyatt, Arthur, Bedford

The following gentlemen also, on the same day, passed their first examination:—

Godwin, Charles Henry Young, Bishopstoke, Hampshire
Lumsden, William, Hull
Scott, Henry Thomas, Henry's Place, Kent Road

Thursday, March 17th:—

Davison, George William, Tynemouth
Jakins, William Vosper, Cornwall
Lafarelle, James, Coleshill, Warwickshire
Kelty, Patrick Manning, Newick, Sussex
Noble, Samuel Clarke, Kendal, Westmorland (M.R.C.S.)
Smith, John, Birmingham
Wilson, Alexander, Manchester

At the same Court—

Llewellyn, David Herbert, of Easton Pewsey, Wilts, passed his first examination.

HEALTH OF LONDON:—WEEK ENDING MARCH 19th, 1859.

[*From the Registrar-General's Report.*]

In the week ending last Saturday, the deaths registered in London were 1175, the number being almost the same as that of the previous week, which was 1174. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1229; but as the deaths now returned occurred in a population which has increased, they should be compared with the average raised in proportion to that increase; namely, with 1352. The comparison exhibits results as favourable as those observed in the previous week's return; for in each of the last two weeks the number of persons who have died has been less by 177 than the number that would have died under a rate of mortality equal to the average for the earlier half of March.

The number of births last week exceeded the deaths in the same period by 666.

The number of cases in which small-pox was fatal is 15, of which 7 occurred in the East districts. At 15, High Street, Mile-end New Town, a girl, 7 weeks old, died of this disease. The Registrar reports that four others in the same family are suffering from it, but are recovering, and that it is very prevalent all over his district. The mortality from scarlatina with diphtheria has scarcely varied during the last three weeks: the deaths from the two diseases were 81, of which cases diphtheria was fatal in 15, the number in the preceding week having been 19. The 15 occurred in sub-districts as follows: Chelsea North-west, 1; Belgrave, 1; All Souls Marylebone, 1; Somerstown, 1; Islington West, 2; Hackney West, 2; St. George-the-Martyr, Holborn, 1; Limehouse, 1; Bow, 1; Kennington first part, 2; Peckham, 1; Plumstead, 1. Diphtheria has attacked the inmates of a house, No. 8, Commercial Place, Peckham, which stands near an open sewer, and is exposed to the effluvium. A young woman who had not applied for parochial relief died in Bethnal-green from destitution. Two persons died from intemperance, 2 from delirium tremens; a child from ozæna maligna; a widow died at the age of 90 years, a man at 94.

Last week the births of 929 boys and 912 girls, in all 1841 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1692.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·601 in. The readings varied from 28·94 in. on Tuesday to 30·21 in. on Saturday. The mean temperature of the week was 47·4°, which is 5·8° above the average of the same week in 43 years (as determined by Mr. Glaisher). On Sunday the mean temperature was 11·2° above the average of the same day; on Saturday the excess was only 1·9°. The highest temperature in the week occurred on Sunday, and was 58°; the lowest was 35·7° on Saturday. The range of the thermometer in the shade was therefore 22·3°. The mean daily range was 11·9°. On Monday the range was only 4·1°; on Saturday it was 18·1°. The difference between the mean dew-point temperature and air temperature was 5·7°. The mean degree of humidity of the air was 82; on Monday it was 94, approaching complete saturation. The mean temperature of the water of the Thames was 48°. The wind blew from a south-westerly point till Friday afternoon, when it changed to north-west. The rain-fall of the week was 0·41 in., about half of which took place on Monday.

THE INDIAN MEDICAL SERVICE.

The subjoined memorial has been forwarded from the assistant-surgeons of Her Majesty's Indian Army in Bombay.

To the Right Honourable Lord Stanley, *Her Majesty's Principal Secretary of State for India.*

The humble memorial of Assistant-Surgeon H. M.'s Bombay Army.

Most respectfully sheweth,—

That the constitution of H.M.'s Indian Army is such that your memorialist is superseded by his juniors of all departments, civil and military, and that when associated on duty with medical officers of H.M.'s British Army, he is invariably superseded by them, his social as well as military position being thereby materially affected.

2. That according to the present organisation of the Indian Army, medical officers have relative ranks assigned to them as follows:—Assistant-surgeons, on first appointment, as lieutenants; surgeons (average after 16 years), as captains; senior surgeons, after 30 years, as majors; superintending surgeons,* as lieutenant colonels; inspector generals,* as colonels; director generals,* as brigadier generals.

3. That by the Royal Warrant of 1st October 1858, medical officers of the British Army have relative ranks assigned to them as follows:—Assistant-surgeons on first appointment, as lieutenants, after 6 years service, as captains; surgeons (average less than 10 years), as majors; surgeon majors, after 20 years, as lieutenant colonels; deputy-inspector generals, after 5 years as such, as colonels; inspector generals, on appointment, as brigadier generals; inspector generals, after 3 years as such, as major generals.

4. That by the present rate of promotion in the Indian Medical Service, your memorialist has no prospect of attaining the superior grade of surgeon, and the relative rank of captain, until after 16 years service; the average rate of promotion being in Bengal 14 years, in Madras 17 years, and in Bombay 16 years service.

* From the date of their appointment as such, but during tenure of office only.

5. That your memorialist, under the present regulations, is now superseded by many years and will continue to be superseded, if he lives to attain the higher grades, by his juniors in the British Army, as is evident from the following table, wherein the rates of promotion of medical officers in H.M.'s British and Indian Armies are contrasted :—

British Medical Officers.	Indian Medical Officers.	Relative Army Rank.
On 1st appointment	On 1st appointment	As Lieutenants
After 6 years	After 16 years	As Captains
After 10 years	After 30 years	As Majors
After 20 years	Superintending Surgeon	As Lieutenant Colonels
Deputy Inspector General after 5 years as such	Inspector General	As Colonels
Inspector General	Director General	As Brigadier General
Inspector General after 3 years as such	No equivalent rank in the Indian Army	As Major General

6. That in all cases the principle has been invariably recognised and acted upon, of placing military officers of H.M.'s British and Indian Armies on a footing of equality as regards rank, pay, honours, and other privileges; as is exemplified in the recent assimilation of the artillery and engineer corps of both armies, the promotion of lieutenant colonels to the rank of colonels after three years command, and the steps of honorary rank to all officers on retirement.

7. That the Royal warrant of 1st October 1858 has considerably improved the position, pay, and emoluments of medical officers of the British Army, and allowed shorter periods of service to qualify for a retiring pension. It has also fixed a higher scale of retiring allowances than is assigned under present regulations to the medical officers of the Indian Army, whose whole period of service is passed within the tropics. The retiring allowances in British Army being regulated by rank and period of service taken together,—in the Indian Army by length of service *only*, as stated in the following table :—

Retired Allowances to Medical Officers in Her Majesty's British and Indian Armies.

Her Majesty's British Army.

Retired allowances under the terms of paragraphs 10 and 11 of Royal Warrant 1st October, 1858.	After 15 years.	After 20 years.	After 25 years.	After 30 years.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Inspector General . .	—	546 10 0	611 7 6	684 7 6
Deputy Inspector General	—	383 5 0	410 12 6	465 7 6
Surgeon Major . . .	—	301 2 6	337 12 6	—
Surgeon	246 7 6	—	—	—
Retired allowances at 7-10ths of Daily Pay after 25 years service (paragraph 12 of Royal Warrant),				
Inspector General . .	—	—	574 17 6	—
Deputy Inspector General	—	—	383 5 0	—
Surgeon Major . . .	—	—	319 7 6	—

Her Majesty's Indian Army.

	After 17 years.	After 21 yrs.	After 25 yrs.	After 29 yrs.	After 32 yrs.	After 35 yrs.
	£ s. d.	£	£	£	£	£
In H.M.'s Indian Army Retired Allowances are regulated by length of Service *only*, without reference to rank	191 12 6	250	300	365	500	700

From this table it is apparent that a medical officer in H.M.'s British Army is entitled after 25 years service, if an inspector general, to £574 : 17 : 6 per annum—if a deputy-inspector general, to £383 : 5—and if a surgeon major, to £319 : 7 : 6—whilst in H.M.'s Indian Army, a medical officer holding any of these ranks, and after the same period of service, is not under any circumstances entitled to more than £300 per annum; and even after 29 years his pension of £365 is less by £209 : 17 : 6, and after 32 years his pension of £500 is less by £74 : 17 : 6, than an inspector general in H.M.'s British Army is entitled to after only 25 years service.

8. That all other officers of H.M.'s Indian Army and Navy are allowed the option of retiring either on the pension of their rank after 22 years service, or according to length of service, no such option being allowed to medical officers; an invidious distinction, which was emphatically commented on by the late Governor General of India.

9. That the injustice of this distinction is apparent from the fact, that a military officer of the rank of major, or of lieutenant colonel, can retire on the full pay of these ranks after only 22 years service, whilst a medical officer, who necessarily enters the service at a more advanced age, is obliged to serve 25 years for the equivalent of a major's pay, and 29 years for that of lieutenant colonel.

10. That notwithstanding that medical officers are deprived of the privilege of retiring according to rank, the scale of their retiring pensions is actually less favourable than is assigned to military officers by length of service, inasmuch as a military officer (as may be seen by the following table) can retire on the pay of a major *four* years after being entitled to that of a captain, and on the pay of a lieutenant colonel *four* years after being entitled to that of a major, whilst a medical officer has to serve *eight* years after being entitled to the pension of a captain, before he can retire on the equivalent of that of a major (instead of four), and *twelve* years before he can retire on the pension of a lieutenant colonel (instead of eight).

Medical Pensions; present Scale, by length of service only.	Military Pensions by length of service and according to rank.	Medical Pensions if graduated proportionably to Military Pensions.
After 17 yrs. £191	After 20 yrs. £191	After 17 yrs. £191
„ 21 250	„ 24 292	„ 21 292
„ 25 300	„ 28 365	„ 25 365
„ 29 365	„ 32 456	„ 29 456
„ 32 500	And the pay of their rank after 22 yrs. service.	And the pay of their rank after 19 yrs. service.
„ 35 700		

11. That your memorialist confidently trusts that, in adjusting the rank, pay, and retiring allowances of medical officers of H.M.'s Indian Army, the same spirit of justice and liberality may be extended towards them as has been shown towards medical officers of H.M.'s British Army, and has been exemplified in assimilating the position of all military officers of the British and Indian Armies; due consideration and weight being given to the more advanced age at which medical officers enter the service, and the expensive nature of their preliminary professional education.

12. That the constitution of the medical department of the Indian Army differs from that of the British Army in many respects, and chiefly in that many of its members are employed by Government on civil and non-professional duties, similar to those of the Indian Civil Service. Medical officers so employed do not attain any higher rank than that of captain until they have completed 30 years service, when they reach that of major, after which they can never attain a higher rank should their service be extended indefinitely.

13. That all members of the Indian Civil Service have relative ranks assigned to them, after certain fixed periods of service, and are classified accordingly.

14. That when military officers are engaged on civil or non-professional duties, their progressive rank is not affected by being so employed, but advances in the same manner as if they had continued in the performance of military duty. Consequently medical officers employed on the same civil duties as civilians and military officers, are not only superseded by them in the junior grades, but are completely debarred from the superior ranks assigned to all civil and military officers, however employed.

15. That your memorialist begs most respectfully to be permitted to quote the words of the late Governor General of India on the subject of relative rank to medical officers, and their supersession by all other branches of the public service :— "*It is impossible to conceive how such a system can have been maintained so long, on the strength of no better argument than that 'it has been' and therefore 'it ought to be.' It is impossible to imagine what serious justification can be offered for a system which in respect of external position, postpones service to inexperience, cunning to ignorance, age to youth; a system which gives a subaltern who is hardly free from his drill prece-*

dence over his elder, who perhaps has served through every campaign for thirty years; a system which treats a member of a learned profession, a man of ability, skill, and experience, as inferior in position to a cornet of cavalry just entering on the study of the pay and audit regulations; a system, in fine, which thrusts down grey-headed veterans below beardless boys." (Minute by the most noble the Governor General of India on the Indian Medical Service, para. 36.)

16. That your memorialist, in all deference and humility, trusts that at a time when arrangements are being made for reconstructing all branches of H.M.'s Indian Army, he is not exceeding a memorialist's privileges in respectfully submitting for your lordship's consideration the expediency of reconstructing the medical department of the Indian Army in such a manner as shall secure to all medical officers, after certain fixed periods of service, the same progressive grades of relative rank as are assigned by present regulations to all officers of the Indian Civil and Military Services, whether in civil or military employ.

Wherefore your memorialist earnestly prays that your lordship may be graciously pleased—

First, To take into consideration the subject of relative rank to medical officers of the Indian Army, with the view of preventing their supersession by all other branches of the service.

Second, To direct that the rules regarding precedence, honours, and all advantages attaching to relative rank, as well as honorary rewards for meritorious or distinguished service, and an increase of pay and retiring allowances, proportionate to that laid down in the Royal Warrant of 1st October 1858, be made applicable to medical officers of H.M.'s Indian Army, equally with those of H.M.'s British Army, so that your memorialist's present position and future prospects may receive the same consideration as has been shown to, and is now enjoyed by every medical officer in H.M.'s British Army.

And your memorialist, as in duty bound, will ever pray.

Dr. Brown-Séquard. We learn from the *Lancet* that this distinguished physiologist, whose lectures last year at the College of Surgeons and St. Bartholomew's Hospital attracted so much attention, is about to deliver courses in Edinburgh and Dublin, and probably in Glasgow.

American Medical Association. The twelfth annual meeting of this Association will be held at Louisville, Kentucky, on May 3rd.

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

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Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Dr. Edward Smith; Mr. T. Holmes; Mr. Jabez Hogg; Mr. J. V. Solomon; Dr. James Russell; Dr. A. M. Inglis; Mr. F. Hele; Mr. C. S. Hadden; Mr. R. Davies; Mr. T. M. Stone; Mr. John Birkett; Sir Charles Hastings; Dr. Leet; Dr. Hayes Jackson; Mr. Nunneley; Mr. R. Griffin; Dr. F. Brittan; Dr. W. Webb; Mr. John Propert; Mr. H. W. Rumsey; Mr. R. Bates; Mr. J. J. Terry; Mr. Erlin Clarke; Mr. Thos. Griffin; Dr. W. Ogle; Dr. Bryan; Mr. Sutton; Medicus; Mr. J. A. Jinkings; Mr. Woodhouse; Indian; Mr. R. Sandford (with enclosure); Dr. L. Beale; and Mr. Chatto.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. On Wounds and Injuries of the Eye. By William White Cooper, Fellow of the Royal College of Surgeons, etc. London: Churchill. 1859.
2. A Manual of Medical Diagnosis: being an Analysis of the Signs and Symptoms of Disease. By A. W. Barclay, M.D. Cantab., LL.D. Edin. Second Edition. London: Churchill. 1859.
3. Hæmorrhoids and Prolapsus of the Rectum: their Treatment by the Application of Nitric Acid. By Henry Smith, F.R.C.S. Pamphlet. London: Churchill. 1859.
4. Chloroform and other Anæsthetics: their History, and Use during Childbirth. By John Chapman, M.D. (Reprinted from the *Westminster Review* for January 1859.) Pamphlet. London: Williams and Norgate. 1859.
5. An Essay on the Action of Medicines in the System: or, on the Mode in which Therapeutic Agents introduced into the Stomach produce their Peculiar Effects on the Animal Economy. Being the Prize Essay for which the Medical Society of London awarded the Fothergillian Gold Medal for 1851. By Frederick William Headland, M.D., B.A. Third Edition, revised and enlarged. London: John Churchill. 1859.
6. On the Hygienic Management of Infants and Children. By *T. Herbert Barker, M.D.Lond. London: John Churchill. 1859.
7. A System of Dental Surgery. By John Tomes, F.R.S. With 208 Illustrations. London: John Churchill. 1859.
8. Healthy Skin: a Popular Treatise on the Skin and Hair, their Preservation and Management. By *Erasmus Wilson, F.R.S. Sixth Edition. London: John Churchill. 1859.
9. Report on Influences of Marriages of Consanguinity in Offspring. By S. B. Bemiss, M.D. Philadelphia: Collins. 1858.

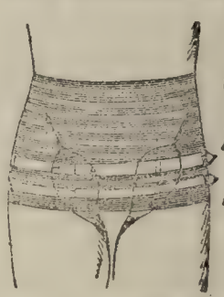
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The following were the numbers of Stamps issued to the four London weekly Medical periodicals in 1857.

British Medical Journal	**106,534**
Lancet	60,250
Medical Circular	57,600
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXVIII.] LONDON: SATURDAY, APRIL 2, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

SOUTH LONDON OPHTHALMIC HOSPITAL.

TWO CASES OF DIPLOPIA.

By J. ZACHARIAH LAURENCE, Esq., Surgeon to the Hospital.

CASE I. A gentleman, aged 50, consulted me last June. He went to bed one night in his usual health, and on rising in the morning, he found to his great surprise "that he could scarcely see." On trying his eyes further, he found that in attempting to take something off the mantelpiece, he altogether missed his distance. Being obliged to go into the country that morning, he with great difficulty walked to the railway station, and was perplexed to find that his ticket appeared two tickets, and that his change appeared double what it ought to have been. This state of things had been going on for about a month, when he first came under my care.

I found that the principal defect of sight under which he laboured was double vision (diplopia). He saw everything double; but he could recognise one image to be an illusory one—a spectrum—the other, a reality. The curious feature in his case was that, on looking at a lighted taper, for example, when he looked down at it, it appeared single, but in proportion as he looked upwards, a second taper seemed to rise up from behind the real one. *When he used either eye alone, all diplopia ceased.* On requesting him to read the bottom of the page of a book and to follow the lines with his finger, using one eye alone, his finger ran correctly along the line he was reading; but with both eyes open, his finger ran along the white margin, or even altogether below the book. In fact, he was obliged to wear a shade over one eye to enable him to pursue his avocations.

On examining his eyes carefully, all I could detect was a slight but decided *squint of both eyes*, and a very contracted state of the pupils. My friend and colleague, Mr. Holthouse, states very intelligibly the cause of the diplopia in such a case as this: "Where the inversion or eversion of the eye is great, the images will be so far apart that the wrong one becomes placed altogether beyond the field of vision of the good eye .... for this reason, squinters seldom experience this symptom .... indeed, as a general rule, this symptom will be found to occur more frequently in slight distortions." (In our case, the muscle affected appeared to be the *upper* or *lower* rectus.)

Viewing this case as one of spasm of the recti muscles, depending on some disturbed innervation, I ordered my patient five grains of the citrate of quinine and iron three times a day, and an occasional leech to the eye. Under this treatment he was, when I last saw him, gradually recovering his usual vision.

Shortly afterwards, I met with a very similar case in my practice at the South London Ophthalmic Hospital.

CASE II. Wm. F., aged 39, consulted me at the Ophthalmic Hospital, on August 14th, 1858. On getting up the day before, he found a "confusion of vision" when he used both eyes.

If he closed either eye, his sight was perfect; but when he used both eyes, he saw everything double. In his case, the lower image appeared to him to be the illusory one. I could not detect any positive squint; as in the first case, both pupils were unusually small. Under the treatment already mentioned, he made a complete recovery.

A SERIES OF CASES OF TEALE'S AMPUTATION.

THE practical suggestion of Mr. Teale has been received with attention in London, and we append several cases in which it has been put in practice. They do not embrace all the amputations that have been performed, and we hope to lay before our readers, shortly, another series, which may assist them in forming an estimate of this method of operating. As far as our own observation goes, it seems to us that the great advantage of the operation consists in the less necessity that exists for the painful and tedious dressings which are required in the older methods of amputation. Thus, in Mr. Pollock's case (Case III), the only dressing used was a piece of simple cerate laid over the end of the limb; and in every case it may be confidently anticipated, that if the patient's health be in a reasonably good condition, sufficient union will have taken place to hold the flaps in contact after the removal of the sutures, without further means of support. The great advantage of this, especially in children, no one who has had to dress stumps will be slow in appreciating. The list of cases we publish is from accidental circumstances a very unfavourable one; as in most of them the amputation was performed merely as a last resource, and as a preferable alternative to leaving the patient to an otherwise inevitable death. Hence several of the cases exhibited extensive sloughing of the flaps, and this was in one respect a testimony to the efficiency of Mr. Teale's method, as it showed how large a quantity of the stump might be destroyed by gangrene, and yet a sufficient covering for the bones be left. In Mr. Hawkins's case, indeed, the commencement of necrosis in the end of the stump of the bone suggested a difficulty in the treatment of cases presenting this complication, since the extremity of the bone is buried in soft parts, which will probably have closed over it to such an extent, as to render its future extraction difficult, if not impossible, without incision, and to lead to the formation of troublesome sinuses in the stump. Against this occasional inconvenience, we may, however, fairly set the far less probability that exists for the occurrence of such a complication at all; since, when the end of the stump dies, it is almost always the result of exposure, from deficiency of covering, or abscess in the stump. The form of the flap will prevent the former, and the depending opening the latter condition. The recovery of two patients (Cases I and II) who were labouring under symptoms of phthisis, seems to show that the healing of the stump in these cases makes less call upon the constitution than in the ordinary methods; and the rapid recovery of the patients (see Cases IV and VI) appears to point to the same conclusion. Whether the operation will be found to be as effectual in guarding against pyæmia as Mr. Teale anticipates, is a question which can only be settled by experience. Out of the three fatal cases recorded here, none seems to have been caused by that affection.

ST. BARTHOLOMEW'S HOSPITAL.

TWO CASES OF TEALE'S AMPUTATION.

[*From Notes by* G. F. HELME, Esq., *House-Surgeon.*]

Under the care of W. LAWRENCE, Esq.

CASE I. Elizabeth Burns, aged 54, was admitted January 28th, under the care of Mr. Lawrence, suffering from disease of the bones of the leg. She stated that her leg had been bad for four years. At the commencement, there was no swelling, nor any tenderness at any part, but constant pain in the tibia and fibula at their upper part. In September 1857, she was in this Hospital, and remained until December 24th, 1858. During that time, Mr. Lawrence removed what turned out to be a malignant growth from the tibia, which had caused the skin to ulcerate over it, and then protruded. This proceeding was adopted in consequence of the woman refusing to allow her limb to be removed. The wound healed, but the limb was left

in much the same state. She had constant pain, and some thickening of the bones. The thickening seemed to commence just below the head of the tibia, and extend downwards. Mr. Lawrence still wished to amputate the limb; but, the woman still refusing, she was discharged from the Hospital in December 1858, and was admitted again on January 28th, for the purpose of having the leg amputated. This was done the next day (January 29th), after the manner recommended by Mr. Teale. The woman's health had rather improved since she had been out of the Hospital, but still she was a very unfavourable subject for the operation. She bore the operation better than was expected. The flaps were brought together at the time of the operation, and the junction of the anterior long and posterior short flaps on the back of the thigh united by first intention; the discharge coming from the sides of the limb where the anterior flap is doubled on itself. The woman has not had an unfavourable symptom; but her ultimate recovery is doubtful, as symptoms of phthisis have appeared. The stump is now (March 16th) healed, with the exception of one of the corners, where there is a very slight discharge of pus.

The bones of the leg, when examined after amputation, verified Mr. Lawrence's diagnosis. The cancellous texture was quite soft, broken down, and ulcerated. The periosteum over the whole of the tibia and fibula was considerably thickened; and in two places (1, near the head of the tibia, where Mr. Lawrence had previously removed a growth of bone; and 2, near the lower end of the tibia) the tibia seemed almost fractured, in consequence of a growth of the periosteum into its substance.

Case II. Robert Ferth was admitted under the care of Mr. Lawrence on August 31st, 1858, suffering from disease of the knee-joint. He stated that, three months previously, he first noticed something wrong about his knee—a little pain on walking. This was followed by swelling of the knee, and increase of the pain. He then applied at the Hospital, and was admitted; and, since his admission, the knee had gradually become worse. He had intense pain, and all the symptoms of ulceration of the cartilages. Numerous abscesses formed in the neighbourhood of the joint. The man's health now began to suffer, and he was induced to part with the limb. Amputation was performed on December 11th, 1859, on Mr. Teale's plan.

This patient's state of health was very bad indeed—a worse subject, if possible, than the former. During the operation, very little blood was lost; but he was extremely faint. Very few arteries could be found to be tied, and consequently the wound was left open till the evening, as probably some more would require ligaturing. Towards evening, some hæmorrhage occurred, and three ligatures were applied, and the flaps were adjusted: they, however, did not fit quite so well as in the former case, the muscles having contracted. All went on well until the evening of December 21st, when secondary hæmorrhage occurred; and Mr. Lawrence, who was in the Hospital, opened the stump, but, not being able to find any vessel, he applied the tincture of sesquichloride of iron over the bleeding surface. The stump has not yet quite healed, as most of the healing process has been accomplished by granulations caused by the disturbance of the stump ten days after the operation. However, all things considered, this case has progressed more favourably than was expected, considering the patient's health, the secondary hæmorrhage, and also the condition of the flap; for the muscles of the thigh were every where riddled with abscesses, and several were opened during the amputation. A granulating surface, of the size of a shilling-piece, is all that remains to heal.

ST. GEORGE'S HOSPITAL.

FIVE CASES OP TEALE'S AMPUTATION.

[*From Notes by* G. F. Cooper, Esq., *Surgical Registrar.*]

Case III. Wiliam A., aged 31, a groom, was admitted under the care of Mr. Cutler, on September 7th, 1858. His history was, that three years ago he had been kicked by a horse just below the left patella, and that ever since then there had been enlargement of the knee, gradually increasing, especially on the inner side. Three weeks ago, he had been again kicked below the knee on the outer side, since which time there had been pain in the part, and some little swelling, for which linseed-meal poultices had been applied. He had never asked medical advice on account of the disease in the knee. He stated that he had lost flesh for the last seven or eight months; and that the tumour had been increasing more rapidly during the last three or four.

On admission, there was considerable solid enlargement about the joint, especially on the inner side. The head of the tibia was much enlarged, and the lower end of the femur seemed also expanded. Covering the lower end of the femur; at the inner side, was a soft elastic swelling, which, however, was not apparently movable on the bone, and there was a collection of fluid projecting between the heads of the tibia and fibula, and touching the tendon of the biceps. Pressing the bones gave him no pain; but there was a little shooting pain in the joint occasionally. He could only bend the joint to a very slight extent; but the limb was quite useful, both for walking and riding. The glands in the groin were slightly enlarged, and had been so for some months. His aspect was healthy, and his health and appetite were good, except for the loss of flesh above mentioned.

After a few days rest in bed, during which the size of the knee somewhat decreased, the collection of fluid near the tendon of the biceps was punctured with a grooved needle. No pus was found, and the fluid appeared to resemble synovia. Accordingly the case was treated as if it were merely irritation of the joint, consequent on chronic inflammation of the joint ends of the bones; although the peculiar sensation of the soft swelling covering the lower end of the femur, led some to suspect the existence of a tumour in that situation. He was put under the influence of mercury, blue pill and opium being given till the gums were slightly affected; and a succession of blisters were applied to the knee. This course of treatment, however, produced no improvement; and by the end of October it became evident that the diseased joint had increased in size. There was also increased tenderness referred to the lower part of the joint.

As it was clear that the disease was not amenable to treatment, and as the limb was an incumbrance to the patient, it was determined to remove it before his health became further affected. Accordingly, on November 11, Mr. Pollock proceeded to amputate.

The amputation was performed after Mr. Teale's method. The circumference of the thigh having been measured at the part where the limb was to be removed, and a base of half that length taken, a lateral incision was drawn down the limb on each side from the extremities of this base, equal in length to the base; the lower ends of the cuts were then joined, and the soft parts dissected up from the bone. Then the posterior flap was made by drawing the knife perpendicularly across the back of the limb an inch below the base of the anterior flap. The arteries were then tied, and the flaps adjusted by sutures. The operation took rather longer than an ordinary amputation; but the stump which was left was very shapely, and the edges fitted most accurately.

On examination of the knee, the swelling over the lower end of the femur was found to be composed only of the thickened synovial membrane and cellular tissue; the ends of the bones were somewhat enlarged; the joint was full of strumous looking curdy pus. The swelling near the tendon of the biceps now contained pus. It was in connection with a rather deep cavity excavated out of the external tuberosity of the tibia, close to the head of the fibula, but not involving the tibio-fibular articulation. There were several other such cavities in the articular ends of the bones, the deepest being situated between the condyles of the femur. They contained pus of similar appearance to that above described, and a few small spiculæ of dead bone. The cartilages were removed in several places, especially over the outer condyle of the femur. The ligaments were healthy.

On the 15th, it was found that a large part of the stump had united by the first intention. The sutures were removed, and the parts had contracted sufficient adhesion to allow of the stump being left without any other dressing than a piece of lint spread with simple ointment. No strapping was used.

On the 16th, he was complaining of slight pain in the right elbow, which he attributed to rheumatism; the parts over it looked red and hot. He said he did not sleep very well the previous night—had been subject to rheumatic pains. There were occasional cold chills during the few following days, but no distinct rigor.

The right wrist, and the knees and ankles in succession, were slightly swollen and red on their surfaces. He now complained of much pain in the chest, and there was much coarse respiration on the left side. Small doses of calomel and Dover's powder repeated several times, appeared to relieve these symptoms entirely; and he continued to improve until he quitted the

hospital. The stump was then nearly well. After leaving the hospital, the chest symptoms returned, and he died two months afterwards, phthisical.

Case iv. Henry B., aged 38, was admitted under Mr. Hawkins's care, on September 1st, 1858, on account of a disease of the knee-joint, attributed to a sprain eighteen months before admission. It is unnecessary to go minutely into the history of the disease in the joint, which was treated by means of calomel and opium, blisters, mercurial frictions, etc., but without any benefit, as abscess formed and was opened externally, as well as extending up among the muscles of the thigh for a considerable distance. Accordingly, it was thought better to amputate the limb at once. He had had a cough for three years before his admission, but not to any very great extent. Examination of the chest did not reveal any distinct sign of phthisis. The operation was performed on January 6th. Notwithstanding the presence of abscess in the soft parts which formed the anterior flap, a good deal of union occurred; and he went on so favourably as to be able to sit up in a chair a fortnight after the operation. This improvement in the state of the parts was, however, coincident with a great deterioration in his general health. The cough recurred, his health failed, and on the 24th, the posterior line of union began to slough. This sloughing advanced rapidly down to the bone, which became exposed, and was apparently in process of necrosis. He became rapidly exhausted, but without much cough, and sank on February 4th. Shortly before death, the anterior part of the stump began to present a sloughy appearance, as if the end of the bone was about to penetrate it.

Post Mortem Examination showed extensive gangrene of the stump, so that the end of the femur projected from the opening at the back. It was necrosed for the space of about half an inch. Both lungs contained a large quantity of crude tubercle, but no vomicæ. There was extensive strumous ulceration of the intestines.

Case v. Henry H., aged 55, was admitted under the care of Mr. Tatum, on December 11th, 1858, on account of an accident in which a bullet had lodged in the dorsum of his foot, between the first and second toes. This had been extracted. He was an exceedingly nervous and irritable man, and presented the appearance of a drunkard, although it was said that his habits had been temperate. A large quantity of stimulants and tonics was prescribed, but the wound became sloughy, diffuse inflammation attacked the foot, and large abscesses formed in every part of the extremity. Under these circumstances, as the man was evidently sinking, it appeared right to give him the chance of amputation; and accordingly, the extremity was removed by the rectangular flap operation in the lower third of the leg, on January 27th. The arteries were found only slightly atheromatous, and there was no apparent disease beyond the superficial sloughing and abscess.

There was nothing remarkable in the operation, and the ends of the bones were well covered, without pressure; but the patient's state of health was such that no operation would probably have succeeded. The flaps soon sloughed, and he died exhausted on February 12th. No *post mortem* examination was made.

Case vi. Charles H., aged 13, a boy of very scrofulous aspect, was admitted under the care of Mr. Johnson, on account of caries of the tarsal bones and ankle-joint of six years standing. Some necrosed bone had been removed about a year before, but this had not checked the disease, which had now advanced to such an extent that amputation was inevitable. The presence of extensive sinuses about the lower part of the leg rendered Mr. Johnson unwilling to adopt Syme's method of amputating, and accordingly the leg was removed in the lower third by the rectangular flap operation, on February 17th. The success of the operation was perfect, and the boy left the house within less than three weeks of the date of amputation (March 9th) with the stump completely healed.

Case vii. Thomas H., aged 46, was admitted under Mr. Hewett's care on February 14th. He had been a man of very intemperate habits, and had been suffering from disease of the tarsus for nine years. The disease had at first so far yielded to treatment as to allow of his walking about from three years after the commencement of the ailment until last October, although the joint had never been free from pain. At that period abscesses formed in various parts of the foot, from which, on his admission, raised papillæ projected, leading to exposed and carious bone. As his health was giving way under the disease, and as the latter was too extensive to allow of any hope of cure by milder means, and he was anxious to have the leg amputated, Mr. Hewett acceded to his wish, and removed the leg at the lower third by the rectangular flaps on February 17th. The man, however, did not do well. Although he suffered very slightly from the chloroform, the limb soon became painful, and inflamed. He was very low and weak, with an anxious countenance, bad appetite, dry tongue, and weak pulse. The stump soon afterwards sloughed, but not to so great an extent as not to leave a very fair covering for the ends of the bones when the sloughing stopped, as it did in a few days, when he experienced a temporary improvement. But this did not last long.

In the early part of the present month, he began to suffer from cough, having had an old winter cough for many years, and soon the stump again began to slough; the discharge was profuse and intolerably fetid. Still the bone was not exposed, and had it been possible for him to have recovered, there would have been quite enough soft parts to cover the bones. His constitutional weakness, however, rendered this impossible, and he sank gradually, without any fresh symptoms, dying on March 26th, apparently of exhaustion merely.

A *post mortem* examination was refused.

Original Communications.

FOUR CASES OF VESICO-VAGINAL FISTULA.

By I. Baker Brown, Esq., F.R.C.S., Surgeon to the London Home for Surgical Diseases of Women, etc.

Since I had the honour of reading at Edinburgh a paper relating eleven cases successfully treated by operation, five more have appeared in the British Medical Journal, under the head of St. Mary's Hospital Reports; thus making sixteen cases. I now relate four more, making up the number to twenty. The practical value of this success will be apparent to every surgeon.

Case i. (Reported by W. F. Wratislaw, Esq., Visiting Surgeon.) *Vesico-Vaginal Fistula of Seven Years Duration: Twenty-five Operations: Ultimate Cure.* Eliza Z., aged 29, married, in July 1851 was delivered, with instruments, of her first child, after a labour of three days duration. Twelve hours after labour, her urine escaped involuntarily, giving her great pain. On April 29th, 1852, she was admitted into St. Mary's Hospital. On examination, the vagina was found to be almost obliterated by cicatrisations. On the left side, the finger passed into a *cul-de-sac*, at the end of which was felt the os uteri. Across the other part of the vagina was a large fistulous opening into the bladder. On May 5th, I operated upon her, and closed a large portion of the fistula. She then left the hospital; and becoming pregnant, aborted in the third month. Five weeks afterwards, she was readmitted; and the second, third, fourth, fifth, and sixth operations were performed upon her, in addition to the actual cautery being used. During these repeated operations, the bands of cicatrisation were cut through, and the os uteri turned into the bladder, as it appeared easier to close the fistula by so doing. She then left the hospital; and the seventh, eighth, and ninth operations were performed at her own house. She then went to Dover to recruit her strength; and when she returned, the tenth operation was performed at her own house. In 1854, she returned to the hospital, and the eleventh operation was performed. On November 1st and December 24th, 1856, she had the twelfth and thirteenth operations performed at her own house. On February 3rd, 1857, she was readmitted into St. Mary's Hospital, and the fourteenth operation was performed. After this, she went into another hospital; and in August, was operated upon with harelip pins, and in November, with common sutures. She was readmitted into St. Mary's on April 5th, 1858, and I performed the seventeenth operation. On April 28th, the eighteenth operation was performed. On May 19th, Bozeman's operation was performed, making the nineteenth. This did not succeed; and she was discharged on June 20th, to recruit her general health.

She entered the London Home, on July 3rd, 1858. There still remained two openings: one would admit a No. 12 bougie situated near the urethra; the other was a small one, barely admitting a probe. There was a strong band of adhesions, extending from the walls of the vagina to the point of the larger opening.

July 6th. Bozeman's operation was performed, and the adhesions divided. The urine escaped on the fourth day.

July 24th. I freely divided the bands of adhesion, and plugged the vagina with a large sponge-tent covered with oiled silk. This was changed every other day.

August 3rd. On proceeding to operate on this day, it was discovered that the smaller opening communicated in a circuitous manner with the under edge of the larger one; I therefore opened the track, and made the two openings into one. The vagina was ordered to be regularly plugged with full-sized sponge-tents.

August 17th. Bozeman's operation was performed, using a leaden button and six sutures. The urine escaped on the seventh day. On removing the plate, it was found that one of the deep incisions had laid open the cervix uteri about an inch from the os, which was still in the bladder. Through this opening, an uterine sound could be easily passed into the uterus.

October 3rd. Bozeman's operation was performed with five sutures, with the effect of reducing the opening to the size of a pin's head.

November 2nd. Bozeman's operation was performed; but the urine escaped on the same night; and on

November 4th. The operation was re-performed. The button remained on nine days, but still there was a slight escape of urine through a very small opening. However, the parts had a healthy granulating appearance; and she was recommended to remain quiet in bed; and very little urine escaped that night. None escaped on the following day and night. From this time she lost none, and freely passed it at pleasure.

November 28th. A most careful examination found every part firmly united, and no sign of the old fistulous opening.

January 20th, 1859. She now menstruates through the vagina, which she had not done for years; and her vagina was of the ordinary size. Her health and spirits were good, and she was making a most cheerful and inspiriting nurse.

Remarks. This case is full of interest, and exhibits an amount of courage and perseverance on the part of the patient which is beyond all praise. Such a series of operations is not likely to occur again, as the new method will enable us to grapple at first more successfully with the difficulties.

Case ii. *Vesico-Vaginal Fistula: Four years and a half Duration: Operations: Cure.* Jane B., aged 26, a very short small made woman, was admitted into the London Home on October 20th, 1858. Mr. Humphreys, of Shrewsbury, kindly sent this patient to me.

She said that she had been delivered four years and a half previously with instruments after a labour of thirty-six hours duration. For the first few days she passed her urine properly; and nine days afterwards she had retention, which necessitated the use of the catheter. After a good deal of pain for three days, her urine came away with a gush; and since that time she had never been able to retain any portion in any posture. It always flowed away from her without the slightest control. She had undergone about twenty operations unsuccessfully.

On examination, an opening was found of the size of a half-crown situated close up to the os uteri. There was a great deal of spasmodic action about the bladder, so that the mucous membrane of its cavity constantly protruded through the fistula, and filled the vagina, looking like a vascular tumour. The edges of the opening were thin and soft. The vagina was a good deal contracted; and one band of cicatrisation was thick and strong, and drew the lateral wall of the vagina towards the angle of the opening, and formed an obstacle to the apposition of the edges.

I determined to endeavour to reduce the size of the fistula before dividing the bands of adhesion; and, therefore, on November 2nd, proceeded to perform Bozeman's operation. The patient having had chloroform, and being placed in the lithotomy position, I pared the edges of the fistula, and succeeded in removing the whole circumference in one piece. The mucous membrane of the bladder which protruded very much during this part of the operation, was held up with spatulas. Seven iron wire sutures were then inserted, and a leaden button was put on, and the operation was completed in the usual way. She had two grains of opium, and the catheter, with an attached bag, was left in the bladder.

November 3rd. She had great sickness. The catheter caused a good deal of irritation. The sickness abated gradually, and she went on well until November 11th, when a little urine escaped.

November 15th. I removed the button, and found the greatest portion of the opening firmly healed. The opening which remained was the size of one wire, which cut itself nearly out, and thus formed the fistula.

December 9th. The parts having become firm, I freely divided all the constricting bands; and the vagina was plugged with oiled lint.

December 12th. The lint was renewed, and large sponge-tents were ordered to be introduced every day.

December 24th. The divided parts having healed, Bozeman's operation was this day performed. It required three sutures and a leaden button with three holes, and silver sutures.

She was very sick after the operation, and became so exceedingly irritable, that she would not remain quiet, and was constantly withdrawing the catheter herself; so that on the seventh day after the operation, there was again a slight escape.

January 24th, 1859. I again performed Bozeman's operation. The patient this time was placed on her hands and knees, and did not have chloroform. It required again three sutures and a leaden plate with three holes. She was not sick this time, and remained much more steadily under control. Everything went on well, and there was no escape whatever.

February 5th. The button was removed, and the whole fistula was found firmly healed and the parts quite sound. She could retain her urine quite well, and passed it with perfect command; and in a week left the Institution quite well.

Remarks. The failure of the first operation here, I am convinced, arose entirely from the iron wire cutting itself out up to the line of union, and as I have observed the same thing to occur in other cases where there was any tension from constriction after laceration of the vagina, I now always employ silver wire.

Case iii. *Vesico-Vaginal Fistula: Operation: Cure.* The previous history of the case was furnished by Dr. J. Hall Davis, who placed the patient under my care. "M. D., aged 30, a woman of stout habit, good conformation, and previous good health, was taken in labour of her eighth child, March 1st, 1856, at 9 p.m. Her midwife was sent for at 10 p.m.; and arriving soon afterwards, found the liquor amnii already escaped, the breech at the brim of the pelvis, the os uteri dilated to the size of half a crown; active labour was present. At 4 a.m. (March 2nd,) the orifice of the uterus was fully dilated, and the breech had reached the pelvic outlet. The pains continued strong throughout the night; and, in consequence of the pressure exerted on the neck of the bladder, the midwife had found it necessary to empty that organ with the catheter.

"At 11 a.m. (March 2nd), no progress having taken place notwithstanding ample parturient action, the parts, moreover, having become heated and swollen, the patient being much fatigued with fruitless efforts, I was sent for and arrived shortly afterwards (half-past 11 a.m.). I found the breech at outlet, swollen, and impacted, the parts heated. I introduced the catheter and removed a little urine, and having satisfied myself that another mode of delivery was impracticable, I proceeded to deliver by evisceration, which I effected through the outlet of the child's pelvis. Thus the abdomen was diminished, and very moderate traction completed the birth. The child (a female) was large, swollen, but not putrid. I gave it as my opinion that the child should have been delivered earlier,* with the necessary precautions. The delivery of the child occupied rather more than an hour, and the placenta, being thrown off spontaneously into the vagina, was removed soon afterwards. In the course of the following days the patient was the subject of acute peritonitis, which was treated by application of leeches to the abdomen, hot linseed poultices, and turpentine stupes. Vaginitis also ensued, and sloughing of the portion of the vesico-vaginal septum, leaving an opening of the size of a five shilling piece. For the latter inflammation and its consequences, warm water with a weak solution of chlorinated soda was employed as an injection; and the catheter was resorted to till the fistulous opening occurred. At the end of three weeks the patient was up and about. After this I merely suggested frequent ablution with tepid water, injections into the vagina to prevent calcareous deposits on the mucous coat. The patient being of very cleanly habits, this was properly attended to.

"I hoped that, in the course of time, such an amount of contraction of the fistula would take place as would warrant some attempt being made by surgical operation to close the aperture.

* The above M. D. was a patient of one of the Lying-in Charities under my care; and her case of fistula, tabulated in the statistics of my work (table xi, p. 275), is the only instance of a urinary fistula which has occurred to me in any of the Charities under my direction—comprising 7302 deliveries. (J. H. D.)

I was not disappointed in this, and becoming subsequently acquainted with the success of Dr. Bozeman's operation, founded, but greatly improved, upon that of Marion Sims of New York, and having already witnessed one case of complete cure of a large urinary fistula (A. T., case viii, operated on June 10th, Mr. Brown's Pamphlet), on which† I had been consulted before operation, I was induced to place this case under Mr. Baker Brown."

The patient was operated on November 1st, 1858, at the London Home, in the presence of Dr. Davis and several other practitioners. The edges of the opening, now reduced at least three-fourths of its original dimensions, extending transversely, situate at the junction of the urethra and neck of the bladder, were first pared, the patient being under anæsthesia. The edges were then brought together by silver wires, silk threads, previously passed through, being used as their conductors, and then removed. The two halves of each wire were then passed through a hole in an oblong plate of lead, suitable to the opening to be covered. This plate was then with a special instrument pressed firmly upon the opening, the wires made tense. A shot, perforated by one aperture, was then passed over the two halves of each wire, pressed firmly up to the plate, and nipped with a well adapted pair of pincers, so as to obliterate the aperture of the shot upon the wire. Thus the plate was fixed securely in its place, and the surplus wire being cut off, the operation was complete. The patient was operated on in the position for lithotomy, and the vagina was well dilated by a special speculum and by tenaculum forceps, held by steady assisting friends. After the operation the patient was placed on her side, with an elastic catheter in the bladder, attached to a caoutchouc tube and bottle; the bowels were constipated by opium, having, previously to the operation, been well opened by aperients. Full diet was ordered.

On the eighth day the plate was removed, and a linear cicatrix was visible in place of the former aperture; no leakage whatever observable.

Two days afterwards, it was evident, that a minute aperture yet remained, and a second operation was performed, from which Dr. Davis was unavoidably absent. The result is, that the cure is now quite complete.

Case iv. *Vesico-Vaginal Fistula, Five Months Duration: Operations: Cure.* T. C., aged 19, married, was taken in labour on October 29th, and was delivered with forceps on October 31st, after a hard labour. There was a good deal of irritation of the bladder afterwards; and in a few days all her urine came away without any control on her own part, and continues to do so now in all postures alike.

She was admitted into the London Home on December 2nd, 1858. An examination showed an opening of the size of a florin, situated about half an inch from the os uteri. The edges were very unhealthy, having an ash-gray look, and evidently inclined to slough. The whole vagina was very sore and excoriated. She had a good deal of constitutional depression with headache, with tenderness and swelling in the left inguinal region deep in the pelvic cavity, shivering, constipation, and much wasting. She was given decoction of cinchona with dilute nitric acid, generous diet, and opiates at night.

She gradually improved much in general tone, and the vagina became more healed. The edges of the fistula cleaned. The cicatrisation of the vagina contracted; and several bands formed which dragged upon the opening. On January 3rd, 1859, she was put under chloroform, and I divided these bands, and plugged the vagina with oiled lint, which was changed every day. This gave much more room.

January 23rd. I performed Bozeman's operation, the patient being placed on her hands and knees, without chloroform. A leaden button and six sutures were used.

January 24th. Some urine had escaped.

January 26th. The pulse 140; the tongue dry. She was ordered to have some blue pill and extract of colocynth.

January 27th. The bowels were well opened, and she was much improved. There was an escape of urine.

From this time she improved in her general health, and on February 4th, I removed the button. The fistula was found to be healed in the middle in such a way as to leave two openings, one the size of a fourpenny piece, and the other of a large bougie. As the vagina was rather irritable, and the general tone low, she was put upon tonics for a short time previous to another operation.

February 21st. She was placed under chloroform on her back, and I proceeded to operate. I intended to close each opening separately, but as I progressed with the operation, I found it would be much easier to close them under one button. I, therefore, did so with four sutures with a long straight needle carrying the silver wire itself, which I had used in some of my earlier operations, and which in certain cases is easier to use than the short needle in the *porte aiguille*.

She went on very well, and had no escape of urine or any untoward system, and on March 2nd I removed the button, and found the opening entirely closed.

March 7th. She could retain her urine at pleasure. In every respect she was perfectly well.

March 9th. She left the Institution quite well.

17, Connaught Square, Hyde Park, March 1859.

† I am happy to be able to state that the above case of A. T., Case vii, about which I had been consulted previous to operation, and which was discharged cured by Mr. Baker Brown on June 29th, continues cured, on November 30th. The husband then informed me that his wife continued quite well, and was never in more robust health, and that she had not the slightest return of her former complaint. (J. H. D.)

LABOUR COMPLICATED BY RETROVERSION OF THE UTERUS.

By Geo. Greaves, Esq., formerly Surgeon to the Manchester and Salford Lying-In Hospital, etc.

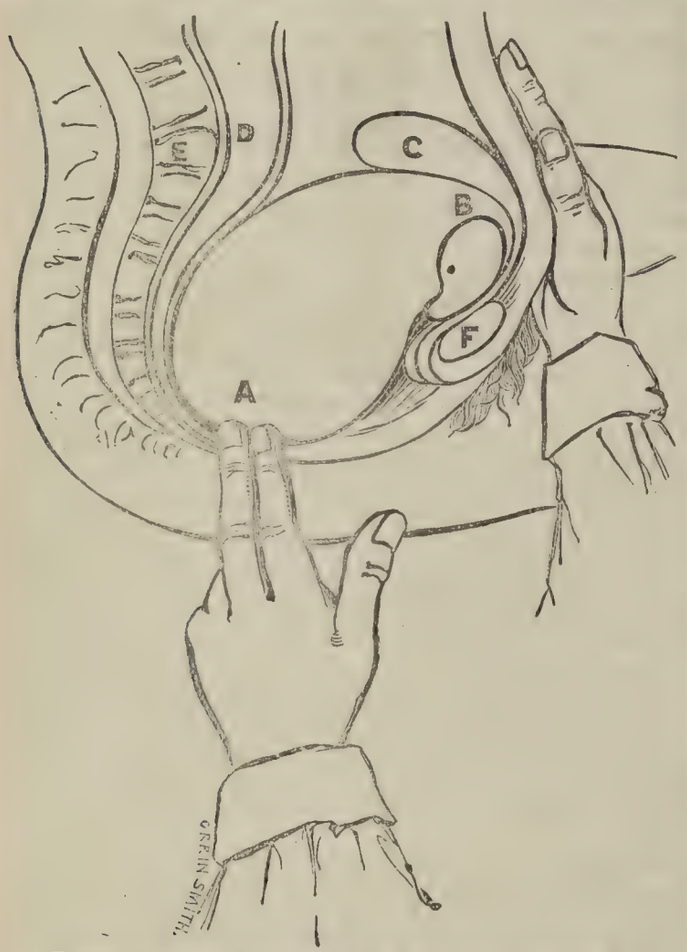
The following case may be thought worthy of being recorded, because a mode of treatment, hitherto, I believe, not described, was successfully employed.

On November 17th, 1856, I was requested by Mr. J. R. Chick to see with him a case of labour, rendered difficult, as he believed, by retroversion of the uterus. The patient, Mrs. R., aged 40, was in labour of her sixth child. She believed herself to be about six months advanced in pregnancy. On examination, I found that Mr. Chick's diagnosis was correct. There was, between the posterior wall of the vagina and the rectum, a large rounded tumour, which had already advanced to within an inch of the perinæum, and descended still lower with every pain. I had considerable difficulty in finding the os uteri; but was at length able to feel it above the symphysis pubis. I found the os dilated to the size of a half-crown-piece; and through the membranes, which were still entire, I was able to distinguish the head of the child, and to ascertain that the anterior fontanelle was the presenting part. An examination *per anum* confirmed the opinion as the position of the uterus, to which the other phenomena necessarily led; and I thus learned that I had before me the difficult task of delivering a woman, six months gone with child, whose uterus, instead of being in the normal position, was placed with its fundus all but resting on the perinæum, and its mouth, directed upward and forward, and resting on the symphysis pubis.

My attention was first directed to the bladder. By using a flexible male catheter, I withdrew about a pint of urine, which had been secreted since Mr. Chick had emptied the bladder an hour or two before. The patient said that her bowels had acted freely on the previous day; but as I had found in the rectum some scybala flattened by the pressure of the uterine tumour, I thought it right to give an enema, to remove any possible accumulation in the higher part of the rectum. This was done by means of a flexible tube, introduced to the extent of seven or eight inches. Nothing but the enema came away. I next endeavoured to correct the position of the uterus. The mode in which this is usually directed to be done is by making upward pressure, with one or two fingers of one hand introduced into the rectum, on the fundus of the uterus, while by a finger or fingers of the other hand in the vagina the os uteri is brought down. The first proceeding is a safe one, and may be effectual; but it appears very doubtful whether the requisite force could be applied to the os uteri without dangerous bruising or even laceration. However anxious I might have been to attempt it, anything like traction exerted on the mouth of the womb was in this instance out of the question. When I again introduced my finger into the vagina, I could no longer reach any part even of the cervix uteri. The os had become so far dilated as to allow the child's head, still covered by the membranes, partially to protrude. By the violent action of the abdominal muscles, the scalp of the child was being forced downward between the symphysis pubis and the body of the uterus, and was there felt as a fleshy tumour. The mouth of the womb was positively higher than when I first examined; being, as I have said, out of reach of the finger.

Although, however, the soft parts covering the vertex of the fœtus were beginning to descend toward the outlet, I could entertain no hope that a spontaneous righting of the position of the uterus would take place, or the child be safely born by the natural expulsive efforts, for with every pain the fundus descended, and there was reason to fear that it might be forced through the vulva, pushing before it the posterior wall of the vagina. The prospect of such a form of *procidentia uteri* was by no means an agreeable one. As there could be no doubt of the death of the child, the thought presented itself of perforating and bringing down the head by some form of crochet. But no suitable instrument was at hand, and there was no time to be lost in sending for one.

In this emergency, a mode of treatment occurred to me which formed the only novelty in this case. The child's head, although the scalp was to some extent forced down behind the symphysis pubis, was still, during each pain, distinctly perceptible, through the abdominal parietes, above the pubes. I thought that, while with two fingers of the left hand in the rectum, making steady upward pressure on the fundus of the



Position of the Parts, and the Mode of Treatment employed.

A. Fundus uteri.
B. Os uteri; child's head protruding, covered by membranes.
C. Bladder.
D. Rectum.
E. Promontory of Sacrum.
F. Symphysis Pubis.

uterus, I might be able, by counter-pressure with the right hand laid flat upon the abdomen immediately above the pubes, to rectify the malposition of the uterus. By this manipulation, persisted in for a few minutes, I succeeded beyond my hopes. I first felt the fundus recede a little, and then, almost with a bound, the uterus righted itself; the tumour of the fundus vanished from the rectum, that of the head from the hypogastrium, and, in a minute or two more, the fingers introduced into the vagina met the child's head arrived almost at the os externum. Delivery was speedily accomplished. The uterus contracted, but rather irregularly, so as to retain the placenta, which had to be removed by the hand. Regular contraction ensued, not a single unfavourable symptom succeeded, and in a few days the patient was convalescent.

There was not much to be learned of the previous history of this case. About ten weeks previously, Mrs. R. had suffered from retention of urine, with symptoms of peritonitis, and was relieved by the catheter and a few leeches. There can be no doubt that retroversion had then taken place, and continued until, the increasing bulk of the uterus rendering its new position intolerable, it was excited to efforts prematurely to throw off its burthen. That these efforts were so long delayed, must be attributed to the capacity of the pelvis, which certainly was of more than average size. The appearance of the fœtus proved that at least six months had elapsed from conception.

Of the various modes of treating a retroverted uterus named by writers on the subject, that said by Dr. Ramsbotham (*Obstetric Medicine and Surgery*, 3rd edit., p. 629) to have been "suggested by Bellanger and Lallemand, and spoken of with praise by Boivin and Dugès," comes the nearest to that employed in this case. It is to pass a sound into the bladder, to act as a lever upon the os uteri, so as to press it down. We must agree with Dr. Ramsbotham that such a procedure is in the highest degree objectionable, from "the palpable chance of injury" to the urethra and bladder, or even to the uterus itself. To the method employed by me, the same objection cannot, I think, be made. If it do no good, the pressure of the open hand through the abdominal walls can scarcely do harm.

The proposal made by several writers, while pressing up the fundus of the uterus, with the fingers of the other hand to draw down the cervix uteri, is founded on the same principle. It is the application of a mechanical remedy to a strictly mechanical affection. The advice to use the force thus applied to the os uteri "in the most gentle manner" (Ramsbotham, *op. cit.*, p. 627) shows the dread entertained, by those who have recommended it, of possible mischief to the uterus. It may be questioned whether sufficient traction could thus be made, without inflicting serious injury. Both these recommendations show that others besides Burns (*Principles of Midwifery*, 8th ed., p. 258) have seen that in pressing on the fundus alone, "our efforts tend rather to press the os uteri farther up, than to raise the fundus into its place." It has been felt that means were wanting of causing the uterus to revolve on the centre of its long diameter.

It may be possibly said that due allowance has not, in narrating this case, been made for the rupture of the membranes which must have occurred immediately before the revolution of the uterus. In a similar case, it would probably be right to endeavour thus to reduce the bulk of the uterine mass before attempting its replacement. On this occasion, the end was doubtless attained by the additional pressure to which the ovum was subjected.

BELLADONNA IN INCONTINENCE OF URINE.

By T. T. Griffith, Esq., Wrexham.

As the multiplication of successful results best substantiates the claims of any remedy to confidence, I beg to enclose for insertion the following case of long continued incontinence of urine cured by belladonna.

Master B., aged 4, of a delicate strumous constitution, had been subject since early infancy to nocturnal incontinence of urine, which the ordinary means had failed to correct. I saw him first on December 31st, 1858, and prescribed the following:—

℞ Extracti belladonnæ gr. iiss; alcohol ʒss; syrupi tolutani ʒi; aquæ destillatæ ʒv. M. Fiat mistura cujus capiat cochleare i minimum ter die.

Directions were given to take him up, late at night, and early in the morning.

The good effects of these means were soon apparent; and to make the special influence of the belladonna more clear, the complaint returned during its omission for a few days. Its good effects were, however, soon re-established, by taking it again regularly; and its use being no longer necessary, it was gradually discontinued. A week ago, I received from the little patient's father the following satisfactory report. "My little boy has quite recovered from his weakness; and if ever he does suffer from it, a single dose of the medicine quite corrects it."

Donation of Dr. Muetter to the College of Physicians of Philadelphia. Early in January last, Dr. T. D. Mütter perfected his agreement with the College of Physicians, by which he gives to that institution his museum, together with his plates and diagrams, to serve as a basis for the "Mütter Museum." Besides this, he endows the College with thirty thousand dollars, to defray the expenses of the museum and to establish lectureships. The College is bound, on its part, to have a fire-proof building completed within five years, for the accommodation of the collection.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY
LIONEL BEALE, M.B., F.R.S.,
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Lecture I.

Note-Book; Conical Glasses for examining Urine; Quantity of Urine; Colour of Urine; Smell of Urine; Clearness or Turbidity; Consistence; Deposit; Specific Gravity; Methods of taking the Specific Gravity; Reaction; Acid Urine; Alkaline Urine, from the presence of Volatile or Fixed Alkali.

Gentlemen,—It will be my endeavour, in the present course, to combine the advantages of an oral lecture with those of a practical demonstration; and I think you will agree with me in the opinion that, in this manner, a greater amount of information may be gained in a short time, and its practical bearing upon the investigation of disease shown more satisfactorily than by listening to an ordinary lecture. I propose, therefore, to devote the first half-hour to a short description of the substances which you will afterwards have an opportunity of examining for yourselves. The remaining hour and a half will be occupied in subjecting the different constituents of the urine to microscopical and chemical investigation in the laboratory.

The first part of my course will comprehend the examination of healthy urine; and then I propose to give one demonstration upon the *microscopical examination* of those urinary deposits most frequently brought under the notice of the physician, and the changes which lead to the formation of casts of the uriniferous tubes. The examination of various *morbid* specimens of urine, and the detection of *extraneous matters*, will then be considered. Lastly, I propose to make a few remarks upon the different forms of *urinary calculi*, and to consider the conditions of the urine which lead to their formation.

My chief aim will be to direct your attention especially to those parts of the subject which bear upon the practical examination of the urine, with reference to diagnosis and the investigation of disease; and I shall only dwell upon those chemical processes and microscopical researches which are adapted for the *clinical examination* of this secretion, and which may, with a little trouble, be pursued by the practitioner. I shall briefly allude to the nature of the morbid changes which we are able to discover by an examination of the urine, but shall not attempt to discuss in detail the treatment to which the patient should be subjected,—for two reasons: first, because many of you are as well able to offer an opinion on this part of the question as myself; and secondly, because, as we all know, in the majority of these cases, the difficulty lies in the diagnosis: the exact nature and history of the morbid changes having been ascertained, the proper plan of treatment often at once suggests itself to the practitioner.*

Before I describe the different substances entering into the composition of healthy urine, I must refer to some preliminary operations to which the specimen should be subjected before it is attempted to separate its chemical constituents from each other, or to examine any deposit that may have been formed in the microscope.

Note-Book. The result of every observation should be carefully entered in a note-book at the time it is made; and it is often of the greatest importance to make a sketch of the microscopical characters of a deposit, and to append a careful but short description of the specimen at the time the drawing is made, as well as notes of the case from which the urine was obtained. (On drawing and measuring objects, see *The Microscope in its Application to Practical Medicine*, 2nd edit., p. 33.)

Now, suppose a specimen of urine brought to you for examination, how is the investigation to be commenced? what are the first points which should attract your notice? in what order should they be observed? and how are you to ascertain the nature of constituents which are dissolved in the fluid, or which form a visible deposit?

The perfectly fresh urine should be poured into a conical glass vessel.

Conical Glasses for examining Urine. The best form of conical glass for placing specimens of urine in, is one suggested by my colleague Dr. Budd. It is represented in Figure 1. Its advantages are these—that the specific gravity may first be taken, and then the fluid allowed to stand, for the subsidence of any deposit, without transference to another vessel. It therefore combines the advantages of the conical glass and urinometer-tube in one vessel.

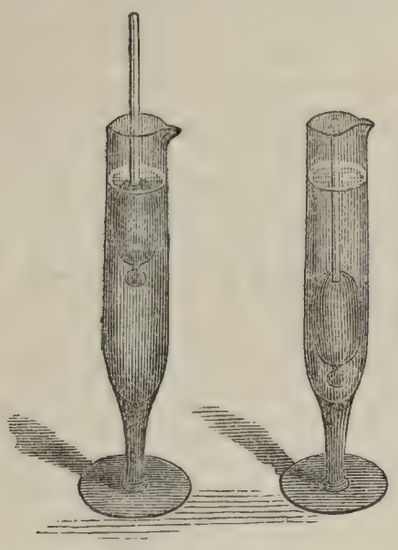


Fig. 1.

Quantity of Urine. It is very important in all cases to know the quantity of urine passed in twenty-four hours. The most minute examination often fails to show any fact of importance in the investigation of a case, in consequence of the quantity of urine passed not having been measured. The practitioner in many cases desires to know the general amount of compounds resulting from the disintegration of tissues which are formed in the course of a given time, and this knowledge cannot be gained unless the urine be carefully measured. This is the more necessary, as the amount varies so much even in healthy persons. The temperature of the air, and the amount of moisture present in it; the state of the skin and mucous surfaces generally; the activity of the functions of respiration and circulation; the amount of exercise; the quantity and nature of the food, and, of course, the amount of fluid taken,—are some of the circumstances which affect the *quantity* of the urine passed. In health, it may be said to vary from fifteen or twenty to fifty or sixty ounces. Dr. Thudichum, in some experiments carried on for from fifty to seventy days, in the case of two individuals, finds the average amount to be from sixty to sixty-eight ounces in the twenty-four hours. The experiments were performed during the months of November, December, January, and February. In round numbers, the proportion in health may be estimated at from twenty to sixty ounces; and a greater quantity is passed in the winter than during the summer months.

Colour of Urine. Urine from the same person varies much in colour at different times, and specimens taken from a number of persons in a state of health exhibit the greatest variation in tint. Nevertheless, important information is often gained by observing the colour of urine. In some cases, from the colour, we are led to suspect the presence of certain substances dissolved in the fluid; in others, we may feel sure that certain morbid constituents are not present. The colour of the urine, as well as many other characters, seems to be affected by the period of the day, the nature of the diet, the state of the respiratory process, changes of temperature, and many other circumstances. Healthy urine varies from a pale straw colour to a brownish yellow tint. In disease, it may be perfectly colourless, of a natural colour, bright yellow, pinkish brown, of a smoky appearance, blood-red, or even dark blue. What we learn from these differences in colour will appear when we come to consider the characters of the urine in disease. Urinary deposits also vary much in colour: they may be white, pink, red, pale or dark brown, blue or black. The nature of the colouring matters of urine has been carefully

* This course of Lectures was delivered only to practitioners.

investigated by Heller, who obtained a yellow colouring matter, *uroxanthine*. This can be decomposed into a red colouring matter, *urrhodine;* and a blue substance, *uroglaucine*. The former has the same composition as indigo red; the latter, as indigo blue. Uroglaucine may be obtained from all specimens of urine, and, in disease, sometimes forms a visible blue deposit. Indigo blue has nearly the same chemical composition as hæmatine: it is doubtless formed from it. Leucine, which has also been met with many times in urine, is another substance which may be produced in the formation of this blue deposit of indigo. The yellow colouring matter of healthy urine was termed by F. Simon of Berlin, *hæmaphæin*. The presence of a substance in the urine from which indigo can be obtained must now be regarded as a settled fact; and it is probable that the blue deposit observed in certain instances, and referred to by different authors, was indigo blue, formed by the decomposition of uroxanthine.* Dr. Hassall has published some interesting cases, and has very carefully analysed the deposit.† I can fully confirm his statements, as I have recently had an opportunity of examining a specimen of urine with blue deposit, which was sent to me by my friend Dr. Eade of Norwich.‡ *Uroërythrine* is another colouring matter described by Simon, and always associated with uric acid and urate of soda. This substance is probably the same as *purpurine*, described by Dr. Golding Bird. It has been analysed by Scherer, who finds that it contains about 65 per cent. of carbon. It would seem that, when the elimination of substances from the liver, rich in carbon, is interfered with, an increased quantity of this substance is excreted in the urine. Dr. Harley finds that the colouring matter of healthy urine contains a notable quantity of iron, like the hæmatine of the blood; and he gives to it the name of urohæmatine. Prout believed that the colouring matter of urine was due to the presence of a sort of resin; and Dr. Harley has lately isolated a resinous substance, which possesses many characters in common with the resin derived from certain plants, and closely resembles draconine, which is obtained from dragon's blood, the exudation from the stem of one of the resin-bearing palms.

The relation of the colouring matters of the urine to those of the bile has been dwelt upon, and Berzelius long ago drew attention to the resemblance of the latter to the chlorophyll of plants. Certain chemical reagents cause the same change in both these colouring matters. A red colouring material is not unfrequently seen in the cells in the central part of the lobules of the liver, and Dr. Bence Jones met with a gall-stone of a brick red colour. There is much reason for believing that the formation of these colouring matters is connected with the disintegration of blood-corpuscles, and the quantity formed and the intensity of the colour probably depend upon the activity of the oxidising processes going on in the organism; but the whole question of the production of colouring matter in the living body is still involved in great obscurity. The separation of a substance from the urine, from which indigo blue and indigo red may be prepared, must be regarded as a fact of the greatest interest; and further experiments on this subject are likely to lead to important results in connexion with the development of organic colouring matters.

Smell of Urine. From the smell of the urine, in some instances, the practitioner may gain useful information. Healthy urine has a peculiar and very characteristic smell, which has been described as aromatic, but well known to all: it probably depends upon the presence of certain organic acids. In disease, the specimen may be highly *pungent*, from the presence of *carbonate of ammonia*, which is produced by the decomposition of the urea excited by some animal ferment, especially by mucus of the bladder in a state of incipient decomposition. In other instances, it may have the smell of healthy urine, but the odour very much more intense. Sulphuretted hydrogen may be evolved from it. The smell of the urine is affected by many articles of food, such as asparagus, garlic, and cubebs. Turpentine, even if inhaled, causes the urine to evolve an odour something like the smell of violets.

Clearness or Turbidity. Healthy urine is perfectly clear and transparent; but, after it has been allowed to stand for a short time, a very faint, flocculent, bulky deposit collects towards the lower part of the vessel. This cloud consists of a little mucus, with imperfectly formed epithelial cells from the mucous membrane, and epithelial *débris*.

In disease, the urine may be opaque from the presence of different substances held in suspension. Urate of soda is the most frequent cause of this opacity, in which case the colour of the mass is generally of a dirty yellow, or brownish, resembling peas-soup. Very rarely it results from fatty matter in a minute state of division, and the urine has the appearance of milk. This occurs in cases of *chylous urine*. In these instances, the turbidity still continues after the urine has been allowed to stand still for some time; but generally the opacity of a specimen depends upon the presence of a deposit temporarily suspended in it from agitation, but which collects at the bottom of the vessel after a time, forming a visible deposit, leaving a perfectly clear fluid above it.

Consistence. Healthy urine is perfectly limpid, like water, and can be readily made to drop from a tube. In disease, however, the urine may be *slightly viscid*, or so *thick* and *glairy* that it may be drawn up at the end of a rod like a thread, and cannot be made to drop at all. It may be *semi-fluid;* and in rare instances, although passed perfectly fluid, it has afterwards assumed the form of a thick *firm jelly*, so that the vessel containing it might be inverted without its escape. Such specimens have been met with, associated with a milk-like appearance, in cases of *chylous urine*.

Deposit. The only deposit which urine in health contains is the faint unimportant mucus-cloud before referred to. All the constituents removed from the organism in this excretion, in health, escape in a perfectly soluble form; but when the healthy physiological changes are in any way interfered with, some of these constituents are produced in abnormal quantity, and are deposited, in an insoluble form, either at the time the urine is secreted, while it remains in the bladder, or at a variable interval of time after it has been passed. The deposit may be soluble in the warm fluid precipitated as soon as it becomes cold, or its deposition may be due to certain chemical decompositions occurring in the fluid.

The presence of a visible deposit in urine is, in all instances, to be regarded as *abnormal*. The nature and import of urinary deposits will engage much of our attention in the present course of lectures. I shall describe the different forms of deposit, and the mode of collecting them for examination, in a subsequent lecture.

[*To be continued.*]

* See note on Heller's observations upon the colouring matters of urine, in Dr. Thudichum's "Treatise on the Pathology of the Urine," p. 326.

† Philosophical Transactions, 1854, p. 297; Proceedings of the Royal Society, June 16th, 1853.

‡ This case will be published in the "Archives of Medicine," vol. i.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF ENTOZOON IN THE BRAIN.

By F. Brittan, M.D., Physician to the Bristol Royal Infirmary, and Lecturer on the Practice of Medicine in the Bristol Medical School.

[*Read February 24th*, 1859.]

During last April, I was requested by Mr. Granville to see with him A. M., aged 29. The previous history of the case was as follows.

She had always been healthy, strong, and active, until about a year and a half since. She then began to suffer from irritation of the stomach and frequent vomiting, occurring chiefly in the morning and continuous for several hours. The attacks were variable in severity and effect upon the general health. The matter vomited was like that of pyrosis, watery, or mixed with the food. The vomiting was generally accompanied by pain in the head, closely resembling the nervous forms of headache. During the attack, and for some time after, there was great prostration, so that frequently she was unable to rise from her bed, and inability to take food; whilst general febrile excitement, seldom absent for more than a few days, mingled these symptoms together, presenting a complete resemblance to some well known forms of hysteria.

No definite indication of the true nature of the affection having been discovered, the treatment, Mr. Granville informs me, was directed chiefly to relieve the gastric irritation. "With this view, the various gastric and general sedatives were prescribed, and many indirect modes of allaying the main symptoms attempted, and the principal antispasmodic remedies usually employed in hysterical affections were tried with but slight success. Change of air was at one time recommended, and proved more efficacious; the general state of the patient was

for a time greatly improved, and the vomiting subsided, but returned with its accustomed severity. The exhibition of chalybeates was of somewhat greater value; but no treatment permanently relieved the case."

I found her a strongly made, stout girl, with a well developed muscular system, and rather fat. Menstruation was generally regular; she had not been subject to cough before this affection. The bowels were rather confined. Her mother suffered from some disease of the head; and her brother died of diseased brain, having been partially paralysed and unconscious for a week before his death. She never had a fit, nor any distinct cerebral attack. Her complaint now was of the sickness and vomiting, and of the pain in the head, which prevented her from performing her usual household duties. The epigastrium was very tender; the recti muscles were tense; she had brought up blood twice in considerable quantity. The heart's action was normal; and the breath-sounds healthy, but gave me the idea of insufficiency, and I was half-inclined to believe in the existence of some adventitious bulk in the thorax. The organs of sense were perfect. Imagining the case to be one of gastric irritation with probable ulceration, I advised accordingly. She shortly afterwards became my patient at the Infirmary, where the same treatment was followed out, with careful dieting, and leeches to the head and epigastrium. At the end of two months, she went out much relieved. I still saw her occasionally as my out-patient to the end of September, when the symptoms, which had been gradually increasing in severity, became so aggravated that I again admitted her. She now could not lift her head from the pillow, from the dead, dull, heavy pain and sensation of weight; nor could she move it on account of excessive pain and stiffness in the neck. She was bled freely, but with only temporary relief. She then stated she could not open her eyes, and appeared to be "hysterical." The catamenia, which had been absent, reappeared under appropriate treatment. But, being fully impressed with the idea that she was dying, she preferred to return home, and left the Infirmary to all appearance healthy in bodily and cerebral functions, except as in an ordinary case of hysteria.

In five days, her father informed me of her death, under the following circumstances. She went on as before to the evening when she died; she then was helped into bed from the night-chair, and conversed for some minutes with her father. He left the room, an attendant remaining at the bedside. On his return in half an hour, he was informed she had been sleeping; but he found her dead. There had been no struggle nor convulsion; not a movement, in fact, to mark the period of her death.

Post Mortem Examination thirty-six hours after death. The body was very fat and muscular; pale. The lungs were normal in every respect. About half an ounce of fluid was found in the pericardium. The heart was very large, and loaded with fat; the right ventricle was very thin; the muscular tissue was pale; the left ventricle was normal; there was a little fatty deposit in the mitral and tricuspid valves. The stomach was thin and flabby, with two or three slight patches of vascularity; but there was no abrasion nor indication of former ulceration. The brain was healthy in appearance, save that the cerebellum was prolonged by two little flaps that extended down beside the medulla, and were deeply indented by the edge of the foramen magnum. On minute examination, a cyst about one inch in diameter was found lodged in the fourth ventricle; the roof of which was softened to a dirty pultaceous appearance and consistence. The cyst contained a white semiopaque mass about one-fourth of an inch in length, and what appeared like a twisted tube protruding from it, containing fluid. On removing the end of this tube, what seemed the head and neck of tænia, about one-fourth of an inch in length, protruded. The head, which has four suckers and a central circlet of hooklets, is identical with the typical head of a tapeworm, in my cabinet. The neck shows the transverse markings as of segments, and ends in a sort of bulb attached to the mass.

Remarks. I shall not proceed to expatiate upon this case, which appears to me valuable principally for its suggestiveness, but will briefly point out the special circumstances, which induce me to bring it forward.

1. The remarkable persistence of the gastric irritation and intense vomiting, even of blood, without any perceptible lesion of the gastric mucous membrane.

2. The equally persistent headache which, with the vomiting, had no other assignable cause than the existence of the cyst in the fourth ventricle.

3. The interest attached to the almost certainty that irritation of the roots of the pneumogastric nerves by the cyst, was the cause of the gastric symptoms. No other nerve connected with the fourth ventricle appearing affected. This is the third instance which has lately fallen under my own observation, in which severe gastric symptoms proved after death to have been due to irritation about the fourth ventricle. In fact, these symptoms in the last case considerably influenced me in forming what proved a correct diagnosis.

4. The strange nature of the contents of the cyst and its remarkable corroboration of the recent discoveries in regard to the development of the entozoa—and of the tænia in particular. This parasite is totally unlike the ordinary *cysticercus cellulosæ* in the shape of the head and suctorial pores, unlike the *echinococcus*, in having not only a head, but a long segmented neck. There is no larval nor perfect entozoon with which I am acquainted that exactly resembles this specimen; but it is identical with the head and neck of the tænia solium believed, I should say proved, to be developed from the *cysticercus* or *echinococcus*; and every analogy seems to me to prove that this specimen is *cysticercus* or *echinococcus* partially, but considerably, developed into a tapeworm. I may add, that with this specimen, I also exhibited to the meeting two heads of tænia from the human subject. One was of the long oval shape, having four suctorial pores and a circle of hooklets, identical with that from the brain. The other had a truncated head quadrilateral in shape, almost made up of the four concave suctorial discs, and with a depression between them at the apex instead of the prolongation and circle of hooklets.

HYDATID CYST OF THE LIVER: WITHDRAWAL OF THE FLUID BY TAPPING: PERMANENT COLLAPSE OF THE CYST.

By William Budd, M.D., Senior Physician to the Bristol Royal Infirmary.

[*Read February 24th*, 1859.]

Isaac Thomas, aged 35, a collier by occupation, a man of spare habit and faded appearance, was admitted into the Bristol Royal Infirmary on June 2nd, 1858, on account of a painful swelling in his right side. He had enjoyed pretty good health until about two years before admission, when he began to suffer pain in the region of the liver, and soon after perceived an enlargement there. This enlargement had gone on gradually increasing until it attained the limits it presented when he came to the Hospital. He had meanwhile suffered a good deal in general health, and had lost much flesh and strength. There had never been any jaundice. On examination, a large tumour was found in the right hypochondrium, extending from the margin of the ribs to about two inches below the umbilicus, and describing in its outline, as far as it could be traced, the segment of a circle, of which this might be taken as the radius. The tumour was not tender on pressure, but had been at various times the seat of severe pain. The only other circumstance which it seems important to mention is, that the patient had for some months past been suffering from chronic catarrh, and that he presented the characteristic indications of pretty extensive emphysema of the lungs.

From the history of the case, and from the even globular character of the tumour, I came at once to the conclusion that it was an hydatid tumour. I may add, that I failed, however, to satisfy myself of the occurrence of the peculiar fremitus which percussion is said to elicit from tumours of this particular kind.

On July 18th, in order to verify the diagnosis, the tumour was punctured with a grooved needle by my colleague Mr. Prichard, and about one ounce of fluid was withdrawn from it. This fluid was perfectly limpid when drawn, but, on being allowed to stand, threw down a slight sediment, which, on microscopic examination, was found to consist entirely of amorphous granular matter. No echinococcous hooklets could be discovered in it. The most important character I have reserved for the last. The fluid did not contain even a trace of albumen. I looked upon the entire absence of this product as decisive in confirmation of the diagnosis.

Of all the varieties of cysts of which the human body may become the seat, the hydatid cyst is, as far as I know, the only one (of any large size, at least) which yields a limpid fluid, entirely devoid of albumen. The fact is not only peculiar (as I believe) to this kind of cyst, but, if I mistake not, bears a physiological relation to the parasite of which it is the nidus. In the thickly peopled colony which inhabits an hydatid cyst, a

certain number of the members are, for a time, at any rate, attached to its walls, and derive their pabulum directly from the infested subject. But, in addition to these, there are great numbers of others which, after a certain period, float free in the sac; and these last, although no longer attached to the living body from which they draw their nutriment, continue, often not only to grow and to nourish themselves, but to develope a very numerous offspring.

Now, the substance of these creatures is made up of a material which is chemically closely allied to albumen, and which has been undoubtedly directly derived from it. On the other hand, the only possible source of albumen for these unattached members is the fluid in which they float. The inference seems unavoidable, therefore, that if albumen is absent from this fluid, it is only because the nutritive functions of these beings are so active that this element is appropriated as soon as t is given out.

The nature of the tumour being ascertained, the next question was, how to deal with it. In cases of this kind, there is one great principle which should always be kept in view, namely, that the chief dangers connected with them arise from *the indefinite powers of parthenogenetic growth and development* which these parasites possess. An hydatid cyst does little or no harm, in the liver, at least, so long as it remains small. It is the continuous and often enormous enlargement of the cyst by the indefinite multiplication of the colony it encloses, which leads to all the mischief. The great object of treatment, therefore, is to prevent this multiplication by destroying the individuals which are its source. A very important circumstance in connexion with this object is, that hydatids, when dead—at any rate, when their bulk is not large—do not run into putrescence, or extricate any products that are hurtful to the living economy. By gradual interchange and substitution with the organic elements by which they are surrounded, their original constitution is altered in such manner that they remain, chemically speaking, in a passive state. In the course of my experience, I have met with a considerable number of cases in which dead hydatids, imbedded in a putty-like material, had lain for indefinite periods in what may be called the *fossil* state, and without causing the slightest injury to the persons who were the unconscious bearers of them.

The problem for the physician, therefore, is, if possible, to compass the death of the brood of echinococci, without danger to the subject infested with them.

To kill the parasite, the simplest measure is to withdraw, by tapping, the fluid in which they live. Why it should be, is not at all clear; but experience has shown that, in the great majority of cases, the sac, once emptied of its fluid, never fills again; and that the death of the parasites (from want of nourishment, I presume) is the result.

Unfortunately, this operation exposes the patient to two very great dangers. In tapping an hydatid cyst of the liver, there is, on the one hand, great danger of the fluid escaping into the peritoneum, and setting up inflammation there; and on the other, especially if care be not taken to prevent admission of air, there is risk of exciting suppuration of the cyst. Where, however, the cyst adheres to the abdominal walls, the first danger is eliminated, and the second may generally be obviated by the proper precautions.

In the case of Isaac Thomas, there were several circumstances which led me to the conclusion that the cyst did adhere to the abdominal walls. One of these was the severe pain which he had suffered in the situation of the tumour, at times when there was no evidence of its growing rapidly. But still more significant was the fact that change of position did not alter in any way the limits of the tumour, or affect the position of its point of maximum prominence. It was observed, in addition, that by no kind of manipulation could the abdominal walls be made to shift, or slide over it.

The principal objection to the performance of the operation being considered, therefore, to be out of the way, it was determined to treat the case, in the first instance, by tapping the cyst so as to withdraw all its fluid. In the event of this expedient failing, I proposed to attempt to *poison* the echinococci by injecting a small quantity of tincture of iodine into the cyst with a syringe constructed on the same principle as that which is used for the injection of nævi. Galvano-puncture was another measure held in reserve, in case neither of the other two should succeed.

On September 3rd, in accordance with these views, my colleague Mr. Prichard tapped the cyst, and withdrew from it twenty-three ounces of a perfectly limpid fluid, void of albumen, as before.

In performing the operation, care was taken that no air should get into the sac. The result was an immediate collapse of the tumour, which, from extending to two inches below the umbilicus, immediately before the operation, could scarcely now be felt below the margin of the ribs. This change was attended by a sense of very great relief. No ill consequences followed the tapping, and in two or three days the patient felt quite well and comfortable.

The cyst did not fill again; and when the man left the house, in the middle of October, nothing could be felt of the tumour. At my request, he came back about two months afterwards, merely to show himself. As he was still suffering from catarrh, he remained a short time in the Hospital. During this period, he was examined repeatedly with very great care, but no external indication could be discovered of the former cyst. He was entirely relieved from all the symptoms which formerly attended it, and he had gained much flesh and strength.

I ought to add that, on examining with the microscope the sediment which was thrown down by the fluid taken from the cyst on the second occasion, I found four very beautiful echinococcus-hooklets in it.

Discussion. Mr. H. Clark remarked on the difficulties of destroying hydatid cysts, from their situation, etc.; and thought more attention should be paid to their prevention. They were principally derived from the animal kingdom, especially from swine; and were rarely found in Jews or Mussulmans, who avoided pork. He referred to the experiments of feeding animals on hydatids, tænia, etc., and reproducing other forms in them. Hydatids were frequently found in the brains of lambs, but rarely in those of sheep, and were due to the ova of tænia passed by the sheep-dogs.

Dr. Brittan stated that, on inquiring amongst his patients suffering from tapeworm, eight out of ten were in the habit of eating raw meat. The temperature of ordinary cooking was not always high enough to destroy the ova of hydatids.

Dr. Budd remarked, that the tænia solium was very common in Bristol. He always had cases amongst his out-patients, and thought that it was owing to the quantity of fresh pork imported and eaten there, as Irish pigs are very commonly measly, much more so than English, owing probably to their feeding on excrementitious matter, on account of the absence of privies and drains in Ireland.

Dr. Herapath said, that measly pork was not the only cause of tapeworm. The ova may generate without passing through any animal. He mentioned a case occurring in an infant at the breast, aged nine months; and another occurring in a child aged two, who had never tasted raw meat.

Dr. Davies drew attention to a pamphlet on *Measly Pork*, by Dr. Fleming of Cork (now of Birmingham). He had almost constantly noticed the habit of eating raw meat in patients subject to tapeworm.

Periscope.

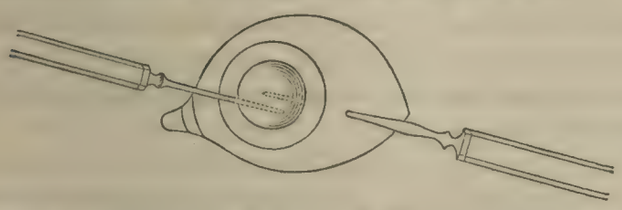
OPHTHALMOLOGY.

RECLINATION OF CATARACT WITH TWO NEEDLES.

In the *Ophthalmic Hospital Reports* for October 1858, Mr. J. V. Solomon describes a method of employing two needles in "reclination" of cataract. He observes that the permanent results of this operation are most favourable where the eyeball is normally of large size, and the cataract consists of a hard nucleus enveloped in soft lens matter. This kind of cataract presents a broad edge and a deep antero-posterior diameter. Being in close contact with the ciliary body, and with the iris, to which its capsule is not unfrequently adherent, it obliterates the posterior, and sometimes encroaches on the anterior chamber. Hence the passage of a needle (entered through the sclerotic) over the rim of the lens to the centre of the pupil is difficult, inasmuch as the instrument is very apt to spit the lens or the ciliary body, or to be caught under the capsule of the lens or in the tissue of the iris.

Having dissected the eyes of a patient on whom reclination had been performed, Mr. Solomon was induced to examine whether the occurrence of the accidents above mentioned might not be obviated: and he was led to the conclusion that the

desired object would be attained by pressing back the outer and lower side of the lens from the iris, with a fine needle passed through the nasal side of the cornea, thus making a free space for the sclerotic needle to pass to the front of the cataract, as represented in the accompanying woodcut.



Other advantages which appeared likely to arise from the use of two needles, were an increased facility in the removal of the soft portion of the cataract previously to the depression of the more solid portion; protection of the iris from contusion; and an effectual obstacle during the operation to the dislocation of the cataract into the anterior chamber. Mr. Solomon states that all his expectations were fulfilled when he operated with two needles; and moreover, that the lens was more easily and methodically reclined, and was capable of being placed with greater exactness in the outer and lower fourth of the vitreous humour than in cases where only one needle was used.

FORMATION OF AN ARTIFICIAL PUPIL BY TYING THE IRIS.

Mr. Critchett describes, in the *Ophthalmic Hospital Reports* for October 1858, an operation which he terms *Iriddesis* (Ιρις, and δεσις a binding). The object is to prevent the receding of the portion of the iris drawn through the cornea in the operation for artificial pupil. This operation is performed in the following manner. The patient, if at all restless, being placed under the influence of chloroform, the wire speculum is inserted, and, with a pair of forceps, a small fold of the conjunctiva close to the cornea is held so as to fix the eye. An opening is then made with a broad needle through the margin of the cornea, *close* to the sclerotic, and just of sufficient size to admit the cannula forceps; with it a small portion of the iris, near, but not close to, its ciliary attachment, is seized and drawn out to the extent considered necessary to enlarge the pupil; a piece of fine floss silk, previously tied in a small loop round the cannula forceps, is slipped down and carefully tightened around the portion of iris made to prolapse, so as to include and strangulate it. This manœuvre requires a little practice and dexterity, and is best accomplished by holding each end of the silk with a pair of small forceps with broad extremities, bringing them exactly to the place where the knot is to be tied, and then drawing it moderately tight. A single tie is sufficient; the ends are then cut off, and the operation is complete. Little or no irritation usually follows. The small portion of iris included in the ligature speedily shrinks, leaving the little loop of silk, which may be removed from the eye about the second day. This operation has been performed many times by Mr. Critchett, and by his colleagues, Mr. Bowman and Mr. Poland, and the result has been in every respect most satisfactory; the size, form, and direction of the pupil, can be regulated to a nicety; its mobility is preserved, and the eye speedily recovers from the effects of the operation. It is applicable to numerous groups of cases, including all those in which the natural pupil, or even a part of the natural pupil, is movable, and has a free edge.

Drinking Fountains. The first drinking fountain erected in London is now nearly completed. It is situated at the north-eastern corner of Snow Hill, in the wall of St. Sepulchre's churchyard. The work is composed of columns and sill in polished red granite, with an alcove of white marble, the whole being enclosed within an arch, which gives depth and importance to the design. This fountain, as well as others, which are intended to be erected at the front of the Royal Exchange, in the Regent's Circus, and other localities in the metropolis, are to be completed through the sole and generous munificence of Mr. Gurney, of Lombard Street. The artists employed to design and model these useful and ornamental embellishments for our streets, are Messrs. Wills, Brothers, and the one now in hand is being erected by Messrs. Child, Son, and Martin, of Doctors' Commons. (*Building News.*)

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, APRIL 2nd, 1859.

JOHN HUNTER.

On Monday last, the remains of the celebrated surgeon and physiologist, John Hunter, were deposited in their honourable resting-place among great men in the old Abbey of Westminster. The heads of our Colleges, and other representatives of bodies great in the sciences which Hunter cultivated, followed the body to its tomb in the nave of the Abbey; while in their rear came several hundred members of the profession, both residing in London and in the provinces, who had assembled to shew respect to the memory of a man whose name has been bound up in the instructions they have received, and whose teachings have influenced the art which they practise.

But, beyond the rank and the number of those who followed the body of Hunter, there was, to many minds, something wanting. In other countries, when such a man as Hunter—or even a man of less note—is committed to the earth, men of kindred spirits record, in the language of the orator, the life and acts of the departed. It may be a question whether the continental custom of delivering funeral orations can ever be made thoroughly congenial to British feelings; or whether we can so accurately appreciate a man's worth within a few days after his death, as to hold back our respect from prevailing over our judgment; but, if there was ever an occasion on which our time-honoured custom might have been varied, it was on that of the reinterment of John Hunter. Sixty-five years had elapsed since his death; and he had become, to the vast majority of the medical profession, a historical personage. There had been time to judge of his merits and of his failings—not absolutely, it is true, but still sufficiently.

Why, we ask in the name of the hundreds who assembled on Monday in Westminster Abbey, did not some one, of vigorous and comprehensive mind, unswayed by servile respect for the man, but honouring him as the exponent of the science which he cultivated and promoted—why did not some one (and some there must have been) thus qualified, seize the opportunity of doing one of the greatest honours to the name of Hunter that could be conferred on it? What a lesson might have been read, on the influence which the labours and the doctrines of John Hunter have had on the professional knowledge and practice of the last half century! And, while the monuments of his intellect and industry were recalled to the minds of the hearers, no less honour would have been done to his memory by condemning that blind worship of his name, and *post mortem* flattery, which have so much prevailed. We are, we repeat, disappointed that the reinterment of John Hunter was allowed to pass off without an oration. Objections might have stood in the way of

its delivery in Westminster Abbey: but surely a convenient place might have been appointed, to which those who had attended the interment might have repaired, and where a masterly oration, full of interest and of instruction, might have been delivered.

From this unfortunate omission, we turn with pleasure to the energetic efforts which are being made to honour the memory of Hunter by a statue. To the Council of the Royal College of Surgeons is due, it appears, the merit of originating this scheme; or, at all events, of giving it an organised form. On March 12th, the members of the Council met in the College; and, having formed themselves into a Committee, agreed to the following resolutions as the basis of their operations:—

"That this committee feel that the present solemnity affords a most fitting opportunity to the members of the medical profession and others of raising a public memorial of their high appreciation of the physiological and surgical labours of John Hunter, which have mainly tended to the advancement of the science of their profession, and to the high rank of British surgery; they, therefore, determine that a subscription shall be opened for the purpose of raising a Statue of John Hunter."

"That the following gentlemen, in addition to the members of Council, be invited to join this committee—viz.: The Trustees of the Hunterian Collection; the President of the Royal College of Physicians of London; the Master of the Society of Apothecaries of London; the Regius Professor of Physic of Oxford; the Regius Professor of Anatomy of Cambridge; the Directors-General of the Army and Ordnance, and Navy Medical Departments; the President of the Royal Society; the President of the Linnæan Society; the President of the Zoological Society; the President of the Geological Society; the Very Reverend the Dean of Westminster; William Hunter Baillie, Esq.; Richard Owen, Esq.; and Frank T. Buckland, Esq."

"That this committee recommend to the Council of the College that the Treasurers be authorised and requested to pay the sum of one hundred guineas from the College Fund in aid of the subscription for raising a Statue to John Hunter."

"That the President and Vice-Presidents of the College be treasurers of the Statue Fund."

"That Mr. John F. South be the honorary secretary."

A meeting of the Committee of the Hunter Statue Fund was held at the Royal College of Surgeons, on Tuesday, March 29th, the President in the chair. The meeting was also attended by the President of the Royal College of Physicians; Dr. J. Risdon Bennet and Dr. Baly, censors; Sir Philip de Malpas Grey Egerton, Bart.; the Professor of Anatomy at Cambridge; the Master of the Society of Apothecaries; the Very Rev. the Dean of Westminster; and other members of the committee. The Secretary reported that he had received communications from the Very Rev. the Dean of Westminster; Sir Philip de Malpas Grey Egerton, Bart.; Sir James Graham, Bart.; the President and Censors of the Royal College of Physicians; the Professor of Physic at Oxford; the Professor of Anatomy at Cambridge; the Master of the Apothecaries' Society; the President of the Linnæan Society; W. Hunter Baillie, Esq.; Richard Owen, Esq.; and Frank T. Buckland, Esq., accepting the invitation to become members of this Committee. The following resolution was passed.

"That a sub-committee of five be appointed, to consider the site, the artist, and the material, for the statue of John Hunter; and that such sub-committee do report to the Committee their recommendation on the subject specified."

On the motion of the President of the Royal College of Physicians, it was resolved that the nomination of the sub-committee be left to the President of the Royal College of Surgeons; who accordingly nominated the President of the Royal College of Physicians, Sir Philip de Malpas Grey Egerton, Bart., the President and the two Vice-Presidents of the Royal College of Surgeons, to be the sub-committee.

The advertising columns of this day's Journal contain the first list of subscribers to the Hunter statue; and a goodly list it is. The subscriptions already amount to above £600; and, both in town and in country, the profession is hastening to pour in its contributions.

There will be an opportunity for recurring to the subject of the John Hunter statue, when the recommendation of the sub-committee will have to be examined. At present, it is unnecessary to urge the members of the profession to subscribe to the statue fund; they need no stimulation from without, and their contributions will be the more valuable, in being the spontaneous expressions of esteem for the man whom we would honour. Our task is merely the grateful one of recording the progress of the statue scheme, and our unfeigned pleasure at the success which has hitherto attended it.

THE WEEK.

The seventh annual festival of the Royal Medical Benevolent College is appointed to be held on Wednesday next, at the London Tavern in Bishopsgate Street; and we earnestly entreat all members of the profession, who can possibly find time, to be present on the occasion, and to enrich the funds of this excellent institution by their offerings of benevolence. Since its foundation, the aid which the College has afforded to many of our necessitous brethren and to their families has been great; but still it has not been enabled to effect all the good for which it was designed. As a result of its dependence on voluntary support, its range of usefulness must be proportionate to the extent to which that support is afforded; and therefore we would claim for it a foremost place during the next week in the kindly thoughts of our associates. "Bis dat qui citò dat," says the old proverb; and we trust that the festival of Wednesday next will be honoured by the presence of numbers who will not hesitate to give, each according to his ability, and with a willing heart.

The friends of the Medical Benevolent Fund of the British Medical Association will rejoice to hear that a legacy of *three thousand pounds* has been bequeathed to this useful though unpretending charity. The donations and legacies are, as far as we remember, appropriated to the purchase of annuities; and it will at once be seen, that this splendid addition to the treasury of the Fund will considerably increase its powers of affording to those, who may become candidates for its aid, the means of comfort in old age.

A medical correspondent of the *Torquay and Tor Directory* makes an appeal, in the number for March 23rd, on behalf of the Hospital for Consumption at Torquay. He states that the institution will be several hundred pounds in debt at the close of the season on the 1st of June, because it has extended its advantages this winter to twice as many patients as are usually admitted. There have been during the season sixty-six inmates, every vacancy being immediately filled up as it occurred. The hospital is intended for the use of the con-

sumptive poor, sent from those counties which have the privilege of nominating. Any county, except Middlesex, which will furnish a subscription list amounting in the aggregate to £20 per annum (the cost of one patient) becomes a privileged county. For this small sum, any county may thus become privileged in such wise, that any one of its annual subscribers of one pound may nominate a patient who will cost the institution twenty pounds. Berks, Cornwall, Dorset, Gloucester, Hants, Somerset, Devon, and Wilts, are at present the only privileged counties. The restriction applies to gratuitous admission; but on self-supporting terms (ten shillings per week) any suitable case from any where may be admitted. The season lasts from October 1st to June 1st; but the same patient may return season after season, if required. The writer in the *Torquay Directory* complains that the hospital does not receive that support which it deserves from the more wealthy visitors of Torquay—with a few exemplary exceptions; and he endeavours to shew that it would be a good investment for much of the floating benevolence of the country. We hope the desired impression will be made on the visitors of Torquay; but we would especially direct the attention of our associates to the terms on which counties are privileged to send patients, and ask whether it may not be advantageous to some of the poorer consumptive patients of other counties also than those mentioned as privileged, to have an opportunity of deriving the benefits of the healthy climate of Torquay?

The importance of sanitary legislation is so thoroughly recognised in the profession, that we feel it unnecessary to do more than call attention to the subjoined petition, which has been adopted in Cheltenham and Gloucester:—

To the Honourable the Commons of Great Britain and Ireland in Parliament assembled,

The petition of the undersigned inhabitants of, etc.,

Humbly sheweth,—

That a large amount of preventable sickness, infirmity, and mortality, now exists in the several towns and districts of England, even where the rate of mortality is comparatively low.

That such preventable disease inflicts upon the community an immense pecuniary loss, far exceeding the highest estimate of the cost of proper measures of prevention; that it leads to moral and social degradation, to pauperism, and crime, and to the increase of a stunted, ill-developed, and degenerate population; and that its various causes are at present but imperfectly understood, even by those who have paid the most attention to the subject.

Your petitioners therefore pray that your Honourable House will be pleased to re-enact the Public Health Act of 1858, with its essential provisions intact, and with such amendments as shall enable Her Majesty's Government to make searching inquiry into all cases of excessive local sickness and mortality, and to report whether adequate means of prevention are employed by the constituted local authorities.

Your petitioners likewise pray that your Honourable House will be pleased to enact such further measures as shall establish a permanent, universal, and effective system of investigation, with periodical reports, by local scientific officers, in independent position, respecting the amount, the nature, and the causes of prevalent diseases, with reference especially to the crowding of population, the condition of dwellings, the adulteration of food, etc., the impurity of water, the effects of various kinds of occupation, the execution of preventive measures, and any other matters which affect the health and physical welfare of the poor, who are the chief sufferers from preventable disease, and whose interests are unrepresented in the Local Boards constituted for parochial or municipal management.

And your petitioners, etc.

We have always maintained that the medical officers of hospitals and infirmaries ought to have seats and votes in the managing committees of these institutions; and we are not at all pleased at finding that the South Staffordshire Hospital is one of those in which the physicians and surgeons are excluded from seats at the council board. The matter was brought forward at a recent meeting of the subscribers and governors of the hospital, by Mr. R. Sandford, one of the surgeons, who proposed a resolution to the effect that the physicians and surgeons should be *ex officio* members of the weekly board. After some discussion, the motion was withdrawn; but we hope it will again be brought forward, and pushed to a successful result. It was ably argued by Mr. Sandford, and by Mr. Coleman, who seconded his resolution, that the time given to the hospital by the physicians and surgeons was equivalent in value to the money of the subscribers, and that a seat at the board would be a just acknowledgment of the services of the medical officers; and that on many questions which came before the board, the medical officers alone were capable of forming a correct opinion. Mr. Sandford, in his speech, referred to the comparatively obscure position which the profession occupied in public estimation, as a result of being generous to others, before being just to themselves. The volunteering of services without fee or reward had resulted in a depreciation of skill; for when a man valued his own commodity at nothing, he could not expect the public to put a higher price upon it.

MEDICAL REGISTRATION.

REGISTRATION FEES: NOTICE.

The Medical Registrar presents his compliments to the Editor of the British Medical Journal, and would be obliged if the attention of members of the profession could be drawn to an advertisement sent herewith, which shews the registration fees payable in the respective cases of persons qualified before or not till after the 1st of January, 1859; and also the fee payable for any *additional* qualification—*i. e.*, either obtained since January 1st by a person previously qualified, or added to the qualifications of a person already registered.

Association Intelligence.

MEETING OF COMMITTEE OF COUNCIL: NOTICE.

A meeting of the Committee of Council will be holden at the Queen's Hotel, Birmingham, on Tuesday, the 5th of April, at One o'clock.

The Financial Report for last year will be presented, and other business transacted.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 29th, 1859.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, April 21st, 6 P.M.

MEDICAL BENEVOLENT FUND.

At a meeting of the Committee, held on March 29th—Sir James Clark, Bart., President, in the Chair—Mr. Toynbee, Treasurer, read a letter from Mr. G. R. D. Walker, of Budleigh-Salterton, Devon, a friend and one of the trustees of the donor, announcing a legacy of £3,000 to the Fund.

SHROPSHIRE BRANCH: PROPOSED AMALGAMATION WITH THE SALOPIAN MEDICO-ETHICAL SOCIETY.

At a recent meeting of the Shropshire Branch of the British Medical Association, held at the Lion Hotel, Shrewsbury, Francis Whitwell, Esq., President, in the Chair, the following resolutions were unanimously agreed to.

1. Proposed by Dr. Henry Johnson, seconded by S. Wood, Esq.—

"That, in the opinion of this meeting, an amalgamation of the Shropshire Branch of the British Medical Association with the Salopian Medico-Ethical Society may greatly conduce to the interests of the profession in the counties of Salop and Montgomery."

2. Proposed by J. Hickman, Esq., seconded by J. Green, Esq.—

"That, in order to effect so desirable a consummation, and to cement still more strongly the bond of union at present existing between the members of the respective Associations, it is expedient that a proposal to amalgamate be made to the Council of the Ethical Society."

3. Proposed by P. Cartwright, Esq., seconded by R. Wilding, Esq.—

"That it will be judicious, in the event of the proposed amalgamation being effected, to adopt the Rules and Bye-Laws of the Ethical Society, subject to such revision and alteration as may be found most advisable; and that the President of the Branch, with Dr. Henry Johnson and Mr. J. R. Humphreys, with power to add to their number, be appointed to confer upon the subject with the Council of the Ethical Society, and to report thereon to a future meeting."

4. Proposed by J. R. Humphreys, Esq., seconded by Dr. Bakewell—

"That, in the event of the amalgamation, Dr. Styrap be solicited to accept the office of Honorary Secretary to the associated Societies."

Francis Whitwell, *President.*

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS, IN CONNEXION WITH THE SOUTH-EASTERN BRANCH.

The third of the series of meetings for the present session was held in the Town Hall, Gravesend, on Friday, March 25th, at 3.30 p.m.: C. J. Pinching, Esq. (Gravesend), in the Chair. There were also present: John Armstrong, M.D. (Gravesend); F. Barham, Esq. (Maidstone); F. J. Brown, M.D. (Chatham); John J. D. Burns, M.D. (Chatham Prison); J. E. Crook, M.D. (Northfleet); Daniel Culhane, Esq. (Dartford); Jas. Dulvey, Esq. (Brompton, Chatham); W. B. Everett, Esq. (Rainham); Frederick Fry, Esq. (Maidstone); Henry W. Gould, Esq. (Wateringbury); Samuel Gould, Esq. (Northfleet); J. H. Gramshaw, Esq. (Gravesend); William Hoar, Esq. (Maidstone); H. W. Joy, Esq. (Maidstone); W. T. Keddell, Esq. (Aylesford); F. Plomley, M.D. (Maidstone); Thomas Hextall Smith, Esq. (St. Mary Cray); Flaxman Spurrell, Esq. (Bexley Heath); John W. Woodfall, M.D. (Maidstone); with the following gentlemen as visitors: Charles Bateman, Esq. (Northfleet); S. Norton, M.D. (West Malling); E. A. Steddy, Esq. (Chatham); Thomas Wheatley, M.D. (Gravesend); and P. Whitcombe, Esq. (Gravesend).

The minutes of the last meeting were read and confirmed.

NEW MEMBER.

John Grayling, M.D., of Sittingbourne, was unanimously elected a member of the Branch, on the motion of Mr. Dulvey, seconded and supported by Dr. Armstrong and Mr. Joy.

COMMUNICATIONS.

The following papers were then read:—

1. On some Cases of Laryngismus Stridulus. By J. Henry Gramshaw, Esq. (Gravesend).

2. Report of a Case of extensive Phagedænic Ulceration: with a few Observations on the Advanced Stages of Syphilis. By James Dulvey, Esq. (Brompton, Chatham).

3. On a Case of Lead-Poisoning. By F. J. Brown, M.D. (Chatham).

Each of these papers excited a lengthened and interesting discussion, at the conclusion of which, it was moved by Dr. Armstrong, seconded by Dr. Woodfall, and carried unanimously—

"That the best thanks of the meeting be given to Mr. Gramshaw, Mr. Dulvey, and Dr. Brown, for their interesting communications; and that they be requested to allow them to be published in the Journal of the Association."

Thanks were also voted to the Mayor of Gravesend, for his kindness and courtesy in placing the Town Hall at the service of the profession on this occasion; and to the Chairman, for his ability in presiding.

The meeting then (at 6 p.m.) adjourned to dinner at the Old Falcon Hotel, where a most happy evening was passed, every one present acknowledging the benefit and gratification derived from these scientific, and, in a professional sense, brotherly gatherings.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Anniversary Meeting, Tuesday, March, 1, 1859.

Sir Charles Locock, Bart., M.D., President, in the Chair.

A large meeting was held on this occasion, Mr. Partridge, of King's College, having been put forward as a candidate for the presidency in opposition to Mr. Skey, who was nominated by the Council.

REPORT OF COUNCIL.

Dr. Barclay read the annual report of the Council, which stated that the annual income of the Society was considerably in excess of the expenditure, and that an additional investment had been made, making the entire sum now invested by the Society £3464:17:3. The deaths during the year had been unusually numerous, comprising eight resident and eight non-resident Fellows, one honorary and two foreign Fellows. 354 works had been added to the library, of which 145 had been presented, and 209 purchased. The Library Committee had made their triennial inspection, and reported that they were satisfied with the condition and custody of the books. An arrangement had been made with the Obstetrical Society to hold its meetings in the Society's rooms.

Dr. Webster moved,

"That the report be adopted, and that the agreement with the Obstetrical Society be confirmed."

He drew attention to the fact, that by allowing several Associations to meet in its rooms, the Society was at an expense of only £25 a year for rent.

The motion, having been seconded by Mr. Pollock, was unanimously adopted.

PRESIDENT'S ADDRESS.

The President delivered a closing address, in which he gave the customary obituary notices of the Fellows who have died during the past year, which are as follow. *Resident Fellows:* Mr. Benjamin Travers; Sir James Macgrigor, Bart.; Dr. John Snow; Mr. Sherard Freeman Statham; Mr. John S. Gaskoin; Dr. Richard Bright; Mr. George James Squibb; and Mr. Henry Alexander. *Non-resident Fellows:* Sir Philip Crampton, Bart.; M. Pierre Brulatour, Surgeon to the Hospital at Bordeaux; Dr. Thomas Bell Salter, of Ryde, Isle of Wight; Dr. Walter Adam, of Edinburgh; Dr. Edward Phillips, Consulting-Physician to the Hants County Hospital; Dr. Thomas Jones Drury, Physician to the Salop Infirmary; Dr. John Kaye Booth, late Principal of Queen's College, Birmingham; and Dr. John Bampfylde Daniell. *Honorary Fellow:* Mr. Robert Brown, Keeper of Botany at the British Museum. *Foreign Honorary Fellows:* M. A. F. Chomel, Professor of Clinical Medicine in the Faculty of Medicine, Paris, etc.; and Dr. Johannes Müller, Professor of Anatomy and Physiology, and Director of the Anatomical Museum, Berlin. He (the President) expressed his great delight in witnessing the increasing prosperity of the Society, his gratitude for the honour conferred upon him by his election to the office of President, and his thanks to the members for their kind support in the discharge of his duties.

On the motion of Dr. Watson, seconded by Mr. Hale Thomson, a vote of thanks was unanimously accorded to the President for the dignified, courteous, and effective manner in which he had discharged the duties of his office.

The President briefly acknowledged the compliment.

OFFICERS AND COUNCIL FOR 1859-60.

The following gentlemen were elected the officers and council for the ensuing year. *President:* F. C. Skey. *Vice-Pre-*

sidents: Thomas B. Curling; Spencer Smith; A. J. Sutherland, M.D.; J. A. Wilson, M.D. *Treasurers:* W. Baly, M.D., F.R.S.; Alexander Shaw. *Secretaries:* A. W. Barclay, M.D.; C. H. Moore. *Librarians:* E. Meryon, M.D.; G. D. Pollock. *Council:* Benj. G. Babington, M.D., F.R.S.; G. H. Barlow, M.D.; G. Burrows, M.D.; W. White Cooper; J. F. Harding; Prescott G. Hewett; W. A. Hillman; Luther Holden; C. Hutton, L.R.C.P.; E. H. Sieveking, M.D. The number of Fellows who voted was 128; 99 for Mr. Skey, and 29 for his opponent.

Editor's Letter Box.

CASE OF MEDICAL ETIQUETTE.

Sir,—I do not think with you, that it was the duty of B (as stated at page 260 of the Journal) to busy himself about the accident; although he might have wished to be ready to attend, provided an application was made to him. If he had been wanted, he would have been sought for instead of A, whose services *were* required.

After reading the letter of Medicus, it seems to me that B's anxiety for a patient led him, not only to take one unfairly from A, but also to what was still more craving—even to crib the remuneration for A's services. Let us hope for a different version from B; but without that, shall you say that Etiquette has been observed, and that you would act in the same way? I am, etc., Observer.

March 26th, 1859.

CASE OF MEDICAL ETIQUETTE.

Sir,—"Medicus" having asked the opinion of his fellow-associates on the question of medical etiquette propounded in the Journal last week, I venture to give you my notion of it; and I am the more induced to do so, because I cannot look at the matter in the same light as you do.

A, it is stated, was called upon, and requested to continue to attend the patient. Now, if the patient himself were going to pay for the attendance, what could the attendant on his master's family have to do with the case? If the master were a Catholic, must the servant, being a Protestant, be necessarily pestered in his last moments by a Catholic priest, merely because the master happened to belong to that persuasion? And was it by reasoning in a line parallel to that, that B thought it his duty to drive to the master's residence, unsolicited, in time to anticipate the arrival of the patient?

It is not usually considered to be a very dignified course for a professional man to pursue, to call on his patients, like the grocer's or butcher's boy, "for orders". But perhaps your correspondent may not have stated the case fully: and, if B was from home when A attended his patient for him, A should have called on B, and given the case up to him. Nothing to that effect, however, appears on the face of the record,

I am, etc., W. A. B.

Mayfield, March 29th, 1859.

Parliamentary Intelligence.

HOUSE OF LORDS.—Thursday, March 24th, 1859.

MEDICAL ACT AMENDMENT BILL.

On the motion of the Earl of Carnarvon, this Bill went into Committee.

Lord Cranworth proposed the insertion of a clause to the effect that nothing in the Act should prevent any foreigner who had obtained any diploma in a foreign university from being resident physician established exclusively for the relief of foreigners in London. The Bill of last session had been found very useful as regulating the medical profession; but, in consequence of a want of the clause proposed, injustice was done to a very valuable institution—the German Hospital, situated at the east end of London: and there were a large number of poor Germans in London who had no other resource in case of sickness; and it was absolutely essential in this case that the resident medical officer appointed should be a German.

The Earl of Carnarvon did not see any objection to the clause, and would consider it before passing to the further stages of the Bill.

The Bill then passed through Committee.

Monday, March 28th.

MEDICAL ACT AMENDMENT BILL.

This Bill was read a third time, and passed.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Challice. On March 26th, at Southwark, the wife of John Challice, M.D., of a daughter.

Claremont. On March 28th, at Thorney Place, Camden Town, the wife of C. C. Claremont, Esq., Surgeon, of a son.

Connolly. On March 24th, at Bourton Villa, near Moreton, Gloucestershire, the wife of *George Strutt Connolly, Esq., Surgeon, of a son.

Noad. On March 26th, at Wokingham, the wife of G. W. Noad, Esq., Surgeon, of a daughter.

Scott. On March 22nd, at Malta, the wife of James Edward Scott, M.D., Surgeon Rifle Brigade, of a son.

Stevens. On March 22nd, at Biggleswade, the wife of *Charles P. Stevens, Esq., Surgeon, of a daughter.

MARRIAGES.

Craven—Welsh. *Craven, Robert Martin, Esq., Surgeon, Hull, to Mary Hay, eldest surviving daughter of the late Robert Welsh, Esq., of Northumberland Street, Edinburgh, at Lame Hall, Dumfriesshire, on March 24th.

DEATHS.

Down, R. R., Esq., Surgeon 70th Regiment, on the road to Moultan, in charge of troops, of fever, on February 4th, aged 42.

Millard, Joseph, Esq., Surgeon, at 43, Claremont Square, Pentonville, of phthisis, aged 31, on March 27th.

Ridgway, Archibald Redfoord, M.B.Lond., Staff-Surgeon 2nd Class, at South Street, Finsbury, lately.

PASS LISTS.

Apothecaries' Hall. Members admitted on Thursday, March 24th, 1859:—

Bateman, C., Leicester
Buck, H., Burnley
Gutteridge, E. P., Brighton
Hamilton, G. H., New South Wales
Head, R. T., East Grinstead
Instan, C. N., Birmingham
Oughton, Tyler, Jamaica
Packard, J., Yoxford
Rawdon, H. G., Liverpool
Workman, Wm., Reading

At the same Court—

Dickins, F. V., of the Royal Infirmary, Manchester
Thompson, H., Sandford Drigg—passed their first examination.

[The name of Robert William Dunn was accidentally omitted last week. He passed his examination for, and was admitted as, a licentiate on the 17th inst.]

HEALTH OF LONDON:—WEEK ENDING MARCH 26TH, 1859.

[*From the Registrar-General's Report.*]

The deaths registered in London, which were 1175 in the previous week, declined to 1141 in the week that ended last Saturday. In the ten years 1849-58 the average number of deaths in the weeks corresponding with last week was 1234; but as those now returned occurred in a population which has increased, they can only be compared with the average raised in proportion to that increase, namely, with 1357. The result

of the comparison is satisfactory, for it appears that 216 persons survived who would have died last week if the average rate of mortality for the latter part of March had prevailed.

The number of children born last week exceeded the number of persons at all ages who died in the same period by 801.

Scarlatina was fatal in 63 cases, diphtheria in 14. In the two previous weeks the numbers referred to the latter disease were respectively 19 and 15. The 14 deaths from diphtheria now recorded occurred in sub-districts as follows;—St. John, Paddington, 1; Chelsea south, 1; Belgrave, 2; All Souls, Marylebone, 1; Rectory, Marylebone, 1; Islington West, 1; Hoxton New Town, 2; Hoxton Old Town, 1; London Road, 1; Battersea, 1; St. Paul's, Deptford, 1; Plumstead, 1.

Small-pox carried off seven children and six adults in the week. Seven of these cases were registered in the sub-district of Islington West, all of which occurred in the Small-pox Hospital. Four deaths from measles occurred in St. John, Paddington. The deaths caused by bronchitis were 105, those by pneumonia (or inflammation of the lungs) 66. Both diseases exhibit a mortality considerably below their corrected averages, which are for the former 145, for the latter 103. Three cases of child murder are returned. The oldest persons who died in the week are two widows aged 91 and 93, two men each 95, and a man 98 years.

Last week the births of 961 boys and 981 girls, in all 1942 children, were registed in London. In the ten corresponding weeks of the years 1849-58 the average number was 1653.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·938 in. The readings varied from 30·21 in. to 29·75 in. The mean temperature of the week was 46·1°, which is 4·1° above the average of the same week in 43 years (as determined by Mr. Glaisher.) On the last two days the mean daily temperature was 9° and 7° above the average. The thermometer fell to its lowest point 34° on Tuesday, and rose to its highest 58·2° on Friday. The range of the week was therefore 24·2°; the mean daily range was 12·3°. On Sunday the range was as much as 19·6°; on Thursday it was only 9°. The difference between the mean dew-point temperature and air temperature was 7·4°. The mean degree of humidity of the air was 76. The mean temperature of the water of the Thames was 48·1°. After noon, on Monday, the wind blew generally from the north-west. The rain-fall was 0·17 in., all of which took place on Monday.

ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR THE INSANE.

An adjourned Special General Meeting of the Association was held at the Freemasons' Tavern, on the 26th of March, 1859, to receive the report of the Committee appointed at the Special General Meeting, held at the Great Western Hotel, Paddington, on Saturday, the 28th of February, 1859, to consider the Bills brought in by the Government for the Amendment of the Laws relating to the care and treatment of the insane confined in public and private asylums, and to make suggestions for a revision of the Laws of Lunacy: Dr. Conolly, D.C.L., President, in the Chair.

Dr. Forbes Winslow moved, and Dr. Paul seconded, that in the absence of Dr. Lockhart Robertson, Edward P. Conolly, Esq., barrister-at-law, and Honorary Secretary to the Committee, act as Secretary to the meeting.

Mr. Conolly informed the meeting that Drs. Bucknill, Hood, Sutherland, Campbell, Stevens and Tuke, had withdrawn their names from the Committee.

The report of the Committee was considered clause by clause. The following resolutions, based chiefly on that report, was adopted:

1. That the contemplated appointment of medical examiners, under the Lunatics' Care and Treatment Bill, is highly objectionable, inasmuch as they would probably in most cases be gentlemen imperfectly acquainted with insanity; that their visits would cause much disturbance to the patients, and would consequently have an injurious effect upon them; and that the proposed system of secret reports is one in every respect to be condemned.

2. That the time allowed for sending notices of admission and copies of orders and certificates is unnecessarily restricted, and would be of no advantage to the patient.

3. That the clause depriving medical practitioners, being wholly or partly proprietors of any licensed house, of the power of certifying to the existence of insanity with a view to the reception of a patient in any other licensed house, is objectionable, inasmuch as it would most unnecessarily prohibit a very competent class of men from signing certificates, and would thereby be disadvantageous to the public.

4. That the clause making it compulsory on the part of the proprietor of a licensed house to submit a full statement of his private affairs to the inspection and consideration of the commissioners is objectionable; instead of which if the commissioners should in any particular case have reason to believe that a patient has not sufficient allowed him, or entertain any doubt as to the proper appropriation of his income, or of the sum of money paid for his care and treatment, the committee would suggest that the commissioners should then have the power of ascertaining the amount paid to the proprietor for such patient.

5. That the number of the paid commissioners should be increased.

6. That in all cases in which new licenses shall be granted, the name of a medical man should be inserted as colicensee, who should be made jointly responsible for the management of the house, and the treatment of the patients.

7. That the time during which the certificates in the case of an escaped patient remain in force should be extended.

8. That patients should be admissible into any licensed house upon their own notice in writing to the commissioners, without any order or certificates; and that such notice should hold good for one week.

9. That the provision that no person shall be a commissioner who, within one year next preceding his appointment, has been directly or indirectly interested in any licensed house, should be repealed; and that in the event of any person having any interest in a licensed house being appointed a commissioner, he should, within six months of his appointment, state on oath that his interest, direct or indirect, had ceased, and that in the interval he should not visit the house in question, or vote in any matter connected with it.

10. That provision should be made for restricting the power given to the visitors to remove the officers of an asylum; and that, as regards the medical superintendent, as chief officer of the asylum, an appeal should lie to the Secretary of State for the Home Department.

11. That the forwarding copies of the reports of the commisioners' reports to the magistrates assembled in Quarter Sessions, as proposed in the Lunatics' Care and Treatment Bill, is inexpedient.

12. That with reference to the Lunatic Poor (Ireland) Bill, a committee be appointed consisting of those members of the association who are resident in Ireland, to consider the laws for the regulation of asylums in that country, and the proposed Bill upon the subject, and to report thereon to the association at the annual meeting, to be held this year in Dublin, in July.

13. That a deputation from the association request an interview with the Secretary of State for the Home Department, and endeavour to obtain his support to their views.

14. That a petition be presented to the House of Commons, praying for such amendments in the laws as are desired by the association, and against the objectionable provisions of the new Bills.

15. That the President of the Association (Dr. Conolly, D.C.L.) be elected to offer to give evidence before the Select Committee of the House of Commons, and to represent there the views of the association.

After a vote of thanks to the Chairman, Dr. Conolly, D.C.L., and to the Secretary of the Committee, Edward P. Conolly, Esq., Barrister-at-law, the meeting adjourned.

C. Lockhart Robertson, M.B.Cantab., *Hon. Sec.*

Hayward's Heath, Sussex, March 27th, 1859.

Medical Students in the United States. So far as we have been able to learn, the number of students attending the different colleges in this country during the session of 1858-59, is larger than it was last year. From a published catalogue, we see that 570 were in attendance at the Jefferson Medical College; but we are unable to state the size of the classes at the other schools in Philadelphia. From our exchanges, we find the following reports of the number of students at some of our medical institutions, which we believe are reliable:—University of Louisiana, 306; St. Louis Medical College, 135; University of New York, 350; College of Physicians and Surgeons, 180; New York Medical College, 107; Medical Department of Harvard University, 139; Shelby College, 53; New Orleans School of Medicine, 140. (*North American Medico-Chirurgical Review.*)

REINTERMENT OF JOHN HUNTER.

This solemnity took place on Monday afternoon in Westminster Abbey. After the sudden death of Hunter, on October 16th, 1793, his body was privately interred in the church of St. Martin-in-the-Fields, where it quietly reposed until the recent Order in Council requiring the vaults to be closed up gave Mr. Frank Buckland an opportunity of searching for, and ultimately securing, as already noticed, the precious remains, which were found enclosed in what must originally have been a very handsome coffin, covered with fine black cloth, and thickly studded with gilt nails and ornaments. On it was a brass plate with the family arms, encircled in a rich scroll, with the cypress entwined, and bearing the following inscription :—"John Hunter, Esq., died 16th October, 1793, aged 64 years." Beneath this the authorities of the Royal College of Surgeons caused another plate to be attached stating that, "These remains were removed from the Church of St. Martin-in-the-Fields by the Royal College of Surgeons of England, March 28, 1859." The coffin, which had been deposited in the Abbey on Saturday evening, was reinterred on the north side of the nave. There was, of course, no portion of the service appointed for the dead read over the grave; although it was fully expected that Mr. Green, the President of the College, would have delivered an oration. The following was the order of procession :—The remains in the original coffin, borne on a high bier, followed by the Dean of Westminster (without his robes) and Mr. Baillie, a grand nephew of Hunter; Lord Ducie, and Dr. Clarke, of Cambridge, as representing the trustees of the Hunterian Museum; Mr. Buckland (a son of the late respected Dean of Westminster, and to whom the profession is indebted for the discovery of the remains) and Mr. Owen, the late Hunterian Professor; Dr. Mayo and Mr. Green, the Presidents of the Royal Colleges of Physicians and Surgeons; the Council and Professors of the College of Surgeons; the Censors of the College of Physicians; the Master and Wardens of the Apothecaries' Company; Mr. Thomas Bell, F.R.S., President of the Linnæan Society; Mr. Skey, F.R.S., President of the Royal Medical and Chirurgical Society; Mr. Hilton, F.R.S., President of the Medical Society of London; Dr. Baly and Mr. Stanley, of St. Bartholomew's Hospital; Dr. Tyler Smith and Mr. Spencer Smith, of St. Mary's Hospital; Dr. Bennett and Mr. Solly, of St. Thomas's Hospital; Dr. Chowne and Mr. Hancock, of Charing Cross Hospital; Dr. Ogle and Mr. Tatum, of St. George's Hospital; Dr. Freer and Mr. Shaw, of the Middlesex Hospital; Dr. Radcliffe and Mr. Holt, of the Westminster Hospital; Mr. Fergusson, of King's College; Mr. Gay, of the Great Northern Hospital; and many other London and provincial surgeons. Arrived at the grave, the coffin was without further ceremony deposited in its final resting place, where it was inspected by the crowded assembly, amounting to about six-hundred, among whom were several ladies. The subscriptions for a statue to Hunter have already reached £600.

LOCAL TAXATION OF HOSPITALS: DEPUTATION TO THE HOME SECRETARY.

On Thursday, March 24th, a large deputation of members of the House of Commons, and of gentlemen connected with hospitals, waited on the Right Hon. T. Sotheron-Estcourt, the Secretary of State for the Home Department, at his official residence in Whitehall, for the purpose of soliciting the right honourable gentleman to so amend the "Local Assessments Exemption Abolition Bill" that those hospitals and other charitable institutions which have so long enjoyed the exemptions should not now be assessed to the local rates. The deputation included Mr. Spooner, M.P., Mr. Newdegate M.P., the Hon. Butler Johnstone, M.P., Mr. Christy, M.P., Mr. R. Child, M.P., Mr. John Pritchard, M.P., Mr. Cayley, M.P., Mr. W. Wickham, M.P., Mr. Alderman Salomons, M.P., Mr. C. C. Clifford, M.P., Mr. Fortescue, M.P., Mr. William Beresford, M.P., Sir John Ramsden, M.P., Mr. W. H. Adams, M.P., Mr. John Bright, M.P., Mr. James W. Buller, M.P., Mr. Grenfell, M.P., Mr. Frederick Dundas, M.P., Mr. Alderman Copeland, M.P., Mr. Sidney Herbert, M.P., Mr. Palk, M.P., Mr. W. P. Price, M.P., Mr. Wigram Crawford, M.P., Mr. Robert Hanbury, M.P., Mr. Roebuck, M.P., Mr. Hadfield, M.P., Sir James Duke, Bart., M.P., etc.; also Major General the Hon. T. Ashburnham, Colonel Paget, and Dr. Goodfellow, from the Metropolitan Convalescent Hospital; Mr. Fowell Buxton, chairman of the London Hospital; Mr. T. H. Smith, solicitor to the General Lying-in Hospital; the Rev. Mr. Owen, chairman of the Royal Free Hospital; Mr. Cockerell, secretary to the Cancer Hospital; the treasurer to Guy's Hospital; Mr. W. Sharp, Mr. A. Ryland, Mr. W. R. Hughes, and Mr. Abel Paxton, General Hospital, Birmingham; Mr. J. C. Haster, Manchester Infirmary; Mr. J. M. Tennant, Leeds Infirmary; the Rev. W. Staunton, Warneford Hospital, Leamington; Sir Henry Cooper, Dr. Alderson, and Mr. H. Gibson, Hull General Hospital; Mr. Warre, Royal Free Hospital; Mr. W. Hollowes, solicitor, and Mr. A. Shedden, secretary, Middlesex Hospital; Mr. John Davis, London Hospital; Mr. James Hopgood, Mr. Acton, Mr. Phillpotts, and Mr. W. P. Price, M.P., Gloucester Infirmary; Mr. H. G. Goldingham and Mr. H. Aldrich, Worcester Infirmary; Mr. W. T. Cockerill, Cancer Hospital; Mr. Quarles Harris, Royal Orthopædic Hospital; Mr. Henry A. Palmer, Bristol Royal Infirmary; Mr. H. Goring, Bedford Infirmary; Mr. Thomas Henry Smith, solicitor for the General Lying-in Hospital, York Road.

Mr. Spooner, M.P., introduced the deputation.

Mr. Ryland, chairman of the Birmingham Hospital, read resolutions which had been passed at a meeting held just previously, to the effect that it would be impolitic and unjust to abolish, as proposed by the bill now before the House of Commons, the exemption from all local rates, which has ever existed in regard to all property in which there is no beneficial occupation; that the present exemption of hospitals ought to be continued; also, that charity schools and similar institutions for the benefit of the poor, supported wholly or in part by voluntary contributions, ought also to be exempted from local rates.

Several gentleman then addressed the right honourable gentleman in a conversational tone, urging that the greatest injustice would be done to the numerous charitable institutions which they represented, if the exemption which they had enjoyed for many years were abolished.

The Home Secretary said that he would propose a clause to the bill to exempt any building occupied or used exclusively for the purposes of an hospital, infirmary, dispensary, school, or almshouses, supported by annual voluntary contributions to the extent of at least one half of the total annual expenditure of the same. He would have that clause printed, in the papers of the house, so that honourable members could have a copy of it, which would enable them to take it into their consideration.

The deputation then withdrew.

Epidemiological Society. On Monday, April 4th, there will be read communications on Diphtheria, by Drs. Jackson, Burdon Sanderson, and Eugene Mackay, R.N.

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from: — Dr. A. M. Inglis; Mr. E. Crossman; Mr. Dulvey; Mr. Gramshaw; Dr. F. J. Brown; Dr. Meran; Dr. P. H. Williams; Dr. C. R. Hall; Mr. O. Pemberton; Chirurgicus; Mr. A. Fleischmann; Mr. C. J. Evans; Mr. J. R. Humphreys; Mr. I. B. Brown; Mr. T. M. Stone; Mr. T. Holmes; Mr. J. Z. Laurence; Mr. G. Greaves; Dr. C. H. Jones; Mr. Nunneley; Dr. F. Hawkins; Dr. W. Robertson; Mr. A. Prichard; Mr. H. Dove; Observer; Mr. W. Martin; Dr. McWilliam; Dr. William Budd; Dr. E. Smith; Dr. F. Brittan; Dr. Lionel Beale; and Dr. Russell.

Colwell's Trusses have been recommended to the public by upwards of thirty of the Daily, Weekly, and Medical Journals. The following are extracts:

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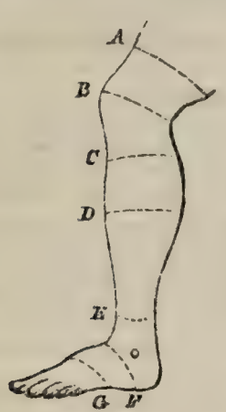
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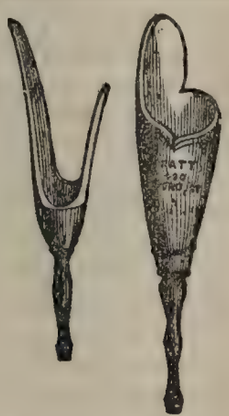


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The Council of the Royal Medical Benevolent College have the pleasure to inform the Governors and Friends of the Institution that the SEVENTH ANNUAL FESTIVAL will take place at the LONDON TAVERN, Bishopsgate Street, on Wednesday, the 6th of April next, when the Right Hon. the LORD STANLEY, M.P., has kindly consented to take the Chair.

The following Noblemen and Gentlemen have undertaken to officiate as Stewards on the occasion.

The Most Noble the Marquis of Salisbury, K.G.
The Right Hon. the Viscount Cranborne
The Right Hon. Sir John Pakington, Bart., M.P.
Lord Henry Gordon Lennox, M.P., Portland Place
Sir Michael Shaw Stewart, Bart., M.P., Belgrave Square
Sir Charles Locock, Bart., M.D., Hertford Street
Sir John Wm. Fisher, Grosvenor Gate
Sir Charles Hastings, M.D., Worcester
Sir Thomas Phillips, Temple
Mr. Alderman Salomons, M.P., Great Cumberland Place
J. I. Briscoe, Esq., M.P., Fox Hill, Chertsey
J. H. Gurney, Esq., M.P., Kensington Palace Gardens
Thomson Hankey, Esq., M.P., Portland Place
James Whatman, Esq., M.P., Vinters, Maidstone
B. Samuelson, Esq., M.P., Banbury
Colonel Burlton, Portland Place
Major Moore, Portland Place
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Walter Moyse, Esq., Mayor of Lynn
M. Wolverley Attwood, Esq., Dulwich Hill
Dr. Henry Bennet, Grosvenor Street
Dr. James Bird, Hyde Park Square
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T. Marsters Kendall, Esq., Lynn
Dr. John Mackinlay, Isleworth
Frederick Manby, Esq., East Rudham
George May, Esq., Reading
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Richard Quain, Esq., F.R.S., Cavendish Square
Edward Ray, Esq., Dulwich
Dr. Reed, Hertford Street, May Fair
Charles Ross, Esq., Portland Place
Thos. H. Smith, Esq., St. Mary Cray
W. E. Snow, Esq., Tredegar Square
Gordon E. Surtees, Esq., Devonshire Place
Francis Webb, Esq., Chancery Lane
John Wiblin, Esq., Southampton
Dr. J. Stanton Wise, Banbury

Dinner Tickets, price One Guinea, may be obtained from the Secretary, at the Office of the College, in Soho Square. Dinner will be on Table at Half-past Six o'Clock precisely.

By Order of the Council,

Office, 37, Soho Square,
March 2nd, 1859.

ROBERT FREEMAN, *Secretary.*
HERBERT WILLIAMS, *Assistant Secretary.*

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXIX.] LONDON: SATURDAY, APRIL 9, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

WORCESTER GENERAL INFIRMARY.

NOTES OF CASES.

By ALEXANDER INGLIS, M.D., House-Surgeon to the Infirmary.

I. HYDATID TUMOUR OF THE LIVER.

G. T., aged 54, a blacksmith, was admitted on June 19th, 1858, under Dr. Williams, complaining of pain over the region of the liver, which organ appeared enlarged. His countenance was somewhat livid, but not jaundiced. The heart's action was weak, the sounds normal. He had œdema of the lower extremities, but no ascites. His urine was scanty and loaded with lithates.

June 20th. He passed a very bad night, and was so ill this morning as to be unable to answer when spoken to. He lay constantly upon his right side. The extremities were very cold, and he had great lividity of the countenance. He was ordered to have friction and hot bottles applied to the extremities, and to have brandy in small quantities frequently during the day. He sank gradually, and died between ten and eleven o'clock at night.

POST-MORTEM EXAMINATION, thirty-six hours after death. The heart and lungs were normal. The liver was much enlarged, and on removing it from the body, there were found four separate tumours containing fluid, situated under the right lobe. On opening one of them, a quantity of lemon-yellow fluid escaped, which was followed by a number of hydatids of various sizes. There were several hundred hydatids in each cyst. On examining the yellow fluid of the cyst, it was found to be very albuminous, had a specific gravity of 1012, and showed a green colour on the addition of nitric acid, probably due to bile. The microscope showed compound granular cells, and some crystals of cholesterine. The fluid contained within the hydatid cyst had a milky colour, and contained but a trace of albumen. Numerous oil-globules were seen under the microscope. An examination of the inner wall of the hydatid cyst showed numerous echinococci. The wall of the outer cysts which contained the hydatids was very thick, and was imbedded in the tissues of the liver. In each of these cysts the large hydatids floated perfectly free in the straw-coloured fluid, and within the large hydatid cysts the smaller ones were contained. The fluid of the large hydatids was milky, the same as the small ones. The cell-walls of the principal hydatids were thicker and more opaque than the smaller ones. The gall-bladder was quite healthy, and there was no obstruction of its duct. The right kidney had a small cyst on its outer side, but merely of a simple character. The other organs were healthy.

REMARKS. In this case the *post mortem* appearances were very distinctly seen, and agree very closely with the description given in M. Valleix's excellent work on the *Practice of Medicine*. He says the hydatid is always free in the cyst, and never attached to the wall which some authors assert. In this case they were all found free and floating in the yellow fluid of the cyst. The external cyst is an organised structure, consisting generally of cellular and fibrous tissue, although sometimes cartilaginous, and even osseous. It is imbedded in the structure of the liver. M. Andral relates one case in which the hydatid was directly in contact with the tissue of the liver. Whether in that case an external cyst ever existed, or whether it suppurated and afterwards became absorbed, is doubtful. Sometimes the external cyst, instead of being filled with yellow albuminous fluid, contains pus.

II. WOUND OF THE ABDOMEN WITH PROTRUSION OF PART OF THE LARGE INTESTINES.

G. O., aged 30, a labourer, was admitted June 25th, 1858, under Mr. Sheppard. He was brought to the Infirmary between six and seven o'clock in the evening, having met with a severe accident about two the same afternoon. Whilst taking some young magpies out of a nest, the bough of the tree on which he was gave way; he was precipitated into a hedge, and one of the stakes supporting the hedge spiked him in the abdomen. Protrusion of the bowel took place immediately; but, notwithstanding, he walked home the distance of a mile. A medical man was sent for, who arrived soon afterwards, but as it was the patient's wish to be removed without delay to the Infirmary, reduction of the protruded portion of bowel was not attempted; it was merely protected by a binder round the abdomen, and he was put into a cart to be conveyed here, a distance of eight miles.

On admission, the bandage was removed along with the other coverings, which exposed a large portion of intestine protruded through the abdominal walls. The wound in the integument was four inches in extent, but the one in the walls of the abdomen was not nearly so extensive, being not over two inches. Through this opening, which was situated on the left side, just where the lowest costal cartilage bends round to be attached to the rib, projected a portion of bowel, of the size of an ordinary fist. It was evidently part of the transverse colon. A slight bruise existed on one spot, but it did not extend to any depth. None of the other organs appeared to have suffered.

A moderate amount of pressure served to reduce the protruded bowel, and the integuments were brought together with sutures; a compress of lint, over which was placed a flannel bandage, served to keep the parts *in situ*. He was ordered a grain of opium in pill every four hours.

June 26th. He passed a quiet night. Pulse 82, soft. He complained slightly of pain extending down the descending colon. The pills were reduced to one every eight hours. In the evening, as the pain was more severe, eight leeches were ordered to be applied over the abdomen.

June 27th. The pain was much less this morning. The wound was dressed to-day for the first time, and the sutures were removed.

July 10th. He had continued to improve steadily since last report, and was able to be up to-day.

July 17th. He went home quite well.

REMARKS. The above case is interesting in so far, that it is a good example of a severe accident, followed by wonderfully little constitutional disturbance. The man, after the bowel had protruded, walked a mile, was afterwards conveyed eight miles in a cart, and allowed between four and five hours to elapse between the receipt of the injury and the reduction of the displaced intestine. He may be said never to have had a bad symptom, and left the Infirmary quite well, after only three weeks residence. Much of his good luck may probably be ascribed to it being the large intestine, instead of the small, which was protruded.

III. MALIGNANT TUMOUR OF THE NECK PRESSING UPON THE TRACHEA, AND PREVENTING RESPIRATION: TRACHEOTOMY.

Stephen Mabell, aged 40, a bargeman, was admitted into the Infirmary on the 8th of September, under Mr. Budd. The patient stated that for six or seven weeks past he had felt pain in his throat, with difficulty in breathing and swallowing, and observed a swelling on the left side of his neck. In his employment he was much exposed to cold and wet, and he ascribed his present illness to these causes. He said he was

quite strong before this attack, but had fallen away very rapidly in flesh since. He never had any syphilitic affection. He had had no treatment previous to admission, except the application one evening of a mustard poultice to his throat.

On admission, he experienced difficulty in breathing and pain in swallowing. He had loss of voice. He had a copious expectoration of muco-purulent matter tinged with blood. A firm swelling existed on the left side of the neck, which appeared to be pressing upon the larynx. There was nothing to be seen on looking into the throat except a slight increased redness, and a little ulceration at the back of the pharynx. He was ordered a blister and a gargle of alum.

September 10th. He was not much better. The throat was directed to be touched with the sponge dipped in a solution of nitrate of silver.

September 14th. Another blister was ordered to be applied to the throat.

September 15th. He expressed himself as rather easier since the second blister. He was ordered to have ten grains of Dover's powder at bed-time.

September 17th. His breathing was much worse to-day; and, after holding a consultation, it was agreed that tracheotomy was his best chance of relief. It was accordingly performed, and his breathing soon became very much easier, and swallowing less painful.

September 18th. He slept comfortably during the night. He had for nourishment, milk, arrowroot, eggs, and beef-tea.

September 24th. He was ordered to have fifteen minims of dilute nitro-muriatic acid in water three times a day.

October 9th. The tumour was increasing rapidly, and appeared as if it contained fluid. He breathed comfortably, but always through the tube.

October 26th. He was getting very weak. The tumour continued to increase, pushing the trachea forwards, and to the right side.

October 28th. He died this afternoon, having used the tube for six weeks all but a day.

Post Mortem Examination showed well marked malignant disease, which appeared to have commenced in the lymphatic glands of the neck. The swelling consisted of a number of cysts filled with yellowish fluid. Under the microscope were seen numerous cells, corresponding in appearance to that denominated the cancer-cell. Both the trachea and œsophagus, more particularly the latter, were the seats of extensive ulceration.

Remarks. We have in this case unmistakable evidence of tracheotomy not only having relieved severe symptoms, but prolonged life. The patient survived for six weeks all but a day after the operation; and had his breathing not been relieved at the time it was, he could not have existed many hours. The performance of tracheotomy for the relief of aneurism and tumours generally, has often been a disputed point; and those who oppose it, do so on the ground that as it can do no permanent good, it is only inflicting unnecessary pain upon the patient, and tending to bring the operation of tracheotomy into disrepute. It is the duty of every medical man to do his utmost to relieve and prolong life, if he cannot cure the disease. The operation of tracheotomy is a slight one; and if, in cases of aneurism or tumours pressing upon the trachea, we can relieve the urgent symptoms, the patient ought surely to have the benefit of it. Contrary to bringing discredit upon surgery, it is placing it above medicine. The physician, having done his utmost, calls in the aid of the surgeon to prolong the patient's life.

BIRMINGHAM WORKHOUSE INFIRMARY.

HYDROCELE: RADICAL CURE BY METALLIC SETON.

Under the care of Redfern Davies, Esq.

The substitution of metallic wires for vegetable ligatures is a subject so much under the notice of the profession at the present time, that the following case, ordinary in all other particulars, commends itself to our notice as illustrative of the idea thrown out by Professor Simpson, with regard to the treatment of hydrocele by iron wires.

Patrick Coyne, aged 32, a well proportioned Irishman, was admitted into the Infirmary, on February 5th, in consequence of being the subject of hydrocele; which, he stated, had been tapped some three months previously. The fluid had fast accumulated to about the size of a small cocoa-nut; and he was desirous of having something more effectual done for him. Accordingly, following out precisely the plan suggested by Professor Simpson, an iron wire was introduced longitudinally and another one transversely.

February 6th. All the fluid had drained away.

February 12th. The wires were withdrawn. The portion contained within the scrotum was quite bright. A copious purulent discharge issued from the track of the wires. There was considerable swelling of the scrotum; but the testis was but very slightly enlarged, and by no means tender. He was ordered to have hot fomentations applied, and the testicle to be supported.

February 15th. The discharge was much less, and the swelling less. He was allowed to go about the ward, with the scrotum supported.

February 25th. All discharge had stopped for three days; and the swelling had quite subsided.

March 6th. Upon looking at the scrotum, the raphe was seen to be in the median line of the body, and the two sides appeared to be equal and natural, save in the centre of the one which was operated upon, where there was a slight puckering and depression of the surface. Upon examining it with the fingers, the parietes of the scrotum on the affected side were felt to be thickened and matted together in the centre. The testicle lay naturally.

The case would seem to be radically cured; and during the whole of its progress, the inflammation excited was so moderate in intensity, and the pain throughout so trifling, or indeed absolutely *nil*, that this plan of treatment seems deserving of further attention.

Original Communications.

REMARKS ON THE USES OF BLEEDING IN DISEASES.

By W. O. Markham, M.D., F.R.C.P., Physician to St. Mary's Hospital, and Lecturer on Physiology and Pathology at the St. Mary's Hospital School.

[*Read at the Royal Medical and Chirurgical Society of London, November 23rd*, 1858.]

The subject of bleeding in inflammation has of late so much occupied the attention of the profession, that I feel called upon to offer a word of apology to the fellows of this Society, for bringing it under their consideration. I have ventured to introduce the subject here, for two reasons: Because, in the first place, I know that there are many members of the profession, besides myself, who consider that the issue of what has been called the "Blood-letting Controversy" has not been altogether satisfactory, in so far as it has tended to bring about, in practice, a greater abstinence from the use of venesection than is altogether desirable in the treatment of disease; and, secondly, because I am desirous of placing before the Society a few particulars concerning the mode of action of blood-letting, from which, I venture to think, we may draw a truer estimate of the value and uses of bleeding in disease, than can be obtained from a consideration merely of the consequences, which have been noted as ordinarily resulting from it.

It is not my intention to weary the Society by going through all the historical details of this discussion. The opinions of the past and of the present generation of authorities upon most of the points relating to venesection, are tolerably well known to all of us. I shall, therefore, confine myself as narrowly as possible to an exposition of certain of the modes of action and consequences of bleeding in disease, such as are familiar to us all, and which will, I believe, be generally accepted as indisputable facts. And I shall then ask the Society whether, arguing from these facts, we may not legitimately arrive at some positive and definite conclusions, concerning the uses of bleeding, and its right application in disease. Hitherto, in this controversy, men have chiefly founded their opinions, as to the value of venesection in inflammation, upon conclusions drawn from the general results of practice, and upon the very fluctuating basis of personal experience and of medical statistics. If the views here suggested be admitted, they will, I cannot but think, tend in some degree to explain the remarkable discrepancies of opinion which always have been, and still are held by the ablest practitioners of our art, concerning the use of this remedy; and they will also tend to show why bleeding is found to be at one time of such marked and manifest service in the treatment

of disease, and why again it is so often found to fail in giving the relief anticipated from it; and, moreover, this other conclusion seems to result from them; viz., that venesection is, at the present moment, less frequently resorted to than is desirable.

Entering, then, at once upon the argument, it is necessary, in the first place, to premise that a marked distinction must be drawn between venesection and the local abstraction of blood. I may, I believe, take it as a fact which admits of no dispute, that the local abstraction of blood from an inflamed part during, at least, the congestive period of the inflammatory process, acts beneficially *quoad* the part inflamed. We have the proof of this clearly demonstrated in the diminution of the chief characteristics of the inflammation—of the heat, the pain, the redness, and the swelling—which is so constantly seen to follow, and so immediately, the local abstraction of blood from external inflammations; and this, too, whether the inflammation be of a specific or of a traumatic origin. A few leeches, for example, applied to a sprained ankle, or to an inflamed rheumatic joint, rarely fail to give relief in either case. And if this fact be admitted as true in the case of external inflammations, we may most reasonably conclude, that in the treatment of internal inflammations, direct abstraction of blood from the inflamed part will be equally beneficial, whenever it can be performed, and performed under the same condition. This, I say, we may reasonably conclude, because the chief local accidents of inflammation are alike, whether the inflammation be fixed upon the internal or upon the external parts of the body.

Now direct abstraction of blood draws blood from the inflamed part, and so acts locally upon it; moreover, it draws blood, we may surmise, that is altered and deteriorated by the inflammatory process, and therefore no longer fitted for its proper purposes, and which may act poisonously upon the part itself, and upon the system generally, in so far as it passes into and mingles with the general circulation.* But venesection has no such direct influence over the inflammation. Venesection acts upon the inflamed part only through the general circulation—in a secondary manner, *i.e.*, through the influence which it exercises over the vital forces of the body. It reduces the action of the heart; it lessens sensibility; and, in so far, it brings ease and comfort to the patient; but it exercises no visible or appreciable influence over the external inflammation, unless carried to such an extent as will produce syncope; and never such effects as are produced by the local abstraction of blood. A few leeches applied around an acutely inflamed eye will more surely give relief, than a pint of blood would taken by venesection. We may bleed a man until he is blanched, but we do not thereby cure his rheumatic affections, or his pneumonia; these, spite of all our bleeding, will still run their course, modified for good or for ill by the shock thus administered to the body. But though such bleeding bring no cure to the inflammation, and sometimes manifestly works a very baneful influence over its future progress, it is not without its apparent use. Amid great suffering it brings great comfort. The patient and his physician feel and see the striking and instant relief which it effects. Herein lies its advantage; and herein lie the danger and the delusion attending the practice of venesection. The present benefit of it is evident; but the dangers of the practice lie all in the future, and require the calculating eye of science to spy them out. This is a lesson, which has been learnt by experience in all ages of medicine, but which has been turned to practical account only in our own day. The baneful influence over the progress of inflammations exercised by large bleedings, was well known to Heberden and other keen observers of disease, long before the days when disease first changed, as it is said, its type.

Direct bleeding, then, acts immediately on the local inflammation; it does not (as ordinarily practised) affect the system generally. Venesection, on the other hand, has a powerful influence over the constitution, but very little, if any, immediate influence over the local inflammation. The good effects of direct bleeding are manifest, and it does no hurt to the constitution. The good effects of venesection upon inflammations are dubious and disputed; its evil effects over their progress have been often demonstrated. Concerning the *modus operandi* of the direct abstraction of blood, there is no necessity for us to theorise here; it is enough for the argument that it exercises a manifestly beneficial influence over the disorganising process, and that it does so without injuring the vital powers of the patient.

* May it not be this poisoned blood which excites the inflammatory fever attending traumatic injuries?

Now, applying the conclusions thus arrived at, concerning the influence of direct bleeding, and of venesection over *external* inflammations, to the case of *internal* inflammations, we are, I think, legitimately led to the conclusion, that direct bleeding must be beneficial in the cure of all those *internal inflammations*, in which it can be effected; that is to say, in which there is a direct vascular communication between the inflamed parts and the parts from whence the blood is drawn; but that venesection will exercise no directly beneficial influence over them. And modern experience seems to have confirmed this conclusion, by assigning the highest value, as a remedy, to direct bleeding in all those cases of acute *internal inflammations*, in which anatomy teaches us that it is practicable, and by giving a daily decreasing estimate of the value of venesection in such cases. The inutility and the dangers attending the practice of large venesections, have been long ago recognised by the physician and the surgeon in the case of *external inflammations*. The surgeon never bleeds now-a-days to prepare his patient for an operation, or to anticipate the dangerous consequences of some external injury; and the physician also has abandoned to practice in all those *external inflammations*, which fall under his care—in erysipelas and acute rheumatisms, for example, and, doubtless, for similar reasons. Modern pathology has proved definitely, that from the very nature of these inflammations, venesection neither is, nor ever could have been the proper cure for them.

But in *internal inflammations*, from the very nature of the case, we cannot see our way so clearly to a like conclusion. The light, indeed, diffused by modern medicine, has broken in upon us here; but it has not yet cleared away all the obscurity. One by one, those internal inflammations whose treatment was thought absolutely to demand large general depletions, have been erased from the catalogue—in practice at least; for strange, in this particular of bleeding, is the discord between the theoretical precepts enjoined by our authoritative text books of medicine, and the actual practice of their authors. Acute dropsy, hepatitis, gastritis, cerebritis, peritonitis, etc, are found no longer to require large losses of blood for their cure. Pericarditis and endocarditis even, for whose cure only a few years ago—and long after the date, be it observed, when diseases are said to have taken on a new phase—the most copious bleedings were considered necessary by our highest authorities, are now found to be actually injured rather than benefited by such treatment. All these facts—this remarkable revolution in the modern treatment of disease—though no positive proof, assuredly tend to prove the truth of the assertion: That general bleeding neither is, nor ever could have been, a right and necessary remedy for the cure of inflammation, *quoad the inflammation itself*.

Are we then to conclude from this, that physicians have been during so many years, and that they still are, at this present period, acting under a complete delusion as to the services rendered by venesection in internal inflammations? This, most assuredly, it is impossible to believe. And I will now proceed to show in what manner venesection, as I believe, does act, when it acts usefully in internal inflammations; and I will also endeavour to show what seem to me to be proofs of the actual necessity for venesection in the course of certain internal inflammations and other diseases. The thesis which I would maintain is this: That, as regards internal inflammations, venesection is of service, not through any *direct* influence which it exercises over the inflammatory process, but in consequence of its removing certain of the *secondary* consequences, which arise *accidentally* out of the inflammation; that venesection, in fact, acts in internal inflammations, as it acts in all other diseased conditions in which it is of service, viz., by relieving the oppressed and congested condition of the heart, which has arisen as their consequence; and that the direct abstraction of blood is of service in those internal inflammations, in which anatomy shows us that it is possible.

Now, I believe, it will be found by those who will calmly investigate the position here assumed, that the condition to which I refer—the cardiac congestion—necessarily exists to a greater or less extent in all those cases, in which practice shows that venesection is a useful remedy—whether the congestion have arisen *secondarily*, as for example in pneumonia; or *directly*, as a consequence of valvular or aortic disease. And it will also be found, that the benefits of the venesection become more clearly manifest in proportion, as the disease for which it is practised tends to produce a higher degree of this cardiac congestion. It is a fact well worthy of note here, that the particular inflammation, which both in past and present days has been especially selected as demonstrative of the utility of venesec-

tion, is just the very inflammation, during whose progress the condition to which I refer is most readily apt to supervene. And it is also certain, that at the present moment at least, venesection is never practised except in those diseases, during whose progress this congestion plays a prominent part.

Let us consider, shortly, the case of pneumonia from the point of view here indicated. When we come to investigate the different facts attendant upon pneumonia, we shall find that there are certain special conditions associated with it which give a different significance to venesection practised for its cure, from that usually ascribed to it; viz., reducing the febrile action, lessening the pain, aiding the action of other remedies, and controlling the inflammation. The most important indications for venesection in the acute stage of pneumonia, as laid down by authorities, are: the difficulty of respiration, the oppression that is felt, and the pain. But a little consideration will show us that the pulmonary inflammation is not the sole cause of these symptoms. Pneumonia arrests *pro tanto* the respiratory function and the pulmonary circulation; the necessary consequence of which is a proportional degree of interference with the heart's action and its congestion. Then, again, pleurisy is the usual attendant of pneumonia, and the pain of pleurisy will prevent the free movement of the thoracic walls. Hence, then, we have three distinct facts to consider as causes of, as symptoms of, and in reference to the relief of, the impeded circulation; viz., the inflamed lung; the obstructed heart; and the inflamed pleura. Now it is evident, that in pneumonia direct abstraction of blood from the inflamed lung is impossible, that no amount of cupping or leeching over the thorax will draw blood directly from the seat of inflammation. It is, therefore, only through the general circulation, that we can possibly operate in this way; and what proof have we that venesection will operate beneficially upon the inflammation? Reasoning from a just analogy—from what we see in the case of *external* inflammations—and fortified by the large and general concurrent testimony of modern experience and observation, we are certainly justified in concluding, that large bleedings—the only bleedings which have any manifest influence over the inflammation—are more likely to be injurious by weakening the system, than beneficial by diminishing the local inflammation. Again, it may be argued, and for similar reasons, that neither does venesection exercise any beneficial control over the pleuritic inflammation which accompanies the pneumonia.

But if venesection—admitted to be often of great service in the course of pneumonia—act not usefully either upon the inflammatory processes going on in the lungs or in the pleura,—then we are naturally led to ask, whether its useful influence may not be exerted upon that other necessary condition of pneumonia—the distended and obstructed heart. We are, indeed, necessarily led to such an inference, arguing *par voie d'exclusion*, and admitting the foregoing premises to be correct. Moreover, we find as I conceive, that the inference is raised to something of a certainty, when we reflect upon what *must* necessarily be the condition of the heart in those other diseases—whether inflammatory or otherwise—in which bleeding is also admittedly often of benefit to the patient—in aneurisms and cardiac diseases.

The extremely beneficial effects of venesection in wounds and severe injuries of the lungs have been placed beyond doubt, by the experience of Mr. Guthrie during the Peninsular war, and by that of our army surgeons before Sebastopol. Venesection was found by them in such cases absolutely necessary to save their patient's lives. In injuries of this nature it is evident that the heart must be grievously oppressed, and its right side especially distended with blood. The lung in a man thus injured has its function suddenly arrested; the aerating surface of the lungs being reduced by one half. And here the prominent symptoms, which are the indications for the venesection, are just the same as those which are its indications in pneumonia. But the bleeding is practised *at once*, before any inflammation arises; indeed its beneficial effects are most noted, the earlier it is practised after the receipt of the injury.

Again, in those cases of diseases of the heart and of its great vessels, in which venesection is so often found of temporary service, does not the same condition of the organ exist, and do not the same symptoms indicate the employment of the remedy, as in pneumonia? In the case of endocardial and pericardial inflammations it is evident, that the impeded circulation—this cardiac congestion—must frequently be produced, and from causes immediately affecting the heart itself. In the case of peritonitis, the congestion may be produced in part mechanically—as a consequence of the partial arrestment of the respiration, by the pressure upwards of the diaphragm. In the case of injuries of the head, the oppression of the heart may be produced by diminished nervous sensibility of the lungs.

There is also another fact which corroborates the view here held; viz., the nature of the pain which so frequently accompanies pneumonia and pleurisy, and which is so often relieved by venesection, and often taken as the chief indication for the bleeding. This pain is, as far as I know, invariably ascribed to the attendant pleurisy, and the relief afforded to it by venesection ascribed to the relief given to the pleurisy; but there are good reasons which, I think, justify us in believing that such pain does not invariably, nor as a rule, result from pleurisy; and that it is, in fact, more often than otherwise the consequence of obstruction to the passage of the blood through the heart. The reasons are these: The pain in question is usually referred to the same spot somewhere beneath the breast; and this sometimes even when the stethoscopic signs of the pleurisy indicate that the pleuritic inflammation is seated over some other part of the long, and not there where the pain is felt. Observers, indeed, have noted that the pain is in some cases referred to the healthy instead of the inflamed side of the chest. Now there is nothing, certainly, in the anatomical relations of pleuritic inflammation, which would lead us to believe that the pain attending it should be always felt at the same part of the chest, wherever the seat of the inflammation of the pleura.

On the other hand, we constantly meet with a pain of this kind which arises in diseases of the heart and its great vessels, when the circulation and respiration are much disturbed. The pain may arise suddenly in such cases; and it is relieved more readily and effectually by small abstractions of blood, than by any other remedy. The pain, often severe, familiar to every one, which sometimes arises, after running, in the lower part of the chest, the so called stitch in the side, appears to me to find a ready explanation is this deranged condition of the heart. Here we have the blood suddenly sent to the heart in a large quantity, so that its right side becomes distended and oppressed, and the very same condition of it is produced as occurs in pneumonia; indeed, in this congested condition of the lungs (as far as the mere circulation of the blood is concerned,) we have an exact temporary simulation of pneumonia in its very beginnings. Moreover, it must not be forgotten that we constantly meet with cases of pleurisy, in which there is an entire absence of pain. Every stethoscopist is well aware that pain is often absent in pleurisy, and that pleuritic friction sounds are very frequently the only signs which indicate the existence of the pleurisy in pneumonia; and, again, that the pain here spoken of is often present, when no signs of pleurisy exist.

If, again, this pain were really the invariable consequence of pleurisy, how are we to explain the fact of its frequent removal by venesection, venesection having, as above maintained, no proven influence over inflammations? The other explanation of its origin—viz., as a consequence of cardiac derangement—gives us the clue to its removal.

I do not, of course, mean to conclude from this, that pain never accompanies pleurisy, for there is no doubt that it frequently does so; but the pain of which I am speaking is of another sort, and, as I believe, not to be relieved by venesection, excepting in so far as venesection, being large, deadens sensation.

Facts of this kind naturally, as I think, lead us to the conclusion, that the relief often given by venesection, aptly practised in pneumonia, results rather from its influence over the oppressed heart, than from its influence over the inflammation of the lungs and pleura. And it is a fact worthy of remark, that at the present day there is never any question as to the necessity of venesection in any other diseases than those above referred to, that is to say, in which this oppressed condition of the heart is frequently an accidental ingredient. Indeed, it may be truly said, that venesection is almost wholly abandoned in practice, except in the case of diseases of the lungs and of the heart and its great vessels; and for the reason, as I conclude, that the condition of the heart, which is remedied by the venesection rarely occurs in the course of other diseases—or, at least, to such a degree as to require its use.

In order more clearly to explain the position assumed, I will here narrate four cases, in which the congested condition of the heart was provoked by causes operating in different parts of the body; viz., in the heart itself; in the lungs; in the abdomen; and in the cranium. In all of them the same condition of the heart and the same symptoms were present, claiming a similar treatment.

A powerful vigorous looking man, who had enjoyed good health previously to his present illness, came under my care in St. Mary's Hospital during the last summer. He was suffering severely from dropsical symptoms; the lower part of his body was œdematous; and there was serous effusion in his peritoneum and pleura. His breathing was much oppressed and very painful. His face was dusky. The cause of all this mischief, which had arisen rapidly, was organic valvular disease of the heart. The remedies prescribed gave him no relief. On the third day of his residence in the hospital, he was evidently worse: he could not lie down. I ordered him at once to be bled, and stood by him while about twenty-six ounces of blood were taken from his arm. He felt immediate relief. The next day, I found him decidedly better. On the third day after the bleeding, he was able to lie down in bed. In the course of a week, he was walking about the ward, and soon afterwards left the hospital convalescent, and, as he himself thought, quite well, but, of course, with his organic disease of the heart unchanged.

In this case, the good effects of the bleeding were too immediate and lasting to leave any kind of doubt as to their reality; and I see not how it is possible to ascribe those effects to any other cause than to the influence exercised by the bleeding over the heart. There was here no inflammation to relieve; and it is very certain that the bleeding could have no direct power in removing the effusions which were mechanically pressing upon and impeding the function of the lungs and other organs. If it should be suggested, that the bleeding promoted the action of other remedies, I would answer, that it could not fail to do so, in that it relieved the heart; but that the benefits of the bleeding were distinctly manifested before those remedies displayed their due effect.

To show the good effects of bleeding in pneumonia, I will relate the case of a man who was some months ago under the charge of Dr. Chambers, in St. Mary's Hospital. This man's disease was inflammation of the upper lobe of the right lung. Complete dulness on percussion, and loud bronchial breathing heard over that part, clearly indicated that consolidation of the lung had taken place there. There was no coexisting sign of pleurisy. The patient suffered severely from pain in the side, and his breathing was much oppressed. He was therefore ordered to be bled, and from twelve to fourteen ounces of blood were taken from him. The bleeding brought great and immediate relief; and, on the following day, the condition of the man was entirely changed. He was then found breathing tranquilly, and the pain had left him; but the stethoscopic signs were unaltered, and the condition of the lung was unchanged. The bleeding could have had no direct influence over the inflamed lung; it admitted air no better now than it did the day before; and it is evident that no amount of bleeding could have removed the exudation into the air-cells and pulmonary tissue, which caused the dull percussion. How then did the bleeding work this, so manifestly beneficial effect? Solely, I think we must conclude, through its action upon the distended and oppressed heart.

The following case illustrates the benefits of bleeding in a case in which the chief cause of the cardiac congestion was pressure of the abdominal organs upon the diaphragm. A lady, of delicate health, and subject to palpitations of the heart, while driving out, a few weeks before her confinement, was suddenly seized with great difficulty of breathing. On reaching home, she was immediately visited by a physician to one of our county hospitals, a gentleman well known to many of the Fellows of this Society. He at once ordered her to be bled, and largely bled, notwithstanding her puerperal condition and delicate state of health; and I cannot doubt, from what he told me a few days afterwards when I saw the lady, that the bleeding had saved her life. The cold air, we must suppose, produced congestion of the lungs, which were already prevented from acting freely by the upward pressure of the diaphragm, the necessary consequence of which must have been distension of the right side of the heart.

As an instance of this congested condition of the heart resulting, secondarily, from cerebral injury, I will relate the following case. A strong man, in the prime of life, fell, and in falling struck his head. He was brought to the hospital quite sensible. In the course of twenty-four hours, he became highly excited, his breathing grew difficult, and there appeared signs of extreme pulmonary congestion. The house-surgeon, led by these signs, would have bled the man, but waited for the surgeon's arrival—such is the dread we now-a-days have of the lancet. When the surgeon arrived, the matter was beyond his help, for the patient was dead. On examining this man's body, I found the brain and its membranes in appearance perfectly healthy, with the exception of one red congested spot, the size of a florin, situated upon the upper and anterior part of the right lobe. This spot corresponded to the place where the injury had been inflicted on the scalp; the membrane was merely congested. There was assuredly no cerebral lesion here, such as would account for his death. The lungs were most highly congested with black fluid blood, and the right side of the heart was much distended. The heart itself, when emptied of blood, was small and covered with fat; and its muscular tissue was pale, flabby, and attenuated: the organ did not correspond to the size and vigorous look of the man's body. Now, is it not necessary to look to the heart here, rather than to the brain, as the immediate cause of death? We may argue thus:—that the violent blow on the head, in so far as it produced concussion of the brain, diminished the nervous energy of this organically enfeebled heart; and that, in consequence, the organ had become unequal to the task it had to perform ordinarily, and therefore permitted the blood to accumulate in it; the mischief being, no doubt, increased by defective action of the respiratory function. In a case of this nature, it is evident that venesection is the only remedy which can be of service; and is it not very probable that it would have assisted the organs, and freed them from a task to which they were unequal? The weakened heart was equal to its ordinary duties, but unequal to meet such an extraordinary occasion; and therefore it failed. Bleeding would have relieved the embarrassed organ.

I need not refer to any specific instance of the uses of small bleedings in the course of thoracic aneurisms, and of diseases of the heart, because every one will, I think, at once admit their great utility in relieving the painful and suffocating feelings which so often attend these diseases.

[*To be continued.*]

THE ESSENTIAL OILS IN THE TREATMENT OF PUERPERAL FEVER.

By H. Dove, M.R.C.S.Eng., Norwich.

The oil of turpentine has for several years been used in this city and neighbourhood in a great variety of forms of puerperal fever with much advantage, and occasionally with almost magic effect. It is usual to commence the treatment with half an ounce of turpentine and an equal quantity of castor oil, repeating a drachm of the former every four hours. I have seen the turpentine fail in cases well suited for its peculiar action, and I have also seen it add to the intensity of the disorder, and hurry on its fatal result.

Considering what a nauseous medicine turpentine is, that it irritates the kidneys, suffuses the eyes, and produces more or less head symptoms, I was induced to try, in its stead, the essential oils, selecting that of peppermint, and giving thirty or forty minims in divided doses during the twenty-four hours. I have now used this oil in seven cases, and in another case, the oil of carraway, with all the advantages and none of the disadvantages of the turpentine. The dull colour of the complexion, œdematous condition of the surface, and offensive evacuations usually observed in puerperal fever, point out the necessity of commencing the treatment with at least one stimulating dose of aperient.

For illustration, I will detail the most severe of the eight cases.

Mrs. G., a delicate woman aged 20, primipara, attended by a midwife, had an easy labour, and did well for four days; but on the fifth, she complained of chills, profuse perspirations, headache, intense thirst, vomiting and purging of offensive matters, and pain and distension of the abdomen. She was restless, her countenance was anxious, breathing short and hurried, tongue covered with a white fur, pulse 160; the lochia and urine were scanty; the skin was of dull colour and œdematous. A dose composed of tincture of rhubarb and castor oil, of each half an ounce, with five minims of the oil of peppermint in a little water, was immediately administered, and thirty minims of the oil of peppermint were given in divided doses, during the twenty-four hours. A spirit lotion was applied to the head, and mustard poultices to the abdomen.

On the following day, the vomiting had ceased; the headache was relieved, and the pulse was considerably reduced. The purging, thirst, and perspirations continued for a few days and gradually ceased. In this case convalescence was slow, differing from the others, in which convalescence was remark-

ably rapid. Instead of the loathing usually expressed where turpentine has been used, there was an evident desire to take this oil, and, indeed, to continue it, when the necessity for it had ceased.

My belief is, that almost all the essential oils would do just as much good as the turpentine, and I do not think that I shall have recourse to the turpentine again.

OBSTINATE CHRONIC DISCHARGE FROM THE NOSTRIL REMOVED BY EXTRACTION OF A CARIOUS TOOTH.

By Alfred Fleischmann, Esq., M.R.C.S., L.S.A., L.M., Associate of King's College, Wrexham.

Miss Rose S., a little girl, aged 5 years, had been troubled for about three months with a constant, though not profuse, discharge of slightly purulent mucus from the right nostril; it appeared to be the sequel of a cold. The mucous membrane, so far as it could be examined, was healthy, and there were no indications of any morbid growth. She was ordered a strong injection of gallic acid, and took concurrently small doses of the sesquichloride of iron. The only advantage she derived was, that the discharge lost its purulent character; in amount it remained the same, though the treatment was long persevered in, and other local astringents tried. I suspected that there must be some undiscovered local irritation. Not being able, on careful examination, to find anything wrong in the nasal passages, I looked to the condition of the teeth; and, finding the right upper canine carious, removed it. The discharge was much lessened on the next day; and, in the course of a day or two, disappeared altogether.

This short account may, perchance, afford a useful hint to some one; at any rate, it is a good illustration of reflected irritation, and teaches us that oftentimes the *fons et origo mali* is not just where we might expect to find it.

Transactions of Branches.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

PARAPLEGIA IN RELATION TO RENAL DISEASE.

By William Hinds, M.D., Birmingham.

[*Read February 10th*, 1859.]

The object of the following paper is to bring under the notice of the members of this Branch certain lesions of the nervous system in connection with some form of renal disease. I have reason to believe that these lesions, resulting in more or less paraplegia in the relation mentioned, are not so generally recognised by the profession as they deserve to be. This relation is scarcely, if at all, mentioned in some standard works on medicine; while, at the same time, there has been manifestly wanting, in many cases of paraplegia—especially, perhaps, of *progressive* paraplegia—a clear and sufficient pathological explanation. That this obscurity actually exists, I may refer in evidence to no less an authority than Dr. Watson, who uses the following remarkable words:—"But in very many cases we detect no alteration that seems adequate to explain the paraplegia" which "creeps on slowly and insidiously." Now, Dr. Baillie's mode of explaining some of these obscure cases of paralysis of the lower limbs, as detailed in the *Medical Transactions*—namely, by supposing serous effusion to occur in excess into the spinal canal, originating within the cranium or in the canal itself—has completely failed to stand the test of investigation.

Paraplegia then, unconnected with actual disorganisation or disease of the cord itself, being duly recognised by the experience of able and practical authorities, we are free to inquire into those other conditions of the afferent or efferent nervous agents, or those relations of the sympathetic system on which this loss of power may sometimes depend.

Amongst the most important of these lesions at present known, I believe must be ranked that relation with diseased kidney, to which I have now to direct your attention.

In the autumn of 1857, the subject of paraplegia, in relation to disease of the urinary organs, was most ably brought before the profession in a very valuable lecture, delivered by Mr. Spencer Wells, at the Grosvenor Place School of Anatomy and Medicine. That lucid exposition I read with intense interest, as probably many others did also. Several years ago, I had cases of incomplete paraplegia of the kind mentioned under treatment; but I never read these cases so satisfactorily to myself, as when I met with the facts brought forward in the lecture to which I have alluded.

I propose to bring under the notice of the members two cases of this affection. One of the patients died several years ago; and I shall give the results of the *post mortem* examination. The other case is still living, and open to the inquiries of any gentleman who may feel disposed to investigate the case. I shall first, however, quote one or two passages from the lecture of Mr. Wells, by which we shall get a clearer insight into the nature of these cases.

Since 1845, in which year Mr. Wells's attention was first drawn to this affection, he has had eleven cases under treatment; and, though he does not express as much, he seems to afford ground for the presumption, that one great reason was why the attention of the physician has not been more especially called to this important affection, is the fallacy of confounding cases of disease of the mucous membrane of the bladder, resulting from actual disease or injury of the spinal marrow, with those cases in which the causation may be said to be reversed, the spinal marrow being intact, while the origin of the disease is to be looked for external to the spinal canal. Mr. Wells observes:—

"When a patient comes to you with a tottering gait, complaining of weakness in the knees, a tendency to stumble in going up and down stairs, or on any uneven ground, and a certain loss of that muscular sense which enables us to walk without watching the feet to know where to place them at every step, your first impression will be very naturally that you have to deal with a case of spinal disease. Your first impression may be correct. As you proceed with your examination of the case, you may obtain evidence of some injury to the spine; some distortion of the bones; some displacement from caries of the bodies of the vertebræ or ulceration of the intervertebral cartilages; some point at which pressure, or a sharp pass, or a hot sponge, causes pain; some history of inflammation of the cord; some indication of the pressure of a tumour, or of an aneurism on the cord; or possibly some proof that the disease is within the cranium. But you may find nothing of the kind. You have to exclude all these; and you are driven to assume a diseased condition of the lower portion of the cord, perhaps a simple atrophy, of the existence of which you have no other proof than the paraplegic symptoms I have just enumerated. Let me assure you then that you may have all these symptoms, that they may go on to complete paraplegia, and the patient may die, and that then you may find the cord perfectly healthy, so far as our examination can teach us, while the kidneys and bladder are the seat of manifest disease."

Much credit is due to Mr. Stanley, of St. Bartholomew's Hospital, who, I believe, was one of the first to bring these cases prominently before the profession. His cases were published in the *Medico-Chirurgical Transactions* for 1833. The following is a note of one of them.

"The first of these cases to which my attention was directed, occurred in the year 1818, in a man admitted into St. Bartholomew's Hospital on account of paraplegia, combined with retention of urine. Both sensation and the power of motion were entirely lost in the lower limbs. On examining the spine, tenderness on pressure was discovered at the third lumbar vertebra, which, viewed in connexion with the other symptoms, was considered to indicate the existence of disease in the vertebræ; and an issue was accordingly made in this part of the spine. Considerable amendment of the symptoms followed. Sensation and the power of motion were in a certain degree regained, and the retention became changed into incontinence of urine. Here the improvement ceased, the general health failed, and he gradually sank.

"On a careful examination of the body, no disease could be discovered in the containing or contained parts of the vertebral column; the vertebræ, fibro-cartilages, spinal cord, and nerves, were all perfectly sound, as were also the brain and its membranes. In one kidney were numerous small abscesses dispersed through its substance. The other kidney was gorged with blood, and its substance was much softer than natural. The mucous lining of the ureters and of the bladder was very muscular, and the muscular coat of the bladder was thickened.

Several equally striking cases are given by Mr. Stanley; but the foregoing will sufficiently illustrate the disease.

Case I. In the spring of 1848, a gentleman (Mr. C.) came to me complaining of severe pain in the loins, more especially on the left side, the pain extending down the left groin and to the corresponding thigh. There were, moreover, symptoms of growing paralysis of the lower extremities. He was lame in his gait, and his legs and feet seemed difficult to manage, clumsy, and unwieldy. Though this was noted and recorded after examination, no conclusion was come to that there existed any disease of the spine; and though the case was afterwards seen by several medical men, no solution of this feature of the case was attempted, so far as I was able to learn. Indeed, both the history of the case and the other symptoms pointed it out as, in some form or other, disease essentially of one or both kidneys.

The history was this: About four years previously, this gentleman, then a corpulent person, after standing for several hours upon some wet ground, was suddenly attacked with severe pain in the loins, for which he was locally bled and otherwise treated, His urine, it was reported, contained a great deal of blood. He appeared to recover his usual health very soon, remaining well until Christmas 1846, when he had a severe and persistent attack of bronchitis. From this period, though the bronchial affection subsided more or less in about a couple of months, he never regained his accustomed health. His old pain in the loins supervened, and he began to emaciate rapidly.

Repeated and careful examinations of the urine was made, with the expectation of finding albumen, but with no satisfactory result. Mr. C. underwent a searching examination at my house by Dr. Fletcher. He was seen afterwards by Dr. Evans and several other medical men. Not getting better in the hands of the legitimate practitioners, he fell into the hands of the quacks, and amongst others, homœopathy owes something to his patronage, and to the protracted, and, at that period, unquestionably obscure nature of the case. But the quacks yielded still less relief; and after consulting the late Dr. Wright and one or two other gentlemen, he again sent to me, as an old friend and attendant.

On August 23rd, 1849, I found him suffering from severe and protracted diarrhœa, which had lasted two or three months. Some time previously, a tumour had appeared in the right loin, reaching forward towards the front of the abdomen. I found its size to be about that of a swan's egg, or perhaps larger. It was evidently pushed down about two inches by the diaphragm, at each deep inspiration. The urine was slightly acid; tested with heat and nitric acid, it exhibited an evident albuminous deposit; specific gravity 1008. It should be also mentioned, that the patient had lately experienced several attacks of epilepsy. These attacks were, most probably, to be attributed to uræmic poisoning. Hectic flushings were often present; œdema of the ankles and increasing prostration supervened; and lastly, incontinence of urine, and the patient died after repeated attacks of convulsion, the tumour having much increased in size.

The *post mortem* examination was made forty-four hours after death; the late Dr. Wright, who had some time before seen the patient, gladly embracing the opportunity of being present.

There was externally no appearance of the tumour; but, on examination, the right kidney was found to be about seven times as large as in the healthy state. The upper half of its substance was entirely disorganised, and exhibited patches of tuberculous matter in a more or less softened condition. The tumefied portion of the kidney was composed of large patches of softened tuberculous matter embedded in a friable light coloured gelatinous looking substance or lymph. The left kidney was at least one-third larger than natural. Its cortical portion was in a state of granular degeneration. The whole gland was dark and dirty in colour and congested. One or two small tubercles existed in it.

I have no note of examination of the spinal cord; and cannot tax my memory as to the fact, so that the negative evidence in this case, such as it is, cannot be adduced.

Case II. Another case which I desire to introduce, is that of a once powerful and robust man, who, before his illness, followed the occupation of a brewer. This case came under my notice two or three years since, the most prominent symptom being an incomplete paralysis of the lower extremities. For some time this paralysis went on increasing, so that he was unable to step out of doors for fear of stumbling and falling down. One leg (the left) in particular was, as it were, dragged after him when he attempted to move across the room. Both lower extremities were very unwieldy, the left being almost useless, and had to be lifted up in progression.

The other features of this case, and which point it out as one of kidney disease, are these: At the latter end of 1856, he had an attack of hæmaturia to the extent of several ounces, accompanied with nausea and vomiting, and intense and agonising pain about the left loin. On the 30th of October 1857, his urine was found to be of the colour of coffee grounds, a sediment being present. Examined by heat and nitric acid there was distinct opacity. The specific gravity was 1035, and under the microscope the sediment was found to consist principally of blood-corpuscles, with a few organic and pus-granules.

On July 1st, 1858, the urine was again, as before, found to contain flakes of lymph after being tested, and the chocolate coloured urine was again found to contain a large quantity of blood-corpuscles. There is also some very gradual emaciation, the appetite being capricious and the general health low. Amongst the acknowledged symptoms of uræmic poisoning which are found in this case, are occasional attacks of an epileptic kind; a loss of consciousness for one or two seconds, general anæmic feebleness, and disturbance in the digestive organs already mentioned.

As to the *cause* of this man's disease, it must be borne in mind, that his occupation, that of a brewer, while it gave great facilities for free drinking on the one hand, exposed him, on the other, to those changes of temperature and other conditions which are especially potent in the production of kidney affections. At one time par-boiled in the exhalations of the furnace and wort tubs, and anon exposed to the cold and damp of the cellar or the cooling yard.

The *treatment* of this case, which has been in the hands, at one time or other, of different medical men, I shall not occupy your valuable time in giving *in extenso*, any more than the history of the case; but I will simply mention, that it has consisted of local blood-letting and counter irritation, various tonics, and strychnia, with many other means less noteworthy.

It should be mentioned, that besides the instances noted of pain in the left loin and hæmaturia, several attacks of violent pain in the same spot are related, but the exact dates are not remembered, and it may be also noted, that the left leg, corresponding with the side on which the intense pain has been experienced, is most affected with loss of power.

At the present period there is some amendment to the general health, but little or no amendment in the paraplegic features of the case, and there is good reason to believe, that disease of some nature is still going on in at least one of the organs which I have specified as being the seat of disease in this case.

I shall venture to offer but very few remarks in conclusion; for the simple reason, that I am unable to give any logical exposition, supported by facts, of the mode in which the nervous influence which subsists in the healthy state between the brain and spinal marrow, and the voluntary muscles, is obstructed in the cases brought forward, and in those of a similar nature which have occurred in the experience of others. If I venture upon any hypothesis at all, it will be simply as a suggestion or in an interrogative sense. I perceive, that in the able lecture of Mr. Spencer Wells to which I have referred, the paralysis is attributed to a disturbed relation between the great sympathetic nerves and the spinal nerves. Mr. Wells observes:—

"But I think what I have said is enough to show, that if you disturb the normal condition of the sympathetic nerves supplying the kidneys and bladder, you need not be surprised at an alteration in the condition of the spinal nerves with which the disordered sympathetic nerves communicate, or in the condition of the muscles which derive their motor power from the spinal nerves, whose relations with the sympathetic have been disturbed."

On the other hand, it appears that Mr. Stanley attributed the effects to "irritation." But irritation is not a very definite term, unless we can attach to it some physical condition, or some plainer and more real meaning than is usually understood by it.

Now, it occurs to me, that when the kidney is inflamed, or hypertrophied, or spoiled by means of a morbid process of any considerable extent, it almost of necessity implicates more or less the parts in the immediate vicinity. We have, of course, the renal plexus and other portions of the great sympathetic nerve which will hardly escape being more or less involved in many of these cases. But I think we may proceed a step further than either "irritation" or "disturbed relations." We have not to deal even with any phenomena or disorder of mere

sensation, which, indeed, is pretty well intact in many of these cases, but with indirect impediment to the progress of volition to the lower extremities. The will is impeded in its course from the brain; and voluntary muscular power therefore becomes interfered with, and though there is an intimate relation, doubtless, between the great sympathetic and those agents of voluntary motion the spinal nerves, there is really at present no good or valid reason to look for an *indirect* cause rather than a direct one; for a lesion in a function that we do not know to be affected, in preference to one that we know to be so.

I would suggest, then, that the seat of the interruption of motive power is likely to be found in the *lumbar plexus*, or in the branches themselves which go to form the crural or femoral nerve, its greatest branch. This plexus, or some of its branches, will be in close proximity to the kidney resting on the psoas and quadratus muscles; and it is by no means without reason that we should infer, that whenever there exists a progressive and inflammatory disease of the kidney, the morbid process should extend to, and affect the nerves as well as other parts in the vicinity. It is, indeed, difficult to conceive any reason why, in such cases, the great nervous plexus should not suffer; and if so, we should have unquestionably a simple solution of the most difficult portion of the problem, for it is fair to assume that such an implication would be amply sufficient to account for the interrupted nervous influence which is the proximate cause of the paraplegia.

That such a solution is not purely imaginary may be inferred from various facts. First, the nerves of sensation—not by any means the first to lose their functions in many of these cases of paralysis—are yet frequently more or less morbidly excited, sometimes to an extreme degree; as is shown by the paroxysms of violent pain, and by more persistent pain of less intensity, and it is a perfectly just inference, therefore, that the motor nerves, which give transmission to the volitional impulses, and which are so intimately connected with the sensory, must suffer an amount of interference with their peculiar functions. It will not for a moment be disputed that nerves *are* morbidly affected, by inflammation or otherwise, to a serious extent in the vicinity of diseased organs. Dr. Inman has lately given a case in which two intercostals were invaded by an aneurism—as exhibited in the *post mortem* examination—and diagnosed by symptoms.

Now, I am aware that certain diseases of the bladder and prostate gland have been mentioned as having occurred in the Parisian hospitals and elsewhere in relation with subsequent paraplegia; but, *mutatis mutandis*, there are other most important nerves besides the lumbar plexus which supply voluntary power to the lower extremities. I allude to the great and lesser sciatic and gluteal nerves, with other branches of the sacral plexus, all more or less susceptible of being invaded by diseases of the latter class. In the last number (vol. iv, third series) of *Guy's Hospital Reports*, we have a valuable series of cases of paraplegia, by Dr. Gull, many arising from injury or disease of the cord; but case xvii of this series is one with respect to which no lesion of the cord whatever could be discovered.

In this case it was supposed that the paraplegia was the result of ramollissement of the substance of the cord. In the words of Dr. Gull:

"The examination of the cord did not confirm this diagnosis. In the present state of nervous pathology, the case remains unexplained. It is confessedly difficult to establish a negative, but the difficulty was met with unusual care in this case. Hours were spent in the examination of the cord, but with no other result than to show that there was no appreciable lesion of it besides a slight and doubtful softness of the tissue of two points. We may therefore certainly conclude," observes Dr. Gull, "that the spinal cord may have its functions impaired, and even lost, and that suddenly, as far as the power of motion is concerned, without any distinct amount of anatomical lesion."

Now, most remarkably, this very case, which had so baffled the search for lesion of the cord itself, is one in which there was intense and early disease of the bladder. I will quote a few words from the description of the case, taken before death.

"Henry P., aged 32, clerk to a solicitor in the city, was admitted into Guy's Hospital, December 23, 1857. A tall, well-made, rather pallid, but otherwise healthy looking man, suffering from entire paraplegia of the lower extremities and sphincters, but without affection of sensation. He stated that he never had any previous illness." It appears that he once fell over some chairs, but that all effects of the accident passed away in a few days. He was married in 1857, and gave himself up to excessive sexual indulgence. For *two or three months* previously to the development of the paraplegia, he experienced difficulty of micturition. The urethra is described as healthy. The day after his admission, there was noticed œdema of the integuments of the lumbar region. The spine was normal; the integuments over the sacrum were reddened. Nausea and vomiting set in; and death from exhaustion occurred on the 30th of December; the case "having been brought to a rapid termination by the supervention of acute peritonitis upon inflammation of the bladder."

These are the salient points of the case before death. Let us now turn to the state of parts as seen in the *post mortem* examination. I give only one or two sentences, and in the words of Dr. Gull. "Membranes of the cord healthy." ..... "A few granules of brain sand were found in the posterior columns about the middle of the dorsal region. No traces of inflammatory exudation anywhere, either in the cord or its membranes;" but the mucous membrane of the bladder was found in a condition of sloughing. "Its muscular coat and the pelvic areolar tissue infiltrated with fœtid pus and urine."

Here it will be seen that the affection of the bladder had evidently preceded all other symptoms.

In this case, Dr. Gull dwells with little favour upon the hypothesis put forth by Mr. Stanley, that the relation between disease of the kidneys and bladder, and paraplegia, was one merely of impression made upon the cord "through incident nerves." Dr. Gull sought with determined perseverance, in which, as he says, "hours were spent," to discover a lesion in the cord itself. We owe to Dr. Gull doubtless an acknowledgement of the great care and ability which he has exercised in this and the other cases given in *Guy's Hospital Reports*. While the whole case is given with great candour, and nothing kept back that would tend to support or spoil a theory, it is at the same time to be regretted, that the valuable opportunity which this case afforded of determining the condition of the plexuses given off, and branches to the lower limbs should not have been embraced. Had the same care and able efforts employed upon the cord itself, been extended to an investigation into any altered conditions of those media or offshoots which are employed in conveying the voluntary power to the lower limbs, we might hope to have had a more clear and satisfactory solution of the case than Dr. Gull has been now able to afford.

It is not within the scope of this paper to do more in conclusion, than allude to the primary causes of this class of paraplegic affections. The presumed greater prevalence of the affection within the last few years has been attributed to excessive smoking, cold bathing, and the "flowing-sitz"; and also to sexual irregularities and excesses. In connexion with the latter, I cannot help quoting the following passage. The author observes:—

"I am disposed to attach much more importance to sexual irregularities, the occasional excess and occasional abstinence which follow the state of celibacy, or the late marriages of the present day. The excessive luxury of our age brings its own punishment with it."

"If young ladies cannot wear a dress which costs less than twenty guineas, if they are not content with dressing *themselves*, but will insist in carrying about a preposterous cage of hoops and rings four times the size of the human figure, and covering this with silk at a guinea a-yard; if they will spend five or ten guineas on a bonnet which affords neither shelter nor warmth to the head, they cannot expect a moderate man to ruin himself with milliners' bills, and need not be surprised if he shrink into his solitary bed-room and live at his club."

The author observes further:—"If parents of moderate means, who have brought up their children respectably, will not allow their daughters to marry a man who has to make his way in the world, but insist upon a house and servants and carriage, we need not be surprised at the number of old young ladies and old young men we meet with everywhere, and we need not be surprised at the physical evils which flow from such an unnatural state of society."

Now, yielding credit to the author for the above clever and humorous and just sarcasm, it still may occur to some of us, that there are causes which we may think quite as potent as the one he points out. One of these which he has altogether omitted, is that overworking of the kidneys, which must result from the taking of large and constant quantities of malt liquors and other still more powerful alcoholic stimulants to excess. In my own view, this last cause is likely to rank amongst the most powerful causes, another of which is regular

and violent exposure to cold. If the three causes here specified be placed side by side, and although the subject of causation in regard to disease is unquestionably a varied and comprehensive one, there will be in the cases under consideration little to be accounted for by other agents.

As I do not propose to go into the treatment of these affections, this will conclude what I have to bring under your notice in regard to that important disease paraplegia in connexion with diseases of the renal organs.

Reviews and Notices.

Practical Observations on the Operations for Strangulated Hernia. By J. H. James, F.R.C.S., Consulting Surgeon to, and late Senior Surgeon of, the Devon and Exeter Hospital, etc. Pp. 95. London: John Churchill. 1859.

Mr. James thus states the intention of his work:—

"It does not attempt to be a treatise on hernia; such an attempt would be out of place when there are so many and so good; the object is, as briefly as possible, to give the result of my own experience, either as confirmatory of some, or as opposed to other, points of practice, which may now be more or less in esteem, giving reasons for my opinions when they differ from those of others, and offering, in some instances, views which I believe to be new, though it is indeed difficult to say what is really so." (P. 2.)

The number of cases of strangulated hernia on which Mr. James has operated since the year 1821, has been thirty-six; he states, however, that he has copious notes of above one hundred operations in which he has either operated himself or has assisted others. The thirty-six cases are tabulated under the following heads:—date; kind; age and sex; duration of hernia; duration of strangulation; vomiting; constipation; tenderness of belly; tenderness of rupture; contents; bowels moved after operation; and remarks, including the *post mortem* appearances in the deaths in hospital. Of the thirty-six cases, twenty-two were femoral, fourteen inguinal and scrotal; twenty-four were in hospital, twelve in private practice. Of the private cases, six died; of the hospital cases, eight; the greater proportion of deaths in private practice being chiefly due to causes which every country surgeon will readily imagine.

Mr. James has, with one exception, always opened the sac. But he discusses impartially, from the statistics of recorded cases, the merits of the proceeding in which the hernial sac is returned unopened—Petit's operation. He would

"Undoubtedly prefer it when the ring can be divided with facility, and where there is no reason to suppose such a state of the contents as to require examination; but when the statements now made are duly considered, I do not think there will be found any inherent difference in the two operations so intrinsically great, as to lead us to prefer Petit's where these conditions do not recommend it; and, indeed, his own advocacy can hardly be considered to go further than this." (P. 86.)

There are some other points in regard to hernia, on which Mr. James specially comments. One of these is the diagnosis of inguinal hernia in the female. When difficulty arises from an obscuration of Poupart's ligament by the size and immobility of the tumour, Mr. James offers the following guide:—

"If the hernia be true inguinal, it must of course come through the inner ring, and take the usual course into the groin and labium; but in such cases as these the cause of obscurity is *that the tumour mounts nearly to the spine of the ilium*, a fact which of itself, I think, declares its nature. I am not aware that this has been pointed out as a ground of diagnosis; to me it seems conclusive, for in no other case does it ascend high, except in the congenital hernia of males, and then not to the same extent." (P. 11.)

Mr. James's experience in hernia does not vie in extent with that of London hospital surgeons, and he does not pretend that it can do so; but, making good use of the opportunities afforded him in a practice of forty years, and comparing his own observations with those of others, he has now made a valuable addition to those contributions to surgical knowledge, which have long ago made his name honourably known in his profession.

A Handbook of Chemical Analysis (adapted to the Unitary Notation), based on the Fourth Edition of Dr. H. Will's Anleitung zur Chemischen Analyse. By F. T. Conington, M.A., F.C.S., Fellow of Corpus Christi College, Oxford. Pp. 290. London: Longman and Co. 1858.

Tables for Qualitative Analysis. To accompany Conington's Handbook of Analysis. London: Longman and Co. 1858.

A Manual of Qualitative Chemical Analysis. By A. Beauchamp Northcote, F.C.S., Demonstrator to the Professor of Chemistry at Oxford; late Senior-Assistant in the Royal College of Chemistry, London; and Arthur H. Church, F.C.S., of Lincoln College, Oxford; late Assistant to Professor Brodie. Pp. 428. London: John Van Voorst. 1858.

Chemistry for Schools, By Dionysius Lardner, D.C.L., late Professor of Natural Philosophy and Astronomy in University College, London. With one hundred and seventy Illustrations. Pp. 243. London: Walton and Maberly. 1859.

The Elements of Inorganic Chemistry. By J. C. Buckmaster, F.C.S., late Student in the Government School of Mines, etc. Pp. 216. London: Longman and Co. 1858.

The *Handbook* of Mr. Conington and the *Manual* of Messrs. Northcote and Church may be regarded as rival candidates for the favour of the student in the chemical laboratory; and in the laboratory they must be themselves tested, in order that a qualitative and quantitative analysis of their respective merits may be obtained. In many points which must inevitably enter into works of this kind, there is naturally a resemblance; but sometimes the processes by which the same result is arrived at slightly vary. There are, however, a few accessory matters, in which the two works agree or differ, and which it may be well to note.

Both works adopt the plan of printing in smaller type the descriptions of the less common substances, in order not to perplex the beginner, but rather to direct his attention to those things which, being more frequent, are of more importance to him to learn. Messrs. Northcote and Church devote a chapter to a description of chemical reagents: Mr. Conington omits this, believing that the use of them, of apparatus, etc., will be better learned by a few days practice in the laboratory. The authors of the *Manual* say nothing of quantitative analysis: of Mr. Conington's book, about seventy pages are occupied with this important subject, including some directions for volumetrical analysis—a process which, though of vast utility, is scarcely yet sufficiently understood in this country.

Both books are very good; yet neither is so absolutely perfect that he who is master of one may not learn something from the other.

Dr. Lardner's *Chemistry for Schools*, he informs us in his preface—

"Is one of a series of books of elementary instruction for the use of schools and families, of which two have already been published, one on Natural Philosophy, and other on Animal Physiology; and it is compressed within similar limits of bulk and price. It comprehends so much of the elements of Chemistry as may, with moderate attention, be acquired within a reasonable time by the younger class of students, and even as much as may suffice for those who, being more advanced in life, desire merely to obtain a general knowledge of the elements of the material world, and of the chief compounds into which they enter."

The subjects usually met with in text-books of Chemistry are here treated of in the usual happy style of the author, who knows so well how to make science intelligible to the popular mind without rendering it meagre. The

work is admirably adapted for giving a sound notion of chemistry to the juveniles; while many of riper years may study it with advantage.

Mr. Buckmaster has written his little book with the best intention: but he has not succeeded, to our mind, in producing so attractive a work for the young as that of Dr. Lardner. Though small, it is too heavy for the mass of popular students. Those, however, who do not object to it on this score, will derive instruction from its perusal.

Third Report of the Clinical Hospital, Manchester. Containing Results on Physical Development, Hooping-Cough, and Transmitted Diseases. By James Whitehead, M.D. Pp. 117. London: Churchill. 1858.

This is a valuable document, both in the author's statistics and his comments, regarding the diseases of women and children. We extract one or two passages, which show how much remains to be done in the education of the lower classes in relation to matters medical:—

"Superstitions and prejudices, prevalent among some of the lowest orders, operate in a remarkable manner to the detriment of infant life and health. When a child is seized with fever or other malady of severe character, it is generally deemed by the parents to have received its 'death stroke,' and its extinction is waited for with easy resignation, without a thought of seeking remedial aid beyond their own resources. Thus, many cases of acute inflammatory and febrile affections are brought after they existed many days or weeks, and often already in a hopeless state, with the ostensible object of obtaining medicine to soothe their last moments, but more frequently for the real purpose of being able to obtain a certificate of the cause of death. Several such children have been in a dying state when entered on the books. On account of impositions having been occasionally practised in this way, we make it a rule never to certify that a child is dead unless known to be so from actual observation; but only to state that such a patient has been recently under treatment for a disease specified.

"From the moment the idea seizes one of these mothers that her child's malady is to be fatal, all attention to cleanliness, and the comforts derivable therefrom, is discontinued, under the belief, as alleged, that exposure of the skin would be the means of hastening the fatal issue. One case recently brought—not a solitary instance, but only one out of many—had for eight or nine weeks laboured under severe bronchitis with low fever, and latterly had eczema of the scalp; its death had, during all this time, been daily expected. This child, as the mother unhesitatingly stated, had not had the skin on any part of its body one time washed since the commencement of the disease, a period of more than two months. The entire surface was incrusted with filth, which was probably the cause of the protraction of its ailment, and certainly so of the skin disease, for so soon as it was thoroughly cleansed with soap and water, the patient began to mend, and was speedily cured." (Pp. 14, 15.)

"The practice of giving spirituous liquors as medicine to sick children is very prevalent among some of the lowest orders. I lately had occasion to visit frequently a child two years old, daughter of poor parents, residing in a wretched house in a close unhealthy court. On admission, the patient had been for eight weeks labouring under dysentery and hooping-cough, with low fever. Having, on each of a succession of visits, found the patient in the same unsatisfactory state, namely, rapidly emaciating, with great heat of skin, and insatiably thirsty, I detected on one occasion the smell of spirit when near her. On inquiry, the mother freely stated, apparently unconscious of having committed an error, that the spirit which the child had taken during the last three days was gin, and she believed it had done much more good than any of the other kinds previously tried. Those previously used, and here alluded to, were first brandy, then whisky, then rum; but three days ago she fortunately remembered that gin had been very efficacious in an illness of an elder child, now five years old, so she at once procured some of the best, and had given it freely. It appeared that during the preceding four weeks at least, unknown to me, this child (two years old), had taken from four to eight doses per day of ardent spirit—the dose probably meaning as much as the child could be made to swallow at a time—given under the conviction, conscientious I do not doubt, that it might prove beneficial, as its efficacy was commonly believed in for such complaints. The child died a few days later. The parents, from what I saw, appeared to be sober, frank in expression, but ignorant, slothful, and simple to the last degree; yet, strange to say, contended and happy. This case is not a solitary instance of its kind, but an example of a custom extensively prevalent." (Pp. 16, 17.)

British Medical Journal.

SATURDAY, APRIL 9th, 1859.

DEATH OF BOOTH EDDISON, Esq., F.R.C.S.,

VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION.

We regret much to have to announce the death of Mr. Booth Eddison, Surgeon to the General Hospital at Nottingham, and one of the Vice-Presidents of the British Medical Association, of which he was President for the year 1857-58. Mr. Eddison's health had for a long time been in a declining state. Towards the end of 1858, he left England to pass the winter season in Madeira; and died at Funchal, on March 7th.

ROOM FOR THE LADIES!

About eight years ago, the medical world of Europe was astonished by receiving information that the College of Geneva, in the State of New York, had formally enrolled a lady among its graduates in medicine. The terms used to designate the holders of degrees not having, by some oversight in those who framed them, been accommodated to the use of the female as well as of the male sex, some difficulty arose as to how the lady in question, on the public graduation-day, should be called on to receive the dignity thus for the first time conferred on one of her sex. The difficulty, however, was surmounted by the President of the College, when the lady's turn came, summoning her to receive her diploma as *Domina* Elizabeth Blackwell—*Domina* being intended, we suppose, as the feminine for *Doctor*. Previously to her graduation, Domina Elizabeth Blackwell had duly gone through the course of medical study required by the College, like any other graduate; she also underwent an examination, and presented a medical thesis—the title of which we are sorry we have not at hand.

After her graduation, Domina—or, as for convenience she may be called—Dr. Elizabeth Blackwell, visited England and the continent of Europe, and was a diligent observer of the medical and surgical practice of many of the great hospitals. She subsequently returned to America; where, with a sister who has followed in her steps, and who is known to fame by

the title of Dr. Emily Blackwell, she formed an institution at New York for the purpose of having the members of her own sex instructed in the art of healing; and we hear that several other female doctors of medicine have been made on the other side of the Atlantic.

The practice of medicine by women would for the present have been regarded by us merely as a curious American "institution," were it not for the fact that Dr. Elizabeth Blackwell has lately again honoured this metropolis with her presence. Her mission has been in part to give a course of public lectures on physiological and hygienic matters, and in part to propagate her doctrines on the expediency of qualifying women for treating their own sex and children—that is to say, for supplanting such men as Sir Charles Locock, Professor Simpson, and Dr. West, in the performance of those duties which have been, as it seems, erroneously entrusted to them. Perhaps, also, the complete professional education which Dr. Blackwell has had, and which of course she would wish other ladies to receive, is to be held as a qualification for the enrolment on our hospital staff of a host of female Brodies, Symes, Fergussons, and Watsons, who shall reign supreme either in the women's wards of our hospitals, or in an institution of their own, provided with operating-theatre, pathological laboratory, and all ordinary means and appliances.

That this latter idea may be somewhat of an exaggeration, is just possible; yet we cannot see any impossibility in it, when the past course of Dr. Elizabeth Blackwell is considered. But is not the idea of a female practitioner, such as we have outlined, lamentably ridiculous? Imagine the Semiramis of surgery, a Fergusson in woman's outward guise, amputating a thigh, or removing a diseased jaw or elbow-joint, aided by assistants of like sex and mind, and surrounded by a host of fair damsels, who regard the proceedings of the operator with that appreciation of the cool head and the ready hand which medical students so well know how to feel! Imagine some fair and amiable damsel, a female Rokitansky, poring with inquisitive eye over a collection of ulcerated Peyer's patches or a piece of softened cerebral substance, or assiduously endeavouring to ascertain, by the aid of the microscope, the presence or absence of fatty degeneration in a piece of heart-tissue, or to determine the nature of a tumour which her associate Semiramis has just removed! Call to mind all things that are done in the ordinary course of hospital duties, or even of general practice in town or country; and imagine, good reader, if you can, a British lady performing them.

It may perhaps be said, that there is no intention of proceeding so far; that women are to be educated only with the view of treating the ailments peculiar to their own sex and to children; but that, in special cases, the aid of the male practitioner is to be called in. This is no argument. If the treatment of females by females is right, it is so without limitation; if the treatment by males is wrong, it is so universally. Women who would practise medicine and surgery must do so wholly; there is no shirking the obligation. If they attempt to do less, they will fail in the duty they undertake; and the male sex will have an unfair advantage over the female, in being able to command a higher exercise of professional skill and knowledge.

An argument which is, we believe, prominently put forward in favour of females being professionally attended by persons of their own sex, is the indecency of male attendance. If there be any country or nation where it can be shewn that the professional attendance of the male on the female sex is subversive of moral feeling, by all means then let the women take medicine entirely into their own hands; provided always, that they are thoroughly competent. But we know of no land, the moral creed of whose inhabitants is so utterly flimsy as to be torn to pieces by the cause to which we have referred. In this country at least, it is far otherwise. From the highest rank to the lowest, the British female, in the hour of sickness and danger, confides implicitly all that she most values on earth to the honour of him who has been chosen to give to her his professional care. And when do we ever hear of the trust being broken? The moral character of his female patient is held by the British practitioner, and we may safely say, by every true practitioner of medicine in all countries, as a sacred trust, to be guarded with as reverent care as the most devoted religionist could exercise towards the symbols of his faith, were they entrusted to his keeping. Neither the act of evil, nor the thought for evil, exist; there may be exceptions, it is true, but they are very few and far between. On the one side there is confidence; on the other, the consciousness of being the depository of that confidence. Why should an attempt be made to break through this honourable link? *Honi soit qui mal y pense.*

Let us now come to the abstract question—Is it compatible with the attributes of woman, that she shonld arm herself with a medical education and medical diplomas, and put herself forward to practise medicine? Certainly not. There has been a great deal of nonsense talked in late years about the rights of woman, strong-minded women, and so forth. Granted, that much of this is the result of a reaction; that the female mind has not been properly appreciated; still we are as far as possible from partaking in the extreme views of those who cheer on in their course the Doctors Blackwell and other lady-doctors. Woman has her full share of duty to perform as well as man, and she has been endowed with the qualifications both of mind and of body necessary for the fulfilment of her duty; but there are classes of duties which are peculiar to each sex, and the attempt to perform which, otherwise than by those to whom they have been assigned, is a failure.

We are not going to descant on the duties of woman in her ordinary domestic relations, nor to show to how great an extent the happiness of families, and therefore of nations as made up of individual families, depends on her influence. Our business is with medicine. In the sick-room, the exercise of the moral attributes is divided between the two sexes. From the male are especially expected judgment, decision, and promptness in action: in the female there shine forth most brightly sympathy, tenderness, and devotion to duty; and in the exercise of these she possesses the highest claims to our respect.

Does any one hint that there is no greater incompatibility with feminine attributes in the proceedings of Dr. Elizabeth Blackwell than in those of Florence Nightingale in her attendance on the hospitals of Scutari and the Crimea? There is, we fear, a wide difference between the two cases. The mission of Florence Nightingale was one of mercy and benevolence: she went, that she might afford to the sick and wounded the treat-

ment which woman alone could give them. The mission of the lady-doctors of medicine is—what is it? We lament to record our conviction that it is one of arrogance and self-glorification. There is no analogy between the case of Dr. Blackwell and those instances in which women have been found equal to extraordinary emergencies. We admire, for instance, the heroism of a sea-captain's wife who, some time ago, navigated her husband's ship in safety during his incapacity from illness; and we would respect the calmness and self-possession of any female who should give timely aid to a fellow-creature in a case of accident. But these are rare cases—admirable because they are not of every-day occurrence. When woman undertakes, as a habit, the duty of man, then she goes beyond her province, and loses all title to our respect.

We must not be understood as wishing to shew the slightest disrespect to Dr. Elizabeth Blackwell, or to any *dominæ doctores*, as ladies. It is the principles and practices they have engrafted on the womanly status that we attack. Doubtless they possess excellent intellectual and moral qualities; let them exercise these in performing the proper duties of woman as they are recognised by civilised nations. It can be readily understood, that the qualities of Semiramis may have been the theme of popular admiration; in this age, we prefer the character of Victoria.

We have alluded above to the public teaching of physiology and hygiene by Dr. Elizabeth Blackwell. With this, beyond the very questionable taste, to our minds, of lectures by ladies, we have no fault to find. There can be no question that women ought to know more than they do at present of the processes of life, and of the means of preserving health. But this is altogether another matter from undertaking the treatment of disease. The knowledge we have here briefly advocated can detract nothing from the worth and excellence of woman; the habitual usurpation of functions which are not hers must put her beyond the pale of respect. But there is no fear that the British matron and the British damsel will be tempted, by any cry of woman's dignity or of false delicacy, to do aught that shall diminish the esteem and affection with which they have ever been regarded.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR SCOTLAND.

28, Albany Street, Edinburgh, March 28th, 1859.

Sederunt:—Dr. Andrew Wood, *Chairman;* Mr. Syme, Dr. Christison, and Dr. Alexander Wood; Dr. William Robertson, *Registrar.*

1. The subject of the Medical Act Amendment Bill was considered.

Dr. Andrew Wood laid on the table the following—

Excerpt Minute of Meeting of the Council of the Royal College of Surgeons of Edinburgh, held March 28th, 1859.

Resolved—

"That this Council has learnt with equal astonishment and regret that important clauses have been introduced into the Medical Act Amendment Bill, without any communication having been made regarding them to the General Medical Council, or to the several Bodies concerned.

"That this Council considers that the conducting of legislation in this manner is utterly at variance with the spirit of the Medical Act, and is derogatory to the General Medical Council, which is the representative of all branches of the profession.

"That this Council therefore empowers the representative of the College, Dr. Andrew Wood, to represent to the Scottish Branch Council the importance of their resisting to the uttermost legislation with regard to the medical profession, without previous communication with the General Medical Council.

"That in an especial manner, as regards this College, a clause has been introduced into the said Bill, whereby the Colleges of Physicians and Surgeons of Dublin have been authorised to register Licenses in Midwifery, whilst this Body, and others, which have long included midwifery in their Curriculum and examinations, and have granted special certificates therein, are excluded from participating in this privilege.

"That this Council is opposed to Special Registration of Licenses in Midwifery, seeing that midwifery is not mentioned in the body of the Act, being regarded as an essential part of the qualifications of every properly educated medical and surgical practitioner. But that if such certificates are to be registered at all, the privilege ought to be equally extended to this and other Bodies which examine in that subject." (Extracted from the *Records* by John Scott, Secretary, Royal College of Surgeons, Edinburgh.)

Moved by Mr. Syme, seconded by Dr. Alexander Wood, and agreed to—

"That, while the Scottish Branch Council approve of the introduction of a Bill for extending the time for Registration, and also for correcting any mere clerical errors that may have crept into the Medical Act, they cannot but express their surprise and regret that clauses embodying other and important changes should have been introduced into that Bill in the course of its passage through the Houses of Parliament, without any communication with the several Bodies interested, or with the Medical Council who have been constituted by Act of Parliament the representatives of the whole medical profession."

2. The Regulations of the Faculty of Physicians and Surgeons of Glasgow, regarding Licentiates, were received.

3. The following communications were submitted to the meeting by the Registrar:—

(1.) Various letters relative to unregistered practitioners.

(2.) Memorial to the General Medical Council from the Committee of the Manchester District Medical Registration Association, with letter from Honorary Secretary, relative to the Registration of Foreign Medical Diplomas.

(3.) Memorial to the General Medical Council from Dr. William Mackenzie, of Glasgow, urging the importance of Ophthalmological Education.

4. The application of John Ferguson, of Ebost, Bracadale, Skye, for Registation as "Surgeon in the Public Service", under Section 46 of the Medical Act, was considered and admitted, in accordance with the minute of General Council, January 25th, 1859.

5. It was remitted to Dr. Andrew Wood and Dr. Alexander Wood, to audit, and report on, a state of the Treasurer's accounts made up to the evening of March 26th, 1859.

(Confirmed), Andrew Wood.

MEDICAL REGISTRATION.

PUBLICATION OF THE REGISTER.

We have been requested by Dr. Hawkins to give notice that all persons who desire their names to appear in the Register printed for 1859, should apply to be registered before the 1st day of May, 1859.

REGISTRATION FEES: NOTICE.

The Medical Registrar presents his compliments to the Editor of the British Medical Journal, and would be obliged if the attention of members of the profession could be drawn to an advertisement sent herewith, which shews the registration fees payable in the respective cases of persons qualified before or not till after the 1st of January, 1859; and also the fee payable for any *additional* qualification—*i. e.*, either obtained since January 1st by a person previously qualified, or added to the qualifications of a person already registered.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, April 21st, 6 P.M.
Bath and Bristol. [General Meeting.]	York House, Bath.	Thurs., April 21st, 7 P.M.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

A social and scientific meeting of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on

Friday, April 29th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Birmingham, on the 5th instant.

Present:—Sir Charles Hastings (in the Chair); Dr. H. Barker; Mr. J. R. Humphreys; Dr. James Johnson; Dr. Lankester; Mr. Terry; Dr. Vose; Mr. Waters; Mr. Watkin Williams; Dr. Ogier Ward; and Dr. P. H. Williams.

The Financial Report for the year 1858, was read by the Treasurer. [It is printed below.]

The following resolutions were adopted:—

1. That the Financial Report for last year be published in the Journal.

2. That the Rules received from Dr. O. Ward, and read by the Secretary, be the Laws of the Metropolitan Counties Branch.

3. That this Committee, having had brought before them the Petition to Parliament by the Association for the Promotion of Social Science in favour of more active legislation on the subject of Public Health, request the Chairman to sign a similar petition on their behalf, and recommend the same for adoption by the District Branches.

4. That the list of members who have joined the Association since the commencement of the present year, be published in an early number of the Journal.

5. That the next Annual Meeting of the Association be holden in Liverpool, in the last week of July; and that Dr. Vose, Mr. Waters, and the General Secretary, be requested, as a Sub-Committee, to carry out the arrangements.

Sir C. Hastings stated that it was proposed by the Shropshire Branch that the Medico-Ethical Society of Shropshire should join the British Medical Association. No rule of the Society being likely to interfere with the Laws of the Association, the feeling of the Committee was unanimous in favour of the amalgamation.

Communications were read from Dr. Leet, Dr. Mackesy, and Dr. T. Littleton.

Charles Hastings,
Philip H. Williams, M.D., *General Secretary.*

Worcester, April 6th, 1859.

FINANCIAL REPORT FOR THE YEAR ENDING DECEMBER 31, 1858.

PRESENTED BY THE COMMITTEE OF COUNCIL.

In obedience to the Laws of this Association, your Committee proceed to publish a Financial Statement of the receipts and expenditure for the year ending December 31st, 1858. The accounts have been audited by Dr. Melson and Mr. Hadley, both of Birmingham, who were appointed to perform that office at the Edinburgh meeting of the society. The statement of accounts, as examined and found correct by them, is as follows:—

Receipts to December 31st, 1858.

	£.	s.	d.
Subscriptions	1790	8	9
Advertisements, and sale of Journals	645	8	4
	2435	17	1

Expenditure to December 31st, 1858.

	£.	s.	d.
Balance from 1857	300	3	6½
Expended in the year 1858	2429	3	8
	2729	7	2½
Receipts 1858	2435	17	1
Balance due to Treasurer, Jan. 1, 1859	293	10	1½

The expenditure for 1858 is made up of the following sums:—

Expenditure for 1858.

	£.	s.	d.
Richards (Printing Journal)	1685	9	0
Honeyman (Sundries)	32	0	0
Davidson (Commission)	62	11	6
Mr. Orrin Smith (Wood Engraver)	3	18	6
Interest at Banker's	21	1	9
Salaries; viz.:—Dr. Wynter, Dr. Henry, Mr. Holmes, Dr. Williams, and a Clerk	570	10	0
Secretaries' Sundries	28	17	0
District expenses; Post-office orders, Stamped envelopes; Travelling expenses; and Collecting	24	15	11
	2429	3	8

These accounts do not seem to your Committee to require much comment. The financial position of the Association varies but little from last year. The income and the expenditure for 1858 have been less than for 1857.

It is, however, incumbent upon your Committee to remark that the income from subscriptions is less by £200 than for 1857. This does not arise from a diminution in the number of members; for the number of members was greater in 1858 than in 1857. It must arise, therefore, from a failure of punctuality in the payment of the subscriptions. This is a serious evil, and ought to be remedied.

Every member should consider, that he receives for his subscription a Journal, which costs the Association more than the guinea subscribed, and this should be an incentive to him punctually to pay his subscription, which becomes due on the first of January in each year.

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

Monday, March 7th, 1859.

B. G. Babington, M.D., F.R.S., President, in the Chair.

ON THE ADVANTAGES TO BE DERIVED FROM A MORE EXTENDED SYSTEM OF SANITARY SUPERVISION.

BY HENRY JAMES PAINE, ESQ., OF CARDIFF.

[*Read by* J. O. McWilliam, M.D.]

The author commenced by stating that the advantages to be derived from a more extended system of sanitary supervision were twofold; viz., those which more especially appertain to the science of medicine; and those which were of a mixed character, partly scientific, and partly of general public interest.

With regard to the first class, Mr. Paine observed, that the admirable and well digested Reports of the Registrar-General gave in detail the mortality of the kingdom, and suggested explanations on various salient points as they presented themselves. But, as these were of a general character, the information thus gained, as to the various excitant causes of disease and death throughout the kingdom, must necessarily be limited, unless in cases where the occurrence of special circumstances furnished occasion for a more detailed account of such causes; as, for instance, some peculiarity in the trade or employment followed in the district, an unusually high rate of mortality, or

the outbreak of a violent epidemic, which has occasioned the employment of an inspector to visit and report upon its sanitary condition. Mr. Paine observed, that great assistance would be rendered to the Registrar-General in the prosecution of his researches, and a great boon conferred upon the medical profession and the public, by the existence throughout the kingdom of a regularly organised staff to vigilantly watch over and investigate the death-rate of each district; to report upon its topography, its commercial and industrial peculiarities, the general state of its drainage, water-supply, and other conditions essential to a proper sanitary status; and to record all circumstances adverse to health, in indicating the localities where epidemic diseases more especially prevail, as well as those which are comparatively exempt from such diseases, and in detailing the hygienic agencies which were most useful in combating epidemic visitations.

Mr. Paine considered that the staff might be obtained by the appointment of local officers of health; or that, if the time has not yet arrived for the recognition by the legislature and the public of the true economy of such a measure in life and money value, the duty might, in the meantime, be confided to the medical staff of the Poor-law Board, who would for the present discharge it for a moderate addition to their present remuneration. In the event of a failure from without to obtain this aid from either of the above sources, the Epidemiological Society should appeal to the profession for their assistance, and suggest to them the means by which the desired object could be most effectually carried out. Mr. Paine gave a form of table for recording the course and history of epidemic visitations, which, when filled up from various districts, might be sent to the Society for arrangement in a concise and statistical order.

With regard to the advantages of a mixed character, Mr. Paine considered that to the public these would be of great importance, inasmuch as by an acquaintance with the labours of those employed on the field of sanitary inquiry, the public would be led to recognise the interest which each member of society possessed in the success of such labours. What was already known by the general public had had the effect of lessening the opposition to sanitary improvement. Much more would be done, if, in addition to this general interest, the attention of each individual were aroused by authentic published statements to the peculiar circumstances of his own locality, its status of health, its death-rate, and the sources of disease existing there. If the means of preventing and combating diseases were clearly pointed out; if it could be shown clearly how much the promotion of his own health and that of his neighbours, as well as the enjoyment of social and moral comfort, depended upon his own exertion, what a stimulus would be created for further action.

Mr. Paine next proceeded to demonstrate the effects of sanitary supervision on the health of Cardiff. The contrast between the year 1849, and the seven years which preceded it, was shown.

	Seven years preceding 1849.	In 1849.
Average population	12000	15000
Births (total)	2432	460
Deaths	2532	759
Excess of deaths over births	100	299
Average annual mortality	362	—
Mortality per 1000 inhabitants	30	50
Deaths from cholera and diarrhœa	—	390
Percentage of deaths from cholera, diarrhœa, and dysentery, to total deaths	—	51

From 1849, the town was placed under the provisions of the Health of Towns Act. The improvements were at first, necessarily, only palliative; but, in process of time, sanitary measures of various kinds were extended, and with very marked results, so as to reduce the death-rate from 30.95 per 1000 in 1850 to 20.10 in 1858.

As regards the mortality from cholera in the epidemics of 1849 and 1854, respectively, the deaths from cholera in 1849, with a population of 15,000, were 393; and in 1854, when the population had risen 26,500, the deaths from this disorder were 201 only; or a cholera death-rate of 26.20 per 1000 in the first period, and of 7.64 per 1000 in the latter. Sanitary supervision was equally effective in diminishing mortality from the fever, which was seldom if ever absent from Cardiff previous to 1850. In 1853, the deaths from this disorder were 38; for 1854, 18; for 1855, 10; for 1856, 15; for 1857, 20; for 1858, 19. Cardiff has exhibited during the last five years, a death rate from fever, one half below that of the general population of the kingdom.

Mr. Paine concluded his paper by stating, that the facts which he had endeavoured to set forth, demonstrate to the profession the scientific advantages they may attain by extended sanitary organization; and to the public, that they too, have a large interest in the development of sanitary progress, calculated as it is to ensure the preservation of life, the promotion of health, and to them may be safely added the moral and social well-being of all classes of the community.

Dr. Milroy observed that he had been an eye-witness of the remarkable zeal and ability which Mr. Paine devoted to his duties as the medical officer of health at Cardiff. He bore willing testimony to the reality of the results described in Mr. Paine's paper, and which were entirely due to the exertions of that gentleman. Dr. Milroy added, that in all his experience, he had nowhere seen the sanitary experiment so faithfully and earnestly carried out, or the beneficial results so well marked, as at Cardiff. He regarded Cardiff, in its present condition, as a model worthy of imitation by other towns desirous of the benefits of sanitary supervision.

Mr. Edwin Chadwick considered Mr. Paine's paper as most valuable, affording as it did a test of what zeal and ability on the part of the medical officer can effect. But observed that, under the present system, we must not expect to see results like those of Mr. Paine in one case out of ten; for medical officers were in general restrained from the exercise of free and independent action. On that account, he was of opinion that medical officers of health, and union medical officers, to do their duty effectually, should not be at all dependent upon private practice. Medical officers were frequently opposed by owners of cottages and other property, in the right performance of their duty. Mr. Chadwick added, that he had been accused of parsimony in dealing with medical officers, but he repelled the accusation, and had no hesitation in stating, that the heroism, the disinterestedness, and zeal of the medical profession, was an honour, not only to that profession, but to the times in which we live.

Dr. Greenhow concurred in all that had been said of Mr. Paine's paper, because he was of opinion that its views and results were calculated to give a stimulus to sanitary progress. The establishment of sanitary measures, as an institution of the country, could only be effected by enlightening the people, and not only them, but the House of Commons, in the leading principles of sanitary science. As it cannot be expected that with the present remuneration, medical men in practice in provincial and other towns in the country, will devote the necessary time to investigate the causes and statistics of disease, or to make topographical and other inquiries; it seemed to him necessary, indeed indispensable, that a staff of responsible officers, competent for all such duties, should be appointed by the government.

After some remarks from Dr. Burdon Sanderson, to the effect that careful inquiry in the district of Paddington, of which he was medical officer of health, had revealed great neglect of vaccination among children, and that he had in consequence caused many of these children to be carefully vaccinated; the thanks of the society were unanimously accorded to Mr. Paine, and the meeting adjourned at 10 o'clock.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 8th, 1859.

F. C. Skey, Esq., President, in the Chair.

On the motion of Sir Charles Locock, seconded by Dr. Webster, a vote of thanks was unanimously given to the late senior Secretary, Mr. Spencer Smith.

The President returned thanks for the honour the Society had done him in electing him to office.

A CONTRIBUTION TO THE STATISTICS OF CANCER, COLLECTED FROM THE RECORDS OF THE MIDDLESEX HOSPITAL.

BY SEPTIMUS W. SIBLEY, ESQ.

This communication was the result of an examination of 519 cases of cancer, with the records of 172 *post mortem* examinations. The more recent cases had been reported with uniformity and with some degree of fulness; some of the older cases were less perfect. The diseases embraced within the limits of the paper were defined, and distinguished from those which had been excluded from consideration. A table was then given, in which the seat of the primary cancer in each of the 519 cases was exhibited. There were 103 instances in the male, and 416 in the female; amongst the latter there were 191 cases of cancer of the breast, and 156 of uterine cancer.

There were three examples under the age of ten (all males), and one between the age of ten and twenty. Tables were given, in which the ages were arranged in decennial periods, the cases of breast and of uterine cancer being placed in separate groups. The average age of those attacked with uterine cancer was 43·28 years; with breast cancer, 48·6.

Of the female cancer patients, 83 per cent. either were or had been married, and amongst the single women the disease occurred oftener in the breast than in the uterus. Of the married women, 86 per cent. of the uterine, and 74 per cent. of the patients with breast cancer, had borne children. The average number of the births was 5·2 among the former, and 3·89 among the latter. The interval between the last pregnancy, and the proportion attacked before and after the cessation of the catamenia, were given.

The duration of life (from the first discovery of the disease), in patients who had not been operated on, varied greatly in the different classes of cases. In the breast it was 32¼ months; in the uterus, 14; in the stomach, 8½; in the rectum, 34; in the lip, face, etc., 53; in the penis, 34½; in the bones, 10; in the labium, 29. These figures were not perfectly comparable, as in some cases, especially the external cancers, the period given was the entire duration of the disease, whilst in others (as in the stomach) the period was only that during which the symptoms were present.

An account was then given of the operations (by the knife) in cases of cancer of the breast. Three patients out of 60 died from the effects of the operation. The average duration of life of those who were operated on was 53·2 months. In comparing this with the duration of life in cases in which the disease was allowed to run its natural course (32·25 months), it should be remembered that the cases submitted to operation are more or less selected cases.

As to the hereditary nature of the affection, the difficulties in obtaining accurate information upon this point were first alluded to. The chief of these was the very imperfect knowledge which most people, but more especially hospital patients, possess of the diseases to which their relatives had been subject. Out of 305 cases, in which the point had been particularly inquired into, 34 patients remembered to have had a relation affected with cancer. A table is given of the seat of the disease in each of the 34 cases, in 17 of which the breast was the part affected. Tables were also given, in which the degree of relationship of the cancerous relative was shown, and also the proportion affected on the father's and on the mother's side. Out of the 34 cases, in six more than one relative was cancerous, and in one instance (the chief features of which are mentioned) no fewer than five relatives suffered from cancer.

Phthisis existed in 50 cancerous families out of 130. Similar tables to those before mentioned were given, in which the degree of kinship was exhibited; it being also noted whether the disease was on the father's or the mother's side.

The notes of the 172 *post mortem* examinations were next analysed. In the first place, a table was given, in which the seat of the primary cancer in each instance was exhibited. The cases were then arranged in the following groups:—1. Cancer of the breast. 2. Cancer of the uterus. 3. True cancer of other organs. 4. Epithelial cancer. A series of tables followed, in which the secondary cancers were enumerated, and the cases arranged as follows:—*a*. The disease strictly local. *b*. Involving also the lymphatics of the part. *c*. Involving the lungs and other parts, the liver being unaffected. *d*. The liver cancerous, the lungs being free from this disease. *e*. Those cases in which there were tumours in distant parts of the body, but both the lungs and liver were free from the disease. In each form of the affection, a list of the non-cancerous diseases found in the bodies of the cancer patients was appended.

The bearing of the foregoing facts on the mode in which cancer is disseminated throughout the body was next alluded to, three distinct modes of multiplication being recognised: 1st, the growth of tumours in the immediate neighbourhood of the cancer; 2nd, the development of cancer in the lymphatics of the part; 3rd, the formation of cancerous tumours in distant parts of the body.

In regard to the cachexia, it was noticed that this condition only became developed as the ulceration and sloughing extended, and could not be attributed to pre-existing changes in the condition of the blood of the patient. In nearly all instances the patient died from the ordinary effects of ulceration, or from the interference with vital functions.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, March 31st, 1859.

LOCAL ASSESSMENTS EXEMPTION ABOLITION BILL.

General Buckley inquired of the Home Secretary what course it was his intention to take with regard to this Bill.

Mr. S. Estcourt said that the claims put forward by charitable, scholastic, and literary institutions, to exemption from local assessments, had been very numerous. Many of these institutions had represented that if they were obliged to pay any rates at all, their means of usefulness would be either totally put an end to, or very much circumscribed; and, after hearing several deputations which had waited upon him on the subject, he was persuaded that he should not be able to induce the House to pass this Bill in its present shape. [*Hear, hear.*] There now lay before him two courses—either practically still to preserve as a principle of universal application the liability to rating, or to withdraw the Bill, and deal only with that part of the subject which related to public institutions and public buildings, in which case he thought the proper course would be to proceed by means of a Royal Commission.

Tuesday, April 5th, 1859.

POOR-LAW MEDICAL CHARITIES (IRELAND) ACT AMENDMENT BILL.

The order for the further proceeding with this Bill was also discharged.

Wednesday, April 6th, 1859.

NAVAL MEDICAL SUPPLEMENTAL FUND.

Sir S. Northcote, for Mr. Corry, moved for and obtained leave to bring in a Bill to continue the Act for the regulation of the Annuities and Premiums of the Naval Medical Supplemental Fund Society.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Hawkins. On March 31st, at 36, Colet Place, Commercial Road, the wife of J. Stilwell Hawkins, Esq., Surgeon, of a son.

Henderson. On April 3rd, at Ramsgate, the wife of T. A. Henderson, M.D., of a daughter.

Knaggs. On April 3rd, at Brompton, Kent, the wife of Henry Knaggs, Esq., Assistant-Surgeon 59th Regiment, of a daughter.

Mann. On March 30th, at Manchester, the wife of *R. Manners Mann, Esq., Surgeon, of a daughter.

Shaw. On March 31st, at Meissen House, Upper Clapton, the wife of Archibald R. Shaw, M.D., of a son.

Smith. On April 5th, at Great Hadham, Herts, the wife of Frederick Moore Smith, M.D., of a daughter.

Thompson. On April 2nd, at 16, Wimpole Street, the wife of *Henry Thompson, M.B., F.R.C.S., of a son.

MARRIAGES.

Collins—Wiehe. Collins, Francis, M.D., Assistant-Surgeon 1st Battalion Her Majesty's 5th Fusiliers, to Olympe Amélie, eldest daughter of P. A. Wiehe, Esq., of Port Louis, Mauritius, on January 12th.

Hall—Gibbs. Hall, F. Russell, Esq., Surgeon, Cambridge, to Mary, eldest daughter of the late James Gibbs, Esq., of Mount Street, Grosvenor Square, at Weldreth, on April 2nd.

Sidney—Caird. Sidney, Henry Marlow, Esq., King's Dragoon Guards, to Ellen Julia, eldest daughter of William Caird, Esq., Surgeon, of Exeter, at the Cathedral, Madras, on February 25th.

DEATHS.

Cowan, James McHaffie, M.D., Army Medical Staff, suddenly, at Chichester Barracks, on March 22nd.

*Eddison, Booth, Esq., Surgeon to the General Hospital, Nottingham, at Funchal, Madeira, on March 7th.

Horton. On March 22nd, at Chalford, Gloucestershire, Mary, wife of Richard Horton, Esq., Surgeon.

Keal, John, Esq., Surgeon, at Melton Mowbray, aged 67, on March 26th.

Kidd, Richard Driver, Esq., Surgeon, at 1, Leinster Square, Bayswater, aged 32, on April 5th.

Rumball. On March 24th, at Harpenden, Herts, aged 60, Rebecca, wife of James Q. Rumball, Esq., Surgeon.

PASS LISTS.

Royal College of Surgeons. The following gentlemen, having undergone the necessary examinations in Anatomy and Physiology, terminating on March 30th, will be admitted to the *pass* examination, when qualified, viz.:—

Guy's Hospital.

Addison, William John
Arminson, John
Barrett, Alfred Edward
Beddard, James
Charlton, Egbert
Coleman, Edmund Waller
Cook, John
Evans, Alfred Wm. Armour
Hill, John Daniel
Hodgson, John Burkitt
Holman, Thomas
Hopkins, Alfred
Lewell, James Joseph
Lovegrove, Charles
May, Joseph
Rowbotham, William
Salmon, William Thomas
Tuck, Buckmaster Joseph
Webster, Frederick Richard

St. Thomas's Hospital.

Bolt, Robert Andrew
Caudle, Adolphus Wm. W.
Curtis, Collins
Fernie, Henry Mortlock
Griffith, John
Grove, Samuel
Howse, William
Irvine, George Richard
Lloyd, Albert
Mead, H. T. H.
Nowell, Arthur Henry
Payne, Edwin
Phillips, George Griffith
Smith, Charles John
Stokes, William

University College Hospital.

A Beckett, Wm. Goldsmid
Belinfante, Simon
Cooke, John
Franks, John
Harden, Charles
Istance, Richard
Kipling, Thomas
Lane, William Beamish
Orme, Charles Edward
Roberts, John
Smith, Seth
Thompson, John
Trotter, Charles John
Whitgreave, Vincent

St. Bartholomew's Hospital.

Edye, Stonard
Hammond, Francis James
Harris, William John
Hogan, Francis Vincent
Shine, William Lamb
Spouncer, Frederick Charles
Weekes, W. H. Carlisle

King's College.

Anderson, Mark French
Drewry, G. Overend
Hawkins, Thomas Henry
Hicks, George Augustus
Orton, Theodore
Royle, Arnold

Liverpool.

Bride, John
Miller, William
Smith, Joseph Kellett
Warburton, Alfred

Manchester.

Andrew, A. Littlewood
Dickins, Frederick Victor
Jameson, John Bland

Calcutta.

Beckett, George Macartney
Cullen, Peter
Reid, John

Middlesex Hospital.

Cresswell, John Pearson
Tyler, Edward Alfred

St. Mary's Hospital.

Cocks, Benjamin
Chisholm, Edwin

St. George's Hospital.

Lee, Frederick Fawson
Roberts, Arthur

Birmingham.

Bullock, Thomas William
Ryland, Thomas Edmund

Westminster Hospital.

Clarke, Sidney Edward

Newcastle-on-Tyne.

Huntley, Robert Elliott

Hull.

Bell, John William

Charing Cross Hospital.

Chandler, Edward

London Hospital.

Pechey, William Crisp

Grosvenor Place School of Medicine.

Trevor, James Ebenezer

Leeds.

Jessop, Thomas Richard

Edinburgh.

Glasier, George William
Hall, Robert Arnott

Apothecaries' Hall. Members admitted on Thursday, March 31st, 1859:—

Cheshire, Edward, Vyse Street, Birmingham
Claremont, Claude Clarke, Camden Town
Illingworth, J. A., Maindee, Newport, Monmouthshire
Jotham, Edwin Sparhawke
Quennell, John Cooper
Lewer, Alfred
Ogden, David Henry, Skipton Craven
Saunders, George James Symes, Charmouth
Smith, Charles Joseph Oliver, Keyworth, Nottingham
Smith, Francis
Smith, Walter Stephen, Sheffield
Woolrych, Arthur Edward
Wyer, Otho Francis, Leamington Priors

HEALTH OF LONDON:—WEEK ENDING APRIL 2ND, 1859.

[*From the Registrar-General's Report.*]

The Returns for last week indicate a favourable state of the public health. In the week that ended March 5th, the deaths registered in London were 1215; in the three weeks that followed, they averaged about 1160; in the week that ended last Saturday, they declined to 1067, of which 603 were deaths of males, and 464 those of females.

In the ten years 1849-58, the average number of deaths registered in the weeks corresponding with last week was 1400; but as the deaths in the present return occurred in an increased population, they can only be compared with the average raised in proportion to the increase, namely, with 1540. The result of the comparison is, that the deaths of the last week were less by 473 than the number which the average rate of mortality would have produced. This great reduction is due in part to the fact that, by an improvement in the working of the registration, deaths on which inquests have been held are now registered soon after they occur, and therefore with greater uniformity throughout the quarter, for violent deaths were last week 49, whereas the corrected average for the last week of the quarter in previous years is 128; but, after making due allowance for this circumstance, the chief part of the decrease in the deaths *registered* must be assigned to a comparatively good condition of health among the population.

Scarlatina was fatal last week in 56 cases, diphtheria in 13, showing, in the two diseases together, but a small decrease on recent weeks. The deaths from diphtheria occurred in the following sub-districts:—St. Paul Hammersmith 1, St. Margaret Westminster 1, St. Mary Marylebone 1, Christchurch Marylebone 1, Islington West 1, Islington East 1, Haggerstone West 1, St. Olave 1, Borough Road 1, St. Peter Walworth 2, Waterloo Road first part 1, Kennington first 1. There were 15 deaths from small-pox, all, except 3, amongst children. A man, aged 72 years, died in Grosvenor Street West, of English cholera, after an illness of seven days.

Last week, the births of 952 boys and 885 girls, in all 1837 children, were registered in London. In the ten corresponding weeks of the years 1849-58 the average number was 1807.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·622 in. The readings varied from 29·03 in. to 30·16 in. The mean temperature of the week was 42·6°, which is 0·7° below the average of the same week in forty-three years (as determined by Mr. Glaisher). On Sunday and Monday, the mean temperature was about 7° *above* the average; on Wednesday and two following days, it was from 6° to 9° *below* it. The thermometer in the shade attained its *highest* point on Tuesday, viz., 56·5°; it fell to its *lowest* point, 25·3°, on Friday, or 6·7° below the freezing-point of water. The range of temperature in the week was therefore 31·2°. The mean daily range was 14·5°. The difference between the mean dew-point temperature and air temperature was 6°. The mean degree of humidity of the air was 80; on

Wednesday and Saturday, it approached the point of complete saturation, viz., 100. The mean temperature of the water of the Thames was 47·8°. The wind blew generally from the south-west. The sleet or melted snow measured on Wednesday was 0·50 in. The snow began to fall soon after noon on that day; after two hours, it remained on the ground, and increased to the depth of 6 in. The temperature fell to 32·4° at 3 h. P.M., and continued at that point till 8 h. P.M.

PUBLIC VACCINATION.

The following instructions have been issued by the Privy Council:—

1. Except there be immediate danger of small-pox, vaccinate only subjects who are in good health. Satisfy yourself that there is not any eruption behind the ears, or elsewhere on the skin; nor, even in an incipient stage, any irritation from teething. Under no circumstances vaccinate a subject who is seriously ill, or probably under the incubation of measles or scarlet fever. Do not re-vaccinate persons who in infancy have been efficiently vaccinated, unless they be more than 15 years of age, or, if during any immediate danger of small-pox, more than 12 years of age.

2. Wherever there are proper means of doing so, vaccinate directly from the vesicle of a previous subject. Moist lymph, conveyed from case to case in a vial or in other like manner, must not be used for vaccinating later than eighteen hours (or, in very hot weather, twelve hours) after it has been taken from its source.

3. Vaccinate by four or five separate punctures, so as to produce four or five separate good-sized vesicles; or, if you vaccinate otherwise than by separate punctures, take care to produce local effects equal to those just mentioned.

4. Take lymph only from children who are in perfect health. Especially satisfy yourself as to their freedom from eruption on the skin.

5. Take lymph only from perfectly normal vesicles, and not later than the day week after vaccination. Except on emergency, do not take from any one average vaccine vesicle more lymph than will suffice for the immediate vaccination of five subjects, or for the charging of five ivory points. Do not take lymph from cases of re-vaccination.

6. Register the results of vaccination only after having inspected the cases. Register as "successful" no case of primary vaccination, unless the course of the vesicle have been strictly regular according to the subjoined description, A. Register as "successful" no case of primary revaccination, unless either the regular vaccine vesicle have ensued, or the results have been normally modified according to the subjoined description, B.

7. Use every proper care and exertion to maintain at your vaccinating station the means of vaccinating successively from subject to subject without the employment of dried lymph. If from any cause your supply of lymph ceases, or becomes unsuitable for further use, make immediate written application for a fresh supply; addressing your letter "To the Registrar of the National Vaccine Establishment, Privy Council Office, London, S.W."

8. Scrupulously observe in your inspections every sign which tests the efficiency and purity of your lymph. Note any case wherein the vaccine vesicle is unduly hastened or otherwise irregular in its development, or wherein any undue local irritation is excited; and if similar results arise in other cases vaccinated with the same lymph, desist immediately from employing it.

Signs of Successful Vaccination and of Successful Re-Vaccination.

A. "When vaccination has been successfully performed on a healthy infant, the puncture may be felt elevated on the second day, and on the third, if examined with a magnifying glass, appears surrounded by a slight redness. On the fifth day a distinct vesicle is formed, having an elevated edge and depressed centre. On the eighth day it appears distended with a clear lymph. The vesicle, on this, its day of greatest perfection, is circular and pearl-coloured; its margin is turgid, firm, shining and wheel-shaped. On the eighth day an inflamed ring or areola begins to form around the base of the vesicle, and, with it, continues to increase during the two following days. This areola is of a circular form, and its diameter extends from one to three inches. When at its height, on the tenth day, there is often considerable hardness and swelling of the subjacent cellular membrane. On the eleventh day the areola begins to subside, leaving, as it fades, two or three concentric circles of redness. The vesicle now begins to dry in the centre, and acquires there a brownish colour. The lymph which remains becomes opaque, and gradually concretes; so that about the fourteenth or fifteenth day the vesicle is converted into a hard round scab of a reddish brown colour. This scab contracts, dries, blackens, and about the twenty-first day, falls off. It leaves a cicatrix which is permanent in after life, circular, somewhat depressed, dotted or indented with minute pits, and, in some instances, radiated. The above described local changes, while in active progress, are attended by feverishness; first, from the fifth to the seventh day, so slightly that often the fact passes unobserved; and again more considerably during those days when the areola is about its height; the infant now being restless and hot, with more or less disturbance of stomach and bowels. About the same time, especially if the weather be hot, children of full habit not infrequently show on the extremities, and less copiously on the trunk, a lichenous, roseolar or vesicular eruption, which commonly continues for about a week. When vaccination is performed on such adults or adolescents as have not previously been vaccinated, and likewise when lymph is employed which has recently been derived from the cow, the resulting phenomena, as compared with the preceding description, are somewhat retarded in their course; and the areola is apt to be much more diffuse. There is also more feverishness; but lichenous eruption is less frequently seen.

B. "When persons who have once been efficiently vaccinared are, some years afterwards, re-vaccinated with effective lymph, there sometimes result vesicles which, as regards their course and that of the attendant areolæ, cannot be distinguished from the perfect results of primary vaccination. But far more usually the results are more or less modified by the influence of such previous vaccination. Often no true vesicles form, but merely papular elevations surrounded by areolæ; and these results, having attained their maximum on or before the fifth day, afterwards quickly decline. Or if vesicles form, their shape is apt to vary from that of the regular vesicle, and their course to be more rapid; so that their maturity is reached on or before the sixth day, their areolæ decline on or before the eighth day, and their scabbing begins correspondingly early. In either case the areolæ tend to diffuse themselves more widely and less regularly, and with more affection of the cellular membrane, than in primary vaccination; and the local changes are accompanied by much itching, often by some irritation of the axillary glands, and in some cases on the fourth or fifth day by considerable febrile disturbance."

Gregory, *revised by* Ceely *and* Marson.

ROYAL COLLEGE OF SURGEONS OF ENGLAND: EXAMINATION PAPER.

The following questions were proposed in pathology, surgical anatomy, and surgery, to candidates for the Diploma of Member of the College, at the examination, by written papers, held on April 5th, 1859.

1. Describe the signs of *inflammation* in an external part. Describe also the state of the vessels and the blood in a part which exhibits the signs of a fully developed inflammation. And describe what changes take place in "Resolution" of the inflammatory attack.

2. Describe the mode of union in the case of an *incised wound*. Describe how far the process may be considered inflammatory, whether the union may be effected without any marks of inflammation, and in what manner inflammation may interrupt the process of union.

3. What is the nature of an *artificial anus* when the result of a strangulated hernia? What changes must have taken place in order to its formation, and what changes are required for its establishment?

4. What is the state of the tunica vaginalis testis after the radical *cure of a hydrocele?*

5. State whether the quantity and quality of the *urine* be altered by *injury to the spinal cord*, as in transverse fracture of the vertebræ.

6. What are the causes assigned for the *redundancy of lithic acid* in the urine? How is the excess ascertained? What are the injurious effects, if the excess continue? And what is the treatment of such excess, prophylactic and curative?

CORK MEDICAL PROTECTIVE ASSOCIATION.

At the Annual Meeting of this Society, held on Thursday, March 17, Dr. Harvey in the chair, the following resolutions were unanimously passed:—

1. Proposed by Dr. Beamish, seconded by Dr. Gregg—

"That the report now read be adopted, printed, and circulated; that the resolution unanimously passed at the meeting held on the day of be confirmed as the second rule of the Association."

2. Proposed by Dr. Morrissy, seconded by Dr. Brodie—

"That we recognise with much gratification the successful results of the labours of the Committee within the past year, as evidenced among other things, by the improved position of a considerable number of medical men holding poor-law appointments, and we doubt not but that by continuing in their present straightforward course of supporting alike the claims of the medical officers and the sick poor, they will still further enlist public opinion in favour of that justice for all parties, which it has ever been their object to establish."

3. Proposed by Dr. Townsend, seconded by Dr. Meade—

"That the increase of the pay of Army Medical Officers and the placing them in a higher rank than they have hitherto held, together with the promise of advancing Naval Surgeons to similar privileges, augurs favourably for raising the status of these members of the profession in their several departments, which they ought to hold."

4. Proposed by Dr. Popham, seconded by Dr. Tanner—

"That this Association deem the new Medical Reform Bill a seriously defective measure, inasmuch as no provision has been made for that sound preliminary and subsequent practical education for entrance into the profession which has been on several occasions urged on the legislature. We would, therefore, respectfully suggest to the Branch Medical Council for Ireland to take the initiative in recommending such change as will secure, by future amendments of the Bill, this important provision."

5. Proposed by Dr. Mackesy, seconded by Dr. Corbett—

"That it appears to this meeting essential for the interests of the community that men who are conversant with the principles of sanitary science should aid in all legislative deliberations bearing on the public health generally, as well as on that of the army and navy. We therefore observe with satisfaction that the late movement by the Medical Association of Ireland has opened a door towards securing a benefit at once to the public and to the profession, by seeking for a provision for the representation of the medical body in Parliament."

6. Proposed by Dr. Donovan, seconded by Dr. Baylie—

"That we have seen with much indignation the attempt of the English Poor-law Board, by their late rules, virtually to ignore the qualifications of the Irish and Scotch Medical and Surgical Colleges; and that this Association do, by every legitimate means within their power, seek to insure that reciprocity of qualification in every part of the United Kingdom which, it is plain, the new Registration Act fully contemplated."

7. Proposed by Dr. Lloyd, seconded by Dr. William Cronin—

"That the local press of Cork, as well as the medical press of England and Ireland, which has for years supported the interests of the medical profession, deserves, and is hereby accorded, the best thanks of the meeting."

8. Proposed by Dr. O'Connor, seconded by Dr. Godfrey—

"That the long and disinterested exertions of Dr. Corbett on behalf of the medical profession, need no comment; yet we beg to thank him specially for the important services which he has rendered to Poor-Law Medical officers, by having acted as guardian and member of the dispensary committee within the last year; and we sincerely trust that, in the event of his re-election, he will continue to hold his position, in discharge of which he gained the confidence and respect of all his brother guardians.

Fifty members of the profession from all parts of the province and county dined together. Immediately preceding dinner being served, an address, with four beautiful salvers, were presented to the president, Dr. Harvey; the vice-president, Dr. Meade; the treasurer, Dr. Corbett; and the honorary secretary, Dr. Armstrong, in testimony of their zealous services in upholding the interests of the profession.

The Prize Medal, which was presented by the President (Dr. Corbett) of the Association of 1857-8, for the best reported medical or surgical cases, treated in the Cork hospitals, was, on Wednesday, March 23rd, awarded to Mr. W. Henry Jones, medical student. The cases of his chief competitor, Mr. Moriarty, were by the Council (and subsequently by an unanimous vote of the Association) deemed well worthy a certificate, which it was determined should be presented to this young gentleman, signed by the officers of the Society. The President (Dr. O'Connor) Professor Harvey, and Dr. Corbett urged on the students present the value of the bedside instruction, and of their keeping a record of the cases under treatment in hospital.

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

The anniversary of the foundation of this institution was celebrated at the London Tavern, on Wednesday evening—the Right Hon. Lord Stanley, in the chair. There were also present Lord Dynevor, Mr. J. Briscoe, M.P., Mr. J. H. Gurney, M.P., Mr. D. Pugh, M.P., Ven. Archdeacon Robinson (Master of the Temple), Admiral Carnac, Captain Eastlake, Mr. Propert, and several other members of the medical profession.

The usual loyal and patriotic toasts having been disposed of,

The noble Chairman rose to propose the toast of the evening, "The President of the Institution, and success to the Royal Medical Benevolent College." Nothing could induce him to stand forward as the advocate of the institution, if its claims rested solely upon the fact that the word "benevolent" was included in its title. He believed that there were many institutions which claimed to be benevolent without being in any degree beneficial; that there were many institutions in which the wish to be beneficent was more conspicuous than the result of their working in that direction. When, however, the public were called upon to aid charitable institutions, they should carefully distinguish between those institutions which professed to do good and those in which the subscriptions of the benevolent were, with the least amount of proportionate expenditure, made to afford the greatest amount of public good. He would not stand there as the advocate of the Medical Benevolent College, if it were not in his power to give a satisfactory answer to these two questions—Was the obect of the institution conducive to the public advantage? Were the means which it employed sufficient and efficient? The object was to afford assistance to those members of the medical profession whose success was not equal to their deserts, and to their widows and children. It was impossible not to admit the fact that the medical profession was that which met with the least liberal recognition from the public. Officers of the army and navy enjoyed their half-pay, and gentlemen employed in the civil service of the country had a sufficient retiring alllowance. The law, as a profession, was a lottery, but no one could deny that many of those engaged in it drew splendid prizes. Literary men had the benefit of having their merits immediately appreciated, and the popularity which attended their labours was not the least reward which they as a body obtained. He did not want to overstate the case of the medical profession, but it was notorious that the members of that profession were left without any provision other than that which they could make for themselves. [*Hear, hear.*] They were dependent upon the judgment of the public, and that judgment was not at all times discriminately exercised. The slightest misadventure, nay, the mere appearance of a rival in the field, was often sufficient to injure the prospects of a medical man for life. The medical man had no rest from his labours. The lawyer had his long vacation, the members of the civil service had their stated hours of work, and the officers of the army and navy, however great was the strain upon them in times of war, could not be said to be overworked in times of peace; but the medical man had no command of his own time, save at the expense of the harrowing reflection that, while he consulted his own ease, he overlooked the pain and anguish of his suffering patients. [*Cheers.*] He mentioned this to show the absorbing nature of the profession; and it was owing to the same cause that in the legislature the medical profession was of all others the most inadequately represented. In the army and in the navy, a man who exposed himself to personal danger was honoured with the approbation of his country; but the medical man, although hourly exposing himself to similar danger for the good of suffering humanity, enjoyed no such reward; for, no matter how pestiferous might be the sufferings to which he exposed himself, his moral bravery was taken as a matter of course. Of course when a man entered an overcrowded profession, he had to submit to the economical laws hich all professions were regulated; and, when he applied lief to an institution like the present, he had a right to

show that he had done his best to attain professional independence. There are at present 150 pupils receiving their education at the college; the annual subscriptions, which are yearly on the increase, amount to £3,000; the endowment fund now stands at £3,600; and the existing debt is £3,600, which is more than covered by the value of the property on which it is secured. His lordship concluded with a warm appeal on behalf of the institution, and a high eulogium upon Mr. Propert, the founder of the charity.

Mr. C. W. W. Wynn returned thanks.

Several other appropriate toasts followed.

The subscriptions of the evening amounted to £928:17:6, besides which there were announced two legacies, one of £3,000 and another of £50.

Vaccination. An order has been issued from the Privy Council Office stating, that whereas by the Public Health Act of 1858, the Privy Council are empowered to issue regulations for securing the due qualification of all persons to be contracted with by guardians and overseers of unions and parishes in England for the vaccination of persons resident in such unions and parishes, it is enacted "That no contract for vaccination shall be entered into by such guardians or overseers, except with a medical practitioner who shall be legally competent to practise both medicine and surgery in England and Wales. Provided, that if in any union or parish it shall not be practicable for the guardians or overseers to contract with a person residing in or near to the district for which he shall be required to act, fully qualified as aforesaid, the guardians or overseers may report the circumstances to the Poor-Law Board, and the said Board may permit a contract to be entered into with a medical practitioner not fully qualified for so long a time as the said Board shall deem proper."

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

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Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Dr. F. J. Brown; Dr. Markham; Mr. T. Holmes; Dr. Laycock; Mr. J. S. Bartrum; Mr. Alfred Fleischmann; Mr. A. Emson; Mr. Stone; Dr. Camps; Dr. P. H. Williams; Dr. A. Inglis; Mr. W. Burton; Mr. O. Pemberton; Dr. Hayes Jackson; Mr. P. H. Chavasse; A Looker-on; Sperans; and Dr. J. Armstrong.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXX.] LONDON: SATURDAY, APRIL 16, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

TWO CASES OF ACUTE RHEUMATISM, WITH PERICARDITIS AND ENDOCARDITIS RESPECTIVELY, AND DOUBLE PNEUMONIA.

Under the care of JAMES RUSSELL, M.D.

CASE I. (Clinical Clerk—Mr. T. H. Bartleet.) C. G., aged 24, married, a cooper, was admitted February 18th, 1859. A week before his admission, without any assignable cause, he was taken with shivering, and, on the following day, with rheumatic pain in his back and knees. In the course of the ensuing week, all his large joints became implicated in turn; the pain, however, being most severe in his knees and ankles, having left the knees more than once, but again returning to them. His urine was high coloured. During the last two days, he had a cough, and had spat a little "thick phlegm", of a dark brown colour. He had never had rhematism before. His parents had never suffered from rheumatism, so far as he was aware; but he thought that two of his sisters had been affected with that complaint.

On admission he was in a state of considerable depression; but the expression of his face was tranquil. Pulse 136; respirations 34. The tongue was covered with a thin brown fur. He had some oppression in breathing; there was complete absence of tenderness over the region of the heart, and no complaint of any pain in his chest. Effusion was present to a considerable extent in the right knee, in smaller quantity in the left. Both ankles also were swollen and puffy.

The cardiac dulness was extended, reaching above to the fourth rib, and on the right side to the left edge of the sternum. *Frémissement* was felt very distinctly over the region of the heart; and a very loud pericardial friction-sound, having a peculiar shrill creaking character, was audible, not only over the heart, but extensively over the upper region of the left chest, and faintly under both clavicles. Posteriorly, all the physical signs of consolidation of the lower part of the inferior lobe of both lungs were present; the dulness on the left side reaching to the inferior angle of the scapula, on the right not attaining that elevation by the distance of two inches. On the right side, the vocal resonance had a tremulous character, indicating the presence of some effusion into the sac of the pleura. In front, the chest was clear, and the respiratory sounds pure. A blister, four inches by five, was applied over the heart; he was directed to take ten grains of Dover's powder at night; and two grains of calomel with half a grain of opium every three hours. He was ordered to have two glasses of wine, milk, and beef-tea.

February 19th. He slept a little during the night. The pulse was steady, but very yielding; the respiration uniform. He lay on his back. He said his cough was troublesome, but during a prolonged visit he did not cough once: there was no expectoration. He had less pain in the joints. The tongue was white, brown in the centre. There was perspiration. The urine was copious. The bowels had been open once. The friction-sound had lost its creaking character. The dulness on the right side was advancing forwards into the lateral space. He was ordered to have four glasses of wine, to continue the calomel, and to take fifteen grains of Dover's powder every night.

February 20th. His aspect was satisfactory: he had less cough, and no expectoration. There was slight delirium and confusion. The pupils were rather contracted. He had profuse perspiration. The urine was copious. The bowels had not been open. *Frémissement* could not be felt. The friction-sound was loud and harsh. The cardiac dulness was somewhat lessened in extent. He was ordered to take, every three hours, two grains and a half of calomel and half a grain of opium; and a blister, six inches by five, was applied to the right side.

Feb. 21st. He had passed a bad night, and had slight delirium. Respiration was performed without labour, but he still complained of some oppression: he had less pain in the joints. The tongue was cleaner. He had passed two pints of urine in twenty-four hours. The bowels had been open once.

February 22nd. He complained of feeling very ill, though he was reported better by the nurse. He was emaciating considerably. The tongue was nearly clean. He had some oppression at the chest, but his respiration was free from labour. The cough was troublesome: no expectoration. His countenance was tranquil. He took nourishment. There was more effusion in the left knee, less in the right. He had profuse perspiration. The bowels were not open. He had passed two pints and a half of urine in the last twenty-four hours; a specimen from the total quantity was of deep brown colour, transparent, faintly acid, of specific gravity 1025; it gave a copious deposit of nitrate of urea on addition of nitric acid: it was free from albumen, and from any appearance of consequence, under the microscope. The dulness and bronchial breathing at the back of the chest had reached the spine of the scapula on both sides; in the supraspinous fossæ, respiration was pure and vesicular. There was slight ptyalism. The calomel was omitted; and he was ordered to continue the Dover's powder, to have five glasses of wine, and to take two grains and a half of pill of soap and opium every three hours.

February 24th. He was improving. The left elbow was very painful; the other joints were moved more freely. He had passed about a quart of urine, densely loaded with lithates. Perspiration continued. There was some increase in the effusion into the right pleural sac. The friction-sound over the heart was softer. A blister was applied to the left side, and he was ordered to take a grain of calomel and half a grain of opium every four hours.

February 25th. An additional glass of wine was prescribed, and the following mixture:—

℞ Quinæ disulphatis gra. ij; acidi sulphurici diluti ℥v; aquæ ʒi. M. Fiat haustus ter quotidie sumendus.

February 27th. The joints were nearly free. The urine amounted to two pints and a half in twenty-four hours; it was acid, of specific gravity 1026. He was ordered to omit the mercurial pills, and to take three grains of disulphate of quinine three times a day.

March 3rd. He looked quite alert, but did not sleep well. The joints were free, excepting the right knee. The cough still troubled him: he had some expectoration to-day, for the first time, of transparent mucus. The urine was densely loaded. The pericardial friction-sound was heard with difficulty, and the line of dulness in the posterior region of the chest was descending on the left side. He was taking four grains of quinine at a dose, and ten grains of compound soap pill each night.

March 5th. Not a trace of the friction-sound could be distinguished in the cardiac region (the sixteenth day after admission). Posteriorly, the physical signs had undergone no further change. The cough was irritative: he had some expectoration. He was ordered to have chicken.

March 10th. The heart's sounds were very feeble, especially the first: they were perfectly clear.

℞ Ætheris chlorici ʒ iij; ammoniæ sesquicarbonatis ℈ij; infusi quassiæ, aquæ menthæ piperitæ, āā ʒiv. M. Fiat mistura cujus sumat ʒi 4tâ quâque horâ.

March 12th. He was ordered to take two drachms of cod-liver oil three times a day.

March 15th. The inspiratory murmur on both sides of the chest, posteriorly, was partially vesicular; the expiratory remained bronchial. He got out of bed to-day without assistance.

March 22nd. The posterior region of the chest was resonant on percussion, excepting quite at the base. The respiratory sounds were vesicular, though on the right they retained a slight metallic pitch on deep breathing. His appetite was very good. He was much emaciated; and was ordered to have full diet.

March 25th. Vesicular respiration was restored posteriorly. Convalescence was established.

Table of Pulse and of Respirations.

	Pulse.	Resp.
February 18	136	34
„ 19	124	40
„ 20	122	32
„ 21	124	34
„ 22	116	27
„ 23	122	36
„ 24	122	38
„ 25	132	38
„ 26	132	32
„ 27	120	38
„ 28	124	36
March 1	130	30
„ 3	136	36
„ 5	136	34
„ 8	136	31
„ 10	132	28

Case II. (Clinical Clerk, Mr. E. Ryland.) A. T., aged 14, a servant, had been a girl of feeble health for some years, subject to cough and to pains in the side and head. She had always been dull since she had the measles. She had not menstruated. The present attack of acute rheumatism, which commenced about January 6th, was ascribed to cold caught in washing floors on her hands and knees. Her joints were swollen. She had never had rheumatism before. Her father's family had been subject to rheumatic gout, and a little brother was suffering at the time of her admission from rheumatic fever. During her illness, she had been treated with alkalies; a blister had been applied to the region of the heart; and she had taken pills of calomel and opium, which, however, were suspended, on account of the occurrence of diarrhœa, with much irritation in the bowels.

January 22nd. At this date, when she first came under Dr. Russell's care, she was very pale and feeble; considerably emaciated. She complained of general rheumatic pains, and lay on her back unable to alter her position. Her breathing was hurried, and accompanied by a slight irritative cough. Diarrhœa continued to occur at intervals, and the external muscles of her abdomen were highly irritable. There was exquisite muscular tenderness and irritability over the entire front of the chest, so that the gentlest percussion could hardly be endured. There was no extension of the cardiac dulness; the impulse of the heart was very feeble. A faint systolic bellows sound was heard at the apex of the heart, but was quite inaudible at the base. She was ordered to have two glasses of wine, beef-tea, milk, and two eggs, and to have an opiate enema.

January 24th. Her breathing was oppressed. She had cough, with scanty expectoration of tenacious uncoloured mucus. The physical signs of consolidation of the lower lobe of the left lung were present, except at the base, which remained comparatively clear. Rather small crepitation was heard over the right side posteriorly, and also over the front of the chest. A blister was applied to the left side.

℞ Tincturæ opii ♏xlv; potassæ bicarbonatis ʒiss; misturæ camphoræ ʒviij. M. Fiat mistura cujus sumatur ʒj 4tis horis.

She was ordered to take six grains of Dover's powder every night at bed-time.

January 26th. Yesterday, at the visit, she had just awoke from sleep, and was suffering much distress from constricted breathing, occasioned by spasmodic action of the muscles of respiration; this symptom, however, soon subsided. This day the expression of her face was satisfactory. Pulse 130; very feeble. The breathing was short, quick, and constricted. The tongue was chapped and irregular. She complained of pain, apparently muscular, over both sides of her chest. The cough was as before; the expectoration very scanty. There was consolidation of the lower lobe of the right lung; dulness was complete over the lower lobe of the left. A blister was applied to the right side.

January 29th. She had passed a good night. Pulse 128; very feeble. Respiration 26, but irregular and disturbed by irritative cough. The surface of the tongue was less irregular. Her voice was stronger. The countenance was satisfactory. Emaciation was considerable. The cough was much less. The pains had nearly left the joints. She had œdematous swelling of both feet, especially of the right. The irritability of the intercostal muscles was still considerable: the physical signs were unchanged.

February 1st. Pulse 132. Respiration 28; regular. The tongue was improving. She had more enjoyment of food, and was free from pain. She was ordered to take a grain of quinine daily, and eight grains of Dover's powder every night.

February 3rd. The nurse described the occurrence of fits of deficient memory and confusion of intellect, presenting themselves, with especial severity, after the patient had sat semierect. She had been very low and feeble, and at times quite incapable of expressing herself. She generally awoke from sleep in great discomfort, and at the visit this morning could scarcely speak from sobbing respiration; her pulse was exceedingly rapid. She was confused, and there was much difficulty in obtaining an answer from her. This uneasy condition subsided in a quarter of an hour. The abdomen was much diminished. There was very little cough. The physical signs were unchanged. She was ordered to have three glasses of wine daily.

February 5th. Pulse 132, very feeble and irritable. Respirations 34. She was in a remarkably dull torpid state, so that it was almost impossible to obtain an answer from her. Urine and fæces were passed under her, apparently from mere dulness. Nevertheless, she asked for food, put out her tongue when directed, and was obedient to directions. There was no delirium. Her sleep was uncertain, sometimes tranquil, sometimes uneasy. The appetite was good; the tongue quite natural; the cough was nearly gone. She had no expectoration. The sounds of the heart were very feeble. The dulness in the posterior regions of the chest was less decided; and some vesicular breathing was audible, with a little crepitation. She was ordered to have mutton, and four glasses of wine.

February 8th. The general symptoms were improving. She was more alert, though her urine was still passed into the bed; and the last stool, on the 6th, was voided in a similar manner. The natural resonance was almost restored posteriorly on the right side, and to a considerable extent on the left side also. Vesicular breathing was audible on both sides behind; coarse on the left, with sibilus. In front, respiration was nearly pure.

February 10th. Urine was still passed in bed; her mother informed us that she was apt to commit this indiscretion even when in health.

February 15th. Pulse 112; respiration irregular from sobbing. She was perfectly sensible to the calls of nature, and was much more intelligent. The bellows-sound at the apex of the heart was sharp and shrill, and was audible in the posterior region. Loud vesicular breathing was heard over both sides behind. She was ordered to have two glasses of wine; and to take two grains of quinine three times a day, and five grains of Dover's powder every night.

February 26th. Convalescence was established; the œdema had disappeared for some days.

Remarks. These cases afford a good illustration of the obscurity which often attends the general symptoms of asthenic pneumonia when occurring in the course of other disease. In the former case especially, there was complete absence of pain in the chest and of expectoration; the cough, although mentioned by the patient, was scarcely ever heard at the visit; and the breathing, though hurried, was attended with only slight oppression. The pain in the chest, in the second case, was evidently connected with rheumatism of the intercostal muscles, which, on many occasions, gave rise to much distress; the cough was rather more prominent; and, though expectoration was present, the sputa were uncoloured, and in very small quantity.

The cases also demonstrate in how important a degree the danger of pneumonia is derived from the circumstances under which it occurs; in both these patients, although the entire inferior lobe of each lung was involved, there were no symptoms which gave rise to special anxiety; and this, although in both the heart was implicated. In the man, the small amount of fluid effusion within the pericardium (if, indeed, any were present), was no doubt a very important element in explaining the absence of serious depression.

The symptoms of cerebral disorder which manifested themselves in the girl during the later period of her case, were doubtless due to exhaustion of her nervous power.

TABLE OF CASES OF DIPHTHERIA.

We commence to-day our promised tabular report upon the subject of diphtheria. The present report includes only cases which have occurred in London, and principally those which have been under observation at London hospitals; and the list, short as it is, comprises almost every case which, up to this time, has been admitted into any of our large hospitals. Thus it will be seen that the disease has assumed only a sporadic character in London; for, if any formidable epidemic had visited the metropolis, it would be impossible that, after more than a year's prevalence, no case should have been brought into St. Bartholomew's, King's College, Guy's, the London, and Westminster Hospitals; while several other large hospitals only confess to straggling, and some of them doubtful cases. We shall abstain from any attempt to sum up the results of our inquiry until we have laid before our readers all the materials which we have been able to collect. At present, we will merely observe, that the evidently sporadic character of the disease in London has prevented the reporters from taking down particulars of the meteorological conditions under which it occurred; and that, therefore, the third column in our table remains vacant. We have, however, noted there the date of occurrence of each case, in order that any of our readers who think it worth while may have the opportunity of comparing it with the statement of the weather in London published under the authority of the Registrar-General. For ourselves, we have not thought that any satisfactory conclusion could be thus obtained, and have therefore not troubled our readers with anything on that head.

While we have to acknowledge, with many thanks, the receipt of several interesting reports from our country associates, we cannot help believing that much information might be collected from others who have lived in districts where the disease has prevailed epidemically. We would therefore earnestly request gentlemen who are in possession of any data on the subject, whether tabulated or no, to aid us in making the present inquiry as perfect as possible.

1. Age and Sex.	2. Hygienic conditions; occupation, food and clothing, purity or impurity of air.	3. Meteorological conditions, date, etc.	4. Presence or absence of contagion.	5. Scarlatina.	6. Appearances and symptoms when first seen.	7. Time and situation of the leathery membrane.	8. Fungus.	9. Any affection of viscera (albuminuria, etc.)	10. Treatment and progress.	11. Indication and success of Tracheotomy.	12. Duration and event.	13. Post mortem appearances.	Remarks.
1. F. 11	Child of rich parents. Stinking cistern at top of house	June 1858.	No contagion.	....	Dysphagia. No constitutional disturbance. Small white speck on tonsil.	The white speck on tonsil gradually spread, and was removed by the forceps. No breach of surface. Large pieces vomited up in coughing.	No (microscope).	No.	Dysphagia not great. Dyspnœa gradually increased till 11th day, when tracheotomy was performed. Large spots of purpura showed themselves on 10th day	For dyspnœa, marked relief. Went on well for two days, then suddenly attacked with fatal syncope.	Died of syncope, 13th day.	No post mortem examination.	It was conjectured that a clot had formed & had become detached, stopping up some large vessel. E. Barker, Esq.
2. F. 2	Had been ill for a fortnight, loss of appetite, etc.	Jan. 17, 1859.	Resided in same house with a child who died of *false croup (?)*	....	Dysphagia. Swelling on left side of neck. Dusky redness of fauces.	Grey membrane on tonsils when first seen.	....	No.	Emetic. Steel. Nitrate of silver (½ dr. to the oz.) to the throat. Wine 6 ozs. a day. Improved rapidly.	No.	Recovered 10 days	....	St. George's: Jane White.
3. F. 19	History unknown.	Dec. 19, 1858. Weather moist, & very mild	....	Unknown	Dyspnœa. Tongue specked with depressed white spots.	Uvula and epiglottis when first seen.	No. Some bodies, at first taken for fungi, proved to be fatty acids (Dr. Harley).	Bronchitis. No albuminuria.	Nitrate of silver to throat, and stimulants. Dyspnœa rapidly increasing.	For dyspnœa.	Died of asphyxia, 2 days.	Bronchitis, hydatids of liver, exudation extended some distance down the œsophagus.	University College: Deborah Woolger.
4. M. 33	Railway porter.	April 4, 1858.	....	....	Dysphagia. Swelling in the throat.	Two days after commencem. of attack. Appeared first on uvula.	....	No.	Nitrate of silver locally. Chlorate of potash in 4-grain doses every 2 hours.	....	Recovered, 10 days	....	Symptoms very slight. University College: Thos. Cox. Dr. Jenner
5. F. 20	Servant, had lived in a damp house and was rheumatic.	March 19, 1858.	Had been waiting on a patient said to have had diphtheria.	Had had scarlatina.	Rigors; headache; pain in the throat.	False membrane seen three days after she was first known to be ill; above and behind the tonsils.	....	No.	Equal parts of strong hydrochloric acid & water locally. Chlorate of potash internally. The diphtheritic symptoms soon disappeared	....	Recovered rapidly from Diphtheria; but had rheumatic fever afterwards.	....	University College: Ann Reynolds. Dr. Jenner.
6. M. 17	A consumptive boy.	Feb. 14, 1858.	No contagion.	....	Dysphagia, dyspnœa, swelling about the jaws two days before admission.	False membrane over pharynx, uvula, and epiglottis.	....	No, except phthisis.	He was admitted in a dying state with low delirium, etc., and sank rapidly.	....	Died 3rd day of illness.	Abscess in tonsils, extensive false membrane, phthisis.	University College: H. Morris. Dr. Jenner

1. Age and Sex.	2. Hygienic conditions; occupation, food or clothing, purity, or impurity of air.	3. Meteorological conditions, date, etc.	4. Presence or absence of contagion.	5. Scarlatina.	6. Appearances and symptoms when first seen.	7. Time and situation of the leathery membrane.	8. Fungus.	9. Any affection of viscera (albuminuria, etc.)	10. Treatment and progress.	11. Indication and success of Tracheotomy.	12. Duration and event.	13. Post-mortem appearances.	Remarks.
7. M. 22	....	March 2, 1858.	....	....	Feverishness & dysphagia 4 days before admission.	Patches on posterior wall of pharynx and tonsils.	....	No.	Fauces sponged out with a solution of nitrate of silver (a dr. to the oz.) and chlorate of potash given. Anomalous eruption appeared in course of complaint.	....	Recovered, 10 days	....	University College: Charles Savory. Dr. Jenner.
8. F. 22	....	Nov. 29, 1858.	No contagion.	No scarlatina in the neighbourhood	Dysphagia. Slight dyspnœa.	False membrane on tonsils and uvula.	....	No.	Solution of caustic (30 grs. to oz.) locally. Liq. ammon. acet. with nitre, afterwards stimulants.	....	Recovered, rapidly	....	University College: Dora Hunt. Dr. Walshe.
9. F. 22	Had been much exposed to cold and fatigue, & was recovering from other illness.	Nov. 2, 1858.	None.	Had had scarlatina four years before.	Rigors, sweating, then sore throat & dysphagia; four days.	On uvula & back of pharynx.	....	Bronchitis.	Sesquichloride of iron every 2 hrs. hydrochloric acid & water locally, good diet & wine.	....	Rapid recovery.	....	University College: Ann Costello. Dr. Parkes.
10. M. 24	In hospital for excision of the knee, weak from secondary hæmorrhage.	Aug. 4, 1858.	None.	....	Tenderness of mouth, and dysphagia.	First appeared on roof of mouth.	Fungi found in membrane examined after death resembling penicilium glaucum.	....	Stimuli, dilute hydrochl. acid. Membrane receded & he improved for 3 d. Then a relapse occurred.	....	Died 5 d. after appearance of membrane.	Pneumonia grey hepatisation. Fauces, back of tongue, pharynx, & upper part of œsophagus coated with leathery membrane. Large abscess in situation of knee.	St. Mary's: Charles Gilks. Mr. Ure.
11. M. 30 (about)	....	About Jan. 7th, 1859.	....	....	Leathery membrane when first seen. No constitutional symptoms noted.	Ash grey membrane over left tonsil, uvula, and part of soft palate.	....	....	Nitrate of silver locally, chlorate of potash and dilute hydrochloric acid internally.	....	Recovered.	....	O. P. Charing Cross Hospital: Dr. Willshire.
12. M. 34	Porter.	April 6, 1858.	None.	....	Had been ill a week. Dysphagia; pectoral symptoms.	Time of appearance unknown. Numerous white patches on fauces.	....	Pneumonia. No albuminuria.	Solution of nitrate of silver locally, sesquichloride of iron and wine internally.	....	Recovered, 19 days.	....	Middlesex Hospital: Rd. Fone. Dr. Stewart.
13. M. 27	Footman.	Aug. 31, 1858.	....	....	Had been ill for 8 days, with pains in back, belly, & limbs, and loss of appetite.	Diphtheritic membrane noticed on Sept. 6, on soft palate, uvula, and tonsils.	No. The membrane consisted at first of granular epithelium, soon giving place to corpuscular fibrine.	No. Arms and legs covered with a rash of red blotches.	Hydrochloric acid locally, chlorate of potash & bark internally, stimulants and generous diet.	....	Died 6 days after appearance of leathery membrane.	No post mortem examination.	St. Mary's Hospital: Andrew Ware. Dr. Sieveking
14 F. 5½	....	Feb. 2, 1859.	Had been playing with a child said to have died of diphtheria.	Believed not to have had scarlatina.	Ailing a week. Pain in throat 2 days, principally referred to larynx; fauces covered with greyish patches of false membrane.	On admission, covering fauces.	....	No.	Liq. sodæ chlor. locally, tincture of sesquichloride of iron and wine internally.	....	Recovered, 28 days.	....	S. George's Hospital: Caroline Wright. Dr. Pitman.

[*To be continued.*]

Original Communications.

REMARKS ON THE USES OF BLEEDING IN DISEASES.

By W. O. Markham, M.D., F.R.C.P., Physician to St. Mary's Hospital, and Lecturer on Physiology and Pathology at the St. Mary's Hospital School.

[*Read at the Royal Medical and Chirurgical Society of London, November 23rd*, 1858.]

[*Concluded from page* 287.]

The explanation of the mode of action of the venesection here given, may not be easy, but this forms no grounds for the rejection of it in such conditions of disease, provided the facts here stated be correct, and the inferences rightly drawn from them. If, indeed, these facts, viz., the congested heart and its relief by venesection in such cases, be admitted as results of experience truly interpreted, we may accept their practical deduction, without waiting for a satisfactory theoretical explanation of them. Neither is it necessary for me to observe, that there are congestions of the heart, and periods in the course of all congestions, in which no relief can be hoped for from venesection. Nor need I stop to say a word as to the amount of blood to be taken in any given case; for it must necessarily be different in every case, varying with the nature of disease and the constitution of the patient.

I will, however, to prevent any possible misconception on this head, refer shortly to what, as I conceive, are the particular indications for its use in certain cases of pneumonia, and will also point out the special reasons, peculiar to this inflammation, which render venesection in the great majority of cases of pneumonia inapplicable, notwithstanding the existence of that condition of the heart, for which, as here supposed, venesection is of service. The chief special fact, which gives to venesection in pneumonia a vastly different significance from what it possesses in most other inflammations, has been too much overlooked in this modern and recent blood-letting controversy. The lungs, we must remember, are the prime sanguificating organs of the body. Unless the materials which supply blood are duly subjected to the aerating process, they cannot become serviceable for the purposes of nutrition. The new materials added to the circulation cannot become *blood* unless subjected to this process.

But this blood making process is necessarily arrested, and in proportion to the extent of the pneumonia, that is to say, in so far as the function of the lungs is hindered by the inflammation; and it is arrested so long as the inflammatory process lasts. Loss of blood, therefore, in relation to the extent and duration of the inflammation is, under such circumstances, an irreparable loss.

Now, it is evident, that the greater the extent of the inflammation, the greater must be the congestion of the heart, and consequently, according to the principles here laid down for bleeding, the more desirable should be the practice of venesection in such cases. But now comes in the special fact referred to, which contraindicates the practice; and which tells us, that any temporary benefit thereby gained, will not compensate for the more permanent injury inflicted on the vital powers. And thus it happens, that the more extensive the inflammation, and the more urgent the symptoms, the greater is the danger of the venesection; in fact, just in proportion as the bleeding is more required to relieve the heart, is the practice of it less applicable.

When the pneumonia is limited, the symptoms usually are not such as to require venesection; and it is a fact, that in such limited cases of pneumonia venesection neither is nor ever was practised, even in former times; though, if there really be any potential virtue in bleeding over inflammations, the practice seems as much called for in *limited*, as in more extensive inflammations of the lungs; and for this plain reason, that the possible destruction of even a very small portion of one of these organs is full of danger to life.

There is also another fact which must be considered in reference to bleeding in pneumonia. The condition of the lungs which produces the congestion of the heart is not removed by the bleeding; it remains still in active force *after* the bleeding. The remedy, therefore, can only give very fleeting relief; and we have already seen the irreparable loss which large bleedings entail upon the patient. Bleeding here acts the part of the usurer to the prodigal spendthrift. For a small present accommodation, a large draught is thereby made on the strength of the future estate.

What, then, are the conditions of pneumonia, in which venesection is applicable? I think they are well typified in the case related above; and I would answer the question as follows: Venesection is of service when the general symptoms have risen rapidly and are severe, and the inflammation is limited; when the urgency of the symptoms are, so to say, and in reference to ordinary cases, out of proportion to the extent of the inflammation, as measured by stethoscopy, whenever the symptoms, in a word, are severe, and the stethoscope shows that the aerating processes are not extensively and seriously compromised.

I have already referred to the distinction which must be drawn between venesection and the local abstraction of blood; and, without attempting any theoretical explanation of the fact, I have taken it as undeniably true, that the local abstraction of blood from an inflamed part is of service in reducing the most prominent signs of the inflammation, the pain, the heat, the redness, and the swelling. And I would now inquire whether this fact, observed in the case of *external inflammations*, may not be legitimately applied to the case of *internal inflammations;* just as we have argued of the effects of *venesection* over *internal inflammations* from what we observe of its effects in *external inflammations?* If so, then it should follow, that the local abstraction of blood in internal inflammations will only be of service over those inflammations, in which anatomy teaches us that there is a direct vascular connexion between the internal part inflamed and the part from whence the blood is taken. Now, I think, the experience of every physician shows, that leeches and cupping, when used in internal inflammations, are not nearly so often followed by satisfactory consequences as they are in the case of external inflammations; and that, in fact, they not unfrequently fail to give the relief anticipated from them. May we not seek for the explanation of this in the anatomical relations of the part inflamed to the part from whence the blood is removed? The applying of leeches to the thorax in pneumonia is a common practice enough; but it is evident that leeches cannot draw blood directly from the inflamed lung, and that they cannot therefore act upon the pneumonia? How is it, then, that they so often give relief in pneumonia? Their beneficial effects may very reasonably be ascribed to the direct influence which they exercise over the pleuritis, which so invariably accompanies pneumonia. It is to the inflammation of the parietal pleura that the pain, which is thus relieved, must be ascribed; and between this layer of the pleura and the skin over the thorax there is a distinct vascular connection—the vessels which supply the one being in great part the vessels which supply the other.

Leeching, again, over the precordial region is not unfrequently practised in endocardial inflammation; but it is certain that not one drop of blood can be thereby removed from the endocardium; and surely experience—I mean that large and general agreement in opinion, which alone gives value to a remedy—does not justify the practice. But experience shows us that local abstraction of blood is very often of great service in pericarditis—the very frequent associate of endocarditis be it remembered. How is this to be explained? Local pleurisy—*i.e.*, inflammation of the pleura around the pericardium—almost always accompanies severe inflammation of the pericardium, and is not improbably, in most cases, the cause of the local pain.* The absence of local pain, which is, indeed, common enough in pericarditis, may be very reasonably explained by the absence of pleurisy. But when the pleurisy and the pain exist, we have a ready explanation of the mode of relief in the direct vascular connection above referred to—between the skin and the pleura. And it is also well worthy of note, that there is a direct vascular connection between the branches of the internal mammary, which in part supplies the skin over the precordial region, and also sends a branch to the pericardium.

No one, again, can doubt of the great ease often given by leeches applied over the abdomen in peritonitis; and here we have an explanation of the fact in the direct vascular connexion between the skin and the parietal layer of the peritoneum. Leeches, again, are of undoubted benefit in laryngitis; but ap-

* I do not, of course, allude to that oppressive stifling pain, which is the consequence of the disordered action of the heart, resulting from the effects of the inflammation upon its muscular structures.

plied over the thorax in bronchitis, they are of no avail, and for a similar reason.

As every one's experience must have taught him, leeching and cupping over the liver in painful affections of this organ are very often unsatisfactory in their results; but sometimes they give relief; and when they do, may not the cause be ascribed to their influence over the parietal layer of the inflamed peritoneum over the liver. The adhesions between the anterior and upper surface of the liver and the abdominal walls and diaphragm, so often met with in the dead house, are proofs of the not unfrequent occurrence of such peritoneal inflammation, excited by the deranged condition of the liver.

Facts of this kind, and I need not multiply them, seem to me to point out to us the internal inflammations in which we may anticipate that direct bleeding will be of service; and also to explain why it so often fails to answer the objects anticipated from it in the cure of internal diseases. I am aware that I shall be told in answer to this, that, nevertheless, relief is very frequently found in practice to follow the abstraction of blood from the skin in cases of internal diseases, in which there is no vascular connexion between the skin and the internal part; and that a striking proof of this may be observed, for instance, in the case of cupping over the loins in affections of the kidneys. But I would ask, in the first place, whether the practice does not frequently fail to give relief; and, secondly, whether it is certain that the relief, when obtained, may not be often very fairly attributed rather to the rest and other remedies, always, and in most cases of necessity, coincidentally enjoined with the cupping. Are the cupping and the subsequent relief truly cause and effect in every case, or merely antecedent and sequence? This much is undoubtedly true, that the pain in question and the kidney affection are very frequently relieved without any such local appliance, and solely by the use of those most powerful of remedies in these diseases—rest and warmth. Nevertheless, I do believe, that cupping does sometimes, in diseases of the kidney, give local ease, though I could never satisfy myself that the loss of blood had an undoubtedly direct influence over the progress of the kidney disease. I account for the relief to the pain thus given by the leeches or cupping in this way: Inflamed organs very frequently excite diseased actions in the parts around them; abundant proofs of this we have in the adhesions attending pericarditis, hepatitis, and pneumonia. It is, as I believe, to this irritated condition of the tissues around the kidneys, secondarily excited, that the loss of blood gives relief. To suppose that one drop of blood can be thus directly taken from those organs, is of course an entire, though, perhaps, not uncommon, delusion. The proof that the diseased condition of the kidney does excite changes in the parts immediately around the organ, is often in the hands of the pathologist; he not unfrequently finds the cellular tissue around the kidney firmly adherent to its capsule, and united to it by unnatural attachments.

I shall, perhaps, be also told that this explanation of the effects of blood-letting is of too mechanical a kind; and that it takes no account of that nervous element with its many inscrutable mysteries, which necessarily takes part in the operation. I may be told that dry cupping relieves bronchitis and renal congestions; that leeching at the epigastrium and abdomen relieves gastrodynia and intestinal pains, that blisters on the calves of the legs relieve cerebral disorders, etc., and I will anticipate the objection by saying, that if such results do occasionally really follow as consequences of such antecedents, the truth of the main facts which I insist on are in no way invalidated. That irritation of the skin may act in a reflex way upon internal organs, is a fact beyond dispute; and that it may influence the circulation of the blood in internal organs through the medium of the vaso-motor nerves, is very possible; but the influence of such irritation over the circulation of internal organs in disease, has as yet to be demonstrated.

I have said nothing here of the change of type theory of disease, as explanatory of the modern views concerning venesection. Because the subject would lead to a wide discussion; and because, if the views here sustained are correct, we have in them a sufficient explanation of the change in practice, without being forced to call in such an intervening deity to solve the difficulty. According to these views, venesection, rightly used, must have been of service in those other days, just as it is of service in these present days; it was not more requisite, then, in the cure of certain diseases, than it is now. The theories which men held of the nature of disease in the so-called sthenic times of inflammation led them, logically, to abuse the excellent remedy; and the injuries and mischiefs which followed upon such abuse, not noted clearly by them, but distinctly revealed to us by the light of modern pathology and physiology, and by the touchstone of modern clinical observation, have led us, in late years, unduly to depreciate its value.

The views which I have taken the liberty of thus laying before the society, have necessarily been given in an incomplete form, for it would have been too much taxing the attention of the fellows to have attempted their full illustration. I cannot, however, help adding that this view of the mode of action of venesection is in entire accordance with the modern practice of administering stimuli in certain stages of inflammation, and that it explains away what has been denounced as an unseemly anomaly, viz., the simultaneous abstraction of blood and administration of alcoholic stimuli. The conclusions arrived at, summed up in a few words, are as follows:—

1. Venesection has no *directly* beneficial influence over the course of inflammations, either external or internal.

2. But venesection is at times of great service, *indirectly*, in the course of certain internal inflammations, and in the course of certain internal chronic diseases, and of all disorders which occasion congestion and oppression of the heart.

3. The use of the venesection is in all cases alike. It acts by relieving the cardiac oppression; it neither arrests nor modifies beneficially inflammation.

4. There is a marked distinction to be drawn between the effects of bleeding in inflammation, and the local abstraction of blood from the inflamed part. Local abstraction of blood materially influences the inflammation, reducing the most characteristic of its phenomena. But local abstraction of blood can only modify, in this way, the inflammation of internal parts, when there is a direct vascular connexion between the part inflamed, and the part from whence the blood is taken.

5. It is not denied, that local irritation of an external part, where there is no direct vascular communication between the skin and the inflamed part, may influence an internal inflammation, by reflex action conveyed thence from the skin through the vaso-motor nerves of the inflamed part.

CASES OF NERVE-DISORDER.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

Series III.

My intention in publishing the following series of cases is chiefly to adduce evidence in support of the view that nervous tissue, either dynamic or conducting, may be so enfeebled by some obscure influence as to be disabled from performing its function; that, in fact, paralysis or paresis may thus occur without any discernible structural lesion. This view is received and acted upon by many intelligent practitioners, who well know the difference between "anæmic" paralysis and that resulting from organic lesion; but it is not distinctly recognised by our teachers and lecturers, except as one of the freaks of hysteria. Yet, to judge from my own experience, the state in question is by no means rare; at least, in minor degrees. As far as the evidence we at present possess extends, the view above enunciated seems quite undeniable. Dr. Abercrombie's cases of "simple apoplexy" prove it almost conclusively; and I can hardly imagine that microscopic examination would add much to their authority. It is the fashion, I know, with many, to call all cases of disordered nervous action, which are not referrible to structural change or to familiar causes, *hysterical*—a term which is meant to imply at least a certain amount of mental cooperation in the production of the symptoms. To this coarse, careless practice, I beg to take the strongest exception. I affirm, with the fullest conviction, that the sufferer from nerve-debility, or paresis, may have a far better regulated and stronger mind than he who pronounces with so much levity on the nature of the malady he is asked to relieve. Let the strong unbroken man be exposed to the depressing influence of a long series of enfeebling unwholesome occupations, intensified by mental anxiety and unrelieved by relaxation, or to malarious emanations, or any like cause, and it will soon be seen whether he will think hysterical either a sufficient or just description of his *disease*.

The nervous system in the present day is certainly hard worked; and can it be matter of wonder if it often give way, and express its fatigue by actual failure of functional power? I do not, of course, doubt the existence in many cases of defective volition or disordered imagination; I do not wish to erase from our nomenclature the term "hysterical paralysis"; but I

do wish to introduce one which shall express such conditions as result from purely physical disorder, the will still bearing up against the depression. The appellation of *Neurolysis* appears to me a convenient one, or *Neurotaraxis* where the phenomena are more significant of irritation than of simple exhaustion.

The causes producing the enfeeblement of the nervous tissue may doubtless be various, and it will very much depend on the previous state of the system whether they prove effective or not. Damp cold seems to have been the exciting cause in Case II, influenza in Case I, malaria in Case XI, Series I (Association Medical Journal, 1856). Professor Trousseau believes the poison of diphtheria, by its general action on the system and on the blood, to give rise to the paralysis which is often observed as a sequel of the disease.

The diagnosis of functional paralysis must often be very uncertain, and a cautious tentative proceeding may be the only means of deciding. Further experience is requisite to enable one to lay down general rules. However, the absence of pain and tenderness in the head or spine, of signs of central irritation, and of disorder of the intellect; wasting of the muscles; and previous general debility, with exposure to enfeebling causes,—would be evidence in favour of the existence of functional paralysis rather than organic. Reflex movements are not usual, I think, in neurolysis; but they occurred in Case IV.

In dealing with functional paralysis, it is of great importance to commence treatment early. In conjunction with appropriate tonics, the local application of an interrupted galvanic current to the muscles has appeared to me far the best means of restoring their power. This recommendation of early treatment coincides with that given by Dr. West in his lecture on *Infantile Paralysis*—an affection, I apprehend, often identical with the one we are considering.

Case I. W. D., aged 26, male, was admitted into St. Mary's Hospital on September 10th, 1858. He was ill one month with an inflamed sore-throat, which has got quite well; but since then he has begun to lose the use of his limbs, the legs being weakest. He can now stand, but not walk; the legs are very numb and cold, but he is conscious when they are touched. He has no pain at all. The intellect is clear. No reflex actions are excited on tickling the feet. The pupils are large, and scarcely act at all. The skin is cool; the pulse natural; the tongue white; he has no cough; the sphincters act. The heart-sounds are natural. He has never had syphilis. He lives in a damp locality. He can lift up his legs in bed. Being unable to find any indication of organic disease of the nervous centres, I determined to try the effect of nervine tonics, and prescribed the following.

℞ Strychniæ gr. 1-20; quinæ disulphatis gra. ij; acidi sulphurici diluti ♏viii; aquæ ℥i. M. Fiat haustus ter die sumendus.

Ordinary diet and porter were ordered.

September 14th. He feels much better, has more use of his legs and hands, and can walk a little. The bowels are open.

September 17th. He has been worse since September 15th. To-day he has sore-throat, and much diarrhœa, with copious perspirations. His appetite is lost. He has "no use of the hands or legs again". The medicine was repeated, eight minims of tincture of opium being added to each dose.

September 18th. His tongue is very much furred, yellowish; pulse 120, full and weak. He has been purged three times this morning. There is no pain anywhere. He feels very sick, and has a bad headache; the skin is hot and moist. He cannot raise or turn himself in bed. The medicine was ordered to be taken four times a day; and six ounces of port wine were given.

September 20th. He complains of bad cough. Pulse 96, full, occasionally intermittent. The bowels are quiet. Two grains of disulphate of quinine were added to each dose of the medicine.

September 21st. He has had no sleep, from cough. The pulse is natural, 88. The sputa are of rusty colour, but watery. The tongue in the morning was dry, and brown in the centre; at 2 P.M., moist, and coated in the middle.

September 22nd. He feels much better; his appetite is improving. The bowels have not been open for two days. The tongue is cleaner. He has no use of his limbs.

September 24th. He has no use of the hands: they feel numb, but are sensitive if touched. He can sit up in bed better. The tongue is clean. Galvanism was ordered.

September 25th. Galvanism was applied yesterday with great benefit: he is able to move his hands and arms much better. His appetite is very good: he sleeps well.

October 4th. The legs are now more weak and numb than the thighs. A much stronger current is necessary to excite the leg-muscles than those of the thigh. The calf-muscles are greatly wasted. The feet used to be very cold and numb, but are not so now. The hands feel weak, and are rather numb; he has a sensation of "pins and needles" in them at times.

℞ Strychniæ gr. 1-16; tincturæ ferri sesquichloridi ♏xv; acidi hydrochlorici ♏ij; aquæ ℥ss. M. Fiat haustus ter die sumendus.

October 8th. Great benefit has resulted from the galvanism, and he can now walk and feed himself. He cannot bear so strong a current as before.

The same treatment was continued till the end of November, when he was discharged, with only some degree of weakness remaining in the legs, which was referred to the knees. It seemed that the extensor muscles of the thighs had not regained their full power: he was able, however, to walk very well, and his arms had become quite strong. The dose of strychnia was gradually increased to one-ninth of a grain three times a day. A curious circumstance observed by himself was, that his feet swelled during the night, so that he could not get his boots on in the morning; but, after walking about the ward a little, the swelling subsided. His urine was free from albumen, and was otherwise healthy, except that, on one occasion when he had catarrh, it deposited a good deal of uric acid.

Remarks. It seems to me impossible to regard the paralysis occurring in this man in any other light than as a functional disorder. Whatever change may have actually taken place in the grey matter, or in the nerve-tubes, it surely was not one of irremediable lesion. No softening, or extravasation of blood, or even inflammation, can, I think, have occasioned the symptoms. The paralysis, after a brief amendment, recurred, and became greatly worse under our inspection. This relapse was attended with all the marks of great general debility and prostration. A passive flux took place from the skin and the pulmonary membrane. Under a sustaining treatment he passed through this state, and began to recover power. In promoting the return of muscular strength and voluntary power, the galvanic stimulus was of the greatest use. It seems to me most reasonable from all this to regard the paralysis as the result of simple debility of the nervous tissue, probably of the spinal grey matter. The brain seems to have been unaffected; there was no giddiness or impairment of intellect, or of the special senses. The cord must have been enfeebled in a considerable extent, at least as high up as the origin of the brachial nerves. Sensation and motion were both impaired, the latter most. The arms recovered much sooner than the legs, contrary to what usually occurs in cerebral palsy. The swelling of the feet during the night is to be ascribed, I believe, to weakness of the vaso-motor nerves, aided by the relaxing warmth of the bed, causing undue dilatation of the arteries, and some subcutaneous effusion. This occurrence of nerve-debility during sleep is often observed, and accounts for such phenomena as the more frequent happening of epileptic paroxysms, hooping-cough, and asthmatic attacks, as well as diarrhœal, choleraic, and malarial seizures, during the night. The case may briefly be entitled as an extreme instance of the usual debility of influenza.

Case II. J. Edwards, aged 30, young looking, was admitted October 11th, 1858, under Dr. Sibson. Four months ago, he was in wet grass all the morning. His legs became stiff the next morning, and his knees weak; he felt as if he were standing on pins. The arms also became affected, but only numb. Subsequently, his masticating powers and his voice became impaired; he had double vision for about a month, and afterwards singing noises in his ears. On admission, he was observed to lift the jaw with his hand in speaking, and to shoot out his tongue involuntarily. He cannot raise his arms about his head when he lies down. He walks slowly, lifting his feet. When he gets on his bed, he does it in a series of jerks, and and then falls flat. Both hands are sensitive. The pupils act. He has vomiting. Pulse 64; respiration 32.

October 14th. He complains of pain at the back of the head, and of the arms being more powerless. He cannot open and shut his mouth without the help of his hand, when lying in bed. The power of deglutition is impaired. Memory is perfect.

October 17th. When his wife came into the ward, he went to meet her, pointed to his throat, and nearly fainted. He be-

came excessively pallid; his skin was hot, and covered with sweat. Pulse 120. Soon afterwards, he sank and died. He had taken iron and quinine, and improved somewhat for a time.

Post Mortem Examination. The body was spare, of medium height. The thymus gland was enlarged; it weighed 537 grains. The heart was full of fluid blood, and healthy. The lungs were healthy. The liver, kidneys, and spleen, were immensely congested, but firm, and quite normal in appearance. The stomach was almost empty. The intestines were empty and contracted. The superficial vessels of the brain were slightly congested. The brain-substance was firm; the grey matter was darker than usual; the vascular points were more numerous and evident. The lateral ventricles contained a little serum. The choroid plexuses were rather congested. Nothing abnormal was found in the brain; all the parts were very carefully examined. The spinal cord appeared to be firmer than usual in the part corresponding to the lower dorsal and upper lumbar regions; the upper part was much softer than this, but sections of both these portions revealed nothing unnatural in appearance or worthy of remark. Mr. Gascoyne, who conducted the autopsy, informs me that he considered the softening as a *post mortem* change. Dr. Sibson and I carefully examined portions of the spinal cord and pons Varolii the next day under the microscope, but we could discover no organic morbid change; there was no alteration of the coats of the minute vessels, nor glomeruli. The kidneys were also examined microscopically, and found healthy.

Remarks. In this case, the nerve-disorder was diffuse, but incomplete; it seemed to affect all parts of the cord and the medulla oblongata, but did not cause any actual paralysis till the last. Even the centres of vision seem to have been temporarily disordered. The fatal event probably resulted from arrest of the heart's action, induced through the vagi. The impairment of masticating power shows that the seat of origin of the fifth pair was involved in the paralysing morbid action; and, from the proximity of that of the vagi, it cannot be matter of surprise that the latter nerves should come to suffer also. As to the existence of any organic alteration, the negative evidence to my own mind appears satisfactory, but I do not expect it may be fully so to all. At the least, however, the case seems well worth recording, if only as adding something to the probability of the existence of central dynamic changes, which may induce the gravest peril, without leaving their record in any organic alteration. (I wish to acknowledge gratefully the kindness of Dr. Sibson in allowing me to make use of this case.)

Case iii. J. C., aged 30, male, was admitted December 27th, 1858. He had been ill two days. He went to sleep on the 25th for one hour, and, on waking up, found he had no use of the left hand. He is not aware that he had pressed his arm in any way while lying asleep. He was quite sober at the time. He has but feeble grasping power with the left hand. He experiences sensations like "pins and needles" in the thumb only. The left hand and wrist are cold and dry, and do not get warm and perspire like the other hand. The tongue is clean; the appetite good; the bowels open. He feels in good health.

℞ Quinæ disulphatis gra. iij; strychniæ gr. 1-20; acidi sulphurici diluti g.; aquæ ʒi. M. Fiat haustus ter die sumendus.

September 31st. On being galvanised, he soon became faint, but found immediate benefit in the arm. He seems to be a weakly nerved man.

℞ Ammoniæ sesquicarbonatis gra. v; tincturæ cinchonæ ʒi; spiritûs ætheris sulphurici compositi ʒss; infusi cascarillæ ʒi. M. Fiat haustus ter die sumendus.

January 3rd, 1859. He had been galvanised three times: he can grasp much more strongly. There is much less numbness, but the wrist still feels weak. The mixture was continued; and he was ordered to take a scruple of saccharated carbonate of iron three times a day.

January 5th. He is further improved; the hand and wrist now get warm and perspire like the other. He ceased attendance.

[*To be continued.*]

St. Bartholomew's Hospital. An endeavour is now being made on the part of the treasurer of this admirable institution to convert the large gravelled airing ground forming the quadrangle of the hospital into a garden, for the benefit of the patients; the shrubs already planted appear to thrive very well.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY

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Lecture I.

Note-Book; Conical Glasses for examining Urine; Quantity of Urine; Colour of Urine; Smell of Urine; Clearness or Turbidity; Consistence; Deposit; Specific Gravity; Methods of taking the Specific Gravity; Reaction; Acid Urine; Alkaline Urine, from the presence of Volatile or Fixed Alkali.

[*Concluded from page* 272.]

Specific Gravity. By ascertaining the specific gravity of a specimen of urine, we are enabled to form a rough estimate of the quantity of solid matter dissolved in the fluid; and, by measuring the entire quantity of urine passed in the twenty-four hours, we have data for judging approximately of the quantity of solid material removed from the organism in this secretion in twenty-four hours.

The specific gravity of healthy urine may be considered to be about 1015, and the quantity of solid matter passed in the twenty-four hours at from 800 to 1000 grains. It has been considered sufficient to calculate the quantity of solid matter from the specific gravity by multiplying the number over 1000 indicating the specific gravity, by about 2·5. The result will give an approximation to the quantity of solid matter in 1000 grains of urine. This calculation is by no means correct, and is useless in careful investigations. Its inexact nature is shown by the fact that three very different numbers have been proposed, namely, 2·58, 2·33, and 1·65. When it is considered how widely different the composition of the solid matter may be in various specimens of healthy urine, it is obvious that results obtained in this manner must often be very wide of the truth. Take, for example, *albumen* and *common salt*. A fluid containing 136·4 grains of the former in 1000 grains will have a specific gravity of 1030; while one containing only 80.0 grains of common salt in the same quantity will have a specific gravity of 1064. This clearly shows that any attempt to *calculate* the quantity of solid matter in an animal fluid cannot be very exact. In investigations, therefore, where any approach to accuracy is required, we must evaporate a given quantity of urine (1000 grains) to dryness, at a low even temperature, and weigh the solid matter. In practice, this operation takes some time; and physicians are compelled, as a general rule, to be content with taking the specific gravity. In many cases, the information gained by this simple operation is very important. Thus the urine may be not more than 1002 or 1003—a condition commonly met with in hysteria. A patient may be continually passing urine of specific gravity 1010 to 1012, which is commonly the case with albuminous urine passed by patients suffering from certain chronic kidney diseases. Urine containing a very large quantity of urea, so much that crystals of the nitrate of urea are formed upon the addition of nitric acid (*excess of urea*), usually reaches 1030 or a little higher; and, in cases of confirmed diabetes, where very large quantities of sugar constantly escape from the organism, the urine has a specific gravity of 1035-1040, or even higher.

Methods of taking the Specific Gravity. The specific gravity of a fluid is obtained most correctly by ascertaining the weight of equal bulks of the fluid to be examined and distilled water respectively. For this purpose, a small bottle, with a tubular stopper, holding exactly 1000 or 500 grains of distilled water, at a temperature of 60°, is the most convenient form of apparatus. All that is necessary is to fill the bottle carefully with the urine, wipe it dry, and then weigh it, after having counterpoised the bottle. The number of grains which the fluid weighs is the specific gravity in the case of the 1000-grain bottle, double the weight for the 500-grain bottle, four times the weight for a bottle holding 250 grains, and so on in like proportion.

This method, although perfectly exact, and readily per-

formed where a good balance is at hand, is nevertheless too tedious and troublesome for the practitioner in a general way, and, in the sick-wards, a much simpler, though less correct method, is usually resorted to. The specific gravity is obtained by a small hydrometer, usually termed a *urinometer*. The form of this instrument, and the mode of using it, are well known; but there are one or two points in its construction and management which it may be well for me to refer to. As sold, these instruments are often nearly useless, in consequence of the carelessness displayed in their manufacture. Out of twenty instruments, I have found several differing as much as ten degrees from each other. If the stem of many urinometers be examined, it will be found that all the degrees marked upon it are equal, which clearly ought not to be the case; for when fluids of low specific gravity are operated on, a very small portion of the stem remains above the surface of the liquid, while the reverse holds with respect to liquids of great density. In the latter case, there is, of course, a much greater weight of stem above the liquid, tending to force the instrument lower in the fluid than in the former. Allowance must also be made for the fact that the fluid becomes denser as we pass from the upper to the lower strata.* The tendency of the instrument to indicate a higher density than the real one renders it necessary that the degrees should decrease in length from the upper towards the lower part of the stem. The practitioner should carefully examine his urinometer, to see that there is this difference in the degrees; and, if not, it should be changed. I strongly recommend every one to test the urinometer by immersing it in fluids, the specific gravity of which has been ascertained by the bottle, or by a well made and previously corrected urinometer. If the degrees are incorrect, the observer can always bear in mind the amount of error, and allow for it in taking the specific gravity of different specimens of urine. The vessel which is employed for immersing the urinometer in should not be too narrow, in case the bulb should rub against the sides, when it becomes difficult to ascertain the real density. The diameter of the glass vessel should be rather more than a quarter of an inch over that of the widest part of the bulb of the urinometer. The glass delineated in Figure 1 is a very convenient form.

Another method of taking the specific gravity, which is sometimes followed, consists in having a number of small glass bulbs, with the density of the fluids in which they neither sink nor swim marked upon them. By placing one after another into the urine, one is found which remains just beneath the surface, and the number upon it indicates the specific gravity of the fluid.

Reaction. You may easily ascertain the reaction of urine by the use of litmus-paper, which is prepared by soaking a thin but firm smooth paper in an infusion of litmus. It is desirable not to use blotting paper, or any spongy form of paper, for this purpose. Urine, having an *acid* reaction, immediately reddens this blue paper. The *alkaline* reaction of urine is ascertained by the use of *reddened litmus-paper*, prepared by adding a very small quantity of dilute acid to the infusion of litmus. An alkali always restores the *blue* colour of this reddened paper. If no change occurs when the urine is tested with both kinds of paper, the reaction of the specimen is *neutral*.

Acid Urine. The cause of the acid reaction of urine is obscure, and probably is not always of the same nature. Sometimes the reaction may depend upon carbonic acid, which is present in greater or less proportion in all the animal fluids. In this case, the blue colour of the paper is restored by gently warming it after it has been changed by the acid. A fixed acid reaction may be due to the presence of an acid phosphate of soda—a salt which exhibits an acid reaction, without the presence of any free acid. This salt may be formed by the action of uric acid upon common rhombic phosphate of soda. If I add a little uric acid to this solution of common rhombic phosphate of soda, the mixture still exhibits the characteristic alkaline reaction of the salt; but now, when heat is applied, decomposition occurs; the uric acid disappears, and combines with one equivalent of the soda to form urate of soda; and an acid phosphate of soda is produced. The acid reaction of urine, however, cannot always be explained in this manner; and it is probable that traces of free organic acids are often present. Lehmann has found both free lactic and free hippuric acids in some specimens of urine. Lately, Hallwachs has shown that a large amount of hippuric acid salts exists in healthy human urine.

* This error has been corrected by Mr. Ackland, of Messrs. Horne and Thornthwaite's, where accurately graduated instruments may be obtained.

Many specimens of urine which are slightly acid when passed from the organism, become more strongly so after standing for some days, and crystals of uric acid are deposited. The acid reaction may remain for weeks or even months, but usually the acidity gradually diminishes, and the specimen at last becomes alkaline from the presence of carbonate of ammonia formed in consequence of the decomposition of the urea. The beautiful researches of Scherer have proved that the gradually increasing intensity of the acid reaction, and the deposition of uric acid, were due to a process resembling fermentation, which was excited by the presence of a small quantity of mucus.

The intensity of the acid reaction of urine in health is contiuually undergoing change at different periods of the day. Dr. Owen Rees and Dr. Bence Jones have made numerous highly interesting observations, which prove that the acidity of the urine alternates with that of the gastric juice. When the largest quantity of acid is being set free from the stomach, the acidity of the urine is at its minimum; and when the secretion of gastric juice is diminished, the urine exhibits a most strongly acid reaction. The urine passed just before each meal, or a long time after taking food, is intensely acid, while that which is secreted during the digestive process, for about three hours after a meal, is very slightly so, and in many instances it is decidedly alkaline. It is especially important to bear in mind the existence of these variations in the acidity of the urine in a state of health, and not to refer the intensely acid reaction of urine secreted while no food is taken, to a morbid process requiring the exhibition of large doses of alkalies (*On Animal Chemistry*, by H. Bence Jones, M.A., M.D., F.R.S.). Dr. Beneke has made upwards of one hundred experiments upon healthy and diseased persons without being able to confirm Dr. Bence Jones' observations. In only one case did he find the urine alkaline after meals. Sometimes the acidity was less, but this was not invariably the case. Nevertheless, he admits that the acidity of the whole amount of urine passed varied considerably, although he could not discover the cause. It seemed to be independent of the quantity passed, and was not affected by exercise or food (*Archiv des Vereins für gemeinschaftliche Arbeiten zur Förderung der wissenschaftlichen Heilkunde*, 1 Band. 3 Heft.). Vogel's researches confirm the former results, inasmuch as he found that urine passed during the night was more acid than that secreted during the digestive process.

The intensity of the acid reaction is readily determined by ascertaining how much of a graduated solution of carbonate of soda is required to neutralise the acid in a given quantity of urine.

Alkaline Urine. The alkaline reaction of a specimen of urine may be due to the existence of carbonate of ammonia, in which case the blue colour produced by testing it with reddened litmus is destroyed by the application of a gentle heat (*volatile alkali*); or it may depend upon the presence of an alkaline carbonate, as carbonate of soda, or a neutral salt having an alkaline reaction, like common phosphate of soda, in which cases the application of heat does not restore the red colour of the litmus paper (*fixed alkali*).

Volatile Alkali. The development of carbonate of ammonia in urine depends upon the decomposition of the urea by the action of the mucus or some animal matter, which acts the part of a ferment. In some diseases of the mucous membrane of the bladder, and in cases of paraplegia, where the muscular coat of the organ is paralysed, and consequently the secretion is retained for a long time, this change is very liable to occur, and gives rise to pain and great distress, which are much relieved by washing out the bladder thoroughly with tepid water. A mere trace of urine which has undergone this change is capable of exciting a similar decomposition in a very large quantity. It is important to notice that if pus be present in such urine, it becomes converted into a viscid glairy mass, which is removed from the bladder with the greatest difficulty. This action of the volatile alkali on the pus precisely accords with that which occurs if ordinary liquor potassæ be added to a specimen of pure pus out of the body. Pus thus rendered glairy, forming a viscid adhesive mass at the bottom of the vessel containing the urine, is usually called *mucus*, but, as I have said, it really consists of altered pus. If this action on the pus only occurs after the urine has left the bladder, it is unimportant, but when it occurs before its expulsion, it is always necessary to interfere, and if the change cannot be entirely prevented, owing to the existence of certain mechanical impediments to the escape of the urine, we must try to render the urine acid, and thus prevent its occurrence, by giving very large and frequently re-

peated doses of nitric acid, unless this treatment is contra-indicated by other symptoms, which I shall have occasion to refer to in a future lecture.

Whatever causes prolonged retention of the urine in the bladder, in the ureter, or pelvis of the kidney, will excite this change, and as a consequence, roughening and ulceration of the mucous membrane ensue, with the precipitation of phosphate of lime and ammoniaco-magnesian phosphate. More pus is formed, which effects the decomposition of the urea and aggravates the mischief already produced, and unless relief be afforded, complete disorganisation of the mucous membrane results. Volatile alkali is never detected in healthy urine.

Fixed alkali. Urine, however, often exhibits an alkaline reaction due to the presence of an alkali which is not volatile by heat, and this reaction is often to be met with in a state of health. When an alkaline carbonate is detected in the urine, it usually results from the decomposition of salts of certain organic acids in the organism. Salts of tartaric, racemic, citric, and under some circumstances, those of oxalic and acetic acids, become resolved into carbonates in their passage through the organism, just as by the influence of a red heat, they are converted into carbonates out of the body. The urine may always be rendered alkaline, and very quickly so, by giving such salts in sufficient quantity; and their administration is of great advantage in cases where benefit is likely to be derived from alkalies, especially where strong alkalies do not agree with the digestive organs. I believe that in many cases the alkali thus formed in the organism exerts a more beneficial influence than the exhibition of alkalies or their carbonates. The value of the juice of oranges and lemons in various conditions is to be attributed to this change.

If the alkaline reaction of the urine is due to the presence of carbonate of ammonia crystals of triple phosphate (*Illustrations*, pl. ix, fig. 1; xxi, figs. 1, 3), and a deposit of phosphate of lime in a granular state, or in the form of globules or minute dumb-bells will be present; if, on the other hand, it depends upon fixed alkali, only the latter deposit without the crystals will be detected.

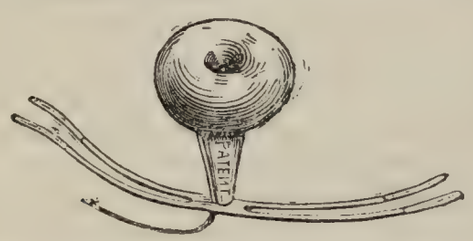
Before resorting to a minute examination of a specimen of urine, it is important to ascertain the *quantity* passed in twenty-four hours, to notice its *colour*, *smell*, *consistence*, *clearness* or *turbidity*, and the presence or absence of a *deposit*, and to ascertain its *specific gravity* and *reaction*.

In the next lecture, I propose to allude to the characters of the organic *constituents of healthy urine*, which are not volatile at ordinary temperatures, but which are completely destroyed by exposure to a red heat.

Inventions and Appliances
IN MEDICINE AND SURGERY.

BOURJEAURD'S PATENT MUSHROOM OR PYRAMIDAL PESSARY.

A new pessary, which has been patented by Mr. Bourjeaurd, is shown in the annexed woodcut.



The pessary is formed of smooth India-rubber, and is, after being introduced into the vagina, inflated by a tube to such an extent as may be necessary. When the apparatus is properly distended, the neck of the uterus rests on its summit. The depression seen towards the upper part of the figure represents the commencement of a cylindrical canal, which is continued through the stem, and through which any discharges may escape. The apparatus is secured by elastic bands, which may be fastened to a narrow abdominal belt. This apparatus seems well calculated to fulfil the objects of a pessary; and two of its advantages are, the possibility of regulating its size, and the non-production of irritation.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, APRIL 16th, 1859.

DRINKING FOUNTAINS.

It certainly is passing strange, that just in proportion as we recede further from the primitive type of living in this country, and boast our cooperative strength in great towns, so we neglect some of the first wants of life. The shepherd or the husbandman is enabled to quench his thirst at every gushing hill stream or pebbly brook he meets; the villager is always plentifully supplied with the pure element in his mossy well, and the smallest country town boasts its public pump in the market-place, where water can be had for the drawing. Alas! how stands the case in large cities? Of old, we had our public conduits in the great metropolis, which were possibly pure enough, as the water was often brought from distant streams in pipes; now these conduits, if they exist at all, exist in the form of parish pumps, which derive their streams, not from the far-off thyme-fields, but from the surface-water of a great city, flavoured in all cases with the matter of our drains, and perfumed with the escaped essences of our gas-pipes. The water of one of the favourite city pumps owes its sparkle to the nitrates it receives from the decomposing bodies in a neighbouring churchyard!

When the cholera comes, we meet the grim monster more than half way. During his last visit, the inhabitants of Broad Street and the Golden Square district toasted his advent in the water of their favourite pump; and lo! in three days they were decimated in consequence.

There is plenty of water, it is true; huge pipes ramify in every street, but not for the poor, who, like the Ancient Mariner, see around them

> "Water, water every where,
> But not a drop to drink."

How the poor have gone on so long without any adequate supply of so necessary an article, even for drinking purposes, passes our comprehension. Perhaps the explanation is, that they have been taught to drink beer and gin; and, as for water for their ablutions—why, as a matter of course, they go dirty.

A great want, however, is sure to be remedied sooner or later; and we rejoice to find that a movement has set in, which promises to supply to the poorer denizens of cities the privileges the peasant enjoys of quaffing without stint the pure element. It is scarcely two years since some humane individual, noticing the eagerness with which crowds collected to drink at the public pumps in hot weather, conceived the idea of a public fountain, to be supplied from a comparatively pure source. No sooner was this simple note struck, than its waves of vibration rapidly spread through the country. No fewer than two hundred and fifty public drinking fountains have

sprung up since that time; and it is quite clear that, the experiment having proved successful, they will in a few years be numbered, not by hundreds, but by thousands.

London is, however, we regret do say, far behind other great towns of the empire. There is, we believe, but *one* fountain as yet in actual work, although there are many in course of erection. The meeting held at Willis's Rooms on Tuesday proves, however, that we are not far behind in the important movement; and when such leaders as the Earl of Shaftesbury and Lord John Russell identify themselves with it, we may be pretty sure that it will be well carried out. It is estimated that this large metropolis will require at least four hundred drinking fountains; and, as it is seen that it will not do to depend upon such soulless personages as parochial authorities to maintain them, it has been wisely determined to form an association for their maintenance as well as construction. We have heard a great deal about temperance societies; but we predict that this association will do more for temperance than all the wordy orators that have trodden platforms, or all the tons of ill written tracts that have been levelled at the heads of gin-drinkers.

The formation of the Association was thus moved by the Earl of Shaftesbury:

"That whereas the erection in the metropolis of public drinking fountains yielding pure cold water would confer a boon on all classes, and especially contribute to the health and temperance of the poor, an association be formed for erecting and promoting the erection of and maintaining such fountains in the metropolis, to be styled the Metropolitan Free Drinking Fountain Association, and that contributions be received for the purposes of the association."

Having made this good commencement, the promoters of the meeting were determined to go yet further. The man with money in his pocket can afford to get his cooled water or lemonade at will; nay, we find that ices can now be obtained at a penny: but the proposition is, to give cool water for nothing at all! The Earl of Albemarle moved

"That no fountain be erected, promoted, or maintained by the association which shall not be so constructed as to ensure, by filters or other suitable means, the perfect purity and coolness of the water, as far as practicable under existing circumstances."

The Earl of Carlisle thought that means should be devised for providing constant coolness. If the association can only do this, Mr, Gough may as well think of packing up for America; and half the publicans will be ruined, during the hot weather, at least. We are not quite sanguine, however, as to the means of adding the luxury of coolness to the waters of these fountains. If the supply were drawn from deep wells, there would be less difficulty; but, as it is to come from the pipes of the different companies, we do not exactly see how the thing is to be done.

We trust, however, with Lord Carlisle, that the supply will be *continuous*. This is a matter of the greatest importance, and one which, we think, has not been sufficiently insisted on by the metropolitan officers of health. If the public fountains can obtain a constant supply, we may hope to find our houses accommodated with the living streams, fresh and fresh; and then, in all probability, when leaden cisterns are banished, we shall get rid of a multitude of obscure diseases, which we firmly believe to arise from the poison of lead being introduced into the system by our drinking water.

We trust that the erection of fountains for drinking purposes only precedes by a short time the erection of fountains for filling vessels at. The poor want water in their homes for cooking and washing; and how they get it present, we are at a loss to know. Why should we not combine all the needs of the poor as regards water in these new fountains? and why should they not be ornamented as we find them in the smallest villages on the continent, and so constructed that man and beast may drink, and vessels may be filled from them? Merely to erect drinking fountains is, in our opinion, to do only half the work required; and we trust that the original idea will so develope itself, that water for any purpose shall be publicly obtainable by the poor.

THE WEEK.

On Saturday last, Dr. Robert Mortimer Glover, lately one of the physicians to the Royal Free Hospital, and well known in the profession as the author of several works of much merit, died under circumstances of a very distressing nature. From the account of the inquest which was held, and from other information which has come to us through a reliable source, it seems that Dr. Glover had for some time past been residing in the house of Mr. W. M. Rochfort, of Kensington Park Road, who is described in the newspapers as a "chemist," but who, we have been informed, has been practising medicine without a diploma, under the shield of Dr. Glover's name. The deceased had been for some time in great pecuniary destitution, although often aided by the benevolence of his professional friends; and had unfortunately addicted himself to habits of intoxication. Within the last few weeks, he married a patient who had escaped from Colney Hatch Asylum. After living at an hotel for about a week on five pounds, they were separated—the bride being recaptured by the officers of the asylum. On the evening of Friday, April 8th, Mr. Gant, one of the surgeons to the Royal Free Hospital, called on Dr. Glover. During their conversation, the latter made frequent visits to an adjoining apartment; and, after some time, he suddenly fell back, breathing stertorously, and apparently intoxicated. As his condition was alarming, Mr. Gant called in the aid of Mr. Rochfort; and they applied friction, hot flannels, etc., without effect, until midnight, when Mr. Gant left him. On the following day, although Dr. Glover remained in the same state, no aid was called in from the neighbouring practitioners; but a messenger was dispatched for Dr. Risdon Bennett of Finsbury Square. Not being able to attend, Dr. Bennett sent a note to Dr. Cormack, who had formerly been an intimate acquaintance of Dr. Glover, requesting him to act in his stead. The temporary absence of Dr. Cormack, however, prevented him from visiting Dr. Glover until the evening, several hours after being summoned; when he found that he had been dead some minutes. In the meantime, Mr. Hopton, a surgeon, accidentally called on Dr. Glover; and, finding his friend in a desperate condition, he at once administered an emetic, which had the effect of rousing him for a time. This, it seems, was the first attempt made to empty the stomach: and we must say, that the neglect of the use of the stomach-pump when Dr. Glover was seized with alarming symptoms on

Friday evening, was a grievous fault of omission. At the inquest, which was held on Wednesday last, Mr. Rochfort said he had previously seen the deceased in a partially insensible state from taking large doses of opium; and he had also known him to take large doses of chloroform—at least, he (deceased) said that he did so. Dr. Glover had told witness that he was obliged to take opium and stimulants, because of his having suffered severely from dysentery while in the East. He never said anything about suicide, and witness believed that he was of a different disposition than to commit suicide. The evidence of Mr. Gant went to show that deceased had taken an overdose of chloroform. The coroner (Mr. Wakley) concurred in this opinion; and the jury, after some deliberation, recorded "That the deceased died from the mortal effects of his taking an excessive quantity of chloroform as an intoxicating agent, and not with the view of destroying life, or of doing himself personal injury." Dr. Glover's latest publication was an analysis of the Medical Act of 1858; and, just before his death, a paper by him, on the application of town sewage to agriculture, appeared in the *Lancet*.

On Monday last, a number of gentlemen, who had undergone the second examination at the Royal College of Surgeons under the new regulations, were admitted Members of the College. Nearly three hundred gentlemen have already passed their first examination in anatomy and physiology. It is also the intention of the Council to enforce the following regulations relating to the preliminary examination of candidates for the diploma of Member of the College.

"Candidates for the diploma of Member of the College, who shall commence their professional education on or after the 1st of January, 1861, be required to produce one or other of the following certificates:—

"1. Of graduation in Arts at a recognised University.

"2. Of an examination for matriculation, or such other examination as shall, in either case from time to time, be sanctioned by the Council of the College; at a University in the United Kingdom; at a recognised University in the colonies; or at a recognised foreign University.

"3. Of the Oxford or Cambridge Middle Class Examinations, either Junior or Senior.

"4. Of the preliminary examination for the Fellowship of the College.

"Candidates who shall not be able to produce one or other of the foregoing certificates, shall be required to pass an examination in English, classics, and mathematics; to be instituted at the College, and to be conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of the Council of the College, and to include such subjects as may hereafter be determined by the Council. And the special or particular subjects of examination shall be published in each preceding year; and the examination from time to time shall be added to or increased, as the opportunities of education may be improved."

In reference to the subscription for a statue to Hunter, which, we are glad to hear, progresses in a satisfactory manner, we would direct the attention of our associates to the letter of Mr. Webber, published at p. 316. The principle which our correspondent seeks to inculcate is, we think, sound—that the memorial of Hunter should not consist entirely of perishable and inert marble. Mr. Webber promises to develope his plan next week: when he does so, we shall return to the subject.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [General Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, April 21st, 6 P.M.
Bath and Bristol. [General Meeting.]	York House, Bath.	Thurs., April 21st, 7 P.M.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

A social and scientific meeting of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on

Friday, April 29th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, December 1858.

MEDICAL REGISTRATION.

PUBLICATION OF THE REGISTER.

We have been requested by Dr. Hawkins to give notice that all persons who desire their names to appear in the Register printed for 1859, should apply to be registered before the 1st day of May, 1859.

REGISTRATION FEES: NOTICE.

The Medical Registrar presents his compliments to the Editor of the British Medical Journal, and would be obliged if the attention of members of the profession could be drawn to an advertisement sent herewith, which shews the registration fees payable in the respective cases of persons qualified before or not till after the 1st of January, 1859; and also the fee payable for any *additional* qualification—*i. e.*, either obtained since January 1st by a person previously qualified, or added to the qualifications of a person already registered.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Monday, March 14th, 1859.

Present:—Dr. Leet, in the Chair; Dr. Stokes, Dr. Smith, Dr. Williams, Dr. Apjohn, and Dr. Corrigan; Dr. Maunsell, *Registrar*.

The minutes of last meeting were approved and signed.

Copies of the regulations of the University of Dublin in relation to the conferring of Degrees in Medicine and Surgery, supplied by the Registrar of the University, were laid before the Council.

Read—Letter and Memorial from the Manchester District Medical Registration Association, requesting that Degrees obtained from Foreign and Colonial Universities and Colleges may not be registered.

Ordered—That portfolios for holding the minutes of the several Councils be provided for each Councillor.

An application for Registration, under the 46th Clause of the Medical Act, was considered, and a special order was made to register James Wilkin, of Blayney, as an Assistant-Surgeon in the Army.

Resolved—That the Registrar be directed to write to such practitioners resident in Ireland, as have not yet placed their names on the Register, to acquaint them that they cannot be included in the forthcoming publication of the General Register, unless they be returned to the Registrar for England before the end of April.

Resolved unanimously—That in reply to a resolution of the Executive Committee of the 7th instant, in reference to abbreviations proposed by that Committee to be used in the publication of the General Register, the Branch Council for Ireland desire again to express their opinion that the Executive Committee were merely empowered by the resolution of the General Council of the 27th November, 1858, to superintend the publication of the Register, and were not authorised to alter, in any way, its form—the power to do so being vested in the General Council only. The Branch Council also desire to observe, that the allusion in the resolution referred to, to abbreviations appended to some names in the Register sent from Ireland, should not have been made without its being accompanied by the letter of the Registrar for Ireland explaining the circumstance.

R. C. Williams.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 22nd, 1859.

F. C. Skey, Esq., President, in the Chair.

THE FORMS AND STAGES OF BRIGHT'S DISEASE OF THE KIDNEY, WITH ESPECIAL REFERENCE TO DIAGNOSIS AND PROGNOSIS.

BY GEORGE JOHNSON, M.D.

The question of the relationship between the various conditions of the kidney commonly included under the term "Bright's Disease," was one of practical interest and importance. The theory of the oneness of Bright's disease was inconsistent with the clinical history and the morbid anatomy of the kidney in its various conditions. A large Bright's kidney usually remained large to the end, and a contracted Bright's kidney had not passed through a previous stage of enlargement. The chief points of distinction between the large white Bright's kidney and the contracted kidney, were the following:—1. The urine secreted by the large kidney is less abundant, of higher density, more constantly and copiously albuminous, and contains small waxy casts with or without oil, but not the granular casts which are thrown off from the tubes of the contracting kidney. 2. The minute anatomy of the two kidneys is different. In the contracting kidney, the gland cells become disintegrated and washed away, leaving the tubes denuded. In the large white kidney, the cells for the most part remained attached to the basement membrane, and undergo changes varying from a slight granular opacity to a complete oily degeneration, or they may at length become replaced by an albuminous or a fibrinous material which fills and obstructs the tubes. 3. There are few exceptions to the rule, that patients who die with a large Bright's kidney have had dropsy. In only two out of twenty-six fatal cases, in the author's experience, had dropsy been wanting at some period of the patient's history; whereas, of thirty-three fatal cases of contracted kidney, there had been dropsy in only fourteen, and in most of these cases the dropsy was very slight and partial. If all the contracted Bright's kidneys passed through a previous stage of enlargement, it was difficult to understand how the majority of those patients who reached this final stage of renal degeneration could escape the dropsy, which, in a greater or less degree, troubled nearly all those who died in what is by some writers assumed to be an earlier stage of the same disease. The rule was that a large Bright's kidney remained so to the end, and that a contracted kidney had not previously been enlarged. But there were exceptions to this rule. There were cases of Bright's disease in which the kidneys, having become enlarged, subsequently underwent a process of contraction in a greater or less degree. These cases, however, were so exceptional in many of their most important features, that they afforded a remarkable confirmation of the doctrine, that in ordinary cases the contracted Bright's kidney was not an advanced stage of a previously enlarged kidney, but the result of a distinct series of morbid changes. The cases in which contraction of the kidney had followed upon enlargement might be divided into three classes:—1. Cases in which the weight and size of the kidney were found to be increased after death; yet in the cortical portion of the gland there were unquestionable indications of commencing atrophy and contraction. The author had met with six cases of this kind, and showed a drawing of the kidney from one case. The gland was large, pale, and waxy; but the cortical portion decidedly wasted. 2. Cases where the contraction of a pale, waxy kidney had proceeded farther, so that the size and weight were reduced below the average of the healthy gland. 3. Cases in which a kidney, having become enlarged and fatty, had subsequently contracted; the fat granulations being still visible in the atrophied kidney. In fourteen years the author had met with only five examples of contracted fat kidney. In two of these cases the period of transition from a large fat kidney to a contracting kidney was clearly indicated by the microscopic characters of the urine. The large waxy and granular casts were observed to take the place of the small waxy and oily casts which had been present during the earlier periods of the disease. One of these cases was under observation for a period of ten years. The chief points of distinction between a kidney wasted by the chronic desquamative disease and one contracted after waxy enlargement were referred to, and illustrated by drawings of the two forms of disease.

Dr. Quain remembered the time when there was hardly any subject before the profession which was under a greater cloud. The mere presence of albumen in the urine was regarded as something formidable in its tendency, and the progress of the disease was almost a mystery; but the researches of Dr. Johnson and others had thrown as much light on the subject as the researches of Laennec with the stethoscope had thrown on the diseases of the lungs and heart. The nature of the deposit indicated the origin and probable progress of the disease, and even seemed to point to its treatment. It was true there were some difficulties still standing in the way, but as time advanced there could be no doubt these would diminish.

Dr. Basham thought the great merit of the paper consisted in the refutation of the pathological theory, emanating from the German school, of the oneness of Bright's disease. The author had constantly endeavoured to show that there were several morbid processes engaged in producing the different forms of renal disease that go by the name of Bright. Those who had paid attention to the disease must be familiar with the appearances described by Dr. Johnson, and aware of the distinctive characteristics that marked the large, flabby, white kidney from the granular, fatty, waxy, small kidney. He could have wished that the author had dwelt more particularly on the fact that the large white kidney was frequently associated with the acute form of the disease, whereas those forms of disease that extend over many years were more frequently found connected with the fatty and waxy kidney.

Dr. G. Johnson agreed to some extent with Dr. Basham that the large pale kidney was usually connected with the acute form of the disease. Where chronic disease followed upon an acute attack it was almost always a large, pale, flabby kidney. He did not know of an instance in which a very small contracted kidney commenced in an acute attack. It was not always,

however, that large, pale kidneys existed in acute cases. One of the cases which he had detailed, where the kidney was contracted, was of ten years duration. If the patient had died at the end of nine years he believed a large pale kidney would have been found. In a considerable portion of cases of chronic enlarged Bright's kidney, the origin was latent, and there was no acute stage so far as one could ascertain. One could not explain the difference in the size by the comparative duration of the cases.

Editor's Letter Box.

CASE OF MEDICAL ETIQUETTE.

Letter from T. Webb, Esq.

Sir,—My attention has been directed to a communication signed "Medicus", in the Journal of March 26th; to your remarks on that communication; and also to replies elicited by it from members of the British Medical Association, in this week's Journal. I am the person representing A in the letter of "Medicus"; and, if you will permit me, I will relate very briefly the circumstances to which that letter refers.

I was called at night, on the 1st ult., to the scene of an accident. When I arrived, I found one person, the butler of Mrs. Levett, of Wicknor Lodge, dead; the other, her coachman, suffering from a scalp-wound and other injuries. Having dressed the wounds of the injured man, I sent him home in a carriage, promising, at his request, to see him on the following morning. Mr. Miller, a surgeon in practice here, hearing of the accident by chance, drove to Wicknor Lodge, and awaited the arrival of my patient. This he did without solicitation. He removed my dressings, knowing that I had applied them; and called upon me as he returned home, to say that he had done so, and that he should consider the case his. This was a proceeding so foreign and unusual to me, that I should, had not Mr. Miller speedily left my house, have administered to him what I consider he very much deserved—a good horse-whipping. I ought to mention, that he is Mrs. Levett's medical attendant; but, as the servants pay their own surgeon, and I was summoned, not on Mr. Miller's account, but on my own, to the accident, I consider that he had no claim whatever to the case; and even had he been called, the dignified way would have been to meet me in consultation on the following morning, without interfering, except in my presence, with my appliances.

This is my own view of the case, and the one entertained by every member of the profession to whom I have mentioned the subject; and, as it seems to be the view taken by your correspondents, and in part by yourself, I venture to submit, although not a member, the whole particulars to the judgment of the Association; merely remarking that, in a practice now extending over more than thirty years, I have held it as a golden maxim, rather to lose a patient than to be untrue to my profession. I am, etc., Thomas Webb.

Barton-under-Needwood, Burton-on-Trent, April 4th, 1859.

[In commenting on this case in the Journal of March 26th, we assumed, from an expression in the letter of "Medicus", that B (Mr. Miller) was the medical attendant of the whole family in which the injured man resided. It appears, however, from Mr. Webb's statement, that he is the medical attendant of the mistress only; and that the servants are free to choose their own surgeons. Under these circumstances, we must say that the conduct of Mr. Miller appears to have been very unjustifiable. Editor.]

GRATUITOUS MEDICAL SERVICES.

Sir,—Having, a few days since, received a circular from that excellent institution, the Royal Medical Benevolent College, soliciting my aid, I was grieved to learn from it the great extent of misery, want, and woe, not confined to the negligent and improvident, that prevail in our profession. The cause of all this painful distress is an ignoble spirit of competition, under the cloak of charity, by the wealthier portion of our body. Is it with a pure spirit of charity, which "seeketh not her own" profit, that so many F.R.C.S.'s and M.D.'s canvass with heavy expense any gratuitous appointment that may fall in a public medical charity? I think not. It is a puffing stepping-stone to practice; and, from this cause, I think that they ought to do something for their poorer brethren.

Let it be taken for granted that an average of these favoured appointments yields such officer an extra hundred a year to his practice, I would then suggest, as a test, that each officer should give to the Medical College fifty pounds a year. This would produce a good income, enabling it to extend its benevolent wings for the comfort and solace of the aged, and instruction to the young at a still more reduced rate. If those fortunate brethren would do this, the public whom they are so eager to serve would not suffer, nor could any branch of the profession complain; especially if the governors would take a hint from that excellent letter of "Delta", in the Journal of February 26th, as to their punctual attendance.

In the Journal of April 2nd, you notice the trite remarks of Mr. Sandford, "of the obscure position which the profession occupied in public estimation, as a result of being generous to others, before being just to themselves." In private practice, gratuitous physic and advice are rarely appreciated; and why should it be otherwise in a public act? In fact, we are considered as medical errand boys, to be ready to receive *orders* from any one. *If paid*, it is an act of grace, rather than that of honest grateful duty.

The breaches of etiquette and honour can never be kept much in check until some Association has the power, "as in the legal and clerical" professions, of legally disqualifying the offending party, or some other punishment.

Between pseudo-charities and the druggist's counter, the incomes of established practices have of late years been much reduced. I am, etc., Sperans.

April 4th, 1859.

HOW TO TREAT THE ENCOURAGERS OF QUACKERY.

Letter from Frederick J. Brown, M.D.

Sir,—Allow me to send you the copy of a letter addressed by me to the wife of a grocer in this town that had visited a patient of mine, formerly her servant. I think that if respectable people were told the plain truth more frequently than they now are, it would be better for all parties.

I am, etc., Fredk. J. Brown.

Chatham, Kent, April 5th, 1859.

[Copy.] "Chatham, March 30th, 1859.

"Madam,—At my visit to L. K., to-day, I was shown a quack pamphlet by Congreve, which you had left at the house. I am aware of the quack-loving sentiments of the public, and I am prepared to expect anything in the way of delusion that can be conceived; but I regret that any person occupying a respectable position in life should encourage the sin and folly of quackery.

"I feel the more sorry because in this case the poor girl is in the last stage of consumption, and is drawing near her end; and I consider it to be cruel to buoy her up by false hopes.

"Excuse me, madam, for plain speaking.

"If you sympathise with this girl, you can usefully show your kind feeling by visiting her and sending her articles of diet. I would name oranges as being a kind of fruit of which the girl is fond. "I am, madam, your obedient servant,

"Frederick J. Brown, M.D.

"To Mrs. ——."

A SUITABLE MONUMENT TO A SCIENTIFIC MAN.

Letter from W. Webber, Esq.

Sir,—It will, I think, be conceded that the time has fully arrived for determining the sort of monument best suited to continue throughout all ages as a record of the unwearied industry, the vast researches, the gigantic achievements, and the not less *unselfish* labours of John Hunter; and to do lasting honour to the universally venerated name of that excellent and truly great man, than whom science can boast no nobler son, suffering humanity no better friend, society no greater benefactor. He manned the life-boat launched by the renowned Harvey. He was the "Magnus Apollo" of the intuitive John Abernethy; the pioneer of the far-famed Astley Cooper; and, as the pilot of the past, the guide of the present, and the helm of the future, he, in death, still lives, the idol of European surgeons, as Harvey must ever live the pride of all physicians. What more precious gift can man bestow upon his fellow-man than the knowledge of how all "live, and move, and

have their being"; thereby raising the minds of his fellow-creatures to a proper and just conception of the infinite wisdom and beneficence of their Omnipotent Creator!

Marble, be the *sculpture* of it as costly as it may, is but the indicative feature of disintegrating and self-decaying time; and therefore, succumbing in its turn with other emblems of mortality, is not calculated to do more than bear witness for awhile that, by the Royal College of Surgeons, the body of John Hunter (found through the assiduous searchings of the scientific Mr. Buckland and his fit coadjutor, the humble-minded but very intellectual Professor Quekett, Curator of the Hunterian Museum) was removed from St. Martin's crypt, and "buried in peace" in the Abbey of the City of Westminster, where John Hunter lived, worked diligently and vigilantly, to the great benefit of his species, the honour of his country—and died like a devoted sentry at his post.

Poor in purse, preeminent in the services he had performed, before he had attained the full term of years allotted "to man that perisheth", he bowed to the will of his great Lord and Master, yielding up the talent and the time committed to his trust "with usury"; bequeathing to posterity an inestimable legacy, and a brilliant and most profitable example. With the memory of such a man we have now to deal. Lest future generations, for whom we are trustees, cast upon us the reproach, which, though evil, would be just, that "the *good*" now afforded by the reinterment of his remains in so deserved and time-honoured a resting place, *does not live after* us, but that it has been, as is too oft the case, "interred with his bones", let us bestir ourselves, one and all—the medical profession greatly profited, the clergy much aided, and with them the laity more largely benefited—to commemorate, in a way rational and grateful, honourable to ourselves, advantageous to those now young in years, and to those that are yet to come, that "his name liveth for evermore", till science shall with Time have passed into Eternity.

Mr. Charles Hawkins, in a letter which has lately appeared in the *Times*, has very ably advocated a course which was early hinted at by the worthy and zealous Treasurer of the Hunterian Fund, Mr. South, and others who agree with us, as probably most others do, that it would be far otherwise than wise to convert profitable gold into perishable marble. Mr. Hawkins's recommendation to his medical brethren is not less sound than opportune. Those who have not done so will do well to contribute, without delay, to the fund for perpetuating the advantages they have in their turn derived from the discoveries of Hunter, and they will do still better if they invite the co-operation of the public in their locality, who may have the means; and who have by medical science been more extensively benefited.

John Hunter, by the diffusion of the great knowledge he had acquired and recorded of frame and function, of form and feature, and of the insight into the divers diseases, various accidents, and the way of combating the numerous "ills to which flesh is heir," laid the foundation for the very valuable superstructure which has been wrought by his meritorious followers, of whom there exist in the present day not a few. The great alleviation of suffering, the extraordinary cures daily recorded in the medical and other journals, effected by the members of the profession, (the heavy costs and trying penalties of whose education must not be forgotten), and the statistics of the multitudinous Life Assurance Offices, show how considerably human nature has been advantaged; how much the mortal span has been extended by the more recent discoveries and improvements in the healing art. The members of the profession need not, therefore, feel scrupulous, or be afraid of incurring odium, by inviting the public to aid them in enlarging the opportunity and the means of promoting the growth of a science so essential to the welfare of all. On the contrary, the public will have just reason to complain if we do not give them the chance of making an investment so safe and profitable to themselves, so due to those who have to follow them.

What incalculable good might be accomplished by the ample fund which might thus be got together by a tribute from all, a tax upon none. As the widow's mite was acceptable, so will the smallest sum be useful; therefore let no one feel himself or herself shut out. I will undertake to bring at least £100 into the Treasury, and I would say unto others, follow ye likewise in the same track to the utmost of your ability.

Next week, with your permission, I will briefly lay before your readers the scheme which has occurred to me for placing our profession in the status it ought to occupy, as conservators of the public weal.

I am, etc.,

William Webber.

Onslow Square, April 11th, 1859.

Parliamentary Intelligence.

HOUSE OF LORDS.—Friday, April 8th, 1859.

RECREATION GROUNDS BILL.

An amendment was made in this measure, and the report was received.

Monday, April 11th.

RECREATION GROUNDS BILL.

This Bill was read a third time, and passed.

Tuesday, April 12th.

MEDICAL ACT (1858) AMENDMENT BILL.

This Bill came before the House upon the consideration of the Commons' reasons for disagreeing with one of their Lordships' amendments.

Lord Wensleydale moved that the reasons of the Commons be agreed with.

The Earl of Carnarvon recommended their Lordships not to insist on the amendment which had been objected to by the Commons; though he thought it might probably be necessary to bring in a Bill next year in reference to an objection which might arise under the present measure.

The motion was agreed to.

HOUSE OF COMMONS.—Thursday, April 7th, 1859.

NAVAL MEDICAL OFFICERS.

Sir J. Pakington said, in answer to a question put by Mr. Cogan, for Captain O'Connell, as to when the warrant would issue placing the naval medical officers on a similar footing with those of the army, that he was unable to name the precise day, and that he could only repeat what he said on a former occasion, that the subject was under his consideration, and that it was his intention to comply substantially with the recommendations made to him on the subject.

MEDICAL ACT (1858) AMENDMENT BILL.

The Lords' amendments to this Bill were considered; and some of them were adopted, while others were rejected.

NAVAL MEDICAL SUPPLEMENTAL FUND SOCIETY ANNUITIES, etc., ACT CONTINUANCE BILL.

This Bill was read a second time.

Friday, April 8th.

NAVAL MEDICAL SUPPLEMENTAL FUND SOCIETY ANNUITIES, etc., ACT CONTINUANCE BILL.

This Bill passed through Committee.

Monday, April 11th.

NAVAL MEDICAL SUPPLEMENTAL FUND SOCIETY ANNUITIES, etc., ACT CONTINUANCE BILL.

On the motion for the third reading of this Bill, in reply to a question from Sir H. Willoughby,

Mr. Secretary Estcourt said this was merely a continuance Bill, and he could not conceive of any persons as objecting to the objects which it was designed to promote.

Mr. Slaney concurred in the opinion that the operation of the Bill might be expected to be beneficial.

Mr. Bowyer said that as this was a Bill referring to the navy, he hoped he should be in order in calling attention to a subject which he wished to bring before the House, relating to Greenwich Hospital. There were now a great number of vacancies in that establishment, which was sufficient to show that it was not popular with the navy, and that it did not give the satisfaction desirable to those for whom it was intended. He would not enter into matters of detail; but he wished to ask the First Lord of the Admiralty what measures the Government were prepared to take to place that noble establishment, which ought to be to them a subject of pride, on a better footing.

Sir J. Pakington said the honourable gentleman had given him no notice of the question, and, therefore, he could only give a general answer; and, while he agreed that the cha-

racter of Greenwich Hospital was a matter of the highest importance, he would take care to institute an inquiry.

The Bill was then read a third time, and passed.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Baker. On April 11th, at Vorley's Villas, Upper Holloway, the wife of Thomas J. Baker, Esq., Surgeon, of a daughter, stillborn.

Briscoe. On April 9th, at the Royal Arsenal, Woolwich, the wife of Henry Briscoe, M.D., Royal Artillery, of a daughter.

Burke. On April 9th, at 31, Molesworth Street, Dublin, the wife of W. M. Burke, M.D., of a son.

Longton. On April 8th, at the Priory, Southport, the wife of E. J. Longton, M.D., of a daughter.

Marsden. On April 11th, at 2a, Hyde Park Place, the wife of Alexander Marsden, Esq., Surgeon, of a son.

Stallard. On April 5th, at 12, Welbeck Street, Cavendish Square, the wife of *J. H. Stallard, M.D., of a son, who survived only a few hours.

MARRIAGES.

Birch—Hamilton. Birch, George, Esq., to Catherine Anna, eldest daughter of the late Joseph Hamilton, M.D., of Queenstown, Canada, at Bath, on April 7th.

Brambley—O'Shaughnessy. Brambley, Alexander Howe, Esq., to Sarah Mary, daughter of Sir W. B. O'Shaughnessy, M.D., at Roorkhee, Bengal, on February 21st.

Cranswick—Tubbs. Cranswick, William Noad, Esq., Surgeon, of Camberwell New Road, to Elizabeth Brown, youngest daughter of the late Joseph Tubbs, Esq., of Herringswell Hall, Suffolk, at Herringswell, on April 7th.

Eves—Redmond. Eves, Augustus, M.D., of Cheltenham, to Matilda Anne, youngest daughter of the late Samuel Redmond, Esq., of Thornhill, county Antrim, at Cheltenham, on April 6th.

Hele—Shute. Hele, N. Fenwick, Esq., Surgeon, to Harriet, youngest daughter of Major Shute, Shaldon, Devon, at Ringmore, Devon, on April 6th.

O'Leary—Morley. O'Leary, Thomas C., M.B., 68th Light Infantry, to Mary Evelyn Pryce, youngest daughter of the late Arthur T. Morley, Esq., of Newtown Hall, Montgomeryshire, at the Roman Catholic and St. Jude's Churches, Portsea, on April 5th.

Sharman—Dulley. Sharman, Matthew Reid, Esq., solicitor, of Wellingborough, to Mary Elizabeth, second daughter of *Benjamin Dulley, Esq., Surgeon, of the same place, on April 7th.

DEATHS.

*Allen, George, Esq., Surgeon, at St. George's, Somerset, aged 63, on March 25th.

Duke, Walter, Esq., Surgeon, at Hastings, aged 45, on April 4th.

Duncan, Henry, M.D., at Calais, on April 6th.

Glover, Robert Mortimer, M.D., at 1, Kensington Park Road, on April 9th.

Hairby, James, M.D., at Hundleby, Lincolnshire, aged 62, on April 3rd.

Hodson. On April 9th, at Bishop's Stortford, aged 43, Betsey, wife of *Charles F. Hodson, Esq., Surgeon.

Percivall, William, Assistant-Surgeon Royal Navy, in the harbour of Rio de Janeiro, on board Her Majesty's ship *Madagascar*, from yellow fever, aged 24, on March 4th.

Taylor, Joseph, Esq., Surgeon, at 4, Vere Street, Cavendish Square, aged 76, on April 7th.

Taylor. On April 9th, at Colchester, aged 3 years and 8 months, Eliza, child of J. R. Taylor, M.D., Deputy Inspector-General of Hospitals.

Thompson. On April 3rd, at Southsea, aged 75, Benham, widow of the late William Thompson, Esq., Surgeon Royal Navy.

PASS LISTS.

Royal College of Surgeons. At a meeting of the Court of Examiners, on Friday evening, April 8th,

Waller, Edmund, of Her Majesty's ship *Wellesley*, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date July 11th, 1853.

The following gentlemen, having undergone the final or pass examinations in Pathology and Surgery, were admitted members of the College at a meeting of the Court of Examiners, on April 11th; viz.—

St. Bartholomew's Hospital.

Adams, James, Addington Place, Camberwell
Buck, Henry John, Norwich
Cann, Thomas, Seaton, Devon
Clare, Henry Ashlin, Holland Cottage, Kennington
Dowker, Frederick Woodcock, Laysthorpe, Yorkshire
Gregory, Bradley, Exeter
Lloyd, David, Carmarthen
May, John Henry Square, Plymouth
Nunn, John Robert, Bedford
Parker, Robert, Churton, Chester
Stone, Thomas Westcott Gale, Lincoln's Inn Fields
Woods, Francis Hollis, Northampton

St. Thomas's Hospital.

Drake, Charles Henry, Kingsclere, Hants
Grabham, Charles, Lonsdale Square, Islington
Griffith, Alfred Leete, Eden Place, Old Kent Road
Grose, Samuel, Boston, Lincolnshire

University College Hospital.

Miles, Rees, Merthyr Tydvil
Roberts, John, Crug, Carnarvon
Thompson, John, St. Mary's, York

Manchester School.

Bancroft, Joseph, Stretford, near Manchester
Foulkes, Frederick, Swineton, Manchester

Guy's Hospital.

Brooks, Bransby, Henley on-Thames

King's College.

Evans, George Maule, Queen's Road West, Regent's Park

St. George's Hospital, and Grosvenor Place School.

Bucknill, Ebenezer, Stanley Street, Chelsea

Westminster Hospital.

Blennerhassett, Richard Henry, Tralee, county Kerry, Ireland

New Fellows. The following members of the College, having been elected Fellows at previous meetings of the Council, were admtited as such on April 14th:—

Benfield, Thomas Warburton, Leicester: diploma of membership dated January 27th, 1843
Budd, Herbert Walker, Worcester: May 29th, 1835
Burke, John Page, Staff-Surgeon, Royal Navy: June 29th, 1840
Cantrell, William, Wirksworth, Derbyshire: February 24th, 1843
Evans, William, Marine Terrace, Herne Bay: May 6, 1839
Godfrey, Thomas, Herne Bay: October 8th, 1841
Impey, Elisha George Halhead, A.M., H.M. Bombay Army: August 16th, 1839
Ingoldsby, Frederick, Finsbury Square: November 5, 1841
Mann, George Smyth, H.M. Bengal Army: April 26, 1839
Owen, Harvey Kimpton, Clapham Road: June 14th, 1839
Risk, James George, Beaumaris, North Wales: June 24th, 1842
Rose, Caleb, Suffolk Place, Pall Mall: May 13th, 1842
Ryan, Michael, Newcastle, Staffordshire, October 8th, 1841
Sheppard, Edgar, Hanover Terrace, Regent's Park: June 13th, 1842
Stovell, Matthew, H.M. Bombay Army: Sept. 5th, 1828
Thompson, Moses Davenport, Stalybridge: May 25, 1838
Vine, George John, Hadlow, Kent: July 1st, 1839
Whitfield, Frederick, St. James's Terrace, Harrow Road: January 7th, 1825
Williams, James, Mount Pleasant, Brecon: June 18, 1841
Wood, John Bland, Broughton, Manchester: February 5th, 1836

At the same meeting of the Council—

Sandels, W. J., of Holyhead, was admitted *ad eundem* a member of the College.

University of Cambridge. At a Congregation held on April 8th, the following degree was conferred:—

Doctor of Medicine.

Burd, Edward, Caius

Apothecaries' Hall. Members admitted on Thursday, April 7th, 1859:—

Bancroft, Joseph, Stretford, near Manchester
Bellringer, George Hext, Penzance, Cornwall
Bett, Robert Longstaff, Howell, Lincolnshire
Bone, William, Calcutta
Fawkner, John, Manchester
Godrich, Henry, Brompton
Ray, Sidney Keyworth, Milton, near Sittingbourne, Kent
Scott, Henry Thomas, Henry's Place, Old Kent Road
Watling, Charles Wyat, Tredington, Shipton-on-Stour
Williams, William, Kidwelly, Carmarthenshire

The following gentlemen also, on the same day, passed their first examination:—

Freeman, William, Maldon, Essex
Huntley, Robert Elliott, Howdon, Northumberland
Paine, William, Lopsham

HEALTH OF LONDON:—WEEK ENDING APRIL 9TH, 1859.

[*From the Registrar-General's Report.*]

In the week ending Saturday, the total deaths registered in London were 1201, and they exhibit an increase of 134 on those of the preceding week. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1151; but as the deaths in the present return occurred in a population which has increased, these can only be compared with the average raised in proportion to the increase; namely, with 1266. The figures show that the deaths of last week were less by 65 than the number which would have occurred under the average rate of mortality for the first week of April.

The deaths from small-pox rose last week to 22, of which number nearly half occurred in the east districts; those from measles declined to 15. Fifty-eight cases of scarlatina and 13 of diphtheria were fatal. Whooping-cough carried off 61 children, five of these in the sub-district of Somers Town. At 14, Catherine Street, Hoxton New Town, three children have died from scarlatina since the 3rd instant, and two others have been attacked by the disease. The medical attendant considers that the severity of the complaint in this instance is due to the bad drainage of the locality. A tailor, aged 79 years, at 5, Back Road, St. George-in-the-East, was "found dead from want of proper nourishment."

Last week, the births of 923 boys and 914 girls, in all 1837 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1556.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·831 in. The barometrical readings underwent very small variations during the first four days; afterwards, the lowest was 29·41 in., the highest 29·52 in. The mean temperature of the week was 56·3°, which is 11·1° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week; and on Wednesday and Thursday this excess was 15·7° and 17·5° respectively. The thermometer fell to its lowest point 43·5° on Tuesday, and rose to its highest 79° on the following day. The entire range was therefore 35·5°. The mean daily range was 21·8°. The range on Wednesday was so much as 33·5°. The difference between the mean dew-point temperature and air temperature was 9·1°. The wind blew on every day from the south-west. The rain measured was 0·10 in.

In the thirteen weeks that ended April 2nd, 16,147 deaths were registered in London, of which 8,160, or rather more than half, occurred under 20 years of age. The quarter was healthier than the same period of last year, and much healthier than that of 1855. The mean temperature of the first quarter in the present year was unusually high, viz., 43·3°; in that of 1858, it was 38°; in 1855, 34·1°. But though the recent mortality has been comparatively not great, scarlatina (including diphtheria) has contributed a remarkably heavy proportion, the deaths from it having been 1167, while in four corresponding quarters they ranged only from 353 to 705. Small-pox has lately increased, for whereas the deaths from it in the two winter quarters of 1857-8 were 60 and 41, in the last quarter they were 201. Of these 201, eight occurred in the west districts, 38 in the north, 43 in the central, 83 in the east, and 29 in the south. The parts chiefly infested were Finsbury, Shoreditch, and Bethnal Green.

Of 525 violent deaths, 436 occurred by accident or negligence, 25 by murder or manslaughter, 64 by suicide.

THE JOHN HUNTER STATUE.

At a meeting of the committee for the erection of a statue of Hunter, held on March 29th, Mr. J. H. Green, the President of the Royal College of Surgeons of England, delivered an interesting address, which has been printed in the form of a pamphlet. He observed that after the lapse of more than sixty years, no public memorial existed to record the grateful acknowledgment, by the profession, of the merits of this illustrious physiologist and surgeon. His claims to the gratitude of his country were indeed manifested by the incomparable museum deposited within the walls of the college. This monument of his genius was the result of years of ever renewed labour, both of mind and body, during hours which he snatched from the harassing duties of professional practice; as well as of a liberal expenditure of professional gains. At his death, all that he could leave as a provision for his family, was only whatever the Museum, which had absorbed all his means, might produce; and, by the tardy munificence of Parliament, it fortunately became the property of the nation, at the inadequate cost of £15,000. John Hunter might be justly regarded as the founder of a science of comparative physiology. It was the peculiar merit of Hunter that, instead of wasting his time on hypotheses and conjectures with regard to the nature and essence of living forces, he had raised his mind to the apprehension of life as a law in aid of a science of vital dyamics, and as the means of giving scientific unity to the facts of living nature. Proofs of the pregnancy of the ideas which animated Hunter's labours, were afforded by the imposing array of facts contained in the Museum. It was impossible to repress admiration of the founder, who, at the sacrifice of fortune and present enjoyment to the cause of science, laboured with undaunted perseverance, amid the sneers of his professional brethren, in the execution of his great work. It was impossible not to appreciate the judgment he displayed in culling the choicest in illustrative facts; it was impossible, in examining his preparatory labours for the description and explanation of the collection, to withhold unqualified praise of the genius which thus brought together this epitome of animated nature in the unity of a scientific idea!

It would be worse than idle to say that his great predecessors, from the immortal Aristotle to Haller, Daubenton, Pallas, and others, among whom the great Harvey might proudly be pointed to, had not largely contributed to our knowledge of animated being: it would be base and purposeless to deny the well-earned merits of his contemporaries and successors: and, without any attempt to detract from the fame of the illustrious Cuvier, who first successfully accomplished a scientific classification of the animal kingdom, based on natural affinities disclosed by comparative anatomy, for Hunter might justly be claimed the praise of originality and priority in the scientific construction of comparative physiology,—of having first presented the facts of comparative anatomy in and as a connected scheme of graduated development, and of having thus furnished the ground of the science of comparative or universal physiology, and with it the well-founded and not unconfirmed hope of making every part of the organised creation give intelligibility to every other part, and all to the crown and consummation of all, the human frame. That, however, he had also more largely contributed to the wealth of facts that form the capital of the science, than had been hitherto admitted—nay, that he had anticipated much of recent discovery in morphology, embryology, and palæontology, could no longer be doubted since the publication of the admirable preface to Hunter's papers on the Animal Œconomy, by Professor Owen.

Hunter's practical and comprehensive mind also led him to connect his scientific labours with his professional pursuits, and with the task of establishing surgery on scientific principles. In his pathology, by contemplating life as an agency working

under the control of law, he remained true to the principle already secured in his physiology; and it enabled him to regard the living body in disease, no less than in health, as a living whole and an organic unity. He not only recognised the living body as a constitution, by virtue of which it forms a system of interdependent parts and of balanced forces mutually reacting and combining to one end; but he also raised into notice the existence of these powers in various degrees of intensity and of relative subordination. From this vantage ground he was led to determine the pathological significance of the terms "susceptibility," "disposition," "irritability," "hereditary tendencies," and "sympathy." The latter term was intended to express the community of feeling and action, which preserve the bond of interdependence in all the parts and actions of the living body in their conspiration to one organic whole. As many of the actions excited by sympathy are for the purpose of effecting processes which tend to the repair of local injuries and to the removal of disease, the principle which he established supplied an intelligible meaning to the so-called "*Vis medicatrix naturæ*." Mr. Green referred to Hunter's work on the *Fundamental Principles of Inflammation* as a most masterly performance of inductive inquiry, unprecedented in the special science to which it is a contribution. In his investigation of the inflamatory process, it was impossible sufficiently to admire the almost wearisome collation of facts by which he removes, point by point, all the separating obscurity, the morbid from the natural action of vessels, and brought them into luminous and intelligible connection. In his researches on ulceration, in connection with the functions of the absorbent vessels, he opened a new branch of science, and it was by his elucidation of the process of adhesion, or union by the first intention, that he principally conferred on operative surgery a scientific character. The knowledge of this mode of union in wounds, whether premeditated or accidental, had eminently contributed to rescue the surgeon's art from the *opprobrium* of unsuccessful operations, and to give simplicity and success to their after treatment.

Mr. Green here related two instances which had come under his notice, to show the slow appreciation of principles. One of the first operators of Paris, about thirty-five years ago, had excited Mr. Green's admiration by the extraordinary care with which he had, in an amputation, prepared the parts for the quick union of the stump, when, to his inexpressible surprise, he stuffed the wound with "charpie", and thus wilfully provoked a tedious suppuration At Berlin, in 1817, he saw a case in which one of the most eminent operators of Germany had tied the subclavian artery for an axillary aneurism. The patient appeared to be in a favourable state, but, for reasons which the operator did not explain, he resorted in a few days to the antiquated and barbarous practice of opening the sac by an extensive incision, and of scooping out its contents. The patient's life was the forfeit of this gross violation of the principle which Hunter had established.

But the appeal to philosophical principles was the cause of Hunter's novel doctrines being a closed volume to the greater number of his contemporaries, and to the mere routiniers of the profession. But, although the principles, implied or expressed in his writings and lectures, subjected him to the scorn or neglect of those less imbued with the spirit of philosophy, the results of those principles, practically exemplified and verified as they were by facts, gradually forced themselves on the conviction of the profession, and became the very groundwork of all professional study, teaching, and progress. Nor ought it to be forgotten, in accounting for the revolution in surgery which he effected, that, in the lifetime of Hunter, the better minds of the surgical profession were attracted to his lecture-room; and, though perhaps at no time exceeding thirty in number, that Home, Cline, Lynn, Carlisle, Abernethy, Astley Cooper, Coleman, and others, were his enthusiastic disciples, and became the enlightened teachers of Hunterian principles in the schools of the metropolis.

If, then, Hunter might be justly regarded as the founder of a science of comparative physiology; if, in first establishing, on the basis of physiology, a rational pathology, he achieved the union of the healing art with universal science; and if he thereby raised surgery into a liberal profession, and produced a beneficial reform in surgical art, by which its power and light in ministering to the ills of man have been incalculably increased; a confident appeal might be made to the liberality of the profession, and of all lovers of science, for the means of raising a memorial of their gratitude and reverence for this great man, who might rightfully take his place in the foremost rank of the benefactors of mankind.

Extraordinary Range of Temperature. Mr. E. J. Lowe, of Highfield House, in the *Times* of April 7th, remarks, that the unprecedented range of temperature which has occurred within the space of a single week is worthy of record. On the 1st of April, the temperature fell to 21·8° in the air, and to 20° on the grass; while on the 7th of April, it rose to 78·0° in the shade, being a range of 56·2°. The hottest temperature before recorded here for April, is April 6th, 1859—viz., 75·8°. In 1848 and 1852, it rose to 75·5°; and in 1854, to 74·8°. During the last sixty-five years, the observations taken at the Royal Society, and reduced by Mr. Glaisher, show that in 1707, the temperature in April rose to 77·0°; in 1841, to 76·5°; in 1848, to 75·0°; and in 1844, to 74·9°—the thermometer to-day rising 1·0° above this amount. The coldest temperature before recorded at Highfield for April is 1855—viz., 22·6°; and 1849, 24·3°. The Royal Society's observations give 27·0° as the coldest for April, and this occurred in the three years 1099, 1808, and 1847. In the present year the temperature has fallen 5·2° below the amount. From the inland position of the Highfield House Observatory, the temperature rises higher and falls lower than in the neighbourhood of London; nevertheless, the temperature has been 0·8° lower, and 2·5° higher than ever before recorded.

Medical Officers of Unions. Some papers have been printed by order of Parliament, on the motion of Mr. Cobbett, M.P., relative to complaints made in December 1857, and February 1858, against Dr. Joseph Arthur, medical officer of the Deptford district. The complaint was, that he neglected the poor, and it was first made to the Greenwich Board of Guardians in December 1857, by the Rev. C. F. S. Money, of St. John's, Upper Lewisham Road. At the beginning of 1858, an official inquiry into the charge against Dr. Arthur was instituted by Mr. H. B. Farnall, Poor-Law Inspector, in the boardroom of the Greenwich Workhouse. His report to the Poor-Law Board appears to exculpate Dr. Arthur from the charge of negligence, but he expresses his strong disaproval of the language of the learned doctor's letter to the Rev. Mr. Money, of the 2nd of May, 1857, and thinks that the Board, in acquitting him of negligence, should take notice of the matter. The doctor about this time came into collision with the Rev. J. P. Courtenay, curate of St. John's, who complains of being "subjected to his insulting and violent conduct" while visiting two sick persons. This complaint was also the subject of inquiry by Mr. Farnall. On this occasion he advised the Poor-Law Board that Dr. Arthur's conduct towards the Rev. Mr. Courtenay, while in the performance of his clerical duties, was "most unwarrantable;" and, referring to the former inquiry, he felt that he must recommend the Board to call for Dr. Arthur's resignation. The Board accordingly did so on the 17th of March 1858. The doctor hereupon appealed to the local board of guardians, promising in future to give the curate, Mr. Courtenay, no further cause of complaint, and expressing regret for the use of certain words in his letter to Mr. Money. The Poor-Law Board, however (20th of April), refused to retract their previous resolution, and intimated that Dr. Arthur, unless he resigned within a week, would be summarily "removed." Dr. Arthur accordingly retired from office; but this was the signal for a "memorial" from twelve highly respectable medical practitioners of the district to the Poor-Law Board, expressive of deep regret at the resignation by their friend, Dr. Joseph Arthur, of an office which "he had held for the last seventeen years and a half with so much credit and honour to himself and advantage to the sick poor." This is dated the 23rd of April, and on the 7th of May the guardians of St. Paul and St. Nicholas, Deptford, solicited an interview with the Poor Law Board for the purpose of urging the reinstatement of Dr. Arthur as medical officer of the Deptford district. Meanwhile, a reconciliation was effected between the doctor and his clerical coadjutors, much to the honour of both parties. The Poor-Law Board, notwithstanding this subsidence of the troubled waters, and the strong representations of the guardians and local physicians and surgeons in favour of Dr. Arthur, still found (19th of May) no reason to "vary their views" with respect to the case. The following day, however, the Board was officially aprized of the reelection of Dr. Arthur to the office of medical officer of the Upper Deptford district, subject to the Board's approval. The Board remained inflexible, declining to sanction the reelection, and on the 1st of July Dr. Arthur appealed to the Secretary of State, earnestly courting inquiry before an impartial tribunal, and feeling that gross injustice had been done to him. Here the paper terminates, whence it is to be inferred that Mr. Walpole, then at the Home Office, declined to

interfere. Dr. Arthur, in one of his letters, gives some hints on the subject of clerical "visitations" from house to house that may be quoted with advantage for the instruction of those parish priests who lack discretion rather than zeal. He writes as follows:—"On Mr. Courtenay (the curate) retiring (from a house) both mother and daughter assured me they never invited him to attend. Now, there is no greater fallacy than to imagine that the sick poor like these visitors; on the contrary, they dread them; when the visitor makes his appearance in the sick room the patient thinks it ominous, and so begins to suspect that he is booked for a speedy passage to the other world. In fact, he looks upon the visitor as the harbinger of death, an idea which his appearance and sepulchral notes in every way tend to establish. The hospital physician allows no intrusion on his cases without his consent. The private physician forbids the visits even of the nearest relatives when life is endangered by noise or excitement. The district physician owes precisely the same regard and attention to the poor; and they may rest assured that, as long as I continue their physician, I shall submit to no intrusion or ungenerous treatment towards them." (*Times.*)

The Approaching General Election. Requisitions, of which the following is a copy, are in course of signature in different parts of the city and liberty of Westminster:—

"We, the undersigned electors of Westminster, having ascertained that your health is sufficiently restored to enable you to resume your duties in the House of Commons, and believing that your principles relative to the duration of Parliament, the extension of the franchise, the vote by ballot, and the abolition of church rates, are in accordance with our own views and opinions, earnestly invite you to become a candidate for the representation of Westminster at the election about to take place. Should you consent, it will be our object to promote your return by every legitimate means in our power, without requiring you to take any personal part beyond appearing on the hustings on the day of nomination. We shall ourselves record our votes in your favour without putting you to expense; and we shall solicit our brother electors to act in a similar manner, feeling assured that we best secure the independent action of our representatives in Parliament by electing them free from any other cost or expenditure than the legal charges of the returning officer.

"To Thomas Wakley, Esq., Coroner for Middlesex, and
lately M.P. for the Borough of Finsbury."

It is said, also, that Dr. Michell, whom the profession will remember for his abuse of Jenner and his discovery, is a candidate for the representation of Bodmin; and that Dr. J. W. Noble, of Leicester, has resigned his office of mayor of that town, in order to obtain the honour of representing it in parliament.

The Hunter Statue. A meeting has been held in Liverpool, at which it was resolved that subscription lists should be at once opened. In Jersey, Dr. Fixott, a Fellow of the Royal College of Surgeons, is acting as honorary secretary. A list of subscriptions will shortly be published.

The Royal Society. Sir Benjamin Brodie, as President of the Royal Society, received a very large party of eminent scientific and literary persons on Saturday evening, in Burlington House.

Harveian Society. At the meeting of the Harveian Society, on Thursday evening, April 21st, a paper will be read by Dr. W. Camps, "On certain perverted cerebral or psychical acts antecedent to mania."

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

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Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

An Old Member. A full report of the prosecution of the editorial staff of *L'Union Médicale* by the Parisian homœopaths has been published in French. The title is *La Médecine traditionelle et l'Homœopathie; procès intenté au Journal L'Union Médicale, par douze Homœopathes: precédé des Mémoires et des Notes diverses publiées par les Parties au Cours des Débats, et recueillis par* J. Sabbatier. It is published at the office of L'Union Médicale, 56, Faubourg Montmartre, Paris, in the form of an octavo volume of nearly 300 pages, at a price of 3 fr. 50 cent., exclusive of postage. Our correspondent could obtain it through one of the foreign booksellers in London.

Mr. Jonathan Harrison. The work to which you refer is Mr. G. M. Humphry's *Treatise on the Human Skeleton*. The price is £1 8s. An advertisement of the book appears in this day's Journal.

Communications have been received from:—Mr. G. M. Humphry; Dr. F. J. Brown; Mr. James Dulvey; An Old Member; Dr. Wm. Hinds; Dr. W. Addison; Mr. Thomas Webb; Mr. William Martin; Mr. Augustin Prichard; Dr. W. O. Markham; Dr. C. H. Jones; Dr. Lionel Beale; Dr. Turnbull; Dr. Jas. Russell; Mr. Higginbottom; Mr. W. Webber; Mr. Holmes; and Mr. T. M. Stone.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXI.] LONDON: SATURDAY, APRIL 23, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

GUY'S HOSPITAL.

EXCISION OF PORTIONS AND OF THE ENTIRE ELBOW-JOINT, FOR SCROFULOUS DISEASE OF THAT ARTICULATION: ILLUSTRATED BY CASES.

By JOHN BIRKETT, Esq., Surgeon to the Hospital, Corresponding Member of the Surgical Society of Paris, etc.

[*Read before the Hunterian Society.*]

THE value and paramount importance of the forearm and hand to all individuals is so great, whatever may be their station in life or social condition, that the practical surgeon has diligently and laboriously studied how such important members might be saved without incurring risk to life in the undertaking.

In 1836, Mr. Blackburn, an active and very intelligent student at Guy's Hospital, published, in the *Guy's Hospital Reports*, vol. i, pp. 268 and 274, a paper entitled "An Essay on the Excision of Diseased Joints"; and in the same volume there is the relation of a case in which the elbow-joint was excised from a man by the late Mr. Aston Key, in 1835. The success attending this case led to the substitution of this operation in preference to amputation in all practicable cases; and there have been a great many operations of this kind performed by all the surgeons of the institution since that time, and with the most complete success. The "conservative surgery" principle, so much vaunted in the present day, has thus been most fully carried out, although it may not have enjoyed the advantage of the publicity so freely accorded to the doctrine as emanating from other quarters.

The cases I shall directly read are examples of surgical interference with disease of the elbow-joint, originating, in all probability, in the articular extremities of one or more of the bones composing that articulation. The circumstances attending the development of the disease have differed to a certain extent. Thus, in one, the disease seems to have commenced immediately after the receipt of an injury; in another, the joint became affected, without any assignable direct cause; in a third, the disease seems to have been secondary to thoracic mischief; and the fourth patient felt the elbow stiff and painful for a year before he fell and contused the part, thus adding the effects of secondary mischief to primary disease.

In all the patients, the scrofulous diathesis was strongly marked, and none of them could be described as having enjoyed the advantages of perhaps even the necessary requirements for healthy nutrition. One was a delicate child, the member of a large family, whose father was in great difficulties, and who, I learned, sometimes obtained scarcely any food at all; another had been a teacher in a village school; the other two were young men, one a clerk in a London counting-house, and the other a porter, who was the strongest of all.

Two of the patients, the girl and young man, were the subjects of pulmonary complications: the man had suffered severely with pleurisy, accompanied by effusion, some months before the elbow gave him pain; and the girl was probably the subject of tubercular deposition, according to Dr. Hughes, at the time she came under my treatment.

All the patients were very much reduced by their sufferings and the purulent discharge; and this was manifested in a very marked degree, in relation to their constitutional diathesis and age. The child was the most reduced of all, although the disease had been active only six weeks; and of the adults, a man (Case III) was in a very low condition, the disease having been acute from two to three months. He was a delicately made, small boned, fair skinned individual, whose muscular and thoracic development were prominently deficient.

After these preliminary remarks, I will read the cases.

CASE I. *Injury of the Elbow Joint; Disease of the same Joint—Inflammation, Suppuration, Abscess, Sinuses; Excision of the Olecranon and Part of the Shaft of the Ulna.* N. W., aged 4 years, was admitted into Dorcas Ward on March 31st, 1854. He was called healthy, but was a delicate-looking strumous child. This child resided with his father and mother at Kennington. They had six other children, all healthy. Until eighteen months before admission, this boy enjoyed good health. He was, about that date, playing with other children, when he fell on to his left elbow, it is supposed, for it was swelled and painful. This swelling subsided in a few days, but about a month afterwards the joint enlarged, and he was brought to Guy's as an out-patient. After local applications and general constitutional treatment, the local disease improved. About six weeks before admission, the joint rapidly swelled, and, during the last three weeks, it had been very painful and inflamed.

When admitted, the left elbow-joint was enlarged, and any attempt to move it caused great pain. It was semiflexed, and the forearm pronated, and held in that position by the child's right hand. Any movement of the member gave pain, and the least local pressure was insufferable. Warmth and moisture were applied, and tonics administered.

April 12th. A large abscess was forming, but the constitutional disturbance was not great; and it was allowed to point and open, which it did about the beginning of May. The opening was not very large, and the size of the swelling was not much diminished by the escape of thin serous pus; and I thought that, at the time the opening was enlarged, it would afford a good opportunity for the examination of the bones forming the joint, and for removing any portion which might appear to be diseased.

On May 9th, 1854, the child being under the influence of chloroform, I made a single vertical incision over the posterior aspect of the joint; and, after removing a large quantity of soft flocculent vascular growth, I exposed the olecranon and contiguous portion of the shaft of the ulna, and cut off about an inch and a half of this bone. The articular end of the humerus and head of the radius appearing to be healthy, I left them untouched. The joint itself contained pus; but, from the ends of the bones consisting, at this age, of temporary cartilage, it was difficult to ascertain whether the articular cartilage was destroyed or not. The portion of ulna excised consisted of the olecranon process and about an inch of the shaft of the bone. The last was entirely deprived of periosteum, was soft, and appeared to have constituted the focus of the disease. The epiphysis of the olecranon seemed to be healthy. Very little bleeding attended the operation. Stripes of wet lint were used to support and adjust the edges of the wound; and the arm was placed in a semiflexed position, or at an obtuse angle.

For four days after the operation, the child suffered very acutely, and the constitutional disturbance was very severe; but on the fifth day, when suppuration was freely established, he was much improved. During this time, and even subsequently, the condition of the arm and the child's general health were such as to anticipate the necessity of amputation at no very remote period; but, by giving the child every possible amount and kind of wholesome nutritious food, he at last improved sufficiently to leave the hospital about three months after the operation.

After this time, the child came as an out-patient for some months; but the restoration of his health was attended with most adverse circumstances.

In May 1856, I admitted the child again, when there was still a continued suppuration from sinuses around the elbow, and his constitutional condition was very low. He left the

Hospital in August, much improved, and the sinuses nearly healed.

During the season of 1857 and 1858, he passed the time at the Royal Margate Sea-bathing Infirmary, and there he derived the greatest amount of advantage. All the sinuses healed, and the health was greatly improved. He has now a very useful arm, but there is very little movement at the elbow.

Case II. *Strumous Disease of the Elbow-joint, of about one year Duration; Excision; subsequent Amputation of the Arm; Recovery.* M. J., aged 20, from near Wells in Norfolk, was admitted on May 2nd, 1855. She had been employed as a teacher in a school, and had enjoyed good health, although of a most strumous diathesis. One year since, her right elbow became stiff and painful, without any assignable cause; and in a few months it inflamed, and her health began to decline. Mr. Hugh Rump of Wells attended her; but, as no favourable change occurred from the treatment, she came by his directions to London, to submit to excision or amputation. When admitted, she could scarcely endure any movement of the forearm; a large collection of pus existed on the outside of the joint; and the hand and forearm were œdematous. Dr. Hughes reported that "mucous rattle and bronchial breathing existed over the upper part of the right scapula, probably dependent upon tubercular deposition." With this opinion, I did not consider that there was much chance of a favourable termination of the case, if I excised the joint; but the girl had made up her mind to have this operation performed; and, although I frankly told her my opinion of the probable result of the case, and that it would be very likely to end in amputation at last, she decided to go through the first.

I did not immediately perform the operation, wishing first to improve her general health; but the joint became more painful, and the abscess broke; and, on May 22nd, I excised the olecranon ulnæ, and the inferior extremity of the humerus. The head of the radius, appearing to be healthy, was not excised. A single posterior vertical and one transverse incision from its centre were made, and not the usual incision in the shape of the letter H. Very little hæmorrhage occurred, and the wound was dressed with wet lint. All the cartilage upon the surfaces of the bones was destroyed; their surfaces, as well as the synovial membrane, were covered with the vascular granulations; but the tissue of the bones seemed healthy. She seemed very well the next day; but for several succeeding days she had constant vomiting and diarrhœa, which no medicine seemed to check. During this time, her pulse was scarcely accelerated; her tongue was clean and moist. She could take no nourishment whatever; she slept very little; yet the wound did not assume an unfavourable aspect. By degrees the wound healed, leaving a fistulous opening, from which pus was discharged.

Thinking that a return to fresh air and the country might be useful, she left the hospital July 30th, and returned home. I saw this patient in the country, in August 1855. Her general health was very little improved, and the arm quite useless. There was still a discharge of pus from two openings; and, from the long time which had elapsed since she was able to use her wrist-joint and fingers, they had become stiff and very nearly fixed in the extended position.

She continued in very delicate health throughout the winter, during which period the arm was kept flexed and at rest; but, as little reparation took place, in April 1856, Mr. Hugh Rump amputated through the humerus. I examined the parts which had been the subject of the operation. Open sinuses led to the ends of the humerus, ulna, and head of the radius. The ends of the humerus and ulna seemed to be healthy; but the head of the radius was carious, and united to the ulna. Much vascular granulation-tissue surrounded the ends of the bones.

From this operation the patient recovered.

The bones, after maceration, show a considerable growth of spiculæ of new bone around their diseased ends; and the texture of the cancellous tissue of all would lead to the inference that a carious state of the bones existed at the time amputation was performed. The radius separated from the ulna by maceration.

Case III. *Disease of Right Elbow-Joint, subsequent to an Attack of Pleurisy; Suppuration, Sinuses, Excision, Cure, with Movement at the Elbow.* Baker, aged 20, was admitted on Sept. 30th, 1857: he had been a warehouseman, and resided at Lewisham. He was a very delicate-looking man, but stated that he had enjoyed good health, except when confined to his bed, about fifteen months since, with pleurisy. About seven months since, the right elbow felt stiff, the joint became flexed, and pain and swelling of the joint followed. It was placed upon a splint for some time, and blistered; but the disease advanced; and in August an abscess was opened, which discharged at the time of admission.

When admitted, he was very much reduced in constitutional powers: he was emaciated, hectic, with slight continued cough; was unable to sleep, in consequence of the pain from the local disease; had little or no appetite; and appeared to be sinking gradually. On an examination of the lungs by the physicians, they were believed to be in a sound condition, although traces of the pleuritic attack remained. The disorganisation of the elbow-joint appeared to be complete, although I could not detect very distinct crepitus, from attrition of the articular ends of the bones, in all probability deprived of most of the articular cartilage.

The arm was carefully bandaged from the fingers to the elbow; stripes of wet lint were applied around the elbow; and the member supported upon a splint, the joint being flexed at the angle which afforded the greatest amount of ease to the patient. Nutritious but light and not stimulating diet was taken. Cod-liver oil was administered, and a narcotic at night. Under this treatment, his constitutional condition materially improved; and, after a residence of twenty days in the Hospital, he seemed to have made so much progress that I considered it right to submit him to excision of the joint, in preference to amputation through the humerus.

This operation was performed October 20th, 1857. A single long incision was made over the posterior surface of the joint, and the ends of the bones excised. The destruction of the articular cartifage was complete, and the cavity of the joint filled with vascular new growth. The tissue of the bones was somewhat soft and spongy, but I could not find any carious or necrosed bone.

In this case, the entire articular surface of the humerus, the olecranon, and coronoid processes of the ulna, and the head of the radius, were removed.

The edges of the incision were adjusted with stripes of lint, and the limb was supported on a splint and pillows, and bent at the elbow at an obtuse angle. The patient was free from acute pain in a few hours after the operation, and at no time subsequently did he suffer from the acute and severe racking pain which attends suppuration of a joint. His diet was now of a more stimulating nature; and he soon regained his appetite, and took food freely. He slept well, and gained strength. A free discharge of healthy pus took place at the wound, which was dressed with wet lint; and by degrees, although very slowly, it healed. This slow healing was dependent upon the low degree of reparative power enjoyed by the patient, who doubtless was all along suffering from the effects of the disease in the pulmonary organs.

Six months after the operation, he had improved in health and strength. The soft tissues around the elbow had become firm, and regained their healthy condition. A little discharge still runs from one or two sinuses, but he is quite free from pain. He can move his fingers freely.

He passed the season of 1858 at the Royal Margate Sea-bathing Infirmary, and there the most rapid improvement took place. His general health became quite established, and the local disease healed up entirely. When he returned to London, in October, he could use his hand freely, and move the limb at the elbow to some extent.

Case IV. *Stiffness in the Left Elbow-Joint for one year before a Contusion of the same; Inflammation; Suppuration; Abscesses; Excision of the Joint; Recovery.* Glazsher, aged 17, was admitted on August 11th, 1858, stated that, in March 1857, he felt a stiffness in the left elbow, for which he could not assign a cause. This stiffness continued until March 1858, when he fell down, and contused the stiff elbow. From this moment the joint became worse and worse; inflammation was set up; suppuration took place; an abscess formed, and was opened; and his general health declined under the sufferings he endured. He said he had always enjoyed good health, and been robust and strong, previous to the disease of the elbow.

When admitted he seemed to have been much reduced by the disease; he was worn out with pain, profuse discharge, and want of sleep. The left elbow was semiflexed and very much enlarged, the soft parts were infiltrated and ulcerated in two places, on the outside and inside, and there were sinuses from which purulent discharge escaped. The limb was kept at rest as much as possible by means of stripes of lint and a splint, and his general health was attended to.

August 17th. I excised the elbow joint by making a single

longitudinal incision in the vertical axis of the limb, and on the posterior surface. The soft tissues being reflected, the olecranon was cut off, and the joint at once exposed by flexion. It seemed to be completely disorganised, and was filled with soft, flocculent, vascular granulations, and the cartilage on the ends of the bones was destroyed. I next sawed off the articular ends of the humerus, radius, and ulna, and of these the portion of the humerus was the only one showing any diseased tissue. In its cancellated tissue was a circumscribed tubercle, through which the section had been made, and the dry preparation demonstrates the cavity which was occupied by the tubercular deposit. I gouged out the bone tissue surrounding that portion of the tubercle left on the shaft of the humerus, and dressed the wound with moistened lint. The arm was placed on a pillow and bent at the elbow at a very obtuse angle. The tissue of the bones was healthy, with the exception of that above described.

This patient progressed very favourably, the limb being supported on a splint and carefully dressed with wet or dry lint, according to the amount of discharge. The pain he suffered before the operation was immediately relieved, and his health became quickly restored.

He left the Hospital on October 27th, or ten weeks after the operation, free from pain, the wound nearly healed, and in good health. Since that date, he has gained strength in the member; he has some amount of movement at the elbow; and now, March 1859, he has resumed work.

Remarks. These cases are examples of partial and complete excision of the elbow joint. The first and second are instances in which only portions of the joint were removed. In the child the olecranon ulnæ and a small portion of the shaft were cut off, which necessarily gave rise to a free incision into the joint, and the opportunity for the escape of all pus collected at the time, or which might subsequently form. And this I take to be the *rationale* of the successful issue of these cases, in which the olecranon only is excised. It is true that in this case the upper extremity of the shaft of the ulna was diseased, and this was probably the primary cause of the disease of the joint. That piece of diseased bone being excised, the nucleus of the disease was removed; and after the destruction of the articular cartilages, repair would ensue. In the second case, I removed all the articular surface, with the exception of that of the radius, which, at the moment of the operation, appeared to be perfectly healthy. The slice off the humerus was small, and scarcely, perhaps, comprehended the entire articular surface. This case was unsuccessful, and the patient preferred to lose her arm rather than submit to a second excision operation. There can be, however, I think, little doubt but that a second operation, and removal of the diseased ends of the bones, might have been attended with a good result, and I should infer, from the examination of the preparation, that in a similar case such a practice would be quite justifiable.

Both the cases of the young men were select cases for the operation, so far as the local disease was concerned, and had the constitutional and reparative powers of the man Baker (Case III) been more favourable, he would, in all probability, have made a more rapid convalescence, and satisfactory cure. In this case less of the ends of the bones were removed than in the last, and the personal experience of these operations leads me to regard the taking away of a fair quantity a great point in the successful issue of the case. In the fourth case I cut off more of the bones, and I think the case has advanced more rapidly and satisfactorily than the third, although this might be attributed more to the superior constitutional powers of the individual, than to the local treatment simply.

In order to advance the discussion of this interesting surgical subject, I will read the following conclusions.

Conclusions. 1. The value of the hand and arm being so great, every attempt should be made to save the member, by removing local disease before proceeding to amputation.

2. The introduction of this operation into the practice of the *London hospitals* dates back to the time of the publication of Mr. Blackburn's paper in the *Guy's Hospital Reports*, vol. i.

3. Conservative surgery has been taught and practised at Guy's Hospital for twenty-five years at least; for in 1835 Mr. Key performed excision of the elbow joint, and it has been uniformly the rule to do so ever since, in all suitable cases. (See also cases by B. B. Cooper, vol. vi.)

4. Although the constitutional diathesis and powers of the patient exert a great influence on the successful issue of these cases, yet the operation may be performed with a reasonable hope of success under very untoward hygienic conditions.

5. When the performance of this operation is determined upon *in the adult*, it is important to the successful issue of the case, that the whole of the articulation should be removed, and very freely.

Lastly, I invite criticism, and hope that no member of the society will refrain therefrom from fear of hurting the susceptibility of the author.

ST. GEORGE'S HOSPITAL.

MALIGNANT DISEASE OF THE HUMERUS: AMPUTATION AT THE SHOULDER-JOINT.

Under the care of H. C. Johnson, Esq.

William B., aged 31, was admitted on February 16th, under Mr. Johnson's care, on account of a tumour in the right arm, of which he gave the following account. In April last, he was aiming a blow with a stick, and missed his object. The arm was fractured by the effort. The arm was put up in a starch bandage, and in six weeks the fracture was united; but, some short time afterwards, he noticed that a swelling existed about the seat of fracture, which gradually increased, and latterly with more rapidity. He stated that he had felt some pain in the affected arm for about three weeks before the accident, of a rheumatic nature. Similar pains had also been felt in the opposite arm, but they had quite disappeared for three months. At the junction of the upper and middle third of the right arm was a tumour, of an oval shape, and about as large as a good sized melon, reaching down to within about two inches of the elbow. The tumour was more prominent externally, but appears to lap round the bone. The arm was bent somewhat outwards, and was an inch shorter than the sound arm. The consistence of the tumour was apparently solid, but elastic; there were very large veins on its surface. The bone above it appeared somewhat enlarged and hardened. The motions of the elbow-joint were quite free. He looked emaciated and worn, and had been losing flesh and strength of late.

He remained in the house for a few days, during which the tumour increased rapidly.

On February 23rd, the arm was removed at the shoulder-joint. A very large number of ligatures were used (as many as thirty-five); nevertheless, in a short time it was found that secondary hæmorrhage was going on; so that it was necessary to open the flaps again, and as many as thirty more bleeding vessels were ligatured.

There were no other unfavourable symptoms about the case. The wound healed with no extraordinary amount of suppuration, and was almost closed when he left the house.

He was last seen on April 12th, and was then much improved in health and appearance.

On examination of the humerus, a longitudinal section of which had been made, it was found to be broken in two just below the tumour. This had probably been done in the sawing. The tumour was of large size, round, with a cyst of some size in the middle, sessile on the outer surface of the bone, the medullary cavity of which was closed by a soft deposit, apparently of a malignant character, for some distance above it. The compact tissue was much thickened above, but was thinned just below the tumour, and, as already mentioned, had been broken there. The tumour showed, in some places, well marked cancer-cells; in others, it had undergone a process of fatty degeneration. In the deposit which occupied the shaft, only fibrous elements were discovered.

The parts were exhibited at the Pathological Society.

Remarks. The above was a very well marked instance of soft cancer springing from the bone, and causing, as malignant disease so frequently does, absorption of the bony elements to such an extent that the bone will give way under very slight force. The tumour was in all probability the cause, and not the consequence, of the fracture. The diagnosis was not for an instant obscure, so evident was the cachexia resulting from the disease, and so characteristic the rapid growth of the tumour. Nor was the relief to the general health from removal of the disease less marked. It will be interesting, at some future period, to record the further progress of the case.

DIPHTHERIA.

TABLE OF CASES. (*Continued from p.* 307.)

1. Age and Sex.	2. Hygienic conditions; occupation, food and clothing, purity or impurity of air.	3. Meteorological conditions, date, etc.	4. Presence or absence of contagion.	5. Scarlatina.	6. Appearances and symptoms when first seen.	7. Time and situation of the leathery membrane.	8. Fungus.	9. Any affection of viscera (albuminuria, etc.)	10. Treatment and progress.	11. Indication and success of Tracheotomy.	12. Duration and event.	13. Post mortem appearances.	Remarks.
15. F. 9	....	Feb. 12, 1859.	....	....	Had been ailing for a fortnight. On admission she was excessively weak, respiration and voice natural.	On admission, several patches on the fauces.	No.	No.	Nitrate of silver locally, wine in large quantity, and sesquichloride of iron with quinine internally. She was weaker next day, and died suddenly in the evening, having complained of dyspnœa only for 10 minutes before death.	....	Died the day after admission.	Pharynx and soft palate thickened, deep slough on the tonsils. No false membrane present here after death. The whole air tube, from the epiglottis to the secondary bronchial tubes, was coated with leathery membrane.	S. George's Hospital: Harriet Allen. Dr. Fuller.
16. M. 7.	....	Jan. 25, 1859.	....	....	Sore throat for two days. On admission was feverish, with quick pulse, hot skin, and furred tongue	On admission, a small patch on the left tonsil.	....	No.	Nitrate of silver locally. At first, quinine and chlorate of potash internally. The patch of false membrane continued to spread. Then sesquichloride of iron was given with immediate improvement.	....	Recovered, 5 days.	....	Children's Hospital: Wm. Tait. Dr. West.
17. F. 8	Living in a damp situation and crowded rooms.	Jan. 13, 1859.	None.	Has had scarlatina.	Had been complaining of difficulty in swallowing, giddiness, and malaise for several days. On admission she was feverish. Dysphagia, enlarged submaxillary glands.	On right tonsil and soft palate.	....	Slight trace of albumen.	Equal parts of hydrochloric acid and water locally, chlorate of potash internally. Rapid separation of the false membrane	....	Recovered, 10 days.	....	Children's Hospital: Hannah Haynes. Dr. Jenner
18. F. 2¼	Child weak. Had lately had scarlatina, and was under treatment for hooping cough.	Jan. 27, 1859.	None.	Has had scarlatina.	Had been ill, and vomiting for the last two days; a small white spot at the same time appearing on the lower lip. The child was very weak, and complained of sore-throat.	On the lower lip, gradually spreading over the whole of the fauces, tonsils, and soft palate.	....	No.	Equal parts of hydrochloric acid and water locally, wine, beef-tea & chlorate of potash internally Remained in the same state till the following evening, when two severe fits of coughing occurred, followed by much lividity, and death.	....	Died the day after admission.	No post-mortem examination.	Children's Hospital: Elizabeth Cooper. Dr. Jenner

1. Age and Sex.	2. Hygienic conditions; occupation, food or clothing, purity, or impurity of air.	3. Meteorological conditions, date, etc.	4. Presence or absence of contagion.	5. Scarlatina.	6. Appearances and symptoms when first seen.	7. Time and situation of the leathery membrane.	8. Fungus.	9. Any affection of viscera (albuminuria, etc.)	10. Treatment and progress.	11. Indication and success of Tracheotomy.	12. Duration and event.	13. Post-mortem appearances.	Remarks.
19. M. 15 [mths.	....	Jan. 4, 1859.	....	....	Ill two days with cold and sore-throat. Mouth and fauces injected, of a violet colour, harsh ringing cough	On posterior surface of uvula, extending down the trachea.	....	....	Died in 36 hours of apnœa.	....	Died. 36 hours.	Violet injection of fauces, grayish-white false mem. lining posterior surf. of uvula & interior of larynx as low as cricoid cartilage.	Pimlico Dispensary: Alfred Barraclough. Mr. Holl.
20. F. 3	....	Feb. 28, 1359.	....	....	Not seen till after death. Had been ill for two days with cold and sore-throat attended with a good deal of depression, then suddenly seized with symptoms of apnœa, and died in an hour.	....	....	....	Died in an hour after the first symptoms of apnœa.	....	Died.	Violet-colored injection of fauces and pharynx, posterior surface of epiglottis studded with sm. circular patches of false membr., interior of larynx lined with exudation, closing the rima glottidis, but not extending below the vocal chords.	St. Paul & St. Barnabas Dispensary: Elizabeth Frankham. Mr. Holl,
21. F. 4	....	Feb. 17, 1859.	....	....	She had a tickling cough, but was not otherwise ill.	....	....	....	No medical treatment at first. The cough increased during the following day, accompanied by some difficulty in breathing, but did not excite alarm till the following day. Two leeches were then applied, but the difficulty of breathing increased, and she died next morning "like a child with the croup."	....	Died, 2 days.	Violet-colored injection of the fauces, with slight infiltration of submucous tissue, a small patch of false membr. brane on either side of pharynx, false membrane on posterior surface of epiglottis and on interior of larynx, quite closing the rima glottidis. The mucous membrane beneath was of the same violet col.	St. Paul & St. Barnabas Dispensary: Jenny Johnstone. Mr. Hole.
22. F. 10	Had been staying away from home, in a damp situation.	Dec. 5, 1858.	....	Her sister was admitted with scarlatina during her illness.	Four days after the first attack of sore throat. Lividity of face and hands.	....	....	....	Equal parts of hydrochloric acid and water, wine in very large quantities (20 ozs. in the day), brandy, beef-tea and chlorate of potash. She sank, with constant vomiting.	....	Died, 3 days.	No post-mortem examination.	Children's Hospital: Lavinia Bowles. Dr. Jenner

[To be continued.]

Original Communications.

CASES OF EXTIRPATION OF THE EYE.

By Augustin Prichard, Esq., Surgeon to the Bristol Royal Infirmary.*

It is probable that by far the minority of surgeons in ordinary practice are aware to what an extent the operation for excising a diseased eye for the relief or safety of its fellow has been practised. The first case which I recorded was operated on in September 1850, and in my "Address on Surgery", read at the anniversary meeting of our Association at Swansea in 1853, I took the liberty of prophesying that it would soon become general; and now the proceeding seems to be well established and recognised by the profession and the public.

About three or four years ago, one surgeon said that he had excised forty eyes, to relieve the other eye, with uniform success; and as a sign that the public is aware of the frequency of its occurrence, I may mention that not very long ago a lady came from London to consult me about some trivial complaint of the eye, stating that she was afraid to go to the distinguished London ophthalmic surgeon, whom she named, and under whose care she had previously been, lest he should cut out her eye, which he was much in the habit of doing, and that it was sufficiently common to fall in with persons in ordinary society who had undergone the operation at his hands.

I believe that it has been performed in many hundreds of cases, and I have not yet heard of one in which any serious or alarming consequences ensued, or in which it was not followed by the desired relief to the remaining eye; and it is to this class of cases, viz., where one eye is diseased beyond cure, either by injury or any other cause, and the other is beginning to sympathise with it, that for the future the operation of extirpation of the globe, will in a great measure be restricted.

A statement of the success of the same operation performed for the cure of cancer, shows a very different and much less encouraging aspect, and the only practical result of my experience is simply to confirm the old established rule, that the longer the operation is deferred, the more does the originally small chance of cure fade away.

Without unnecessarily multiplying instances of excision of the eye, or recounting all the cases in which it has been performed, I should like to cite some which have some special pathological or other interest; and I will begin with those in which cancer was the disease rendering operation advisable.

Case I. *Cancer commencing in the anterior part of the Eye: Operation: Death from Phthisis ten months afterwards.* L. C., aged 18, came under my care in the month of February, many years ago. She had suffered in her left eye for three weeks, and an examination showed what was considered an abscess in the iris and anterior chamber. She could not at that time distinguish the bars of the window, and the disease was treated as of a strumous nature; and subsequently with mercury. The abscesses, or growths, as they ultimately turned out to be, gradually increased and filled the anterior chamber, causing some redness and irritation, but no pain.

Escharotics were applied, causing a drain of the contents, and the disease remained without much change for a year; but in the March of the year following that when she first perceived the disease, the other eye became painful and intolerant of light, with sleepless nights and impaired general health, and the lymphatic gland in front of the ear became painful and hard. An operation wns determined on, and performed on the 20th of March. The whole of the globe and most of the other contents of the orbit were removed, and very free hæmorrhage followed, which was checked by closing the lids and applying a compress and bandage.

She had rather a tedious convalescence, owing to suppuration of the lids, and her weakly condition of general health; but she ultimately recovered, and went home.

There was no return of the cancerous disease in the eye, but after some months she became very ill, with constant cough and emaciation, and died of well marked phthisis about ten months after the operation.

The examination of the eye, which had been removed, showed that its anterior surface was granular, soft, and thick, formed of the altered cornea and iris adherent together; and behind, we found some clear gelatinous matter, which, in all probability, was the lens. The retina and choroid were healthy; the sclerotic was puckered in folds behind, but it was white, and its structure appeared sound. The optic nerve was also healthy, but the ciliary processes were lost in the mass of cancerous matter which occupied the anterior part of the eye. The microscopic appearances were very characteristic of cancer cells, mostly round, but with well marked nuclei and nucleoli.

Besides showing the possibility of the coincidence in the same subject of cancer and tubercle, this case is interesting from our having been able to trace the disease from the beginning, from its origin anteriorly, and from the fact that as long as the patient lived, there was no sign of any return of the cancerous growth after the operation.

Case II. *Cancerous Growth in a Child: Operation: and return of the disease.* S. A. W., aged 2½ years, came under my care in the month of September. The child was healthy, ran about freely, was stout, with a ruddy look of health in its face, and without any predisposition to family complaints. The right eye had always been a sightless eye, having had originally, according to the mother's account, a white spot on the bottom of it, and it was always rather red and weak. During the two weeks before I saw it, it had become swollen and inflamed, and shortly afterwards the eyeball became more prominent, the cornea sloughed, and a fungous mass protruded. The gland before the ear became enlarged, and an operation was considered the only chance.

This was performed on the 27th of October, under chloroform, and the contents of the orbit were well cleared out, and no very severe hæmorrhage followed. The cavity was filled with lint, and a light bandage applied. The tumour was as large as a small apple, with a dark mark indicating the position of the cornea and iris. It was very red below, but the conjunctiva appeared to shut in the disease in front. The lens was discernible in the middle of a quantity of white matter, which filled the whole globe.

Under the microscope, the pulpy matter from the interior was found to be composed of regular rounded nucleated cells, with a few blood-corpuscles.

The recovery from the immediate effect of the operation was rapid; and in a week the patient was taken home; the wound being healed, and the general condition in a tolerably satisfactory state. Within a month, the disease had returned, both in the same orbit and the opposite side of the face, and the entire state of the child was as bad as could be; and it shortly died at home in the country, and no *post mortem* examination was made.

Case III. *Soft Cancer in the eye of a child: Operation: return of the disease: and death.* This is another example of the preceding form of cancerous disease of the eye in children.

J. J., aged 2½ years, became my patient on March 4th, some years ago, ten weeks after the first appearance of the disease in the form of an opaque white spot in the depth of the eye, rather towards the outer canthus.

Three months afterwards, the growth was evidently larger, irregular, and projecting forwards from the back of the eye. The child was suffering from great weakness of the eye, and from nausea.

Excision was performed under chloroform, and the entire contents of the orbit were removed. The disease soon returned and grew to a very great size, projecting three or four inches from the face, and thrusting the nose on the opposite side and closing the nostrils from pressure; and death occurred a little more than a year after the first appearance of the growth.

I have performed the same operation in many other similar cases, and the result has in every instance been the same, namely, the speedy return of the growth, and destruction of the child.

Upon the first appearance of the disease, when it is contained within the globe of the eye, and only seen as a small growth far back in the depth of the posterior chamber, an operation might *possibly* be successful; but I have never yet been able sufficiently to convince the parents of the alarming nature of the disease, to allow me to perform the formidable operation of excision of the globe, when so little external sign of disease existed. I believe that the operation should not be performed except in very early stages of the disease, or for the removal of a very fetid, or painful, or otherwise troublesome growth.

* This paper was prepared for the last meeting of the Bath and Bristol Branch; but was not read for want of time.

Case iv. *Melanosis commencing in the anterior part of the Eye, producing gradual destruction of the sight: Operation: and return of the disease.* W. B., aged 53, came under my care on March 29th, 1854. He was suffering from conjunctival inflammation with considerable irritation of the left eye, which had lasted more or less for two years. The conjunctiva around the outer margin of the cornea, extending for at least the half of its circumference, was stained of a black colour, and the inner surface of the lower lid was also tinged with a similar melanotic deposit. His vision was somewhat impaired at this period.

The eye gradually became worse, and the increase in the thickness of the black deposit under the conjunctiva lining the lid and that covering the globe, caused so much irritation, that the other eye became intolerant of light; and under these circumstances, he consented to the removal of the disease by operation. He was suffering from caries of the ribs and considerable dyspnœa, but chloroform was administered, and answered fairly.

I extirpated the globe on March 20th, 1855, and dissected off the black deposit from the lids at the same time; and in ten days all the intolerance of light in the remaining eye had disappeared, and his health was much improved. On the first of May following he was well in health, and the only sign of local affection was an enlargement of the lymphatic gland in front of the articulation of the lower jaw on the left side.

By the month of August the disease had returned, and he was beginning to sink from hæmorrhage. He had returned to his home, and I saw him occasionally.

The tumour from the orbit grew most rapidly, and its surface dried, so that it presented the appearance of a vast black stony mass reaching down to the mouth. He was unable to get out of bed; and the weather being very hot, the smell was very offensive. I ordered the application of turpentine, chiefly as a disinfectant, and the next day I found that the tumour had cracked, probably by its own weight, and innumerable large maggots had crawled out and soon spread over the pillows and bed. The poor fellow suffered great torment; and I was fearful of cutting across the swelling, lest, in his weak state, he should die of hæmorrhage; I was, therefore, much surprised one day to find the tumour gone, and on inquiry, it appears that, observing a fissure in it, his son, a boy about 11 years of age, had clipped it off gradually with a pair of scissors; and the operation gave him great comfort. After this he soon died; and I found, on *post mortem* examination, melanosis of the brain, skin, peritoneum, and most of the internal organs.

Case v. *Cancer commencing in the lids, and returning after Operation: Death.* T. R., aged 31, became a patient at the Eye Dispensary, early in the year 1854, suffering from a granular growth in the lower lid, which did not yield to local treatment, and which had been increasing slowly for a few months. I lost sight of him for a time, and he was admitted into the Bristol Royal Infirmary in the autumn of 1854, and Mr. Clark, under whose care he was, dissected away the tumour in the month of October. It was composed of small nucleated cells, some round and some fusiform, like the representation of the clusters of developed nuclei given in works on the subject of cancer.

After some considerable period of freedom from disease, the growth recommenced, and produced so much discomfort and pain in the lid, that another operation for his relief was performed by Mr. Clark in December 1855, nearly fifteen months after the first. The tumour had attached itself to and involved the orbital edge of the superior maxillary bone, and after its removal actual cautery was applied to the exposed surfaces.

This operation did not long relieve him, for he returned, and was admitted under my care in October 1856, and by the middle of November the growth was so large, that the eyeball was quite thrust out of the orbit, the cornea sloughing from constant exposure, and his sight completely lost. The swelling overlapped the malar bone, and extended across his cheek, so as to press against the nose.

The pain and distress which he suffered were so great, that another operation was determined on, more with the view of getting rid of the evils connected with the size and tension of the tumour, than with the hope of curing the patient.

I accordingly operated on November 20th, and made two cuts, one from the outer canthus downwards and outwards for an inch and a half, and the other from the middle of the lower lid downwards and inwards for two inches. After turning back the flaps of skin thus formed, I was enabled to turn out the mass from the orbit with the aid of the straight bistoury and curved scissors, to remove the edge of the superior maxillary bone, and apply the actual cautery. Two or three vessels of considerable size required ligature, and the parts were brought together by sutures, the orbit having been filled with lint. The orbital plate of the maxillary bone was softened and partially absorbed, and my finger passed readily into the antrum, which appeared full of the same soft brain-like mass as the tumour itself.

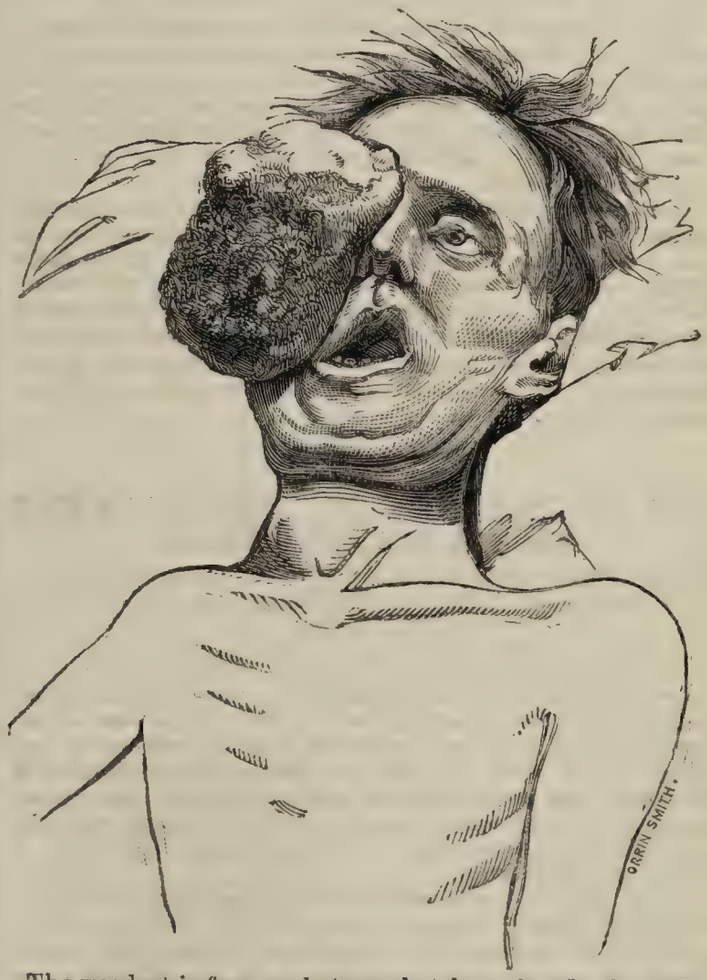
The patient was extremely faint and low from the chloroform; and it was necessary to apply the galvanic battery, which we always keep at hand, for the pulse had begun to beat very slowly, and his breathing was almost imperceptible. He came to himself under the influence of the galvanism.

I think it worthy of a passing notice to mention that this is the second case of cancer in which I have had occasion to operate, where cancer of the brain was found after death, and where the patients suffered so severe and sudden prostration from the effect of chloroform, that death in each instance appeared imminent. The other was a case of cancer of the breast, and is described at p. 348 of the *Provincial Medical and Surgical Journal* for 1851.

Partial and very temporary relief followed this operation. The tumour soon began to increase, but not with any very great rapidity, and he was able to take food freely. In two months the disease projected again from the orbit, and its progress became more active. He lingered on until February 28th of the following year, and then died, three months after the last operation. At the time of his death, the tumour projected far out of the orbit, and was discharging a quantity of thin fœtid fluid, much aggravating his sufferings, which were borne with great patience and resignation.

At the *post mortem* examination, the bones and soft parts round the orbit were found to be much involved in the cancerous disease, and a portion of the anterior lobe of the brain was also converted into a similar mass.

After each operation, a microscopic examination of the growth exhibited the same appearance as it did at the first; viz., nuclei and nucleoli, and round and spindle-like cells of no very large size.



The woodcut is from a photograph taken after death, under somewhat unfavourable circumstances, by Mr. H. Ormerod, surgeon, of this city.

Case vi. *Old standing disease of the interior of the eye: extirpation: ossification of the choroid coat.* The last case which I quote is one of a very different kind, and will serve as

an example of extirpation for old injury or disease, performed for the safety of the other eye; and this is an operation far more hopeful to the patient and satisfactory to the surgeon than when it is performed, as in the other cases just quoted, on account of malignant disease.

H. T., aged about 50, had a disease of the left eye for a great number of years, and was not only totally blind upon this side, but the eye was so weak, that there was great intolerance of light in the other, together with pain and increasing dimness of sight. The left eye did not appear much inflamed; but the cornea was rough, quite opaque, and yellow.

I operated (at the patient's desire, without chloroform) on October 5th, 1858, and removed the globe of the eye alone, in the usual way; namely, by rapidly dividing the conjunctiva above and below, then by laying hold of the internal or external rectus (according as the right or left eye is operated on) with a forceps, the muscles and optic nerve and all the tissues may be readily cut through close to the eye with a curved scissors, and it is then excised with the muscular attachments shewn upon the sclerotic, but without any of the loose tissues of the orbit.

She very soon recovered after the operation, and went out with the lids closed, the other eye quite free from pain and intolerance of light, and with the sight a little better. The improvement in her sight has not been so marked as I hoped it would have been.

The point of interest in this case was the condition of the eye that had been removed. The rough opaque yellow deposit noticed before the operation was only in the conjunctival layer in the cornea; the rest of this membrane was transparent, and the lens, hard and chalky, and of its original size, but not adherent, was found in the anterior chamber.

In the back of the eye there was scarcely any pigment, nor did the membranes appear as vascular as usual; but the choroid coat was converted into a thin delicate shell of bone, brittle and hard, extending from the back of the eye on every side to within the eighth of an inch of the ciliary processes. The capsule of the lens was hard and opaque, adherent to the posterior surface of the iris, whilst the lens itself had slipped through into the anterior chamber.

As in all probability the secretion of the pigment takes place from the arterial surface of the choroid, the non-vascularity of the bony deposit will explain the absence of pigment which was so marked in this case; and the same pathological state which led to the conversion of the lens into earthy matter, destroyed the vessels of the choroid by converting the membrane itself into bone.

There is no question but that the extirpation of a diseased eye to relieve the other has been so frequently performed, that it would be very easy to multiply the cases almost indefinitely, and that the sight has been saved in very many instances. I think, however, that the proceeding has been of very great value in another point of view and indirectly; for the pathology of the subject has been much elucidated by the opportunity thus afforded of examining the organ in different states of disease.

CASE OF POISONING BY DRINKING WATER FROM A LEADEN CISTERN.

By Pye Henry Chavasse, Esq., F.R.C.S., formerly President of Queen's College Medico-Chirurgical Society, Birmingham.

[*Read before the Queen's College Medico-Chirurgical Society.*]

I have much pleasure in bringing before your notice an interesting case of lead-poisoning; more especially, as some of the symptoms were of a peculiar nature, such as patches of hair falling off the head, etc. The case for years was shrouded in obscurity; and it was only just before it appeared to be hopeless, that I was fortunate enough to detect the cause, and thus to snatch the sufferer from a prolonged state of ill health, or from a miserable death.

Case. Mr. ——, of sanguineous temperament, of temperate and regular habits, who is now in his forty-ninth year, about eight or nine years ago, being then in the prime of life, health, vigour, and animal spirits, gradually found himself falling into bad health. From being one of the merriest and happiest fellows in the world, he became depressed, nervous, irritable, and excitable; from being fond of society, he shunned it; from being devoted to his profession, he loathed and took the greatest dislike to it; from being a sound sleeper, so that he would sleep from six to eight hours without awaking, he became restless and sleepless, and awoke in the morning unrefreshed, tired, and wretched; from having had a profusion of hair, so much so, that it looked as though he wore a wig, the hair gradually thinned, and, what was very peculiar, came off in round patches; from having had an excellent memory, and great determination, his memory failed, and he became spiritless and purposeless; from having had the appetite of a plough-boy, and the digestion of an ostrich, he lost all desire for food and became dyspeptic, and was afraid to eat the most wholesome things. After the above symptoms had continued for some time, slight numbness of the right side, principally of the right leg and right arm, supervened, more especially at night. This numbness was not confined to the ball of the thumb, nor to the wrist, but extended to the whole arm, leg, and thigh. There was no wasting of the muscles. The nerves of motion were not affected, as the patient could walk, and use his hand and arm as usual. On a little extra exertion, the patient complained of shortness of breath, palpitation, and slight uneasiness and anxiety about the region of the heart; but there was no organic disease of either the lungs or heart. Occasionally, there was a slight yellowness of the skin, proving hepatic congestion; otherwise the liver was healthy. The bowels were not constipated. The urine was copious and clear, and not albuminous. There was no decided blue mark on the gums. Such was the state of the case. It was at one time thought that the stomach and liver were at fault; remedies were applied, but no benefit accrued. It was then supposed that the patient had not sufficient exercise. Horse exercise was then recommended, and perseveringly tried; but still without the slightest benefit. The patient had now become most nervous and desponding, and was looking forward to death as the only remedy and relief for his sufferings.

When things were thus gloomy and desperate, and it was thought advisable the patient should give up a lucrative profession, it suddenly occurred to me that lead was the cause of his illness. I therefore instantly investigated it. I found that the patient had for years been drinking water from a leaden cistern; I therefore called upon Mr. W. Southall, jun., chemist, of this town, and requested him to analyse the water. He kindly did so, and found distinct traces of lead; and, as the patient was a great water-drinker, the quantity which he took daily must have been considerable.

On making further investigation, I ascertained that there were four individuals, including my own patient, within a stone's throw of each other, who were more or less paralysed; all these patients drinking the same kind of water, and, I believe, from leaden cisterns. Of course, my patient was desired to lose no time in supplying himself with water from another source. He was requested to take no medicine. In less than a month from this time, his sleep returned to him; his numbness abated; his happy joyous temper came back; his merry laugh again resounded through the house; his profession became a pleasure to him; his desire for company returned; his memory resumed its pristine vigour; and, in a few months, the bald patches on his head gradually became covered with hair—at first, very fine, soft, and silky, and perfectly white and colourless, but gradually resuming their proper strength and colour. His head, during its transmogrification, had a very peculiar appearance, and looked piebald; white tufts of hair plentifully peeping up among the dark. Those tufts of white have now disappeared, and he has as good a head of hair as most men verging upon fifty. I am happy to report that my patient is now quite well.

Remarks. I do think that the above is an unique case, not having in my readings seen any exactly resembling it.

It is not improbable that there may be many obscure cases, which, if carefully investigated, may be traced to lead-poisoning. Since my own attention has been called to the subject, I have met with two or three; but not one have I seen so deeply interesting as the case I have just recorded.

I do not know a more miserable death than that of slow lead-poisoning: it is emphatically dying by inches. Your patient's health, happiness, usefulness, and life, are being destroyed by an unseen foe; and if he fancy that he has been living too well, he may drink more water, which, of course, will only increase the mischief.

In all obscure cases, then, I consider it to be our bounden duty to inquire if there be any suspicion of lead-poisoning; for, if the blood be poisoned with lead, it will be of little use in giving medicine: we must remove the cause; and if the case be not too far gone, the effect will cease, and the patient will be cured as if by magic, without a particle of medicine.

I am fully aware that many of the symptoms recorded in the above case are at variance with those described by most authors as pathognomonic symptoms of lead-poisoning. There was no wasting of the muscles; there was no lead-colic; no constipation; there was no dropping of the wrist; there was no atrophy of the ball of the thumb; the motor nerves were not the nerves affected (as they usually are in lead-poisoning), but the nerves of sensation; the blue line of the gums, if not altogether absent, was, at all events, very faint. Notwithstanding all these descrepancies, the history of the symptoms; the debility and thorough prostration, both bodily and mental, occurring in a strong and healthy man, without any assignable cause; the loss of memory; the numbness of the right arm and leg; the hair falling off in round patches; the anxiety and palpitation of the heart on the slightest exertion, the heart itself being perfectly free from organic disease; the satisfactory proof of the presence of lead in the water drank, which water the patient had been drinking for years—for nearly fifteen years; and the rapid and favourable termination of the case, simply from substituting pure water for the water impregnated with lead, without giving a particle of medicine, and without in any other particular changing the patient's diet, air, or habits; the bald places on the head being again covered with hair on the change of water,—leave on my mind no doubt that my patient's blood had been poisoned with lead—that it was a genuine case of lead-poisoning.

Luckily, the true nature of the case was found out in time; otherwise, probably, the more usual symptoms of lead-poisoning, as described by authors, might have supervened.

I think it is a recognised fact, that lead acts deleteriously on the human frame, as a blood-poison. We all know that blood-poisons (such, for instance, as scarlatina blood-poison) act in different constitutions in different ways, sometimes affecting one set of organs or nerves, at other times another.

CASES OF NERVE-DISORDER.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

[*Concluded from page* 310.]

Series III.

Case iv. M. P., aged 40, male, brushmaker, was admitted December 6th, 1858. He had been ill two months. He has no strength in either leg; the left is weakest; he drags it in walking. His feet are cold, and he has "no feeling in them". He cannot walk a quarter of a mile. He has much pain in the loins, but no tenderness is manifested on percussing the spine. He walks with the aid of a stick. The left leg jumps and twitches very much at night. The arms are strong. He has no stricture. The urine is of normal appearance. The bowels are habitually loose. The pulse is very feeble; the skin cool; the appetite very good. He has no thirst. He is not anæmic. He has no pain in the head, but is giddy at times. He has always been very subject to catarrh. He is exposed to cold in a draughty workshop. Ten years ago, he used white lead and potash for washing brushes; his hands were then contracted and numb, so that he could not write. His legs were not affected then. His hands have been well for eight years; and he has left off the use of lead for seven years, and does not now use it in any way His illness came on gradually.

℞ Strychniæ gr. 1-20; tincturæ ferri sesquichloridi ♏xx; aquæ ℥ss. M. Fiat haustus ter die sumendus.

December 13th. He walks better; the "medicine has taken the pain out of the back". The medicine was repeated, and a pitch plaister was applied to the loins.

December 23rd. He has had pain in the calves of the legs the last week; he walks much better. The left arm is numb from the elbow to the fingers along the fore part.

℞ Strychniæ gr. 1-16; tincturæ ferri sesquichloridi ♏xx; acidi hydrochlorici ♏i; ætheris chlorici ♏xv; aquæ ℥i. M. Fiat haustus ter die sumendus.

December 30th. He is much better. He has had pain in the left knee the last three or four nights. The skin is cool; the pulse very weak. There is no blue line on the gums. He was ordered to take five grains of disulphate of quinine three times a day; and to apply to the knee an embrocation of three ounces of turpentine liniment and one ounce of tincture of opium.

January 3rd, 1859. He is improving.

January 27th. The numbness has left the arm; the knees alone feel weak.

℞ Ferri et quinæ citratis gra. x; misturæ nucis vomicæ ♏x; aquæ ℥i. M. Fiat haustus ter die sumendus.

February 3rd. He has been galvanised with advantage. He walked ten miles three days ago.

Remarks. The last two cases are very analogous, showing the occurrence of both motor and sensory paralysis, and its removal, under conditions which seem to exclude the possibility of organic alteration.

Case v. C. C., aged 10, a male, was admitted November 22nd, 1858. He has been poorly the last three weeks, and became worse yesterday. He complains of pain in his head. Last night he was very restless, and brought up about a breakfast-cupfull of blood by retching. He has no appetite; eats nothing. The epigastrium is tender; the face pallid; the tongue moist, slightly white; the bowels open; the skin cool; the pulse very weak. There is clear natural breathing all through the chest. In the consulting-room, he fell down in a fit, struggling very slightly; he scarcely lost consciousness. He was ordered to have a sinapism applied to the epigastrium every other night.

℞ Ferri et quinæ citratis gra. v; tincturæ nucis vomicæ ♏v; aquæ ℥ss. M. Fiat haustus ter die sumendus.

November 25th. He has lost his speech entirely; he had two fits on the 22nd. The bowels are open. The medicine was continued.

November 29th. He is better; his voice fails towards night; the pupils are very large. The mixture was repeated, and he was ordered to have a drachm of cod-liver oil three times a day.

January 27th, 1859. I saw him to-day, quite well. His mother informed me that he went to Uxbridge, and returned quite recovered. He has occasional low fits.

Remarks. This youth appeared to have been stricken suddenly by some debilitating influence: he had, however, no actual palsy, except, for a short period, of the hypoglossal nerves. The hæmatemesis I should ascribe to a paralysis of the gastric vaso-motor nerves, rather than to an ulcer. The fits seemed to indicate a condition of cerebral disorder, not so much pure debility as debility mingled with irritation. The result forbids the idea of organic disease.

Case vi. W. H., aged 16, male, slater, was admitted June 21st, 1858, having been ill two or three months. He feels giddy; "can't talk as easy to himself as he used." He is always very heavy and sleepy. The tongue is clean; the urine free; the bowels open; the pulse quiet. He is rather anæmic. He was ordered to take one-twentieth of a grain of strychnia three times a day.

June 28th. The giddiness is better; he has pain over the left eye. The medicine was repeated, three grains of citrate of quinine and iron being added to each dose.

July 28th. He was discharged cured.

Remarks. This was a slight case, but nevertheless phenomena of cerebral debility and lingual paresis were distinctly marked. It is easy to see that a greater degree of enfeeblement would have produced unconsciousness and loss of speech. These slighter cases seem to me to throw considerable light on the nature of more serious ones.

Case vii. M. S., aged 20, female, servant in a good house, was admitted November 15th, 1858, having been ill two days. She had a fit at first, and nine or ten since, but not "insensible ones". They seem to have been of convulsive character, and only the left side was affected. The tongue was bitten. One fit occurred three years ago. She has some frontal pain, which is better when she is recumbent. She has felt giddy lately, not weak. There is no rheumatism. The skin is cool; the pulse weak; the tongue natural; the catamenia regular; the bowels open; the urine clear. A blister was applied to the neck.

℞ Ammoniæ sesquicarbonatis gra. v; infusi cascarillæ ℥i. M. Fiat haustus ter die sumendus.

Nov. 28th. She has shaking fits in the left side, and temporary loss of use in the left arm and in the leg; "it comes all numb, and keeps jumping." The fits occur frequently, more so at night. The bowels are open. She has palpitation of the heart. The catamenia are present. The urine effervesces a little with acid; it contains a slight trace of albumen. She was ordered to drink porter, and to leave off tea.

℞ Ferri et quinæ citratis gra. x; tincturæ nucis vomicæ ♏xij; aquæ ℥i. M. Fiat haustus ter die sumendus.

November 22nd. She is better, and has no fits. She likes her porter. Pulse quite quiet. The arm is not convulsed. The mixture was repeated; and she was ordered to take five grains of blue pill with colocynth occasionally.

December 6th. She has had no more fits, but has a bad cough. The mixture and pills were repeated.

December 20th. She was discharged well; but was directed to continue the mixture and pills a week longer.

Case viii. E. P., aged 9, female, was admitted October 8th, 1857. She has been ill three months "with fainting fits"; but, during the last fourteen days, has had "struggling ones". The fits begin with drowsiness: she lies down and goes to sleep; in about ten minutes, the fit comes on with struggling and screaming; she complains that her head is coming off; she loses consciousness for three-quarters of an hour. She had two fits yesterday in the afternoon. The head is not hot; the urine is rather pale; the tongue clean; the skin cool; the pulse weak; the bowels costive. She is restless at night, talking and tossing about. Her appetite is not good; she will not take meat. She has a discharge from a scrofulous sore on the foot, connected with diseased bone. Before the fits came on, she used to have abdominal pains like cramp; these have ceased. The treatment employed was citrate of iron and quinine, and cod-liver oil, with tincture of nux vomica during the latter six weeks. Under this she improved greatly, was reported "not like the same child", and the fits ceased. A blister was once applied to the neck, but it did not seem to do any good. About six weeks before her discharge, the following note was made:—"She appears as if her intellect was affected, is unaccountably lively after the occurrence of pain in head, which comes on generally about 6 p.m., and is attended with great heat in forehead." Two years previously, this girl had been under my care with enlarged cervical glands; and she is again at the present time affected in the same way, but has no convulsions.

Remarks. The antecedents of this case were such as to raise serious questioning whether the symptoms might not be owing to the presence of tubercle within the cranium. It seemed, however, quite possible that they might result from some unknown morbid influence on a weakly nervous system; and I was the more inclined to this more hopeful view, from experience of analogous states. These two last cases illustrate the occurrence of convulsions, as a form of nerve-disorder, in circumstances very similar to those under which paralysis or failure of power is observed; and also their cure by the same kind of treatment as has been shown to be beneficial in paralysis. If it should appear to any one that this last case was an instance of ordinary epilepsy, I must reply, that the nocturnal restlessness, the periodic head-pain, and the result of treatment, seem to me to make an essential difference. Moreover, the mere name of epilepsy, without any causal indication, explains nothing. I will admit that the convulsions were epileptoid, but I conceive that the case may be ranked with the foregoing, in which some causal influence may probably be traced.

Case ix. W. H., aged 65, a coachman, was admitted December 7th. He was suffering with his usual winter catarrh, which he had had the last six or seven years. There was no febrile movement. On December 31st, he was suffering from diarrhœa and increased bronchitis. He improved under the treatment adopted till February 21st, when he was attacked with hemiplegia of the left side as he was sitting at home. The arm was most, and the leg but little affected. After this attack, he lost his cough and expectoration almost entirely. He was admitted into St. Mary's Hospital February 26th, and took five grains of sesquicarbonate of ammonia three times a day for twelve days, and then one-twelfth of a grain of strychnia three times a day. On March 16th, when I saw him, he had some difficulty in speaking; but the arm and leg had almost entirely recovered from the paralysis. While asleep, the right cheek was puffed out in expiration; but when he was awake, both cheeks acted well.

Case x. Anne D., aged 68, needlewoman, was admitted March 8th, 1858. She had been ill eight days. She had had a slight fit, which took her senses away for some good while. The left arm is now paralysed in such wise that she cannot bend or extend the hand; but it does not hang motionless; she has use of the upper arm. The hand feels numb and weak; and pain extends up her arm, especially at night. Her speech was very much impaired for some days; she can put out the tongue straight now. The bowels are open. There is no febrile action, no pain, or heat about the head. The urine is thick, but not red. She is thin and feeble. She was ordered to take five grains of sesquicarbonate of ammonia three times a day, to which a drachm of tincture of cinchona was added after a week; and she took a mild aperient occasionally. By March 29th she was well enough to be discharged, having improved steadily from the first. She is now again under my care, but has had no return of the paralysis.

Remarks. The age of these two last patients would lead, *à priori*, to the belief that the cerebral disorder depended on some actual lesion of structure, probably on giving way of some small blood-vessels. Yet the treatment that was found beneficial almost forbids the idea that such was the case. The two cases, though furnishing no conclusive evidence, are yet very suggestive. What would have been the result of purging, blistering, and a course of mercury?

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By William Addison, M.D., F.R.S., Fellow of the College.

Lecture I.

Mr. President and Gentlemen,—If we carefully examine into the causes which produce disease, it will be found that, in a great majority of instances, they may be resolved into some violation or neglect of the natural laws upon which the healthy actions of the animal frame depend. So also, on the other hand, the means of cure in such cases will be found to consist in aiding and adjusting natural efforts to reestablish those laws and conditions which have been outraged or infringed. Let us observe what these natural efforts are.

In the repair of injuries to the human body, certain parts are healed by the growth or production of elements identical with those of the wounded texture. On the other hand, there are organs, injuries to which are repaired, not by the growth of elements identical with those composing the injured organ, but by elements of the same kind with those which are effectual for cure in the former cases. The result is that, in all examples, and in very different parts of the body, the elements of repair appear to have a common form or nature. Now, the parts which are restored by the production of elements identical with those composing the injured texture, are such as have the most general distribution in the body, and are ministering to the purposes of life in the lowliest or simplest manner.

For example:—Fibrous and connective tissues and blood-vessels are everywhere present; no part of the body can be said to be without them; all these are speedily reproduced or repaired when injured or broken. Tendons, ligaments, and bones, are of very general distribution: these also are repaired by new growths of tendinous and osseous tissues. But when we come to investigate the healing process in more special organs, it assumes a different aspect. For, if a portion of the muscular flesh be rent away by an accident, cure is effected, not by the growth of new muscular fibres, but by a growth of common fibrous tissue. So likewise, if a part of the lung, of the brain, or of the liver or kidney, be destroyed by accident or disease, cure, if effected in these instances, is so, not by a growth of the special parenchyma, but by a common fibrous tissue.

Upon this ground, then—namely, the common form of elements of repair—we purpose to review the human body as a structure composed of three orders or classes of parts: a common tissue; the blood; and parenchymatous organs.

I.—A Common Tissue: its several Forms and Uses.

The areolar tissue is a common tissue diffused throughout the whole body. It invests the exterior, and enters with the blood-vessels into the interior of every organ. Its elements everywhere incorporate with the coats of the vessels. And in all fibrous membranes the elements of the membranous tissue between the blood-vessels are of the same kind with those forming the coats of the vessels.

In natural growth, in the embryo, areolar tissue is at first composed of cells and nuclei; and the coats of the blood-vessels, and those parts of the body which are hereafter to become tendons, ligaments, and bones, consist in the embryo of cells and nuclei also. As growth proceeds, the areolar tissue becomes fibrous; and, *pari passu* with it, the coats of the

blood-vessels, tendons, and membranes generally, become fibrous. When growth has been completed, nuclei are found incorporated with the fibres in fibrous membranes, in the coats of the blood-vessels, in capillaries, in periosteum, and also intermingled with the elements of bone. Fibrous membranes and areolar tissue are modelled to the subdivisions of the organ they invest; and bones mould themselves to the soft parts they enclose. If the brain be monstrous at birth, the fibrous membranes and bones investing the organ are monstrous also.

In animals where the hair is particoloured, the fibrous tissue of the skin is patched in corresponding lighter and darker shades; and in such cases we have observed the pia mater patched in similar shades, the pigment being incorporated in the coats of all the small blood-vessels. In some birds of dark plumage, the periosteum is almost black, the tendons are tinged with black, and the coats of the blood-vessels are spotted black.

We have said that the elements of repair have a common form. In the human body, all mechanical injuries, wounds, and fractures, are cured by a common granulation and fibrous tissue, which pass through the same phases of growth as the original connective tissue and blood-vessels in the embryo.

From pathological anatomy we know that plates of osseous tissue are often found incorporated in fibrous tissues, and also in the coats of the blood-vessels; nay, they sometimes hang loose in the form of *phlebolites* in their interior. In five instances of phlebolites examined by Dr. John Reid of Edinburgh, and in others observed by Dr. G. Burrows, Tiedemann, Otto, Carswell, etc., they were attached to the inner coat of the veins by thin fibrous cords. Dr. Reid describes them as hard as bone; two of them were analysed and found to consist of phosphate of lime, carbonate of lime, and animal matter in proportions similar to those existing in bone.

In some experiments recently published, it was found that the periosteum, when separated carefully from a bone and wrapped round a portion of the muscular flesh in a living animal, continued to generate or secrete bone around the muscle, as it would have done around the bone had its removal from it not taken place. And generally all fibrous tissues, both those of original and those of reparative growth, are disposed to, and do very frequently, take on a change to bone or osseous tissue.

These are the grounds upon which we argue a common nature or a common element in the blood-vessels, and in the fibrous and osseous tissues. Periosteum, pericardium, dura mater, pia mater, the coats of the blood-vessels, areolar tissue, tendons, ligaments, and bones,—all these we propose to comprehend under the designation Common Tissue, because they are all reparable by the production of conformable elements. They have a common mode of growth; and are all subordinate tissues—connective, blood-distributing, and supporting tissues.

Objections, no doubt, can be raised against this comprehensive classification; but we shall endeavour to substantiate its propriety by numerous facts; and, when particulars are properly placed in harmony, they become united and form a class, which, if appropriate, may suggest laws fitted to form elements of higher inductions.

Blood, as it circulates in the living body, consists of a colourless fluid; and swimming in it are the red corpuscles. When withdrawn from the body by venesection, blood soon coagulates, forming an uniform soft solid, which is commonly of a deep red colour throughout. There are many occasions, however, where blood before coagulation separates into two parts; the uppermost fluid and colourless, the lower red. The former part, termed lymph, plasma, or liquor sanguinis, forms on coagulation a tough, white, fibrous clot, or tissue; the latter part contains the red corpuscles, and forms a much more loose or friable mass. This spontaneous separation of blood whilst still fluid into two parts, viz., the colourless element or plasma, and the red corpuscles, warrants the distinction we shall preserve and enforce between the fluid or plasma and the red corpuscles.

II.—Relations of the Common Tissue to the Fluid or Plasma of the Blood in Natural Growth, and in the Process of Repair, as observed in Common Injuries.

The human embryo is a body which, in a brief space of time, grows from a microscopic mass of colourless cells into a complex structure composed, with other things, of numerous forms of fibrous tissue, blood-vessels, tendons, ligaments, and bones. At this time, the blood abounds most profusely in colourless or plasma elements. During pregnancy, the placenta, a mass of common tissue, and the blood-vessels of the uterus, are in active growth; and the blood of the pregnant woman abounds in colourless elements. On viewing the circulation of the blood in a living animal, if the part under observation be roughly handled or irritated, the colourless or plasma elements of the blood may be seen lingering upon or adhering to the coats of the vessels; whereas no such attraction is seen between the coats of the vessels and the red corpuscles. The ordinary process of repair involves new growth of blood-vessels and fibrous tissue; and, if blood be drawn from within the sphere of the action, it is found to be highly charged with colourless or plasma elements. The inference from these facts is, that the plasma or colourless elements of blood furnish material for the growth of the common tissue.

But what are the proverbial effects of common injuries? and with what phenomena is their healing or cure accomplished?

If a part of the body be scalded, it speedily becomes red, and a colourless fluid is effused beneath the epidermis; after a short time, the sore or wound heals spontaneously. In burns, the object inflicting injury is higher in temperature; its influence extends more deeply; a portion of the skin is killed. At first, the dead part adheres firmly to the living parts beneath; but afterwards, when a discharge of pus appears, it loosens, and may be easily taken away as a slough, without pain or bleeding.

Case. A young lady with fever had been in bed fourteen days; and a slough formed on the lower part of the back. When first examined, it was black and dry; it adhered very strongly to the parts beneath, and any attempt at its removal would have caused pain and bleeding. But, a few days afterwards, when a discharge of pus appeared, the slough gradually became loosened, and then peeled off spontaneously, without pain or bleeding.

In all cases, the detachment of a slough without bleeding is consequent upon the appearance of the purulent discharge; and when it has fallen off, a new tissue, termed granulations, comes into view. These consist of new blood-vessels traversing embryoniform elements; and they follow the same course of growth as the common connective or blood-distributing tissue in the embryo. Granulations change into fibrous tissue for the reparation of fibrous tissue, and into bone for the repair of bone.

But, before a slough can thus fall off, there must have been a severance of the blood-vessels and other bonds of connexion which previously united the dead with the living parts. This severance is accomplished by granulations and pus, without any bleeding. And, as the new vessels of the granulations carry on the circulation of the blood, so therefore there is positive proof that the older vessels must have been opened for communication with the new ones by alteration and absorption of their coats, without any loss of blood.

When a thorn has entered the flesh, if it be not speedily removed or taken out, abscess and ulceration appear in the parts around; and thus the offending body is loosened and discharged. The action thus set up will go on until the foreign body be cast out; whereupon the parts return to their natural state spontaneously.

Case. A forgeman was struck in the eye by a small particle of iron, which remained impacted in the cornea. He had been suffering from the accident for three or four days. The eye was red, from preternatural vascular action; and through a lens the wound in the cornea was seen filled with pus, the particle of iron still sticking in the middle of the sore. Abscess and ulceration had taken place in the tissue in contact with the foreign body. And that they formed part of the natural effort to loosen and cast out the injurious substance, may be presumed; because, upon the removal of it by surgical means, abscess and ulceration ceased spontaneously, and the eye in a very speedy manner was restored to its natural state, without any further extraneous aid.

If the ends of a fractured bone be examined between the first and tenth day after the injury, the periosteum and medullary membrane are found torn; the neighbouring soft parts swollen; and blood is effused between the fragments. The periosteum and medullary membrane have, both of them, lost their fibrous character at the place of fracture; both have become the seat of a mass of granulations, which grow in the form of rosy points, and unite, interlacing with one another, so that the fractured ends of the bone are surrounded on all sides by granulations. From the tenth to the twentieth day, the granulations assume a firmer and more fibrous character; they are converted into fibrous tissue. Between the twentieth and the

sixtieth day, according to the age and constitution of the patient, the fibrous tissue becomes converted into a spongy, and finally into a compact osseous tissue.

The liver or kidney is sometimes the seat of a parasitical creature termed *acephalocyst*. In such cases, abscess and ulceration may take place in the surrounding tissue; and it is worthy of note to observe the outlet of the contents of the abscess frequently barred in all the most dangerous directions by a thickening and strengthening of the fibrous tissues, whilst, at the same time, in some safer point of the circle, the overlying tissues are thinned away by absorption. Likewise in the lung, if an abscess, the result of softening tubercles, be near to the surface of the organ, and therefore likely to discharge its contents into the cavity of the chest, the accident is provided against. Adhesions form between the wall of the chest and the lung. Fibrous connective tissue grows abundantly upon the threatened spot, whereby the escape of matter from the abscess in that dangerous direction is very often prevented.

When a blood-vessel has given way in the brain, a clot is formed, and the contiguous parts are softened by a species of abscess. If all other circumstances are favourable to recovery, reparation in a great degree is effected, even in these cases. The walls of the abscess change into common fibrous tissue; absorption of all the fluid part of the clot ensues; and the new fibrous tissue fills the space which may have been occasioned by any spoiled or lost portion of the brain-parenchyma.

In small-pox, numerous pustules or abscesses appear in the skin. With the full growth of the pustules, the fever declines.

In all these examples, granulations and pus—abscess and ulceration—are established for the avoidance of greater dangers, for the purpose of throwing off dead and injurious matter from the living body. Nor can we doubt that the purulent discharge in such cases performs an office in the series of events as useful and necessary as the granulations. Granulations and pus are both of them forms of primitive or embryoniform cell-growth. Granulations are the basis of the new repairing texture: they are traversed by numerous new blood-vessels; and they change, as before said, into fibrous tissue where fibrous tissue is needed for cure; and this again changes into bone where bone is needed, as it is for the cure of a fractured bone. Pus, on the other hand, is incoherent, and seems by this special quality to be fitly an agent in the separation of sloughs, and in the discharge of other injurious matters from the body. The particles of pus are colourless, and granulations are red only by reason of the number of new blood-vessels which traverse them; for, when granulations are altering into fibrous tissue, the number of blood-vessels greatly diminishes; and then the texture resumes its natural or proper hue, which is colourless or white. Abscess and ulceration are terms which comprise the effects produced upon the older tissue by the growth of the new one; namely, the loss and absorption it undergoes.

Let us briefly recapitulate the facts, and state our conclusions.

At early periods of natural growth, and in pregnant women where the placenta is growing, the blood *generally*, and, within the sphere of new growth for purposes of reparation, the blood *locally*, is highly charged with colourless or plasma elements. The fluid which exudes from the blood-vessels upon slight injuries—scalds, blisters, and scratches—scarcely differs at all from the plasma. The elements of granulations and pus are colourless, and hardly to be distinguished from the colourless corpuscular elements of the plasma which may be seen in some animals adhering to and accumulating upon the inside of the coats of vessels which have been irritated or wounded.

"The elements of exudations", says Rokitansky, "are found preformed within the vessels; and the character of the subsequent products is thus shown to be dependent upon inbred transformations of the blood, and more particularly of its plasma." Or as we, in somewhat different words, gave expression to the same fact many years ago, "Colourless corpuscular elements of the blood accumulate upon the coats of irritated or injured blood-vessels, and thereby change their character; and from the altered vessels issues the new product, both in repair and inflammation."

Our conclusion is, that a common connective blood-distributing tissue is diffused throughout the whole body; that blood-vessels, fibrous tissues, and bones, are forms of this tissue; and that, in all cases of injury—wounds and fractures—cure is accomplished by new productions of this tissue, the materials of which are derived from the fluid of the blood.

There is, then, a more intimate relation between the fluid of the blood and its containing vessels, than between them and the corpuscles of the blood. And blood-vessels are quickly repaired and reproduced, because their coats are constructed of elements of the plasma—elements which readily corpusculate and fibrillate.

A slough of the skin or outer integument is thrown off easily, without bleeding. In such cases, we presume, therapeutical reactions, comprising suppuration, ulceration, granulation, and purulent discharge, are observed under the best circumstances.

In carbuncle, the dead tissue lies beneath the living skin. The process of separation is therefore protracted until a free outlet has been made either by the natural efforts, or by the knife of the surgeon. In common issues, granulation and suppuration may be almost indefinitely protracted by keeping peas in the sore. In necrosis of bone, the dead bone lies beneath the living skin; nay, sometimes it is included within a shell of new grown bone. In all these cases, granulation, suppuration, and ulceration, are protracted or chronic. The protraction, however, is not chargeable upon any pathological action; the action is physiological, tending to repair; but success is hindered by physical difficulties, as in the following example.

Case. George S., aged 18 years, was admitted into the Sussex County Hospital on April 1st, 1857, under the care of Mr. Lowdell. He had suffered for four years from necrosis of the tibia. Portions of dead bone had from time to time been removed; but no great benefit had resulted. He had now two fistulous openings—one at the upper end of the bone, the other close to the inner ankle—through both of which dead bone could be felt. The intermediate portion of the leg presented that chronic thickening and inflammation of the skin which usually arise from long continued disease. He was anxious to undergo any operation; for the continually repeated attacks of inflammation impaired his health, and rendered him unfit for any work.

Chloroform was administered; and an incision was made along the front of the upper part of the tibia, so as to include the upper opening, and penetrate to the bone. Dead bone could now be seen; but the opening through the new bone was so small that it required enlargement before any portion of the sequestrum could be taken hold of.

"I now found", says Mr. Lowdell, "that the dead bone reached downwards the whole length of the tibia; and then began the physical force part of the operation—the trephining, chiselling, and gouging through new bone, so hard and thick that the proceedings were more like those on a carpenter's table than operating on the human subject. The opening made in this man's tibia was eight or nine inches in length, more than an inch in depth, before all the dead bone could be removed."

The recovery was complete and satisfactory. In a few days after the operation, the surface of the bone was covered with granulations; new integument formed; and in less than three months the patient was discharged cured. His leg was, in June 1858, as strong as the other.

In this case, it is demonstrated, as much as anything of the kind can be, that the action which had been going on for years, and which contributed to weaken and disable the patient, was not a diseased action, in any proper sense of the terms. On the contrary, it comprised the resistance opposed by the living tissues to the decomposition of the dead bone.

The fistulous openings were outlets for the discharge of spoiled and offending matter, necessary so long as the dead bone remained: and, because the reactions cannot effect the expulsion of dead bone in diseased joints and other cases, we have no warrant, therefore, without heed of the surrounding circumstances, to invest them with an exclusively pathological meaning. Therapeutical reactions (as in the case related), when opposed by insurmountable difficulties, may contribute to weaken and undermine the health of the person; but without them a decline of the life of the patient would be the more rapid, because the decomposition of the dead bone would, in such case, be speedily communicated to the contiguous tissues. In all severe injuries—compound fractures, crushed joints, contusions, and lacerations—inflammation, suppuration, granulation, and purulent discharge, must be regarded as phenomena of therapeutical reaction, notwithstanding that, from the severity of the accident or other causes, the health and life of the patient may be endangered in their progress.

It follows, then, that forms of inflammation, granulation, pus, suppuration, and ulceration, are ordinary phenomena of therapeutical reaction in injuries and disease of the com-

mon tissue. The action is between the blood-vessels and the plasma or fluid of the blood; and protraction or chronicity, or even danger to life from physical hindrances, does not impugn the idea or exclude the conception of a process established for reparation, though it should fail.

In the examples we have particularised, the common tissue takes the initiative, as it does in all mechanical injuries. Let us, then, now proceed to speak of the other element—the other moiety, as it were—of the action; namely, the fluid or plasma of the blood.

[*To be continued.*]

Transactions of Branches.

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

REPORT OF A CASE OF EXTENSIVE PHAGEDÆNIC ULCERATION: WITH A FEW OBSERVATIONS ON THE ADVANCED STAGES OF SYPHILIS.

By James Dulvey, Esq., Brompton, Chatham.

[*Read March 25th*, 1859.]

I have been induced to bring before you the details of the case I am about to describe, not from any peculiar points of interest which it exhibited, nor from the frequent occurrence of such instances in private practice, but from the circumstance that, when a case of the kind does occur, it proves one of the most perplexing and protracted affections with which the practitioner has to deal.

A. B., aged about 40, sent for me on January 31st, 1856, having been discharged from the Middlesex Hospital, at his own request, on the preceding day. I found him suffering from extensive ulceration, evidently the consequence of syphilis. On the abdomen there was a large ulcer, in the form of a parallelogram, extending from just below the umbilicus nearly to the pubes, having on its upper and right sides a ragged overlapping edge. The sound skin above the ulcer was so high that it was clear there had been great destruction of substance. In the left iliac region, besides several superficial circular sores, there were two deep excavations with raised edges: one of them was in the shape of a horse-shoe; into the other a crown-piece might have been put. Another ulcer extended from the groin upon the left thigh, four inches in width, and of considerable length; and in the perinæum, immediately under the scrotum, a triangular cavity had also been produced, into which the point of the finger could easily be inserted.

In order to avoid repetition, I may here state that, at a subsequent stage of the case, partly from the treatment which was at one time adopted, and partly from the spreading nature of the cutaneous disease and the thorough impregnation of the constitution with the syphilitic poison, the ulcers, as measured by the patient himself, attained the following extent. That on the abdomen became twelve inches and a half in width (that is from side to side) at the upper edge, and seven inches and a half in length from above downwards; but the lower edge, which ultimately extended to and embraced those in the left iliac region, presented a width of sixteen inches. The width of that from the groin upon the thigh became six inches and a half, but from the outer edge a serpentine ulcer ramified under the thigh to the extent of twenty-two inches and a half.

The ulcers, when first seen, presented an unhealthy appearance: they were of a mahogany colour; and those upon the thigh and abdomen were studded with blackish circular lobes, about the size of a sixpence.

Constitutionally, the patient was in an exhausted condition, and for some time previously had only obtained sleep from the use of morphia every night.

Of the early history of the case my report must necessarily be incomplete, as he had been under treatment fourteen months before I saw him; but I gathered from him that, in November 1854, he had a small sore on the penis, which continued for nearly four months; and that, about a month after the first appearance of the sore, a bubo formed in the left groin, which was, in the course of time, freely opened. Ulceration appears then to have ensued; and on May 30th, 1855, four months after the opening of the bubo, he was admitted an in-patient of the Middlesex Hospital, where he remained eight months. Through the kindness of Mr. Shaw, the senior surgeon of that institution, I have learned that the following treatment was there adopted, at different times.

Internally: Donovan's solution; quinine; syrup of the iodide of iron; opium, given long and *largely*.

Locally: Cinnabar fumigation; lotio nigra; nitrate of bismuth ointment; balsam of Peru; linimentum æruginis; ceratum resinæ cum terebinthinâ.

On two occasions, he was put under the influence of chloroform, and the ulcerated surface freely cauterised with nitric acid. The diet was of the fullest.

I also ascertained from the patient that mercury had twice been extensively administered, with the view of producing salivation, but without effecting this object—first by his original medical attendant, and secondly after his admission into the hospital. I prescribed the following:—

℞ Pilulæ hydrargyri gr. v; sulphatis quin. gr. ij. M. Fiant pilulæ ij omni nocte sumendæ.

℞ Potassii iodidi gr. vj; infusi gentianæ comp. ℥ss; aquæ cinnam. ℥i. M. Fiat haustus ter die sumendus.

He also took one-third of a grain of muriate of morphia every night, which was gradually increased to a grain. Locally, I applied an ointment composed of equal parts of ceratum resinæ and ceratum cetacei during the day, and a carrot poultice every night.

At the end of six weeks, the ulcerated surfaces looked much more healthy; the circular holes had nearly filled up, and had lost their blackish hue; but there was no disposition to heal: on the contrary, the ulceration gradually extended. The mercury was now discontinued, and cod-liver oil added to the other constitutional remedies; and for a short time a lotion was applied, composed of sulphate of copper in a watery solution of opium. On March 30th, Dr. Martin kindly saw the patient with me; and, having derived great benefit in a similar case from the use of the tar ointment, he recommended me to give it a trial. It was applied on strips of calico, and the abdomen and thigh afterwards well bandaged. This plan was steadily persevered in for three weeks; but during this period the ulceration fearfully increased, and, although the ointment was tried in a diluted form, yet it was without avail. In the month of May, a hospital surgeon, of long experience among seamen and marines, also saw the case, and advised, internally, the use of arsenic and mercury, and externally the oxide of zinc ointment, with alternate applications daily of nitrate of silver in solution, and of creasote. These measures likewise failed; and, either from the intense pain produced by the caustic, or from the effects of the arsenic and mercury, or from all these causes, the constitutional powers went down rapidly, and there were fears of the patient sinking. Quinine in large doses was then combined with the cod-liver oil, and soothing applications used. The simpler kinds of external remedies proved, however, as abortive as those of a more severe character. I then determined to try the benzoate of zinc in the following form:—

℞ Gum. benzoes ℈j; spiritûs vini rectificati ℥ss. Dissolve with the aid of heat, and filter. Mix this tincture with a drachm of oxide of zinc, and add the paste thus made to an ounce of prepared lard. The ointment was applied twice in the day.

In six weeks from the commencement of this application, there was a marked improvement. The improvement, moreover, commenced at two of the worst points, namely, at the overlapping edges on the abdominal surface, and in the deep seated ulcers in the left iliac region. The strength of the benzoic tincture was gradually increased till a saturated solution was made, and in four months a considerable portion had healed; still, as in most of these cases, fresh places appeared, and, when the ulcer healed on one side, it extended on the other; and, independently of this extension of existing ulcers, the slightest abrasion of the skin invariably produced a circular sore, which in a short time assumed the shape of a horse-shoe. No caustic application arrested the progress of these. They would have their course, in spite of everything.

When the constitutional powers had rallied, the quinine was discontinued, and the iodide of potassium resumed; the potassio-tartrate of iron being also given in large doses. As the system became impregnated with the iron, the disease gradually gave way; fresh ulcers ceased to be formed; and ultimately, but after a lengthened period, those which remained were healed, the serpentine ulcer under the thigh being the most obstinate and protracted.

Occasionally, stimulant applications became necessary. In

this respect, the ceratum resinæ proved most beneficial; and when anything like an escharotic was required, a solution of the chloride of zinc, in the proportion of half a drachm to one ounce of water, was found to answer best. When dressings of a more healing nature were indicated at particular portions, an ointment containing the carbonate with the oxide of zinc did good. During the latter stages of the case, I substituted benzoic acid for the tincture of benzoin, adding half a drachm to three drachms of the oxide of zinc and two ounces of prepared lard. This did not at first agree with every part, but ultimately I used no other application.

It will thus be seen that arsenic and mercury, given internally, did great mischief; and that the preparations of zinc proved the most efficient and curative external remedies. The chloride of zinc was especially valuable where the nitrate of silver was inadmissible. It is well known that this preparation is now coming into much more frequent use. In the *Lancet* of March 12th, Mr. Wordsworth of Finsbury Square speaks of its being used with great benefit. He says: "In certain forms of tertiary syphilitic ulceration attended with great pain and irritation, it produces the happiest results. It answers well, too, for the enucleation of a chancre, and in the serpiginous ulcers of the face. At the London Hospital, it is largely used to alter the conditions of foul and indolent sores in all parts, and rarely fails to ensure a healthy disposition."

Among the many writers upon syphilis, every one seems to concur in the fact that, in these advanced forms of the disease, the cases are usually of long duration; but, in the way of treatment, the most opposite views are entertained, some building their faith upon mercury alone; others reprobating it altogether, and trusting to the iodides; while a third class of practitioners combine both. In the way of local applications, however, very little assistance is afforded by books; yet there are two methods of cure which I am desirous of mentioning, in the hope that, if any gentleman present has tried either, we may have the benefit of his experience.

One is a mercurial vapour bath, recommended by Mr. Henry Lee. I do not know its exact composition, but in principle I imagine it to be similar to those which have been long used in all the three stages of the disease by Mr. Langston Parker of Birmingham. The other is the treatment of these ulcers by irrigation—a continued dropping of tepid water over the foul ulcerated surface. This plan has been adopted for some time by Mr. Cock of Guy's Hospital, and tried with equal success by Dr. Sutherland in the tropical climate of India.

But, whatever may be the local application, nothing, of course, is of avail without constitutional remedies; and of these I believe, in the more aggravated cases, when the time for giving mercury has passed away, nothing is equal in value to the iodide of potassium, combined, where any kind of phagedænic ulceration exists, with the potassio-tartrate of iron. And here I may add, that Mr. Parker speaks highly of the *iodide of sodium*, given in fifteen-grain doses three times daily. Dr. Gamberini of Bologna, who for many years has given great attention to the subject, confirms Mr. Parker's opinion in this respect; but he says (*Bulletino delle Scienze Medicale*) that, in the great bulk of even the tertiary symptoms, mercury is the preferable and *indispensable* medicine; and that numerically, when no other treatment has been tried, *mercury will cure about* 80 *per cent., and iodine* 20 *per cent.* He only gives the iodides where mercury has been given in vain. Mr. Vincent of St. Bartholomew's Hospital, in his *Observations on Surgical Practice*, speaks with equal commendation of the administration of mercury.

I now submit for your consideration the question, "*Is there any analogy between these advanced stages of syphilis, and lupus?*" This question, as you are aware, has been asked by Mr. Erasmus Wilson, in his work on the venereal affections. Possibly he steps beyond the boundary of legitimate inference when he hazards another question, "*Is scrofula syphilis?*" But still the approximation of such ulcerative forms of syphilis as were exhibited in my patient to the lupoid ulceration is not unworthy of thought. When the hospital surgeon to whom I have alluded saw the case which I have related to you, his first observation was, "How very like lupus!" and in his invaluable work entitled *The Science and Art of Surgery*, the present learned professor of that science in University College Hospital goes so far as to suggest that, even where there is no suspicion of a syphilitic taint, the remedies applicable to tertiary syphilis may be administered empirically with great advantage in many cases of *lupus exedens*. That there is a certain degree of resemblance between such lupoid ulcers and the affection to which I have invited your attention, I think no one will dispute who has seen much of the two diseases; but, at the same time, the diagnosis is generally not difficult. Still the question remains, "Is there any *real* analogy between them?" and on this I now ask your opinions.

Thanking you all very sincerely for the forbearance with which you have listened to me, I conclude with the words of Mr. Wilson: "This subject is too large and too comprehensive for precipitate judgment;" believing, with him, that future years of observation and thought *must* and *will* throw additional light on this interesting and important topic.

ON SOME CASES OF LARYNGISMUS STRIDULUS.

By J. H. GRAMSHAW, Esq., Gravesend.

[*Read March 25th*, 1859.]

I HAVE been led to select this disease for the subject of a paper, partly because two of my own children have been severe sufferers from it, and partly because it seems to me that the pathology ascribed to hooping-cough by Dr. Armstrong, in the valuable paper which he read to us at Rochester, seems rather to belong to this disease than the other. I believe it is his opinion that irritation of the pneumogastric nerve, from some source or other, is the excitant cause of hooping-cough. Five cases of laryngismus stridulus occurred in my practice in little more than two years; two in my own family, and three more in the families of patients. Of these, four recovered completely, and one died: that one was in a family where the parents did not seem willing to recognise the severe character of the complaint, and were averse to giving the child the medicines which were prescribed for it. Indeed, so much so was this the case, that I recommended them at last to take the child into Devonshire, the parent's native air, where also the medical man resided in whom they appeared to have the most confidence; but, before it had been there many hours, it was seized, as is frequently the case, with convulsive fits on the accession of the spasm, and died.

In the other cases, the attacks came on very insidiously. At first, it was difficult to recognise the slight difference in the inspiration on waking from sleep, or on any sudden excitement; but after a time it became more manifest, increasing from day to day, till, in my own two in particular, the spasm of the glottis was so severe, and so long continued, as to end in a fit of convulsions again and again. In the first case, I saw (the child was nine months old) antispasmodics were of no avail whatever; and, from the continued fits, there was for several weeks the most determined squint I ever saw. Under these circumstances, I commenced a course of calomel, one grain every four hours, with an almost immediate improvement. The spasm was of shorter duration, the convulsions less frequent; and a gradual but continued amendment occurred, and a most satisfactory recovery took place, but not until three months had elapsed. Chloroform, our most powerful antispasmodic, was tried more than once; but, in consequence of the impossibility of predicting the exact moment when it would be called for, and the time consumed in the administration of it when the attack had actually commenced, it was found of little service. The calomel treatment was continued a long time. I remember we often said that such an amount of the drug would have salivated most full-grown patients; but the child never suffered in that respect, and the only ill we can now recognise is the partial destruction of most of his first set of molar teeth. His gums were lanced frequently during this period, and the teeth never suffered to press on them a moment longer than we could help. During the latter part of the illness, the medicine made use of was the citrate of iron.

The second case was a similar one, but of shorter duration. Convulsions came on earlier, but lasted a much shorter time; and I think, had the calomel been given before they began, might have been prevented altogether. This medicine was not required nearly so long in this case as in the first (this child was fourteen months old); nor was there any squint in this, or either of the others: *they* were much the same as this one, but were treated earlier, and were almost without fits. Hydrocyanic acid was the principal medicine given, with an occasional dose of grey powder before calomel was commenced; the citrate of iron afterwards. Looking to the antispasmodic effect of blood-letting generally, a leech or two were applied over the larynx in the first and worst case, but without benefit. In all the cases, the diet was restricted to new milk and water, two-thirds of the former to one of the latter; and it always seemed, with advantage. A want of the most proper food—the

mother's milk—or the best substitute for it, that of a judiciously selected wet nurse, seemed to me to have also much to do with the invasion of the attack; but it almost always happens, in such cases, that the child has been completely weaned, and there is then a difficulty in returning to such food. Dr. West, in his chapter on Laryngismus, in the *Diseases of Children*, lays it down as a rule, that the diet should be always sparing; and yet, singularly enough, he recommended cream and the strongest beef-tea to be given to the child of a friend of mine, whilst suffering from the same disease. This child died. In the case I have described more fully, there was more than one cause which might have produced the disease—overfeeding, with food too thick or too nutritious, as the beef-tea was of the strongest; and teething, which also was occurring in all. The child of my friend was the only one of his family which ever had the disease, and it was also the only one which had had beef-tea before it was weaned. Thus, then, I think, we may naturally conclude that irritation of the pneumogastric nerve from one of these causes (and teething, though a secondary one, is by no means the most uncommon) was the pathological cause of the attack in all. On examination of the chests of all these little patients with the stethoscope, no *râle* was ever to be discovered; nor was there occasion to treat any one of them for cough, partial pneumonia, or bronchitis. Yet in hooping-cough, the last, though it may with difficulty be recognised at the commencement, exists always after a time in some portion of the lungs; and, if death should occur, it is nearly certain to be caused by pneumonia, bronchitis, or both. Irritation of the pneumogastric may occasion spasm, but I cannot conceive its producing either of these. I am still inclined to lean to the opinion of Dr. John Barnes of Tavistock Place, expressed to us as students, that hooping-cough is a specific erratic inflammation of the air-passages, commencing high up, gradually spreading itself more universally over the lungs, partaking of what I might almost term an erysipelatous nature; and hence its infectious character, which, by the bye, the pneumogastric disease, laryngismus, does not possess. Dr. Barnes used to say, that what made him more decided in his opinion was, that the application of a solution of nitrate of silver with a sponge had, in the case of his own children, cut short the disease most satisfactorily and effectually. The spasm of the cough I conceive to be occasioned by the specific inflammation existing about the larynx and trachea, which, after death, would be less apparent here in a mucous membrane than the inflammatory redness of erysipelas on the skin; and we all know how little perceptible that is.

Such appear to me to be the pathological conditions of the two diseases; the one inflammatory, the other not; the one contagious, the other non-contagious; the one arising altogether independently of pneumogastric irritation, the other entirely dependent upon it. How far this opinion may be correct, the experience of some of our friends present may tend to show.

CASE OF UNSUSPECTED LEAD-POISONING IN A COOPER.

By Frederick James Brown, M.D., Chatham.

[*Read March 25th*, 1859.]

William R., aged 28, came to Chatham from Wateringbury, about Michaelmas 1856. He obtained employment as a cooper in a brewery. He immediately became affected with ague, and suffered from it at intervals for several months.

In April 1857, he first worked amongst some white-lead casks, bought in the town from a broker that had obtained them from the Dockyard, at a public sale. The casks were taken to pieces and put together again, to render them fit for the packing of bottles of ale. Some of the casks contained so much as half a pound of white-lead. A dust was created during the separation of the staves of the casks, which was respired by the cooper. The dust also formed a layer in the premises, and the man's feet became dry and shrivelled up, in consequence of the direct application of the dust to them, owing to his shoes being low. The man experienced pain and cramp in the feet, and he became scarcely able to walk; but he was cured of fœtid perspiration of the feet, to which affection he had been subject. At the same time, he spat thick, heavy masses, which he believed to be particles of white-lead taken into the bronchi during respiration.

In July, he began to suffer from indigestion, with colicky pains and costiveness. Attacks of this description compelled him to lay up occasionally for about a week at the time. He regarded them as seizures due to the ague that he had formerly suffered from, and he accordingly took quinine and Epsom salts. It was only occasionally that he worked amongst the white-lead casks; but on every occasion he suffered.

I first saw him on July 31st, 1857. I knew that he was a cooper, employed in a brewhouse; but I was not informed of the circumstances connected with the casks, and I had no suspicion of lead-poisoning. The case appeared to me to be one of dyspepsia, but I could not understand the symptoms.

The treatment that I employed afforded but little relief; and it was so late as September 24th, eight weeks from my first visit, that I first thought of examining the gums. The blue line of lead was well marked. The circumstances connected with the casks were elicited upon due inquiry; and the patient was discharged cured in four days.

The treatment that was adopted when the nature of the case was understood, consisted of Epsom salts, with the sulphuric and phosphoric acids.

I have thought this case worthy of your attention, because of two points in it. *First*, it shows the value of inspecting the gums, as well as the tongue; if not in every case, at least in those that present anomalous symptoms, or that resist ordinary treatment: and, *secondly*, it shows the importance of understanding the true cause of any instance of disease.

In this case, fifty-six days were spent in useless treatment; whilst four days sufficed to cure the patient when the correct diagnosis was established.

British Medical Journal.

SATURDAY, APRIL 23rd, 1859.

THE TAUNTON HOSPITAL AGAIN.

Wrong never comes right. The Taunton Hospital is again in trouble. Dr. Kinglake, who committed an error of judgment, we think, in not acting in concert with his brother medical officers when the governors some time since made the insulting resolution with respect to timing them, has since been so galled by the working of this insulting "order," and has been so moved by the overwhelming expression of professional opinion with respect to the tyrannical conduct of the governors, that he has refused to comply with the regulations, and his resignation has perforce been accepted. A special general meeting of the governors was held on Thursday, April 6th, at which Dr. Kinglake's reasons for so acting were given. A general discussion ensued, in which the obnoxious resolution was sought to be rescinded, but without avail; and we have now to record the fact that five out of the six gentlemen, who constituted the staff some time since, have been dismissed or have resigned; and the governors, in place of the physicians, have been compelled to fall back upon the services of two very young general practitioners.

It gives us great pleasure, however, to find that the clergy have in this matter endeavoured to act as peacemakers, by urging the rescinding of a regulation which has worked so disastrously. The Rev. H. T. Tucker moved that a mere record of visits should be made by the medical men without any reference to time—just such a record, in fact, as visiting magistrates make in the jail-books. This proposition was seconded by the Rev. W. Kinglake, for whose noble address on the behalf of Dr. Kinglake, and indeed of the whole profession, we beg to thank him. It is not often that we find the medical character so honourably upheld—not often even by medical men themselves. Here is an extract from his speech:—

"Let me advise you to be just to your medical officers. As

a minor reason for making your rule more respectful, I am sorry to collect that this rule is regarded as a part of a general system of disrespect towards the medical body. Your secretary in this hospital is placed before doctors of a learned faculty. At your hospital dinners, when every sort of toast has been given, you drink the heads of your medical staff at the fag end of the entertainment, just before 'the town of Taunton, and the trade thereof.' These are light matters—light as straws, and less important to those concerned—but it is thought they show 'which way the wind blows.' This uncourteous rule is looked on as part of the same system—as though you might do anything with physicians and surgeons. It is thought that if the noble patron of this hospital, its accomplished president, and its excellent chairman, had declined to do a thing on an honourable scruple, in which they were supported by the best of their order, the framers of this rule would not have forced that obnoxious matter in the faces of those protesting gentlemen. Why, then, not do honour to the great medical body, and remove, if possible, any erroneous impressions? *The governors of a hospital are here, not to impede the principal action by harsh interference, but to assist it. They are the ornamental and subordinate staff of the stage of a hospital; they are what the lords, ladies, and gentlemen, the stage-managers, the scene-shifters, and the crowing of the cock, are to the tragedy of Hamlet. On the medical attendant depends the main action. On his zeal, on his integrity, on his honour, on the patient humanity of his ministrations, must depend the superior credit and character of this charity.* What are you doing? If such a man as Dr. Kinglake come before you, and says, backed by the best names in the profession, that he cannot comply with your form, that form ought not to be enforced. Sir, this is not an arena of strife for the pride of victory—this, indeed, is the house of sorrow, where the bonds of harmony ought to be strengthened by the sight of human suffering. Who are the chief actors in the tragic drama enacted day by day in these wards? On the one side, the afflicted patient, the martyr of suffering; the broken cripple, whose limbs are the sole support of his poor wife and children; on the other side, the good physician, watching symptoms, devising remedies, arresting the progress of disease, and often, by his skill, depriving death itself of half its terrors. Will you, for the sake of a *distrustful time-table*, stop your talented physician in the midst of his healing ministrations? I would as soon stop the good Samaritan from pouring in oil into the wounds of the bleeding wayfarer, because, to the servile yoke of traditions and forms, he preferred the broader law of his own honour and conscience. This question, sir, does not affect Dr. Kinglake personally. Whether he comes here, or whether he does not, he will be the same distinguished physician, and the same high-toned gentleman—[*hear, hear*]. But the hospital will not be the same. To fill up vacancies is not to provide substitutes. If our rules, by their bad taste, tend to repel the flowers of the profession—if they tend to throw the charity into inexperienced and unscrupulous hands—if they lower that professional tone, which, to my mind, is almost as important as professional science itself—I fear lest, in grasping at a shadow, we may be sacrificing the substance—[*hear, hear*]."

This eloquent pleading was, however, of no avail; and the honoured name of Dr. Kinglake no longer gives weight to the staff of the Taunton Hospital.

It is impossible that the governors can withstand these repeated blows; and we do not fear but that ere long the obnoxious regulation, which has excited the disgust of the whole neighbourhood, as well as of the entire medical profession, will be rescinded. We ask ourselves, however, if there is not something amiss with us, that honourable members of our profession can be thus with impunity browbeaten and treated with ignominy by obstinate and unreasonable governors. If a barrister received an insult, in the most obscure country town in the kingdom, from any of the constituted authorities, he would instantly have at his command the whole support of the Inn of Court to which he belonged. It must be confessed, that the *esprit de corps* is far stronger and more practical among members of the legal profession than among those of the medical; and we trust that, as our Association grows, and extends its influence, such cases as that which has occurred at Taunton will come within its sphere of notice, and that the moral support of our whole body will be given when required, to check insolent tyranny, and to protect and encourage those who are unjustly oppressed.

THE NEW REGULATIONS OF THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

At a full meeting of the Royal College of Physicians of London, held on Monday last, the following resolution was unanimously agreed to with regard to the regulations recently issued by the Royal College of Physicians of Edinburgh:—

"That the President and Censors be empowered to address, in the name of the College, a strong and immediate remonstrance to the Royal College of Physicians of Edinburgh, respecting the terms on which they have recently proposed to confer the license of their College."

The regulations of the Edinburgh College were advertised in the Journal of March 19th. The salient points in them are the following. Gentlemen who have undergone a certain prescribed course of medical study extending over four years, and who have given evidence of having received a fair general education, may be admitted as Licentiates of the College by examination, at the age of not less than twenty-one years. An exemption from the examination in professional subjects is made in favour of graduates in medicine of British Universities, and of such foreign Universities as shall from time to time be recognised by the College; and also, for one year, in favour of gentlemen who have been fifteen years in actual practice, and of those who possess a diploma or license from any of the existing licensing boards.

We are not aware of the precise grounds of the remonstrance of the London College of Physicians; but the principal features in the Edinburgh scheme will at once be seen to be highly objectionable.

First, there is the establishment of a new license in medicine by the College. Although the Charter of the College of Physicians of Edinburgh apparently gives the College the absolute power of granting licenses in medicine, yet, for a great number of years, this power has been held in abeyance by the by-laws of the College, which have required the production of an University degree in medicine from those desirous of the license. It is not, therefore, on legal grounds, as we think, that the proceedings of the Edinburgh College can be objected to: but they are most objectionable, inasmuch as by them there is opened a practically new source of obtaining a licence to practise medicine, which is utterly unnecessary.

An equally reprehensible feature in these regulations is the exemption, without any apparent condition, in favour of gentlemen who have been in actual practice during fifteen years. Surely the Fellows of the College, when they agreed to this exemption, cannot have seen the dire result to which it is calculated to lead—a result which would for ever blast the reputation of the College—an institution which has from time to time had on its roll the names of some of the most honoured members of the profession. Anybody who has been in actual practice for fifteen years may be admitted: *ergo*, any charlatan, any holder of foreign degree of doubtful value, any one, in short, who has been in practice fifteen years, but who has no chance of being entered on the General Register, may, if he do not derive profit from the sale of drugs, be admitted as a Licentiate.

It is true that certificates of character and professional qualification are required; but we do not think that even these will always keep out black sheep. At any rate, the exemption might lead to great mischief; while there is no counterbalancing advantage, that we can see, derivable from it.

We believe that the College of Physicians of London are not the only remonstrants. The proceedings of the Edinburgh College cannot but be distasteful to the Scotch Universities; and it is to be trusted that the Medical Council will exercise their power in causing a thorough modification—or still better, an abolition—of these obnoxious regulations of the Edinburgh College of Physicians.

THE WEEK.

The anatomy of suicide is truly an interesting subject. The motives that tempt men to shuffle off the mortal coil, are as diverse as are the motives and passions of men. The manner of making the final exit partakes also of the same diversity. But it is not often that we find the poor mortal, thus hurrying himself into the presence of his Maker, is anxious about picturesque effect with regard to the scene of his desired quietus. The mind of man is, however, wondrously fashioned, as we see by the inquest held on the body of a Spanish gentleman, at the Bear Hotel, Woodstock, on Friday the 15th instant. The unfortunate man arrived at the above hotel on the 12th instant: he employed himself upon his arrival in viewing the grounds and palace of Blenheim, and especially in admiring the pictures, one of which, in a letter to the Duke of Marlborough, while apologising for the act of desecrating his park, he has still time and taste to compliment him upon, as being the finest Rubens that can be seen. Fresh from this act of connoisseurship, and after carefully inquiring as to "the most forest-like looking part of the park," he went out into that noble domain, and shot himself. The letter he left behind him is perhaps the most extraordinary epistle ever written upon the verge of eternity: it is addressed to the Duke, and begins as follows:—

"Woodstock, April 14th.

"My Lord,—I humbly ask your Lordship's pardon and forgiveness for the great liberty I have taken in coming to put an end to my dreary and miserable existence in your park. It may be a childish feeling; but one cannot blow his brains out in a common road, or one of those cultivated fields full of cottages, and life, and civilization, and railways, and establishments of all kinds, of which your blessed country of England abound. So I have not found another proper place to die decently than your handsome park, and you must bear the inconvenience of a dead man in your grounds. I mean no offence."

There is something so comical in this apologetic pleading for having inconvenienced the lordly owner by the presence of his "unhandsome corpse" in his grounds, that, but for the grimness of the subject, it almost moves one to mirth. Nevertheless, with all the ultra romance of the act, there is a touch of nature in it worthy of notice, especially to the artistic mind. Such a mind he evidently possessed. Some men will deliberately lay their head on the rail on which a train is advancing—these are of the heedless race who throw their lives away without more ado; others, such as our poor Spanish gentleman, even lay nature under contributions to adorn their final exit. Such is life.

The very mysterious circumstances attending the death of a German on the sands at Ramsgate have not, we think, been at all cleared up by the particulars given in the *Times* of Monday last, in which the writer assures us that it is the opinion of the police authorities of the place that it was a case of suicide, and not of murder. At the *post mortem* examination held last week, it was shown that the weapon which penetrated the heart must have been worked about in the wound, inasmuch as the puncture in the heart was very much larger than the point of the instrument could have been. Now, unless we suppose that the heart ruptured itself on the infliction of the small wound, it is impossible to believe that the blow was dealt by the deceased; for it would be too much to believe that he could have churned, as it were, at his own heart with a knife. Besides, where is the knife? To assert that it possibly had a wooden handle, and therefore floated out to sea, is puerile. His boots, hatchet, and amputated fingers, were found close to the body; and so should have been the knife, if it had been used by himself. It is scarcely to be believed, moreover, that a man intending to stab himself would, by way of screwing up his courage, deliberately amputate his fingers with a hatchet. We are told that it was his object for some time previously to conceal his identity; to accomplish which, as the *Times* reporter has the simplicity to tell us, he dropped his German Bible out of the omnibus into the road, he being the only passenger! in like manner he dropped his carpet-bag, and cut off the tops of his boots, and even picked out the letters from his wristbands! Having thus obliterated all traces of identity upon his clothes, he next chopped off all his fingers on one hand, two having already been amputated, and thus marking him. Having taken all these precautions to destroy the slightest chance of identity, we are next informed that near his body a slip of paper was found, inscribed with the following words in German:—"Dear Mother,—Here are five dollars—little, but from a good heart.—Henry Matterigh." How the "subtile-souled psychologist", who explains the matter so trippingly in the *Times*, manages to reconcile these two widely divergent facts, we are at a loss to know. So far from feeling convinced that we have here a suicide instead of a murder, our impression is entirely the other way; and we trust that no hasty verdict will be given, which may have the effect of preventing the truth from being brought to light. Since the incomprehensible carpet-bag affair on Waterloo Bridge, no event involving the untimely death of a fellow-creature has given rise to so many painful suggestions as the one under notice; and if, after all, it should be proved that a foul assassination has been committed, this case will undoubtedly deserve to be ranked in the same category with those which, according to *Blackwood*, constitute the "Fine Arts of Murder".

Colney Hatch is already growing under the hands of the builders—a huge wen upon the surface of the landscape—a reproach to the spirit of the age, as far as the *treatment* of the insane is concerned, and a spectacle of sorrow to every philosophical alienist physician. The bricklayers' treatment of the mentally afflicted poor is, we find, spreading into the adjoining county of Surrey. The County Asylum at Wandsworth is to be enlarged so as to find accommodation for six hundred and sixty-six additional patients—we should, by right, call them prisoners—at an expense of £58,000. The county magistrates have so decided; and from their sublime authority there can be no appeal. We record the fact with infinite disgust. At the same time, we feel certain that the doom of these vast prisons has been sounded; and that, just as many of the largest religious houses were overtaken and destroyed, in the very act of being built, by the Reformation, so we feel convinced that the new light springing up with regard to the treatment of lunatics will arrest these vast bastiles ere they have had time to inflict much permanent injury upon the poor mentally afflicted creatures committed to the care of ignorant magnates, who give them stones, instead of sympathy and professional care.

THE LATE BOOTH EDDISON, Esq., F.R.C.S.,

VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION.

Mr. Booth Eddison died at Funchal, Madeira, on the 7th of March, aged 50. The father of the deceased, Mr. John Eddison, resided at Gateford, Nottinghamshire, and died in 1812, leaving eight children, under eleven years of age, to the care of his bereaved widow, who was niece to the well known Rev. Abraham Booth, late Baptist minister in London. Mr. Booth Eddison's mother, who has been dead some years, was remarkable for her ability in bringing up her large family, and fitting them for responsible and useful situations in life. Booth Eddison, the subject of this notice, was the fifth son. He became an apprentice at the General Hospital, Nottingham, in the year erved the usual time of five years, and afterwards attended c wo years at St. George's and Westminster Hospitals, London. He then passed the examinations of the College of Surgeons of Edinburgh, and the Society of Apothecaries in London.

He was elected Resident Surgeon to the General Hospital, Nottingham, having previously gained the confidence of the governors of that institution; and he filled the responsible office for five years.

Mr. Eddison studied at the Lying-in Hospital, at Dublin, and also at the medical schools of Paris, and afterwards commenced practice at Leeds. He remained there, however, only a few months, having an offer of partnership from Mr. Higginbottom, sen., of Nottingham, which he accepted. The partnership continued until the year 1842; after that period, he practised in Nottingham. A vacancy for a surgeon to the General Hospital occurring in the year 1850, Mr. Eddison was elected. For the year 1857-58, Mr. Eddison was President of the British Medical Association. He presided at the meeting held in Nottingham in 1857, and was present, as Vice-President, at the meeting in Edinburgh. He stood deservedly high in his profession, combining great judgment with accurate manipulation as a surgeon.

Mr. Eddison was a member of the Society of Friends, by whom he has long been held in high esteem; and, in accordance with that worthy body of Christians, he was a real utilitarian, and, desirous of benefiting his fellow-creatures, gave his cordial support to the various philanthropic societies of the day. He bid fair for a long life, having apparently a vigorous healthy constitution, being temperate in his diet, and an early riser; but he subjected himself to over-intense labour, both of body and mind, which proved too much for his frame. This he became aware of when too late to remedy. When he found his health declining, he said to a friend: "I have erred in having done two years work in one." For several years he was in a declining state of health, and tried various changes. For some time he resided in Devonshire and Italy; and, in December last, he resorted to Madeira, accompanied by his wife and two daughters. He arrived early in January. A letter from Mrs. Eddison to his brother, Mr. Edwin Eddison, Town Clerk of Leeds, dated March 11th, announcing the death of her husband, says:

"My dear Booth had been rapidly sinking for the last month; and he anticipated the great uncertainty of the continuance of his life. At four o'clock on the 7th of March, he quietly and sweetly breathed his last. We have indeed some very kind English friends here, whose attentions have been most thoughtful and considerate: anything that could be useful to us, or acceptable to our dear invalid, was freely offered. The English merchants here are most liberal; and two of our friends undertook to arrange everything about the interment. The dear remains were laid in a sweet spot—the English cemetery—in a quiet manner, on the 9th. The funeral was conducted very much as Friends'; and above twelve of the principal residents respectfully followed to the grave—the consul among the number."

The result of Dr. Lund's *post mortem* examination revealed general tubercular infiltration of both lungs, with cavities in each; enlargement of both kidneys; and oily liver.

Independently of his professional status, which was of a high character, Mr. Eddison combined integrity, industry, and perseverance, in all his pursuits.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Wednesday, March 23rd, 1859.

The minutes of last meeting were approved and signed.

Copies of the Regulations of the King and Queen's College of Physicians and of the Royal College of Surgeons in Ireland, in relation to the obtaining the Licences of those Bodies, were laid before the Council.

Read—Letter from the Secretary of the General Council, forwarding proofs of the Medical Register for Ireland.

Resolved—That this Council cannot concur in the view taken by the Executive Committee, with respect to the erasure, from the General Register, of Licences in Midwifery granted by the King and Queen's College of Physicians, and by the College of Surgeons in Ireland; and that the Secretary be directed to write to the Secretary of the General Council, to request that the case proposed to be submitted to Sir Hugh Cairns may be communicated to this Council for their observations, before it shall be placed in his hands.

C. H. Leet.

Wednesday, March 30th, 1859.

The minutes of last meeting were approved and signed.

Copies of the Regulations of the Queen's University, and of the Apothecaries' Hall, in relation to the obtaining of qualifications from those Bodies, were laid before the Council.

The Council then proceeded, in accordance with resolution of the General Council of 27th November (No. 7), to examine the Statements of the Courses of Study and Examinations returned by the several Colleges and Bodies in Ireland, mentioned in Schedule A of the Medical Act; and having considered the regulations of the Queen's University, and of the King and Queen's College of Physicians.

It was resolved—That the Registrar be directed to request, from the Secretary of the Queen's University and from the Registrar of the College of Physicians, further information on the points referred to in the notes now made upon the margins of the respective documents supplied by them.

Aquilla Smith.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

A social and scientific meeting of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on

Friday, May 20th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 22nd, 1859.

F. C. Skey, Esq., President, in the Chair.

CASE OF EPILEPSY, IN WHICH CASTRATION WAS PERFORMED.

BY C. HOLTHOUSE, ESQ.

Mr. Holthouse cited ten cases of epilepsy in which castration is said to have cured the disease. In the first case, the testicles were removed in consequence of disease of those organs. In the second case, one testicle was removed on account of an accident to the organ. Both patients were epileptic previous to the affection of the testicles; and their removal, though not done with the view of curing the epilepsy, incidentally did so. These cases were related to Dr. M'Kinley, of Tennessee, U.S, by a Mr. M'Gavoc, of the British Navy, and are published in the *American Medical Gazette* of July, 1855, along with seven other cases in which castration was performed for the express purpose of curing epilepsy. Of these seven cases, two occurred in the practice of Dr. M'Kinley himself; two in the practice of Dr. White, of Tennessee; two in that of Dr. Talbot, Missouri; and one in that of Dr. Hacker, of Louisiana. The tenth case occurred in Germany, the operation having been performed by Holz, under the direction of Joseph Frank, and it is recorded in the *Praxes Medicæ Universæ Precepta*, vol. ii., chap. 11. Mr. Holthouse stated that he brought his case before the notice of the Society, partly because the operation was not attended with the same favourable results as in the cases referred to, and partly for the purpose of removing the misapprehension which prevailed in reference to it. The case of the patient, very nearly as taken by Mr. Adair, the House-Surgeon of the Westminster Hospital, was then read; after which the author stated the grounds on which he was induced to operate, to be:—1. The patient's urgent request; 2. The simple and dangerless character of the operation; 3. The knowledge that epilepsy had been cured by castration; 4. The possibility, if not probability, that it might be in the present case; 5. The history of the case, which showed, first, that every remedy hitherto tried had failed, and secondly, that there was a close connection between the origin and severity of the fits and the condition of the sexual organs. In undertaking the operation he was chiefly influenced by the wishes of the patient. The following were the points on which a physician or surgeon must satisfy himself before acting on a patient's suggestion:—1. That the patient is of mature age; 2. That he is of sound mind, not the subject of hallucinations, or a monomaniac; 3. That his proposition is not unreasonable; 4. That the remedy proposed is not dangerous. The only points on which there could be any difference of opinion were as to the sanity of the patient and as to the reasonableness of the treatment. As to the sanity of the patient, it had been asserted by many that the mere fact of the man having had epilepsy for so long a period was presumptive evidence that his mind was unsound, and the pertinacity with which he begged to be castrated was considered a sufficient proof that this opinion was not unfounded. Lunatics have been known to castrate themselves. If such a desire existed, or such a request were made on the part of any individual without adequate motive, there would be legitimate grounds for believing that he was insane, or at least laboring under an insane delusion. But was there no adequate motive in the present case? The patient was walking in one of the streets of New York, when he was stopped by a physician of eminence and repute, (Dr. Reese), who informed him he had just received a communication in which castration was recommended for certain forms of epilepsy attended with great venereal excitement, and that nine cases had been successfully treated by this method. Dr. Reese advised him to submit to the operation. A consultation was held between Dr. Reese and Professor Parker, Surgeon of the Bellevue Hospital, when the latter consented to operate, and was only deterred from doing so by the interposition of a medical relative of the patient. From this period was to be dated the desire of the patient to be castrated; and believing that he had at last found a remedy for his disease, was it to be wondered at that he should be earnest and urgent in his desire to avail himself of it? Moreover, when he called to mind the origin of his fits—their recurrence on his first marriage, after they had been absent for the two preceding years—their exacerbation on his second marriage as well as under any sexual excitement—and his frequent nocturnal pollutions—could he dissociate the fits from the sexual organs? The removal of the exciting cause of epilepsy, as indeed of any other disease, had been long recognised as the established rule of practice; and although it was not always possible to determine this cause, it was generally admitted that we are justified in acting on a fair presumption of the cause, though such presumption must necessarily fall short of actual proof. Acting on this presumption, epileptic patients had been subjected to trephining, sometimes with and sometimes without success; and Wardrop cured a case of eccentric epilepsy by removing a joint of a healthy finger; and several similar or analogous examples are on record. Mr. Holthouse concluded by asserting that the removal of all extrinsic sources of excitement from a disordered brain was both reasonable and proper; and believing from the history of the case that the reproductive organs of this patient did exercise an injurious influence on his brain,—seeing, moreover, that precedents were not wanting where the removal of the testicles, under like circumstances, had been attended with success—he maintained that the request of the patient was not unreasonable, and that it was perfectly justifiable to accede to his wishes. The results of the operation were certainly not such as the patient anticipated: the fits continued to recur with much the same frequency, and were of a similar character.

Mr. Solly saw the patient in St. Thomas's Hospital, where a consultation was held, and Mr. Simon was inclined to yield to the man's wishes, against the general feelings of his colleagues. He (Mr. Solly) suggested, that if any operation was performed, the spermatic artery should be tied on one side, and if that proved in any way successful, a similar operation might be performed on the opposite side. His reason for making the suggestion was that castration was by no means a harmless operation, or unattended with danger. The last patient whom Mr. Green castrated died within a short time after the operation.

Mr. Holmes Coote said that the patient, having enjoyed the hospitalities of the public institutions in France and Germany, might now be seen any day in St. Bartholomew's, walking about and airing himself, in the conscious dignity of having been castrated. It appeared to him that the man was a monomaniac. In an institution with which he was connected, Bethlehem Hospital, if all the operations were performed which the patients desired, there would be a strange collection of individuals. One man desired to have his throat cut; another wished to be hung, and a third cut off his penis. In the case of a young woman subject to erotic monomania, a surgeon consented, at her request, to excise the clitoris, with the same effect as in Mr. Holthouse's case. The disease was really in the brain, and could only be relieved in an asylum under proper supervision.

Dr. Schulhof stated that eunuchs in the east were found to suffer from epileptic fits.

Dr. Webster had no doubt that Mr. Holthouse's patient was of unsound mind, and the circumstance of his strong desire to be castrated he regarded as a striking indication of that fact. He did not think the surgeon was justified in performing the operation simply because the patient requested it. The statements of the American cases, however, appeared to be sufficient to justify the operation. Long-standing epilepsy was generally accompanied with unsoundness of mind.

Mr. Acton said there were many instances recorded of *operations de complaisance*, so that Mr. Holthouse was not without precedents for his justification. He hoped, however, that surgeons would be prevented from performing an operation of the kind detailed, seeing that the results were so unsatisfactory. He wondered that no one appeared to have suggested the cauterisation of the urethra, which some persons considered useful in such affections.

Mr. Hale Thomson had seen the patient in Westminster Hospital, and had no doubt of his insanity. Had he heard of cauterisation no doubt he would have proposed it. The man was one day observed to be asking all the students to give him sixpence, and having collected in this way about five shillings, he went out and gave the money to some crossing-sweepers. And in many other ways he had manifested his insanity. He had heard more false logic in the paper than he had ever heard in the Society before; and he suggested whether it would not be better to follow the rules of practice laid down by eminent surgeons in this country, rather than adopt ill-understood American eccentricities. When the operation was performed he (Mr. Thomson) protested against it, the testicles being perfectly sound, and left the theatre rather than sanction by his presence such a proceeding. The operation

was not without danger, and the man suffered fearfully from hæmorrhage for two hours.

Dr. Ogle believed the man to be a monomaniac, and he had seen a letter from Paris respecting him, in which it was stated "the physicians think him stark mad." With regard to the experiments upon the lower animals, it was found that if they were castrated before puberty, their sexual desire was entirely destroyed; but this was not the case if the operation was performed at a later period. Cases were on record in which children had been begotten after castration; and it was known that some eunuchs had harems of their own.

Dr. Stallard said he saw the patient several times in Paris, and the impression at the Hôtel Dieu was that he was a monomaniac. He regarded himself as a most extraordinary patient, who had submitted to every kind of treatment.

Mr. Holthouse contended that the desire of the patient was rational, and no more an indication of insanity than the circumstance of blind and deaf patients going about consulting all the members of the profession, and trying every possible remedy. Yet the assertions that he was a lunatic, nearly all rested on the fact of his wishing to be castrated. Lunatics, Mr. Holthouse was told, not unfrequently requested to be castrated: this man requested to be castrated; *ergo*, he was a lunatic. The statement of his giving the crossing-sweepers five shillings was not correct. The patient had broken a window, and not having funds in his possession at the time, collected money to pay for the damage, and he applied it to that object—what he gave to the crossing-sweepers were only a few silver farthings that he happened to have about him at the time. It was said that the removal of a healthy organ was not justifiable. Nor would he justify it in a healthy individual; but in cases of disease it was sometimes necessary, as in amaurosis, which had been cured by the removal of healthy teeth. If the teeth might be removed to save the eye, surely the testes might be removed to save the brain.

MEDICAL SOCIETY OF LONDON.

Monday, March 14th, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

The usual votes of thanks were passed to the retiring officers and council.

Mr. Hilton briefly returned thanks for the honour which had been done him in placing him in the chair. He expressed his determination to do his duty, and he hoped in such a manner as would entitle him to the respect of the Fellows. Now that the election was over, he trusted that all differences would be forgotten, and that there would be union and peace for the purpose of carrying out the great objects for which the Society was established. It was the oldest Society of the kind in London, and might be said, indeed, to be the parent of all the others. It was associated with some of the greatest names of the profession; it possessed a most valuable library, and had a large number of members, embracing a great number of the rising practitioners in medicine.

VARICOSE VEINS. BY JOHN GAY, ESQ.

Having found in modern works the same account of the causes of varicosity of the saphena vein repeatedly reproduced and not feeling altogether satisfied with it, Mr. Gay carefully noted down the history of nearly a hundred cases, as they presented themselves to his notice during three or four years. From his notes he drew the following conclusions:—Active exercise, with certain constitutional tendencies, was often a cause of this affection, especially in men; but garters and overloading of the large bowels had not, as had been alleged, to answer for its production, and the pressure excited by a gravid uterus comparatively seldom. The affection was most commonly observed in women, and it commenced most frequently during the first two or three years of menstruation, in connection with either too profuse or too scanty an amount of secretion. During the first day or two of these periods, the femoral vein was very liable, under these circumstances, to become surcharged; and, from the unyielding nature and small size of the venous division of the femoral ring, dilatation very readily followed. It only required that this repletion should be repeated for several months in succession, and permanent enlargement of the vessel, with its tributaries, was the result. The over filling of the femoral vein was due to its connection with the uterine plexus of vessels, which became congested at the period of menstruation, and was very often, during the setting-in of this function, unable to relieve itself by the natural processes. It was, however, much promoted by the patient taking active bodily exercise at that time. During utero-gestation, the same tendency to surcharge of the femoral veins might often be observed, and was, as in menstruation, the forerunner of varicosity and its consequences. The tendency continued during the first four or five months, and then subsided. If it continued after that time, it did so in consequence of the pressure of the gravid uterus; but in the earlier months, as during menstruation, in all probability it was due to physiological and not to physical causes. The earlier symptoms were—fulness, with or without a sense of throbbing in the region of the femoral vein; cramps in different parts of the leg, especially in the calf; and inflammation of some one or more of the saphenous tributaries, indicated by the patient's complaining of a hard and tender subcutaneous cord. Occasionally, a state of the leg and foot obtained, which denotes capillary excitement, consequent upon remora in the trunk vein. The foot became painful, especially in the seat of the deep plantar fascia, on walking or standing; it was somewhat more livid than it should be, and swelled slightly towards night.

Monday, March 21st, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

PELVI-PERITONITIS, AND ITS RELATIONS TO UTERINE PATHOLOGY. BY EDWARD J. TILT, M.D.

The author began by drawing attention to the frequency with which bands and false membranes were found in the vicinity of ovaries and of the womb, affording evidence of the previous occurrence of peritonitis at some long elapsed period of life; and he quoted many of the pathologists who maintained this position. He then alluded to the well known fact, that peritonitis, either by embedding the ovaries in false membranes, or by determining the occlusion of the distal ends of oviducts or their permanent attachment to some part of the pelvis, was a very frequent cause of sterility. Dr. Tilt insisted on the occurrence of pelvi-peritonitis in some cases of dysmenorrhœa, and in other forms of morbid menstruation; and for further details on this subject he referred to the second edition of his work on *Diseases of Women, and Ovarian Inflammation*. After observing that little was known in general with regard to this most frequent form of peritonitis, the author stated that the complaint had lately been well studied by Drs. Bernutz and Goupil; and he commented on some valuable statistical data derived from their practice. Pelvi-peritonitis most frequently occurred after parturition; it frequently arose out of morbidly-performed menstruation, during the course of blennorrhagia: and, in rare cases, after the use of the uterine sound, or other surgical treatment of uterine disease. The symptoms of pelvi-peritonitis were sharp, persistent pain in the iliac regions; a small pulse, with slight fever; nausea, with constipation or diarrhœa. When the diminution of pain rendered possible the vaginal *toucher*, the finger would feel the lower part of the neck of the womb encircled to a great extent by a semi-elastic swelling. The peri-uterine situation of the swelling was indicated as an important character to distinguish it from tumours depending on phlegmonous inflammation of the broad ligaments, which often rise above the brim of the pelvis, and even implicate the abdominal walls. Dr. Tilt explained how, at each successive menstrual period, a fresh attack of peritonitis would supervene, causing pus to form and be evacuated, or solid adhesions to bind down the womb, and more or less unite the pelvic organs into solid tumours; and that although the complaint was seldom fatal, still it wore down the strength of some patients, who became anæmic and hysterical Having thus sketched pelvi-peritonitis, the author stated that its principal signs—the swelling which partly circles the neck of the womb, and the being subject to relapse at menstrual periods—were claimed likewise, by excellent observers, as the signs of peri-uterine phlegmon, or for the inflammation of that small portion of cellular tissue which lies behind the neck of the womb. Without denying the possibility of such an affection, Dr. Tilt thought it of rare occurrence, and that inflammation originating there would soon pass to the rest of the cellular tissue, to constitute the well-known cases of cellulitis; and he regretted the confusion introduced into the subject by M. Nonat in his papers on peri-uterine inflammation. The author spoke of several cases in which Dr. Bernutz fully expected to find the pathological conditions indicated by M. Nonat; but the patients dying from other complaints rendered it possible to ascertain, by *post mortem* examination, that the cellular tissue surrounding the womb was perfectly sound, whilst the peritoneal recto-vaginal space was distended by pus and false membranes.

The treatment recommended was strictly antiphlogistic; the constant application of warm poultices, or spongio-piline steeped in warm water and sprinkled with forty drops of laudanum, was advised; and blisters and preparations of steel and bark were spoken of favourably in cases of anæmia.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, April 6th, 1859.

Edward Rigby, M.D., President, in the Chair.

Twenty-nine new Fellows were elected.

OBSTETRIC BELT.

Dr. Tanner exhibited an obstetric belt, made by Mrs. Boivin, which was cheap, simple in construction, and easily applied. He suggested that it might be useful also after paracentesis for ascites or ovarian dropsy.

CASE OF EXOMPHALOS IN WHICH THE GRAVID UTERUS FORMED THE HERNIAL MASS. BY G. C. P. MURRAY, ESQ.

This case, which Mr. Murray believed to be the first on record, possessed features of great interest and importance. The patient was a woman, aged 30, the mother of three children, and had been from infancy affected with a small umbilical hernia, which had always been easily reduced. When in the eighth month of gestation, she found one morning, in rising suddenly from the recumbent position, that a large tumour had forced itself through the navel. This protrusion proved to be nothing less than two-thirds of the impregnated uterus, the fœtus being distinctly recognised by palpation. There was no rupture of the linea alba. Reduction was at once effected by means of gentle and careful manipulation, and the organ was happily kept *in sitû* until the end of gestation, when a live female child was born. Mr. Murray quoted two or three cases from Boivin and Burns, which were somewhat analogous, but differed from the present case, inasmuch as the central tendinous cord had in them always yielded or divided; and concluded by observing that the fact of the uterus being subjected to some amount of handling at this late period of gestation, without producing labour, was interesting.

CRANIOTOMY. BY R. DRUITT, M.D.

The patient, aged 32, a tall, healthy-looking Irishwoman, was in labour for the sixth time. Her foregoing labours had been very tedious: three produced living, and two, dead children. When seen by Dr. Druitt, the liquor amnii had been discharged, and hard labour had continued for thirteen hours. The forceps had been applied, and traction used at intervals during five hours. Ergot had been given. The forceps remained applied, and no force had any effect in dislodging the head, which was above the brim of the pelvis. Turning was performed by the author, chloroform having been administered; the body was expelled, but the head and one of the arms remained above the brim, and could not be brought down. The cord soon ceased to beat, and dangerous hæmorrhage now occurred. Nothing now was to be done but to terminate the labour by craniotomy. The interval between the pubis and sacrum was three inches; the head of the child as hard as a cocoa-nut. If this poor woman becomes pregnant again, the operation for the induction of premature labour should be performed.

In the discussion on Dr. Druitt's paper, Dr. Tanner, Dr. Tyler Smith, Dr. Routh, Dr. Barnes, Mr. Borham, Dr. Croft (late of Ceylon), Dr. Richards, and Dr. Elkington (of Birmingham), took part.

SOME RECENT CASES (FOURTEEN) ILLUSTRATING THE PHYSIOLOGY AND TREATMENT OF PLACENTA PRÆVIA.

BY ROBERT BARNES, M.D.

The author sought to avail himself of the foundation of the Obstetrical Society of London, to elicit the experience of its members as to the different principles of treatment of placenta prævia. He submitted fourteen cases which had come under his own care since the publication of his work on the subject; and appended two series of propositions—the one physiological, the other therapeutical—which appeared to be either proved or illustrated by those cases.

Amongst the physiological propositions were the following: 1. In many cases of placental presentation, there arrives a stage when the hæmorrhage is spontaneously arrested. 2. This physiological arrest is not owing to pressure upon the bared surface of the uterus by the bag of liquor amnii, or the child; nor to death of the child; nor to syncope; nor to total detachment of the placenta. 3. This physiological arrest of the hæmorrhage is observed when that part of the placenta which had been implanted within the cervical or lower zone of the uterus has been all detached, contraction of the uterus attending. 4. This stage reached, there is no physiological or pathological reason why further detachment of placenta seated within the middle and fundal zones should occur until after the expulsion of the child, when—and not till then—the remainder of the placenta is cast off as in normal labour. 5. The position of the greater portion of the placenta to the posterior wall of the uterus in these cases, where it forms, by resting on the projecting promontory of the sacrum, a solid inclined plane, directed forwards, is a frequent cause of the transverse presentations which are apt to complicate placenta prævia. 6. In the great majority of cases where an edge of the placenta comes down to the os internum uteri, the umbilical cord springs from this edge, and thus is ready to fall through into the vagina, should the os not be occluded by the child's head.

Amongst the therapeutical propositions were the following: 1. Owing to the high vascularity and development of the lower segment of the uterus, resulting from this part being the seat of the placenta, uterine inflammation and puerperal fever are exceedingly likely to ensue from the pressure and contusion attending the passage of the child. 2. This danger is much increased by the forcible introduction of the hand for the purpose of turning and extracting the child before the os uteri has expanded. 3. In some cases, where it is observed that the placenta has been separated spontaneously from the lower segment of the uterus, the os being expanded to the size of a crown-piece, and the hæmorrhage having ceased, it is not necessary to interfere with a labour now become natural *quoad* placental attachment. 4. Since the os internum uteri *must* expand to the diameter of the child's head, and since, during the dilatation, placenta adhering to the lower segment is liable to successive detachment, causing hæmorrhages, it is an indication to expedite this stage of the labour as much as possible. 5. In some cases the ordinary means of inducing contraction—such as rupturing the membranes, plugging the cervix, ergot or galvanism—will suffice to cause the rapid and safe expansion of the os. 6. The adhesion of placenta to the lower zone of the uterus impedes the regular progress of labour, and delays the equable expansion of the os uteri. 7. In those critical cases where forced delivery or the artificial total detachment of the placenta are dangerous or impracticable operations, the introduction of the index finger through the os, and the separation of the part of the placenta adhering to the cervical zone, is a safe and feasible operation.

Dr. Rigby would ask, was Levret's opinion as to the connection between partial implantation of the placenta over the cervix and prolapsus of the funis borne out by Dr. Barnes's experience? He would make one remark on a point which had, he believed, escaped notice. In cases of placenta prævia, there now and then occurred danger from slight but continuous hæmorrhage after delivery, in consequence of a small rent in the os, which at any other time would be of no consequence, but was of importance in these cases, owing to the extreme vascularity of the cervix.

Mr. Borham had found preternatural position of the child in five out of seven or eight cases of placenta prævia. He was at a loss to explain this. Was it connected with undue shortness of the cord?

Dr. Elkington believed no universal law could be laid down for treatment of these cases. When the placenta was partially implanted over the cervix, and the position of the child natural, he believed that rupture of the membranes and the use of ergot were sufficient. If the implantation was complete, the patient exhausted from loss of blood, etc., the proper treatment was to turn. His success had been greatest when turning had been performed early. He had always found the os easily dilatable when much hæmorrhage had occurred, even though only as large as half-a-crown. He could not consider that the patient was secure from further hæmorrhage after the placenta had been separated to a certain degree. He would be disposed to deliver as soon as possible.

Dr. Barnes, in reply, stated that in two of the cases of marginal presentation the cord was prolapsed. The cause of the preternatural position of the child in cases of placenta prævia, was, as Levret long ago pointed out, the placenta prævia itself. He believed that in cross presentations generally, also, it would be found that the placenta was attached low down, and that this gave rise to the malposition of the child. He had found the os not dilatable in cases where much blood had been lost;

although, undoubtedly, the opposite was the rule. He would submit that the "insecurity" to which Dr. Elkington had referred as hanging over a woman when the hæmorrhage had spontaneously ceased, and the consequent necessity for further proceedings, was a feeling having its seat only in the mind of the accoucheur. He hoped to convert Dr. Elkington to a belief in the physiological views enunciated in the paper.

Parliamentary Intelligence.

HOUSE OF LORDS.—Friday, April 15th, 1859.

NAVAL MEDICAL SUPPLEMENTAL FUND SOCIETY ANNUITIES, ETC., ACT CONTINUANCE BILL.

This Bill was read a second time.

Monday, April 18th.

NAVAL MEDICAL SUPPLEMENTAL FUND SOCIETY ANNUITIES, ETC., ACT CONTINUANCE BILL.

This Bill was read a third time.

Tuesday, April 19th.

THE ROYAL ASSENT

Was given to the following Bills:—

Medical Act (1858) Amendment Bill.
Recreation Grounds Bill.
Naval Medical Supplemental Act Bill.

HOUSE OF COMMONS.—Monday, April 18th, 1859.

MEDICAL OFFICERS OF THE NAVY.

Sir E. Grogan inquired whether the First Lord of the Admiralty had yet arrived at any decision on the subject of the memorial of the Medical Officers of the Navy; whether he was disposed to grant the prayer of the memorialists; and, if so, at what time it might be expected that the new regulations would come into operation?

Sir J. Pakington replied that the preliminary steps had been taken for acceding to the prayer of the memorialists, and all that was now required was the consent of the Treasury. A Privy Council would probably be held on Saturday, when an order of Council would be issued placing the Medical Officers of the Navy in a position of fair and proper equality with the Medical Officers of the Army. [*Hear, hear.*] It was possible the order in Council might not be issued so soon as Saturday; but, if not, it would undoubtedly be issued at the next following Council.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

* *In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Bankier. On April 17th, at 7, Lansdowne Terrace, Kensington, the wife of James Bankier, M.D., R.N., of a son.

Latham. On April 12th, at Greenford, the wife of R. G. Latham, M.D., of a son.

Moore. On April 19th, at Dublin, the wife of *W. D. Moore, M.B., of a daughter.

Ogle. On April 15th, at 13, Upper Brook Street, the wife of John W. Ogle, M.D., of a son.

Webb. On April 19th, at 7, Elizabeth Street, Eaton Square, the wife of Edward Lowe Webb, Esq., Surgeon, of a son.

MARRIAGES.

Allen—Jukes. Allen, Charles H., Esq., of Stoke Newington, to Sarah Elizabeth, only daughter of the late Alfred Jukes, Esq., Surgeon, of Birmingham, at Edgbaston, on April 13th.

Ducket—Denny. Ducket, Clarke A., Esq., Assistant-Surgeon Royal Navy, to Mary, only daughter of the late James W. Denny, Esq., of Bungay, at Gorleston, Suffolk, on April 14th.

Folkard—Lee. Folkard, Arthur C., Esq., C.E., to Frances, second daughter of William Lee, M.D., at Kootoo Colom, Tanjore District, on February 3rd.

Grey—Spaull. Grey, Frederick, Esq., to Eliza Mary, youngest daughter of Barnard Spaull, Esq., Surgeon, of 5, Vale Place, Hammersmith, at St. Mary Abbott's, Kensington, on April 16th.

Hodson—Ring. Hodson, Thomas, Esq., Surgeon, of Clifton Road East, St. John's Wood, to Ellen Catherine, eldest daughter of Richard Ring, Esq., of Wincanton, Somerset, at St. Marylebone Church, on April 14th.

Leigh—Chapman. Leigh, H. T., Esq., Surgeon, of Turnham Green, to Lydia Stratton Helena, widow of D. L. Chapman, Esq., at Christ Church, Turnham Green, on April 13th.

Morrison—Ruan. Morrison, John, jun., Esq., of Glasgow, to Mary Beech, third daughter of the late W. H. Ruan, M.D., of St. Croix, West Indies, at Southampton, on April 18th.

Ord—Rainbow. Ord, William Miller, M.B., of Streatham Hill, to Julia, third daughter of the late J. M. Rainbow, Esq., of Tulse Hill, Surrey, at Streatham, on April 12th.

West—Gatty West, John, Esq., of Little Bowden, to Anna Maria, youngest daughter of the late Henry Gatty, Esq., Surgeon, of Market Harborough, on April 14th.

Weston—Knight. Weston, Edward Francis, Esq., of Stafford, to Adelaide Maria, youngest daughter of —— Knight, M.D., of the same place, on April 13th.

DEATHS.

Donne. On April 16th, at Blackheath, aged 77, Anne Vertue, widow of Edward Charles Donne, M.D., formerly of Mattishall, Norfolk.

Frankish, William, Esq., Surgeon, at Antigua, of yellow fever, aged 26, on March 14th.

Pemberton. On April 12th, at Richmond, Surrey, Frances Sophia, wife of G. R. Pemberton, M.D., Bengal Presidency.

Playfair. On April 17th, at Edinburgh, aged 6 months, Edith Millington, daughter of Lyon Playfair, Ph.D., Professor of Chemistry in the University of Edinburgh.

*Smith, Henry Lilley, Esq., Surgeon, of Southam, aged 71, on April 12th. Mr. Smith was the originator and zealous promoter of self-supporting or provident dispensaries.

APPOINTMENTS.

Baly, William, Esq., F.R.S., appointed Physician-Extraordinary to Her Majesty.

PASS LISTS.

Royal College of Physicians. At the Comitia Majora, held on Monday, April 18th, the following gentlemen, having undergone the usual examination, were admitted Licentiates of the College:—

Dr. Frank Chance, Birmingham
Dr. Donald Dalrymple, Norwich
Dr. Matthew Stovell, Bombay Army

At the same Comitia, the following gentlemen were also admitted Licentiates under the recently enacted bye-laws:—

Bardsley, Sir James Lomax, M.D., Manchester
Bird, Frederick, M.D., Park Street, Grosvenor Sq.
Bird, James, M.D., Hyde Park Square
Blackmore, Samuel, M.D., Bath
Cholmeley, William, M.D., Russell Square
Davey, James George, M.D., Northwoods, near Bristol
Davies, John, M.D., Hertford
Davies, John Birt, M.D., Birmingham
Gream, George Thompson, M.D., Upper Brook Stree
Greenhalgh, Robert, M.D., Upper Woburn Place
Hall, Alfred, M.D., Brighton
Harman, Edward Beversham, M.D., Bayswater
Hood, William Charles, M.D., Bethlem Hospita
Johnson, James Proud, M.D., Salop
Lyon, Felix William, M.D., Lyndhurst
Maclean, John, M.D., Portman Street, Portman Square
Macreight, William Walkinshaw, M.D., Wells
Mapleton, Henry, M.D., Army Medical Department
Moore, George, M.D., Hastings
Miller, John William Moore, M.D., Southsea
Noble, Daniel, M.D., Manchester
Peregrine, Thomas, M.D., Half Moon Street, Piccadilly
Rogers, George Goddard, M.D., George St., Hanover Sq.
Routh, Charles Henry Felix, M.D., Montague Square
Sanderson, Hugh James, M.D., Upper Berkeley Street

Shapter, Thomas, M.D., Exeter
Slack, Robert, M.D., Leamington
Smith, Thomas, M.D., Cheltenham
Waite, Charles Derby, M.D., Old Burlington Street
Washbourne, Thomas Buchanan, M.D., Gloucester
Webb, Francis Cornelius, M.D., Great Coram Street
West, Thomas, M.D., Daventry
Wilkinson, M. A. Eason, M.D., Manchester
Williams, Joseph, M.D., Tavistock Square

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, April 15th, 1859:—

St. Bartholomew's Hospital.

Baker, Thomas Young, Hargrave, Northamptonshire
Bellringer, George Hext, Penzance, Cornwall
Bett, R. Longstaff, Howell, near Sleaford, Lincolnshire
Blaker, Edgar Shaw, Lewes, Sussex
Davies, Thomas Edward, Grosmount, Monmouthshire
Farrington, William Hicks, Ottery St. Mary, Devon
Harrison, Reginald, Stafford
Parker, Charles Robert George, Torquay, Devon
Quennell, John Cooper, London
Sherwin, Henry Chrippes, Petworth, Sussex

Middlesex Hospital.

Cresswell, Pearson Robert, Melbourne, Australia
Meredith, Spencer, Middlesex Hospital
Pearson, Henry Walker, London
Worthington, Francis Samuel, Lowestoft

St. Thomas's Hospital.

Hamerton, Ernest, Elland, Yorkshire
Moreton, Thomas, Marton, Cheshire
Simmons, Edward Lamburn, Gippsland, Australia

King's College.

Sharp, Edward, Truro, Cornwall
Workman, William, Reading, Berkshire

Guy's Hospital.

Comley, John Muspratt, High Street, Whitechapel

University College Hospital.

Kipling, Thomas, Durham

Brighouse, John, Lindley, Huddersfield
Empson, Charles Frederick, Headingley, near Leeds
Hudson, George, Newport, Yorkshire
Jones, Robert, Hulme, Manchester

HEALTH OF LONDON:—WEEK ENDING APRIL 16TH, 1859.

[*From the Registrar-General's Report.*]

The deaths registered in London, which were 1,201 in the previous week, declined to 1,084 in the week that ended last Saturday. In the ten years, 1849-58, the average number of deaths in the weeks corresponding with last week, was 1,118; but as the deaths returned for last week occurred in a population which has increased, they can only be compared with the average raised in proportion to that increase, namely, with 1,230. The result of the comparison is, that the deaths of last week were less by 146 than the number which would have occurred if the average rate of mortality for the second week of April had prevailed.

It is satisfactory to note in the present return, a decrease of scarlatina and diphtheria. The deaths referred to the former, were, in the previous week, 58; last week they were 42; those referred to the latter, were, in the previous week, 13; last week they were 9. The nine fatal cases of diphtheria occurred in the following sub-districts:—Chelsea, South, 1; Hackney, 1; Old Street, 1; West London, North, 1; Haggerstone, East, 1; Church (Bethnal Green), 1; Mile End, Old Town, East, 1; St. Peter, Walworth, 1; and Lambeth Church, 2d., 1. Sixteen persons, of whom thirteen were children, and three were twenty years old and upwards, died of small-pox. Measles exhibits a decided decrease, the fatal cases in the last two weeks having been only fifteen and sixteen. Whooping-cough, which was the most fatal of the zymotic diseases, carried off fifty-six children last week. The total number of deaths, included in this class of diseases, is 229; while the corrected average, for corresponding weeks, is 265. Diseases of the respiratory organs, exclusive of phthisis, were fatal in 199 cases; while the corrected average is 240. Zymotic and pulmonary diseases, are those by which, principally, the mortality rises or falls; and under both heads the results are favourable, as indications of the present state of the public health.

Last week, a house painter, in Kenton Street, died from lead paralysis. Three persons died of intemperance, besides four, whose deaths are referred to delirium tremens.

Last week, the births of 865 boys and 771 girls, in all 1,636 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1,655.

At the Royal Observatory, Greenwich, the mean height of the barometer last week, was 29·277 in. The extreme variation of readings was from 29·57 in. on Tuesday, to 28·75 in. on Friday; after which the barometer again rose to 29·57 in. The mean temperature of the week, was 42·4° (having been 56·3° in the previous week), which is 2·9° below the average of the same week in forty-three years, (as determined by Mr. Glaisher). The mean daily temperature was below the average on every day after Monday, and on the last two days the extent of depression was more than 8°. The thermometer fell from 59·8° on Sunday, the *highest* point attained in the week, to 30·8° on Thursday, its *lowest* point, and the entire range was, therefore, 29°. The mean daily range was 15·9°; the range on Thursday was 23·2°. The difference between the mean dew-point temperature and air temperature was 6°. The mean degree of humidity of the air was 81. The mean temperature of the water of the Thames was 51·8°. After Monday the wind blew, generally, from the north-west. Rain fell on every day, and the amount in the week was 0·86 in. Snow, as well as hail and rain, fell frequently on Saturday.

THE HUNTER STATUE FUND.

A meeting of the members of the medical profession of Liverpool and the neighbourhood was held on Monday, April 11th, at the Medical Institution, to consider the propriety of taking steps for raising a subscription towards the Hunter Statue Fund. Ellis Jones, Esq., Senior Surgeon to the Northern Hospital, presided.

1. It was moved by Dr. Vose, seconded by Mr. Waters, and resolved—

"That this meeting regards with much satisfaction the effort which is now being made to recognise the distinguished labours of John Hunter, in the proposed erection of a monument to his memory."

2. It was moved by Mr. Long, seconded by Dr. Macnaught, and resolved—

"That, in the opinion of this meeting, it is desirable that a subscription should be entered into, to raise a fund in this town, for the purpose of assisting in carrying out the object mentioned in the first resolution."

3. It was moved by Dr. Stookes, seconded by Mr. Steele, and resolved—

"That the following gentlemen constitute a Committee, with power to add to their number, to receive subscriptions, and transmit the same to the Central Committee of the Hunter Statue Fund in London:—The Chairman of the meeting; the Vice-President, the Treasurer, and the Secretary of the Medical Institution; with the mover and seconder of the resolution."

The Fever in Trinidad. Some official correspondence on this subject has been published by order of the House of Commons, on the motion of Sir De Lacy Evans, M.P. The yellow fever was first reported in the island last September, and three officers, with twenty-five men, women, and children, were reported as dead on the first of November. On the first of December the monthly return reported that "*at* Trinidad" (this grammatical blunder is certainly repeated in the official papers, in defiance of the simple rule of Lindley Murray) "yellow fever had disappeared;" but on the first of January, 1859, its re-appearance in the 41st regiment, was reported At the end of the month, however, an improvement in the health of the troops was reported. The disease is ascribed to the unhealthiness of the barracks. The army medical department wrote to the principal medical officer at Barbadoes, on the 25th of November, trusting that every sanitary measure would be taken to improve the state of the barracks and hospitals. The department afterwards (18th of February), approved a recommendation of Surgeon-Major Stone, that the troops should again be encamped on the Savanna. Only one case of yellow fever appears to have occurred since the 25th of January; there were a few mild cases of remittent fever, and the encampment was very healthy.

First Drinking Fountain in the Metropolis. On Thursday week, the workmen in the employ of the New River company, completed the laying on of the water supply, from their reservoir, at Claremont Square, to the newly constructed drinking fountain, at the south-east corner of St. Sepulchre's churchyard, in Skinner Street, Old Bailey. The fountain is neatly executed, and the design is both simple and serviceable, with a touch of ornament about it most gratifying to the eye. In a recess, hewn out of the churchyard wall, two small pillars are fixed, from the top of which springs a semi-circular arch, neatly moulded: the sides of the recess, with the arch itself, are of polished Aberdeen granite. In the centre is a tastefully wrought marble shell, through an orifice in which the water will flow into a bowl of white marble, also highly polished. The setting is finished with cement coating, ornamentally executed in relief, materially heightening the effect of the diminutive work it encloses. Deeply cut in the cement of the major arch, is the inscription, "The first Drinking Fountain," and in the granite curve underneath, "The gift of Samuel Gurney, M.P." These letters are trebly gilt. Upon the plinth, immediately below the basin, is engraved, "Replace the cup;" and, upon the base line, the words, "Filtered water from the New River company." The cost of the water supply will be made a charge upon the consolidated rate, and will, of necessity, be so small as not to be felt by even the most needy of the ratepayers. It is expected that the fountain will be opened in a few days.

The National Vaccine Board. The report of this body (issued on Saturday) states that during the past year 234,150 charges of lymph have been supplied. The letters received and answered by the Board, during the year, amount to 12,418; an excess of 1,706 over those of the preceding year. Six thousand four hundred and forty-five vaccinations have been performed by the stationary vaccinators in London connected with the establishment, and the correspondents of the Board report that 130,697 vaccinations have been performed by them. The Board has commenced careful inquiries respecting the purity of the lymph supplied to them, and also respecting the best means of affording instruction in vaccination to medical students; but, as all these subjects are still under consideration, they are deferred to a future report.

Army Hospital Corps. Orders have been received at the head quarters of the Medical Staff Corps for the removal of men from the regiments of the line, to enter the Army Hospital Corps; the men are not to have more than three years service. They are required to read and write. Those now serving in the Medical Staff Corps are to be retained under the old warrant of Sept. 1855, for the regulation of the corps. (*United Service Gazette.*)

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXII.] LONDON: SATURDAY, APRIL 30, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. BARTHOLOMEW'S HOSPITAL.

LARYNGITIS: TRACHEOTOMY.

Under the care of C. HUE, M.D.

[*From Notes by* — ANDREWS, ESQ., *Dresser.*]

MARY ANN HAGAN, aged 23, was admitted into Hope Ward, under the care of Dr. Hue, January 7th. About three years ago, she suffered from some primary venereal sores; and had, on admission, a large oval opening in the velum palati; but no active disease was to be detected in the fauces. For these last six months she had been troubled with a slight cough, and had gradually lost flesh and strength; though she appeared strong and muscular. About two months ago, she first noticed that something was wrong in her respiration; and, at the same time, the character of her voice became altered. She was admitted into the hospital on January 7th. At that time, her countenance was very anxious; she had great dyspnœa; her breathing was almost entirely diaphragmatic, and very noisy, each respiration being attended with the usual deep depression of the soft parts above the clavicles. The sputa indicated some mischief in the lungs; but, from the noisy character of the breathing, no very definite opinion as the character of the disease in the lungs could be formed by auscultation. She stated that a sudden aggravation of her difficulty of breathing took place on the Thursday evening previous to her admission on the Friday; and since then the distress had been gradually increasing.

On admission, she was bled to twenty ounces, with manifest relief to the symptoms. Her aspect slightly improved; and the pulse diminished in frequency, and became fuller. Twelve leeches were applied on each side of the trachea; and a mixture of acetate of ammonia with half a drachm of tartar emetic wine was given every four hours. She continued in much the same state throughout the day, not suffering the least pain in the larynx, and swallowing food very readily. Respirations 30 in the minute. Towards evening, the difficulty of breathing increased; and, at 12 o'clock, the symptoms were so urgent that it was necessary to take ten ounces of blood from the arm. This loss of blood was attended with no good result; though, when the blood was being drawn, she breathed deeper and with more ease. Her state during the night was so critical that it was necessary for the house-surgeon to sit up with her, as it was expected that tracheotomy would have to be performed before morning.

January 8th. At seven o'clock this morning, her pulse had risen to 150; respirations very irregular, sometimes 40, and at other times 30; her manner very restless; and she had had no sleep since admission, or, according to the statements of her friends, since January 2nd. At eight o'clock, she stated that she felt easier, and the respirations became less noisy. After a short respite, the distress became more marked; and it was necessary to perform tracheotomy, which was done by the house-surgeon, Mr. Helme, at 11 A.M.; the trachea being opened between the isthmus of the thyroid body and the cricoid cartilage. No difficulties were encountered during the operation. The prostration was extreme, both before and after the opening of the trachea; but by the help of brandy, which had to be administered very freely, the relief afforded by the operation became marked. A double tube was introduced, but had to be withdrawn, its presence causing so much irritation and coughing. The wound in the trachea was accordingly held open by blunt hooks until 4 o'clock, P.M.; and, during the greater part of this time, the patient slept comfortably. A double tube was introduced at 4 P.M.; and, during the night, her condition decidedly improved. Pieces of flannel, wrung out of warm water, were applied round the orifice of the tube.

January 9th. The patient complained of great pain in the wound, the edges of which had risen over the edge of the plate of the tube; so, at 1 P.M., the tube had to be withdrawn; and its withdrawal was accompanied with a considerable gush of blood, which, of course, was drawn into the trachea. Her condition was now very critical. The hæmorrhage was, however, controlled by pressure of the finger, and a tube with some difficulty introduced. In consequence of this latter mishap, her condition, though improving, was very unfavourable, as compared with the morning. Pulse 130; respiration 36, and very noisy.

January 10th. Her condition was slightly improved, the pulse and respiration continuing much the same. She slept comfortably for half an hour at a time; her cough, which was very troublesome, waking her up. Considerable difficulty was experienced in bringing up the expectoration through the tube. The character of the expectoration was somewhat altered; it was more tenacious, and streaked with blood.

January 11th. The patient did not progress; and, from this time up to the 16th, her condition remained much the same; her exhaustion becoming more extreme, in consequence of the physical exertion necessary, from bringing up the expectoration, which was now quite thick, and came up in masses so large and hard that the tube had constantly to be removed, and the expectoration assisted through the wound by sponges, forceps, etc. Her state was consequently one of constant danger from suffocation, and her exhaustion extreme. The morning of the 17th terminated her sufferings—seemingly from exhaustion.

No autopsy was permitted.

REMARKS. This case terminated differently from what might have been expected, had the disease, as is frequently the case, been confined merely to the interior of the larynx or trachea. In such cases of syphilitic affection, the cause of death appears to be in general mechanical only, and is due to the spasm of the glottis produced by the ulceration of the mucous membrane around it. Even should ulceration extend down the trachea, there is no reason why the patient should not get perfectly well after a free opening has been provided for the air. In some cases, indeed, it will be found, as in the present, that the irritable condition of the mucous membrane prevents the retention of the cannula in the air-tube; but there will rarely be any difficulty in keeping the wound open by other means. The occurrence of secondary hæmorrhage, as in this case, is certainly an unfavourable event; it is often the result of the shape of the tube, which, as commonly sold, is not long enough to reach the surface when the neck is stout, and gets covered in by the granulations which lap over it, and bleed on any attempt to withdraw it. Notwithstanding these unfavourable symptoms, however, it is probable that this poor woman might have recovered, but for the mischief which had progressed to an unknown extent in the lungs.

DIPHTHERIA.

TABLE OF CASES. (*Continued from p.* 327.)

1. Age and Sex.	2. Hygienic conditions; occupation, food and clothing, purity or impurity of air.	3. Meteorological conditions, date, etc.	4. Presence or absence of contagion.	5. Scarlatina.	6. Appearances and symptoms when first seen.	7. Time and situation of the leathery membrane.	8. Fungus.	9. Any affection of viscera (albuminuria, etc.)	10. Treatment and progress.	11. Indication and success of Tracheotomy.	12. Duration and event.	13. Post mortem appearances.	Remarks.
23. F. 4	....	Feb. 22, 1859	None	....	She had been feverish and complaining of headache and want of appetite for a week, but had made no complaint of her throat. Pulse feeble and quick, tongue furred.	On admission, a patch of false membrane was seen on either tonsil.	....	Albumen in urine since March 1st.	Sesquichloride of iron locally and internally. False membrane continued to spread steadily till Feb. 27, when hydrochloric acid and water were applied locally, & chlorate of potash given internally; then an immediate improvement occurred.	....	Recovered, 12 ds. (Mar. 6th).	....	Children's Hospital: Jane Brillant.
24. F. 1½	....	Feb. 28, 1859	None	....	The mother noticed a white patch on the upper lip three days before admission. Child feverish & fretful. No dysphagia. Submaxillary glands much enlarged.	Before admission, on upper lip; had extended to the tonsil when seen.	....	....	Hydrochloric acid and water locally, wine and chlorate of potash internally.	....	Recovered, 1 day.	....	Children's Hospital: Ruth Frowden.
25. F. 7¾	Lives in a damp and crowded situation.	Mar. 15, 1859	....	Has not had scarlatina	Had been ill for about a week, and had complained for two days of her throat. On admission, she had the appearances of a child suffering under an acute febrile attack.	A patch of false membrane covering each tonsil on admission.	....	None.	Hydrochloric acid and water locally, wine and chlorate of potash internally. Rapid recovery.	....	Recovered, 3 ds.	....	Children's Hospital: Ann Davis
26. F. 4	Same as the above.	Mar. 15, 1859	Sister of the above	....	Had sickened in the same manner as her sister, and been ill for three days. On admission, was feverish and out of sorts, but no false membrane was seen.	A patch of false membrane showed itself next day on the left tonsil.	....	....	Chlorate of potash was given at first; and hydrochloric acid and water applied when the false membrane made its appearance.	....	Recovered, 3 ds.	....	Children's Hospital: Alice Davis.
27. F. 8	....	April 8, 1859	....	....	Sore throat three days; when seen, swelling in the neck, prostration.	When first seen on fauces, difficult to see.	....	....	Solution of nitrate of silver locally; sesquichloride of iron, quinine and large quantities of wine internally. She got gradually weaker without dyspnœa, and died convulsed.	....	Died, 5 ds.	Sloughing ulcer on each tonsil, great inflammation of submucous tissue of fauces, false membrane on fauces and on posterior surface of epiglottis; viscera healthy.	S. George's Hospital: Matilda Woodhatch.
28. F. 3	Living at a public house on a high and dry common.	July 9, 1858	None. No case had then occurred within several miles	A family of 4 young children. None have had scarlatina before or since.	July 12. Breathing very difficult, with loud croupy sound; much prostration. Tonsils enlarged, & nearly meeting under the uvula.	When first seen, an ash grey exudation, covering the whole fauces and throat as far as visible.	....	....	Sol. of nitrate of silver (grs. xx to ℥ i) every two hours locally, two grs. of sesquicarb. of ammonia every hour, wine and beef-tea every half-hour.	....	Died 2 ds. after first visit, 5 ds. after attack	No post mortem examination.	Ellen C. No. 1. Mr. Crossman, White Hill, Hambrook, near Bristo
29. M. 3	Living in a damp situation near stagnant water.	Aug. 19, 1858	None.	Had never had scarlatina.	Aug. 20th. Face flushed, eyes suffused, stuffing about nose and head, pulse small and very rapid; breathing natural while awake, croupy during sleep.	When first seen, slight patches of greyish exudation on tonsils and back of fauces.	....	None.	Sol. of nitr. of silver (grs. xx to ℥ i) every two hours locally, chlorate of potash grs. ij every two hours; wine, beef-tea, etc.	....	Recovered, 3 ds.	....	George H. No. 2. Do.
30. F. 5	Same as the above; lives next door. Child of a labourer.	Sept. 4, 1858	None. The previous case had recovered 12 ds.	Had not had scarlatina.	Day of attack.—Difficult breathing, with croupy sound during sleep, stuffing of nose and head, flushed face, pulse 120.	Next day.—Patches of membrane over left tonsil.	....	None.	Mustard plasters, and blisters, chlorate of potash, sesquichloride of iron, and hydrochloric acid internally, beef-tea and wine.	....	Died, 4 ds.	No post mortem examination.	Mary C. No. 3. Do.

1. Age and Sex.	2. Hygienic conditions; occupation, food or clothing, purity, or impurity of air.	3. Meteorological conditions, date, etc.	4. Presence or absence of contagion.	5. Scarlatina.	6. Appearances and symptoms when first seen.	7. Time and situation of the leathery membrane.	8. Fungus.	9. Any affection of viscera (albuminuria, etc.)	10. Treatment and progress.	11. Indication and success of Tracheotomy.	12. Duration and event.	13. Post-mortem appearances.	Remarks.
31. F. 5	Child of a wealthy farmer, living near a stagnant & stinking piece of water.	Aug. 24, 1858	None.	Had not had scarlatina	Day of attack.—Apparently a severe cold in the head; no affection of the throat.	Next day.—Grey exud. on tonsils and fauces, with dysph., dyspnœa, & extreme prostration.	....	....	Blister all round the throat. The child could not be got to take either medicine or nourishment. Enemata of wine and beef-tea. The leathery membrane continued to extend, and she sank.	....	Died, 4 ds.	No post-mortem examination.	Ann G. No. 4. Ditto.
32. F. 7	Sister to the above.	Aug. 26, 1858	....	Had not had scarlatina	Day of attack.—Slight croupy breathing and extreme prostration.	No lesion visible in the throat.	....	None	Tinct. of sesquichlor. of iron v minims every four hours. She was sent away at the end of a week to a distance of 15 miles; there was then only extreme weakness. She died four days afterwards very suddenly in the morning, while drinking a cup of tea in bed. Had been playing about all day, and had then gone to bed tired.	....	Died, 12 ds.	No p.-m-examination. Died quite quietly, with sud. faintn. Conjectured that a coagulum had formed in the heart. *v.* No. 1 in this table.	Elizabeth G. No. 5. Ditto.
33. M. 20	Brother to the above.	Sept. 4, 1858	....	Had had scarlatina	Next day. Throat sore, with some difficulty of breathing.	When first seen, tonsils enlarged, and covered with yellow exudation.	....	....	The fauces sponged with spirits of turpentine. Sesquichloride of iron, hydrochloric acid, and chlorate of potash, internally. Large quantities of wine and beef-tea. The membrane extended considerably. She was in great danger for more than a week.	....	Recovered, 13 ds.	....	John G. No. 6. Do.
34. F. 19	Servant in the same family.	Sept. 1, 1858	....	Had had scarlatina	Same day. Sore-throat, flushed face, rapid pulse.	When first seen, yellow exudation on each tonsil	....	....	Turpentine applied externally and internally. Chlorate of potash, & hydrochloric acid, every two hours. Rapid recovery.	....	Recovered, 4 ds.	....	Elizabeth —. No. 7. Do. Five young members of this family escd. Not known to have had any communic. with other houses attacked with diph..
35. M. 14	Strong, healthy labouring boy.	Sept. 20, 1858	....	....	Sept. 25. Loss of voice, much prostration, difficult and noisy breathing, tonsils swollen and red.	Sept. 26.—Spots of exudation on tonsils.	....	....	Turpentine applied externally, and on appearance of false membrane, internally also. Chlorate of potash, hydrochloric acid, and sesquichloride of iron every four hours. The leathery membrane extended for a few days, then recovery commenced.	....	Recovered slowly	....	George W. No. 8. Do.
36. M. 4	A delicate boy, living in a healthy situation.	Sept. 4, 1858	....	....	Had been ailing for a fortnight. Sep. 4. Sore throat, great debility, tonsils enlarged.	When first seen, spots of false membrane on tonsils.	....	....	The same treatment as before. The throat symptoms disappeared in a few days. His recovery was very slow.	....	Recovered slowly	....	George W. No. 9. Do.
37. M. 7	A delicate boy, living in a damp, close situation.	Sept. 11, 1858	....	....	Had had sore throat and cold for 10 ds. Sept. 11. Croupy breathing during sleep; not much prostration of vital powers.	When first seen, spots over fauces & roof of mouth.	....	....	Turpentine externally and internally to the throat, tinct. of sesquichlor. of iron v minims every four hours. The false membrane disappeared in three days.	....	Recovered, a fortnight	....	Hen. C. No. 10. Ditto.
38. F. 22	A married woman, living in a close, confined cottage in a dry situation.	Aug. 23, 1858	Had lost 1 child out of 3 from diphtheria 8 days before	....	Aug. 23rd. Great dysphagia and sore-throat, with loss of voice; extreme nervous depression and fear; a small patch like ulceration on left tonsil.	August 24. Left tonsil covered with yellow membrane.	....	....	At first, nitrate of silver locally, bark and ammonia internally. The false membrane extended. Then turpentine to the throat, and tinct. ferri sesquichlor.	....	Recovered, 17 ds.	....	Elizabeth H. No. 11. Ditto.
39. M. 14	A strong, healthy boy	Aug. 2, 1858	....	....	Feverish and sore throat since July 26th.	Aug. 2. Tonsils much enlarged, and covered with yellowish grey membrane. as far down the throat as visible.	....	....	Solid nitrate of silver to the throat, chlorate of potash. The nitrate of silver seemed to increase the thickness of the membrane; medicine continued; no local application. Then blisters to the throat, with much relief.	....	Recovered, 25 ds.	....	Jos. B. No. 12. Ditto.
40. F. 26	A young lady living in a healthy situation.	Jan. 30, 1859	Had just been nursing a brother who died of malign. scarlatina	Had had scarlatina	Jan. 30th. Sore-throat, general feverishness.	Spots of false membrane on tonsils.	....	....	Turpentine to the inside and outside of the throat. chlorate of potash, hydrochloric acid, and sesquichloride of iron. False membrane extended at first, separated in four days.	...,	Recovered slowly	....	Miss T. No. 13. Ditto.

[*To be continued.*]

Original Communications.

ON THE INFLUENCE OF VITALITY UPON SECRETION.

By Thomas Inman, M.D., Liverpool.

On previous occasions, I have ventured to call the attention of the profession to what seemed to be fallacious principles of diagnosis and treatment in respect to some diseases generally considered to be of nervous origin; I propose, at the present time, to call attention to some points connected with secretion, into which we have not so clear an insight as is desirable.

As far as I can ascertain the general notion about secretion, it is, that it is essentially an active process; and that increased secretion, as a necessary consequence, implies the idea of increased action in the secreting organ. Thus we speak of perspiration as increased action of the skin, diarrhœa as increased action of the bowels, diuresis of the kidney, and the like. Still farther, we consider that various organs can be stimulated or goaded into increased action, and we find such ideas constantly put into formulas in the following manner: diaphoretics, diuretics, aperients, etc., are given to increase the action of the skin, the kidneys, the bowels, and the like.

Under other circumstances, we have the idea of increased action put in another form; thus, in rheumatic fever we are told that perspiration is an "effort of nature" to throw off or eliminate a certain poison; in the diarrhœa accompanying many cases of Bright's disease, we are told that the bowels take on "increased action" to relieve the kidneys; that in scarlatina, the kidneys take on increased action so as to supplement the deficient action of the skin, etc. In all these instances, and many others we might name, there is a steady idea apparent, that increased secretion implies increased action, and that increased action implies increased power. This idea receives corroboration from the constancy with which increased secretion from the nostrils, bronchi, urethra, and vagina, are spoken of as produced by "inflammation" of the Schneiderian membrane, of the mucous membrane of the bronchi, etc.

Now I am not going to make the startling assertion that all our ideas on this point are wrong; but I wish to group a number of well known facts in such a manner that it must be apparent to every one, that another interpretation may be given of the phenomenon of increased secretion, besides that of "increased action;" and I wish to point out some of the very practical conclusions which a reconsideration of the subject involves.

The first fact to which I would call attention is, that during the short period of life which elapses between an apoplectic stroke and its fatal termination, we have, in a vast majority of instances, if not universally, an abundant perspiration upon the skin, and a copious secretion (I use the word for want of a better) of mucus in the trachea and the larger bronchi. Cold clammy perspiration, and the "death rattle" in the throat, have long been recognised in many diseases as immediate harbingers of death. With the dying condition of the patient before our eyes, it is impossible to attribute these phenomena to increased power, or increased action; we must, on the contrary, allow that they are due to a failing condition of the vital powers. Now copious perspiration and abundant bronchial secretion do not always come together, and we may therefore advantageously follow up each symptom separately, and ascertain how far the preceding inference is correct.

We ask, in what classes of persons perspiration is most common, constant, and severe? The answer is, it is an almost habitual attendant on consumption; it is nearly constant in rheumatic fever; it comes on partially in the later stages of typhus fever; it is frequent in cases of psoas abscess and strumous disease of the bones; it attends simple debility, whether arising from accidental or constitutional cause; it is common in delicate children; and it is frequently produced by fright or other depressing mental emotion. It often accompanies bronchitis; and one of the most severe cases of colliquative perspiration I have seen, arose from sexual excesses. In none of these instances can we suppose that there is increased action and augmented power.

With regard to the causes influencing the amount of the bronchial secretion, we may again ask, In what persons is it most abundant? We find it far more copious in old age, when the powers are low, than in youth, when they are vigorous, and it augments in quantity every year as the patient grows older and is more enfeebled; it is increased by all depressing agencies, by the action of cold upon the surface which checks the circulation, by the abstinence of food which poverty too often enjoins, and by the use of such drugs as mercury and antimony. It is increased by even trifling exercise, and I have known in many cases a short walk to prove fatal. The bronchial secretion is unusually abundant in strumous children, in those who have a tendency to decline, or are already in consumption. I have known an inordinate amount of secretion induced by fasting, and almost magically cured by a very generous diet. Nor is it without interest, the fact, that of all the popular remedies for profuse bronchitic secretion, those are the most successful which are practically the most stimulating, *e. g.*, ammonia, polygala, myrrh, ammoniacum, tinctures, balsams, etc.

We now extend our inquiry into other secretions, and what do we find? That struma is very generally attended with increased secretion from the nostrils, the bronchi, the bowels, the skin, and in females from the vagina. That a weak old age is attended with, and often fatally ended by, hydrothorax and hydropericardium, *i. e.*, increased secretion from the pleura and pericardium; that ascites is common under the same circumstances; and that general dropsy frequently occurs, even when there is neither renal or cardiac disease. We know that large losses of blood occasionally eventuate in the same phenomena. We know that the children of consumptive parents are unusually liable to increased secretion from the lining membrane of the cerebral ventricle, *i. e.*, to watery effusion. I have had many patients under my own eye, in which hydropericardium and hydrothorax have been traceable to no other cause than cold, privation, misery, and hard usage at sea. I have had others, in which large effusions into the knee and elbow-joints have been due to a similar cause, and where the products of the increased secretion of the synovial membranes have been taken up again under the influence of strong stimulation, *e. g.*, blisters and iodine paint. Still farther, we know that diarrhœa, *i. e.*, increased secretion from the bowels, is a frequent cause of infantile death in the miserable dwellings of the wretched poor, where starvation is more common than profusion, and a low vitality than a flush of strength. The same complaint is common in struma, phthisis, typhus, and other exhausting diseases; it often attends sea scurvy, and is almost habitually produced by fear.

If we turn to the female sex, we find that the secretion of the catamenia is increased by debility; that in the consumptive or strumous, it is not only excessive in quantity, but that it is brought on at irregular intervals by an amount of exertion and fatigue totally inadequate to produce similar effects on the healthy. We find, too, that the vaginal secretion is wonderfully increased in the delicate female; and that leucorrhœa is at once the evidence of debility and the cause of its continuance or increase. In man, we find that the quantity of semen is augmented by various depressing agencies, such as excessive heat, excessive fatigue, and sexual excess; the quality of the secretion is deteriorated, but the amount formed in any given period, say for a week or a month, is amazingly increased, *i. e.*, in spermatorrhœa the amount of the discharge will reach an ounce in three weeks or thereabouts, whereas in health the same amount would not be discharged spontaneously in as many months.

Nor does our experience of gonorrhœa militate against the preceding facts, as we have had repeated opportunities of noticing that the discharge is always most excessive in those of a strumous habit or debilitated frame; and that it may in them be diminished more surely by the use of steel or other tonic, than by a rigidly meagre diet and total abstinence from stimuli. And I would call attention to the well-known fact, that the most popular medicines in that complaint are such excitants as cubebs and copaiba, *which stimulate the parts to decreased action.* Nor is such increased secretion confined to cases of venereal origin; for I have the following account from a well-known physiologist. "In my most feeble state," he writes, "I observed the secretion from the glans penis to be *unusually* abundant, so much so that, having omitted for three days to take my cold bath in a morning, I found stains on my shirt." I have myself repeatedly noticed that the glans is far more moist, and the sebaceous secretion around the corona far more abundant, in delicate or strumous young men, than in

perfectly healthy subjects. A similar remark applies to the vulva of females.

We next turn to the secretion from the kidneys, and find that it is no exception to the rule. The secretion is increased by fear—the most depressing of all our passions; by hysteria—essentially a disease of debility; and in diabetes insipidus, which, there is reason to believe, is the result of extraordinary debility of the constitution, rather than its cause, inasmuch as the amount of solid matter excreted is too small in itself to produce any marked effect on the system. Few are ignorant how much the secretion of the bladder is increased during that low state of vitality which accompanies paraplegia; and how the mucus, till then hardly recognised in the urine, becomes one of its most characteristic ingredients.

Respecting the liver, I have not much definite information to offer: all we can say is, that its sugar-production is increased, as in diabetes, by certain debilitating agencies, and is diminished by such things as increase the patient's strength. Respecting the influence of debility in increasing the secretion of the stomach, we cannot say much beyond the fact that water-brash is common in those whose stomachs are weakened by ulceration, etc.

But our facts do not end even here; for we may now turn to parts in which the amount of secretion is naturally so small as to be imperceptible, viz., the eye and external ear. In the former, we have increased secretion in the poorly fed, the delicate, the strumous, and the aged. Shakespeare, amongst the characters of old age, sets down "a moist eye", "eyes purging thick amber and plum-tree gum." And we may add as a significant fact, that those who are weakly, not only weep sooner, but cry with far more copious tears than those who are strong; that an hysterical burst of crying may be repeatedly checked by a glass of wine, or other stimulant; and that many a man will, when fasting, weep over griefs, which cannot bring a single tear if presented to him when full. In the ear, we have otorrhœa occurring amongst the scrofulous, the children of consumptive patients, and in those who are or have been reduced by scarlatina or other depressing diseases. I have seen it come on when the patient was at the lowest extremity of weakness, and go off as he returned to his strength.

We speak with some hesitation respecting the influence of deficient vital power on the secretion of the milk in the female. But we think that we have noticed, as a general rule, that very healthy women have not so large a quantity as the weakly; that the quantity in the weakly increases in proportion to the debility lactation produces in them; that large quantity and good quality do not generally go together; and that the influence of tonics and stimuli upon a nurse, is to increase her own health and condition, and to diminish the quantity of the milk produced.

Let us for one moment turn to one of the causes of increased secretion, the presence of so-called chronic inflammation. What are the facts connected therewith? why, that during the acute stage of the disease, when the power or increased action may be considered at its height, all secretion is suspended and the secreting surfaces are dry; that the increased secretion comes on when the inflammation is chronic, and that the parts are restored to health under the influence of stimulants. We know how much debility, locally and generally, increases the secretion of pus from a sore; how it abounds under the use of poultices, and almost disappears when dry lint is used.

Coupling all these facts together, we are forced to the conclusion, *that increase in the amount of any secretion, is not evidence of increased action or augmented power, but that it may, and very frequently does, result from diminished vitality, and even expiring life.* How frequently these last conditions are the cause I would hardly venture to enunciate. My impression is, that they are far more common than any one has hitherto supposed.

The practical application of the view we have been setting forward is readily appreciable. Chronic bronchitis, strumous coryza, and some other profuse discharges, have long been treated by stimulants and the most generous diet; but in some other diseases, which fairly come into a similar category, the same principles are studiously avoided. Thus, in gonorrhœa, while we give with one hand such stimulants as copaiba and cubebs, and even apply such local irritants as cantharides externally, we take away with the other hand the patient's beer and wine. I have long thought that this plan could not be the correct one, and I have sought, first, for some reason why alcoholic stimuli should be prohibited in any case; secondly, when they might be administered with advantage. The reason why they are in general tabooed is, because gonorrhœa is most common in young men, that it prevents them from having connection, that this encourages erections, that erections are very painful, and that alcoholic stimuli increase sensual desire, and promote erections—hence they are forbidden. But if erections are not troublesome and rarely, if ever, occur; if the patient is not strong, is of a strumous habit, has much exertion, or suffers from any cause of debility, tonics and alcoholic stimuli may be given with great advantage. Under their use I have seen cases of gonorrhœa yield rapidly, which had previously appeared to be intractable.

But there is another application of the subject to which I must refer in a few words. If the increased secretion into the cells of the areolar tissue in general *dropsy* has its origin in an enfeebled condition of the system (and we will not waste time by demonstrating that it is not produced *simply* by obstruction to the circulation, for that will exist as in phlegmasia dolens, etc., without dropsical effusion, and heart disease without dropsy is common enough), is not any plan of treatment which ignores the use of strengthening remedies manifestly insufficient to complete the cure? Is not the plan of treating it by diuretics and frequent purgation, alone, radically bad? To these observations I will add, that I have had under my care a girl with general dropsy from renal disease, in which an artificial diarrhœa had been kept up for some months, ere she came into hospital, and during that period the anasarca had steadily increased. On her admission, the treatment was entirely changed, the purging checked, and tonics given, and an improvement was immediately apparent. She remained, however, only under notice for a fortnight, and was taken away by her friends, the dropsy remaining uncured.

I doubt not that many practitioners have seen many mild cases of dropsy cured by tonics alone; but I have already taken up so much space, that I must not pursue the subject farther.

THE MEDIAN OPERATION OF LITHOTOMY, FOR THE REMOVAL OF A PORTION OF BOUGIE FROM THE BLADDER.

By Augustin Prichard, Esq., Surgeon to the Bristol Royal Infirmary.

On the morning of Sunday, February 20th, I met two surgeons in consultation, in a case of which I received the following history:—

Mr. A. B. C., aged 28, in good health but of spare habit, on the morning of January 31st (*i.e.*, three weeks before I saw him), having been under the impression that he had a stricture, passed with some difficulty a No. 10 bougie or gum elastic catheter along the urethra; and, after allowing it to remain in the canal about twenty minutes, he found he could not withdraw it. After repeated attempts, by pulling and twisting the instrument, he withdrew it, leaving about three inches behind. He was seen by his ordinary medical attendant; and, in the afternoon, by another surgeon; and they made many attempts to lay hold of the foreign substance with the urethra forceps. They could only succeed in bringing away small portions of the bougie, which appeared to be held by the stricture too firmly to allow of its removal in this way; and, consequently, they placed the patient in a position for lithotomy, and under the influence of chloroform, and with a silver catheter in the urethra, held in contact with the portion of bougie, they cut down immediately behind the scrotum, in the middle line. Upon exposing the end of the bougie, and attempting to withdraw it with the aid of the dressing forceps, after repeated trials, it unfortunately eluded the grasp of the forceps, and slipped back into the bladder. A silver catheter was passed and retained, and a bladder of cold water was applied to the perineum, to stop the hæmorrhage, which was considerable. From this time, for some days, there was but little inconvenience; the patient passed urine every two or three hours. The wound granulated freely and gradually closed; but afterwards the irritability of the bladder increased, and on February the 18th, the wound being almost healed, extravasation of urine took place; the scrotum and perineum became much inflamed, red, swollen, and painful; the wound became unhealthy, and the general state of the patient was as bad as could be, so much so, notwithstanding the stimulus prescribed in the morning, that in the night of February 19th, he had excessive rigors, and appeared to be dying.

When I saw him, early on the 20th, he had somewhat rallied;

he looked sallow and collapsed, his pulse was 130 and very feeble, and his scrotum and perineum hard and painful, and evidently on the point of sloughing; and after considering his state, and the probability of his sinking rapidly, if not relieved of the cause of the irritability of the bladder, as well as of the urine in the cellular tissue of the perineum, we determined to operate, and remove the bougie by the median section.

He was placed on a table, and tied up in the usual position for lithotomy; and I proceeded to operate, substituting two or three glasses of brandy and water for the chloroform, as I was fearful of the depressing effect of the anæsthetic, in a man so worn and weak as our patient was. The gentlemen whom I met in consultation, kindly gave way to my wishes in this respect, for I think that they were inclined to administer chloroform, and save the patient the half hour's torture which was inflicted upon him; but now that the case is concluded and the result has turned out as satisfactorily as we could possibly hope for, advocate as I am for chloroform in the majority of cases, I think that the danger which this gentleman went through would have been considerably increased by the use of that agent, particularly as I believe that on the former occasion he suffered greatly from sickness afterwards, and he appeared to me to be too much like a man likely to sink, to justify us in running any additional risk.

With the staff in the bladder and finger in the rectum, I ran a sharp-pointed knife through the lower part of the old wound and sloughing perineum into the staff, cut upwards so as to enlarge the opening, passed the probe into the bladder, and followed it up by the finger. The prostate felt very much constricted round the point of my finger; and, owing to the infiltration of urine in the perineum and consequent tumefaction, I could not reach readily into the bladder, so as to feel for the portion of bougie, which was, however, readily felt by the forceps.

After repeated trials with two or three kinds of forceps, and after bringing away little bits in the blades of the instrument, it was at last seized about the middle, rotated, and removed. The bladder was washed out with warm water, and the patient lifted back into his bed; and, although he had undergone nearly half an hour's severe suffering, during which his shrieks must have been heard at a great distance, it was at once obvious that his state was in every respect improved. His pulse had fallen in frequency, his pain had subsided, some of the anxiety of his countenance had disappeared, and, from the free opening of the former wound, and the manipulation the parts had undergone, the scrotum and perineum had lost their redness and tension by the leaking out of the urine and effused serum; and he expressed himself as relieved and comfortable. A tonic and stimulating plan of treatment was resolved upon.

The portion of bougie removed consisted of nearly three inches of what seemed to be a gum elastic catheter, dark brown in colour, doubled up and coated with a layer of phosphates, so that it came off in a distinct shell when the forceps laid hold of it.

From this time, for a fortnight, his progress towards recovery was uninterrupted; the wound was closing, and the urine began to flow in its natural channel, when a severe attack of diarrhœa, brought on by error of diet, retarded his progress for some days. This yielded to judicious treatment; and, when I last heard, all the irritability of the bladder had disappeared, the urine flowed chiefly through the urethra, and the patient was rapidly regaining his strength.

I did not see him after the day of the operation, and I therefore have to thank the gentlemen who attended him for many of the notes which have enabled me to draw up this case, as well as for their skilful care of the patient.

We have heard this expression used by older surgeons, "*the wholesome stimulus of the knife*;" and, in this instance, instead of the collapse and shock we generally see after a severe operation, the patient appeared so much roused and relieved, that he was obviously stimulated by the treatment he had undergone.

Lastly, my object in publishing this history is not only for the pleasure of narrating a successful case, but also for the sake of bringing forward what I consider to be a triumphant example of Allarton's operation; for the bougie was, in this instance, removed from the bladder without any injury to the deeper parts, and with no more incision than what was necessary to relieve the infiltrated perineum, and to these conditions, including the power which the patient retained from the first of holding his water properly, the rapid recovery which he made was undoubtedly due; and I think it very questionable whether he could have escaped with his life from the more serious perils of the lateral operation.

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By William Addison, M.D., F.R.S., Fellow of the College.

Lecture I (*continued*).

III.—The Fluid or Plasma of the Blood.

The plasma is a very complicated fluid. Its chief constituents are water, fibrine, albumen, colourless corpuscles, volatile matter, fatty compounds, and salts. In its passage through the capillary vessels it permeates all organs and tissues; and, at various points of the circulation, the parenchymatous depurating organs remove from it those substances, which, if retained in it, would injure its qualities. We find that numerous soluble compounds—substances, for instance, which have been taken as food or drink, and poisons received into the stomach—are absorbed into the plasma, whence they may be again eliminated or removed, changed or unchanged by the depurating organs—the organs of secretion.

Many of the common poisons have a local action as irritants, and also a remote or special action upon some parenchymatous organs; other poisons exhibit only the remote or special action. Cantharides has a special action as an irritant to the stomach; it also affects, remotely, through the plasma, the urinary organs. Morphia, taken by the stomach, affects specially the brain, through the plasma. Digitalis, taken by the stomach, affects the heart; strychnia the spinal marrow, through the same medium.

In experiments on animals with prussic acid, it has been found when death took place within a few minutes only, that the odour of the poison could be perceived in the cavities of the body; and again in other experiments, where preparations of antimony were injected into the blood by a vein in the thigh, the metal has been found in the coats of the stomach.

From these and numerous other facts, which it is unnecessary to particularise, we learn that poisonous substances, taken by the stomach, enter the plasma or mingle with the fluid of the blood; and thereby the poisoning, not of all, but of some one parenchymatous organ ensues, determined by the nature of the poison, and the special qualities of the parenchymatous elements of the different organs. But, if we compare the actions of these common poisons received into the body through the stomach, with the action of aërial poisons inhaled by the lungs, important differences will be found. In the former, the symptoms do not begin with fever, nor is any contagious matter generated in the blood; whereas both these phenomena are distinguishing features of the latter. Here, then, we have a ground for our argument, that the two parts of the blood have distinct pathological relations; for poisons taken by the stomach exhibit themselves by symptoms which proceed from some local parenchymatous organ, and they do not cause the production of a contagious matter in the blood; whereas poisons inhaled from the atmosphere by the lungs very often do so. Yet both species or classes of poisons act through the medium of the blood.

In 1832, numerous cases of cholera, then epidemic, were treated by saline injections, thrown into the blood in large quantities, not only without hurt to the patient, but in some instances with great apparent benefit. Among many others, there is a very remarkable case reported in the *Lancet* (vol. ii, 1831 and 1832), in which five gallons of saline liquid were injected by a vein, in four days.

The first injection was to the amount of nine pounds and a half; it was thrown into the circulation in the space of eighteen minutes. A few hours afterwards an additional ten pounds of the saline fluid were injected, with four ounces of albumen. This was at one of the clock on the morning of the 29th May; at half-past seven the same morning the injection was repeated to the amount of ten pounds, with the addition of ten grains of sulphate of quinine; at half-past eleven the injection was repeated to the amount of ten pounds. On the second of June, at half-past four in the morning, six pounds and a half of the saline fluid were injected, with six drops of a solution of morphia; and on the 19th of June the patient is reported to have left the hospital, well.

If we look around, we may see in all classes of society individuals of various conditions of body. We may contrast the florid complexion with the pale thin face; tissues laden with fat with the spare habit; those who luxuriate in good living with those existing on bread, potatoes, and water. Persons in each of these classes may be following their daily avocations in good health, yet the blood-fluid, we know, cannot be the same in all of them; nor can it be the same or have the same qualities in the same person, if he greatly alter his diet, his food and drink. In the chemistry of the blood, there are scarcely two analyses of it alike; and the milky serum sometimes seen in blood after venesection has been referred to articles of diet, or to the recency of a meal, which has for a time changed the qualities of the plasma.

These facts support or coincide with our argument that the blood must be regarded in respect to its pathology, as consisting of two distinct parts; and of these, that the plasma, or fluid, holds a position of different or inferior rank to the red corpuscles in the functions of life. It furnishes elements of growth and reparation to its containing vessels, the common tissue; and it is the medium in which the corpuscles swim; but it varies, within certain limits, in qualities and composition, from day to day, according to the nature and abundance of the food and drink; nay, further, it appears that it may vary, in quality and composition, from poisonous substances taken into the stomach, so as to occasion symptoms of poisoning in some local parenchymatous organ, before any of the symptoms of fever appear, and without evidence of the generation of any contagious matter in the blood.

IV.—Distemperatures or Dyscrasies of the Plasma or Fluid of the Blood.

There are varieties or changes of health—moods, tempers, and feelings—dependent upon qualities of blood which are temporary, multifarious, and fleeting. They are cured by attention to diet and the excretions; by good living in those who have fared badly, or are half starved; by abstinence and physic in those who have abused the good things of the table. These changes in the moods and feelings of the individual, have all the characters of dependence upon that part of the blood which is quickly replenished and altered by diet—namely, the plasma.

Also there are numerous forms of inflammation which are uncertain and multifarious—dependent upon qualities of blood occasioned by unwholesomeness of diet, privations, and neglect of the functions of the depurating organs—the skin, kidneys, and bowels. Sometimes the simplest wounds fester and ulcerate. Eruptions, pustules, or boils break out in the skin; or the slightest external injury provokes chronic and ulcerative forms of inflammation without fever, comprehended in the terms scrofula and scurvy. For example:—

Sailors at sea are dieted on salt provisions; and in hot climates are accustomed to tramp about the ship without shoes or shockings. Their feet and legs are consequently bitten by mosquitoes, and, when the men have been a considerable time on a salt diet, and in the hot climate, the wounds ulcerate. The ulcerations become larger every day, and will resist all kinds of local treatment, so long as the diet remains unchanged. But, upon a change of diet, and cruising in a cooler latitude, the ulcers heal spontaneously.

Under analogous conditions—of unwholesome or insufficient diet and confinement—fractures in a hospital will remain only partially united; but upon the patient's removal into the country, cure is completed.

When a patient undergoes a formidable surgical operation, and makes a good recovery, the blood is regarded as of normal constitution, free from any taint or distemper. On the contrary, when trifling wounds and accidents degenerate into chronic ulcerations, it is reputed unhealthy. And the unhealthiness or impurity may be limited to the plasma, or that part of the blood from which elements of repair are taken. At all events, it is a question or matter for inquiry, which part of the blood is most in fault in these cases. "A person shall have a sore upon the leg, which is granulating freely," says Mr. Hunter, "when all at once the granulations shall lose their life, and fade away. New granulations may afterwards spring up, and these shall undergo the same process, and so they would continue to go on, if some alteration in the nature of the parts be not produced." That is to say, some alteration in the plasma or fluid of the blood; differences in the nature of granulations being determined by differences in the qualities of the plasma. These examples are sufficient to shew—what indeed is well known—that forms of inflammation, suppuration and ulceration, are produced and kept up by distemperature or unhealthiness of blood, and more particularly of its plasma. And that a depurative operation is often performed on the plasma, by forms of local inflammation, may be argued from the eruption of small-pox. In scarlet fever, that a contagious matter from the blood is discharged by the vascular action in the skin, may be concluded from the properties of the particles of the exfoliating epidermis. And in gout, that offending matter is discharged from the blood by the local inflammation, is also to be concluded from the morbid material deposited in the parts inflamed.

For demonstrative evidence of forms of inflammation dependent on distemperatures or dyscrasies of the fluid of the blood, we may refer to the *chef d'œuvre* of pathological anatomy, the great work of Rokitansky, also to the lectures of Mr. Paget. Actual proof of alterations in the qualities of the plasma may often be obtained by venesection, in cases of inflammation. The speedy separation of the plasma, or sinking of the corpuscles, which occasions buffed blood, indicates a change in the relative qualities of the two parts of the blood. We have recorded the yellowish, greenish, and purplish hues, and the flocculated appearance like curdled soap in the plasma, of buffed blood before its coagulation in different cases of inflammation. And we have repeatedly observed with the microscope differences in elements of the plasma of blood, taken from within the sphere of inflammation, as compared with elements of the plasma of blood drawn exterior to it. It would seem, then, that abnormal qualities of the plasma promote forms of inflammation; and the disposition of the colourless corpuscles of blood to congregate and attach themselves to the coats of the vessels, we may suppose to indicate a way whereby disqualified or abnormal portions of the plasma are transferred to the common tissue for discharge.

In the first part of this lecture, we spoke of the severance of blood-vessels and other bonds of connection between sloughs and the subjacent texture without bleeding. In abscess and ulceration, from thorns and other foreign bodies impacted in the flesh, we showed that great changes take place in blood-vessels without bleeding.

In fact, in all cases of repair, where exudations and new growth appear, the blood-vessels engaged undergo a change from fibrous to corpuscular—their component elements retrograde. This change is exemplified in granulations, the vessels of which bleed upon the slightest touch. We have a perfect conviction that, in places of inflammation, from disordered qualities of the plasma, the coats of the blood-vessels undergo the same changes; for we find that corpuscular elements of the plasma form, not only the coats of new vessels which arise during inflammation, but also supplant the fibrous element of the coats of the older vessels, which must be opened to supply blood to the new ones; and, as the plasma is the part of the blood which plays the conspicuous part in these changes, so it is not difficult to comprehend how it may be relieved of hurtful material in a place of inflammation.

"That sores give rise to very different kinds of pus," says Mr. Hunter, "is very evident to the naked eye, and that the different parts of which the blood is composed will come away in different proportions we can make no doubt; and we find that whatever is in solution in the blood comes away more in one kind of pus than in another." The inference is, that inflammation exercises a therapeutical action in distemperature of the fluid of the blood. Hence, then, inflammation, exudations, granulations, and pus, may arise for two distinct purposes, namely: for the cure of mechanical injury; for the discharge of sloughs and foreign substances from the solid textures; and as a means of cure in distempered plasma.

In injuries to the common tissue, wounds, lacerations, contusions, and fractures, the process of repair comprises inflammation, granulation, suppuration, and ulceration; new blood-vessels are formed without bleeding, and there are discharges of pus. If physical hindrances interpose, the process is protracted and made chronic until they are removed. If they cannot be removed, the life of the person is endangered, and may be destroyed unless amputation be performed.

In distemperature or injury to the quality of the fluid of the blood, by unwholesomeness of diet, privations, or other causes, reactions of the same kind arise for its depuration. These also comprise inflammation, granulation, suppuration, and ulceration; boils, pustules, eruptions, and gout. If hindrances interpose—if the causes of the distemperature comprised in errors of diet, privations, etc., be not abated, the process is protracted and made chronic until they are removed, and in such cases, as in the sailor's before mentioned, to cure the local affections (the ulcers), the qualities of the plasma

must be altered or improved by a thorough change of diet or habits of life.

In the one group—injuries to the solid texture (surgical cases)—the reactions arise for the healing of wounds, the discharge of sloughs, dead matter, and foreign bodies. There is direct evidence of what occasions the action, what it accomplishes, and why it is protracted and dangerous. In the other group—disorders of the blood (medical cases)—the influence of the reaction upon the qualities of the fluid of the blood can only be inferred from collateral events; and these, in gout, small-pox, and the other exanthematous fevers, point unequivocally to the therapeutical characters of inflammation.

In perusing such cases as Mr. Lowdell's, we cannot fail of remarking the advantage the surgeon has over the physician, in being able to go safely beyond the things which are seen. At the bottom of fistulous and ulcerated openings in the flesh, beneath an inflamed and thickened integument, and through a thick crust of new grown bone, he is able to assist, or rather to accomplish the task nature has long been endeavouring to perform. He lays his hand upon the hindrance which has made inflammation chronic, plucks it away, and the person is restored to health. Likewise in other severe injuries, a compound fracture or a crushed joint, the surgeon surveys the whole of the injured parts, and he has time and opportunity, before therapeutical reactions set in—before inflammation, suppuration, granulation, and ulceration have commenced—to form a judgment of the most probable course of events; and if, upon consultation, serious doubts be entertained whether or not the cure should be entrusted to the natural course, he amputates the limb.

The physician is very differently placed. The inflammations he has to deal with arise from qualities in the blood itself; and when he has protracted and dangerous forms to deal with, he cannot lay his hand upon the cause of danger and take it away.

From the facility with which reactions between the fluid of the blood and its containing vessels may be studied in mechanical injuries, has arisen the *doctrine of repair*, daily exemplified in numerous examples.

But reactions of the same kind, from changes in the quality of the blood itself, owing to the difficulties surrounding their explication, have been separated from the ordinary process of repair. Our object will be to accumulate evidence of the propriety of bringing all reactions between the plasma and the common tissues, the process of repair and inflammation, into one—the physiological—category, and to shew that failure of success, in cases of inflammation of blood-origin, no more alters the nature or intent of the action, than does failure of success in necrosis of bone, and in other surgical cases. But further argument upon this matter must be reserved until we have spoken of the corpuscles of the blood.

V.—Of the Red Corpuscles of the Blood.

The development of the red corpuscles of blood is doubtless conducted on the same principle as that of other cells. They take from the plasma, in which they swim, the materials requisite for their growth, and excrete the products that must be consequent on the act of absorption.

"The only hypothesis," says Dr. F. Simon, "regarding the preservation and growth of the blood-corpuscles, is that their increase in bulk is due to a reciprocal action between the young corpuscles and the plasma; and that, as independent organisms in circulation, every change which occurs in them must be accompanied by a simultaneous alteration in the plasma, from which they obtain their nutriment, and into which their excretions must pass." And of the excretions passed into the plasma, those of them which are injurious are withdrawn therefrom by the depurating parenchymatous organs—the secreting parts of the skin, liver, and kidneys.

Now if we treat the red corpuscles as independent organisms, swimming in the plasma, then any matter or substance, whether derived from the plasma or from the atmosphere, which is necessary to their sustenance, to their normal state and functions, may be regarded and spoken of as nutriment. That is to say, we may speak of the corpuscles of the blood as nourished by elements in the air, as well as by elements of the plasma; and, as respecting the matter they excrete or discharge, it is a part only of their excretions which is passed into the plasma: for certainly another part of their excretions is discharged into the air in the form of carbonic acid, by respiration. Let us pause for a moment to consider this matter. The leaves of a plant take in part of the materials of the nourishment of the plant from the atmosphere, and they excrete or discharge into the atmosphere elements that would be injurious to the economy of the plant if retained in it. Also the rootlets of a plant take up other materials of nourishment from the soil, and they excrete into the ground matters which they do not want. In both these examples, in the roots and leaves of the plant, the bodies which perform these offices of absorption and excretion, are microscopic cells—organisms analogous, and in many respects similar, to the blood-corpuscles.

Animals inhale the air and discharge into it matters which are thrown out from the body by respiration; and, in their nutrition by diet, they cast their droppings or excretions upon the herbage, on which they must afterwards feed.

Unicellular animalcules, in a drop of water, derive from it elements of their nourishment, and also they must discharge into it the matter of their excretions. In a *vivarium* water is the medium sustaining different forms of life, and the fluid is preserved in a fit and proper state, because the excretions of the animal furnish nutriment to the bodies of vegetable life, and because, on the other hand, the excretions of the vegetable furnish elements of nourishment to the animal bodies: the excretions of one department of life furnishing food and necessaries to the other department.

There is, therefore, nothing incongruous in the corpuscles of blood taking part of their nourishment from the air, and discharging into it a part of the matter of their excretions; and in their taking another part of their nutriment from the plasma, and discharging into it another part of their excretions. Nor, again, is there any incongruity in our finding that the plasma, or fluid of the blood, maintains its purity because the excretions of the corpuscles are ingredients upon which the functions of the depurating organs are exerted. Nor, finally, if with Zimmermann and Simon we should regard the fibrine of the plasma as an exuvial matter, or excretion of the corpuscles, is there any incongruity in finding it to be an essential material, used in the maintenance and repair of the common blood-distributing tissue.

As respects matter passing from the corpuscles into the plasma, we are able to show, by some remarkable experiments, which will hereafter be fully related, that molecular and tailed forms of some material substance may be seen issuing out of them and passing into the plasma, without much alteration of their form or colour; and, to any one witnessing the experiment, there can be no difficulty in concluding that the corpuscles, in their natural state, discharge matter into the plasma. It must be confessed that but little can be demonstrated of the vital and depurating processes constantly going forward in the blood of the living person. Nevertheless, in the absence of such demonstration, we are warranted, by the experiment just referred to, and by the undisputed teaching of physiology, in concluding that the corpuscles of blood are sustained in their vital and chemical qualities by the plasma and the air; also, that their excretions are passed, partly into the plasma and partly into the air. And, these properties of the corpuscles being established, there are some broad and acknowledged facts respecting venous blood and urea which claim our attention.

[*To be continued.*]

Periscope.

TOXICOLOGY.

DEATHS FROM DRINKING CHLOROFORM.

Two instances of reputed death from drinking chloroform have lately been recorded. One is the case of the late Dr. Glover; the other is reported in the *Lancet* of April 16th, by Dr. W. P. Bain, of Poplar. The records are of much interest; and therefore we insert a record of the inquest, combining with it an account of the symptoms and *post mortem* examination published by Mr. Gant in the *Lancet* of April 23rd. We give also a copious abstract of Dr. Bain's contribution.

Case I. On Wednesday, April 13th, Mr. Wakley, coroner for West Middlesex, and a respectable jury, assembled at the Prince Albert Tavern, Kensington Park Road, Kensington, to investigate the circumstances attending the death of Dr. Robert Mortimer Glover, aged 42, late Physician to the Royal Free Hospital, and the author of several medical works and papers.

Mr. William Glover deposed that he resided at Wallbottle, near Newcastle-on-Tyne. The deceased was his brother. His name was Robert Mortimer Glover. He was a doctor of medicine, and aged about 42. His brother resided at 4, Ken-

sington Park Road, where he died. The last time he (witness) saw his brother was on his return from Scutari, in 1857. He had not seen him during the past year; and he had never known the deceased threaten or attempt suicide. He resided with his brother (the deceased) up to 1854, when he came to London. He had often heard the deceased speak very strongly against suicide.

Joseph Millar stated that he lived at 7, Tottenham Street. He knew Dr. Glover well, and he was with him when his death took place on Saturday evening, about half-past seven, at the deceased's late residence, 1, Kensington Park Road. He had been with the deceased the whole of the day. With the exception of saying "yes" or "no" once or twice while friction was being applied, the deceased continued insensible up to his death. Dr. Hopton was in attendance upon him; and besides the application of friction, hot flannels were applied, and other remedies resorted to.

Mr. Walter M. Rochfort stated that he was a chemist, and resided at Kensington Park Road, where the deceased had resided for the past twelve months. On Friday evening, he was called to the deceased by Mr. Gore (Gant?), a friend of the unfortunate gentleman. The deceased at that time was comatose—he could not speak. He had known the deceased previously, in a partially insensible state, from having taken large doses of opium. The deceased on such occasions said that he took the opium for attacks of dysentery and so forth. He had also known the deceased take doses of chloroform or chloric ether—at least, he said that he did so.

By the Coroner: The deceased was given to intemperate habits; but he had known him to be a month without being intoxicated. He dined with him (witness), and he said that he was obliged to take opium and stimulants, because of his having suffered severely from dysentery while in the East. He never said anything about suicide; and he (witness) believed that he was of a different disposition than to commit suicide. He was married about six weeks ago. After his marriage, he did not appear altered or depressed. There was a separation between the deceased and his wife about a week after their marriage, and she was at present an inmate of Colney Hatch Lunatic Asylum.

By the Jury: He had known the deceased's wife before their marriage. She had been previously in a lunatic asylum.

Mr. Frederick James Gant was a member of the Royal College of Surgeons, and one of the surgeons to the Royal Free Hospital. He was formerly a colleague of Dr. Glover's at the hospital, where the deceased was a physician for about two years: he resigned the appointment in 1856. On Friday evening, he was waiting at Mr. Rochfort's to see the deceased, as he happened to be in the neighbourhood, and shortly afterwards the deceased entered with the *Lancet* in his hand. He appeared well and sober, and directed his (witness's) attention to some articles in the *Lancet*. The deceased, amongst other things, then alluded to his marriage, observing that it was a bad affair. They then had some tea, during which the deceased appeared lively, and spoke of his being abroad during the war. He (witness) was with the deceased during his stay in the east, and they conversed about the climate in Turkey, the Bosphorus, and other things. He then again alluded to his marriage, but without its appearing to affect his mind at all. During the conversation the deceased kept leaving the room every five minutes, which at length caused him (witness) to ask him if anything was the matter. He replied that he was never in better health, and, citing some lines from Horace, he again entered upon a lively conversation about eastern affairs, in which the deceased was well versed. It was now about seven, P.M., and during the previous half-hour he had left the room four or five times, at intervals of about every five minutes. Each time he returned he appeared quite sober, and entered into the general conversation alluded to. Suddenly he seemed to become intoxicated, and uttered some incoherent expression, in another minute something more incoherent. He was then sitting on the sofa. Mr. Gant approached and spoke to him, but he looked up and down the wall, as if endeavouring to recognise where he was, and almost immediately sank down insensible, and snored loudly. His pulse was scarcely perceptible, his eyes were dim and fixed, and the pupils contracted; the sweat stood on his forehead, and his face had a most livid paleness. Mr. Gant at once laid him down and removed his neck-handkerchief and collar, unfastened his clothes, and slit up his flannel waistcoat. The respiration was purely abdominal. Mr. Gant threw some cold water on his chest and face, when he began to breathe heavily. Mr. Gant asked Mr. Rochfort, who now came in, if he could smell what Dr. Glover had taken; to which Mr. Rochfort replied, "Yes—chloroform." It was at first intended to give him two scruples of sulphate of zinc; but this was not done, for immediately his respiration became much embarrassed. The galvanic battery was at once employed, and he breathed more freely. This course was pursued, with the occasional use of ammonia to the nostrils, for five hours, when Mr. Gant left him at one in the morning. At that time he was sleeping as on other occasions when under the influence of alcohol, camphor, or opium, taken immoderately, as was his habit, to induce anæsthesia. At about five, A.M., Mr. Rochfort sent for Dr. Sanderson, an old friend of Dr. Glover, who resided in the neighbourhood, but he was unfortunately absent in the country. Towards nine, A.M., he had rallied sufficiently to swallow an emetic of sulphate of zinc, which, however, taking no effect, was followed by two tumblers of mustard and water. This acted freely in about one hour and a half, when upwards of half a gallon of brownish blood and mucus was vomited, having a strong odour of chloroform, and followed, after the lapse of one hour, by copious purging of the same fluid. It was then practicable to carry him without danger up to his bedroom. About eleven, A.M., Dr. Risdon Bennett—at whose house Dr. Glover had called the previous afternoon—was sent for: but being unable to attend, Dr. Bennett sent a note to Dr. Cormack, who was out, and did not arrive until after Dr. Glover's death. Ammonia was administered internally; friction, hot flannels, and bottles of hot water were assiduously employed during the day, and galvanism reapplied, but without avail. The pulse at the wrist could scarcely be felt, the respiration was again abdominal, and the breath drawn more feebly, and at longer intervals, with puffing expiration. The pupils were greatly dilated, and the coma relieved only by an occasional gleam of partial consciousnes. The general surface gradually became livid and cold, particularly the extremities. Hr. Hopton, a friend, looked in accidentally at about half-past three, P.M., and suggested a mustard poultice to the chest and abdomen, and brandy was administered; but all restorative measures proved useless. Dr. Glover never again rallied, and died at eight, P.M. Mr. Gant believed that *at least* five ounces of chloroform had been swallowed.

Post Mortem Examination, forty-four hours afterwards. The features were remarkably placid: the mouth was closed as at the time of death, but not compressed; the eyes were peculiarly dull and sodden. There was an extensive congestion (hypostatic), of a claret colour, about the posterior portion of the trunk, and congested spots on the arms where they had been pressed during life. The rigor mortis was less than usual, considering the muscular development and previous health. On opening the abdomen and thorax, I first examined the heart. Its cavities were all filled with fluid black blood. All the valves were quite healthy. Some specks of atheroma in an early stage were seen in the aorta. The external surface of the heart presented but little fat; the muscular substance was generally pale and flabby; and the tissue of the left ventricle had undergone fatty degeneration. This was due to atrophy of the muscular fibres, and thus the more obvious appearance of the interstitial fat, without any actual increase of that material. The pericardium contained a table-spoonful of straw-coloured serum. The lungs crepitated throughout, except their bases and posterior borders, which, on section, presented the appearance of black-currant jelly. The mucous membrane of the bronchi was of a claret colour; the tubes were free from mucus, the pleuræ were not injected. The liver was much enlarged, of a pale yellow colour, and soft throughout its substance; various sections showed the proper liver-structure of the lobules to be altogether superseded by a pale interstitial deposit. The lobulus quadratus was almost grumous; the gall-bladder was full of bile, and contained no gall-stones. The kidneys were both large, of a pale yellow colour, and soft; the cortical portion presented an abundant intertubular deposit; the pyramidal portions were healthy. The stomach contained half a pint of brownish blood-and-mucus, smelling strongly of chloroform. The rugæ of the cul-de-sac were *quite black*. The mucous membrane generally presented red congested spots. The lower portion of the œsophagus was intensely red. The small intestine throughout showed dark red spots; and the valvulæ conniventes looked like black bars or streaks across the intestine. The mucous membrane of the large intestine was not congested. The whole intestinal canal contained four pints of the oft-mentioned brownish blood-and-mucous (without any fæces), having the odour of chloroform, like that which had been vomited and discharged by the rectum. Black fluid blood flowed from all the vessels when cut, and the spleen was very small and black. The brain and membranes were quite healthy,

no adhesion of the dura mater; no thickening of the arachnoid, and no effusion of serum. There was a marked absence of Pacchionian bodies. The vessels on the surface of the brain were not congested; the substance of the organ had the consistence peculiar to each part. No undue vascularity was seen on section through the centrum ovale: the cineritious portion of the cerebrum was remarkably well developed; the ventricles were quite empty, and the choroid plexus not turgid. The encephalon weighed forty-five ounces and a half avoirdupois.

The jury, after some deliberation, recorded that the deceased died from the mortal effects of his taking an excessive quantity of chloroform as an intoxicating agent, and not with the view of destroying life, or of doing himself personal injury.

Case II. On October 27th, 1858, at half-past seven, A.M., Dr. Bain was called to assist Mrs. D., who was stated to have been found insensible. He saw her immediately. She was in bed, lying on her right side, her head resting on her breast, the countenance of a death-like paleness, the mouth open, the eyelids half closed, the eyes turned up, the pupils very slightly contracted, and affected by light in the smallest perceptible degree; pulse 84, moderately full; breathing abdominal, without stertor; the surface of the body and extremities warm; total insensibility of every part. Some thin, yellowish-looking fluid had apparently issued from her mouth, which had a faint odour.

Suspecting poison, Dr. Bain looked round the room and found a three-ounce bottle marked "chloroform," with about half a drachm remaining.

He immediately used the stomach pump, injecting about a pint of warm water, which was rejected, tinged with a considerable quantity of bile. Sinapisms were applied to the neck, chest, and feet. She continued perfectly insensible and motionless for many hours, with the exception that, at intervals of about a quarter of an hour, a convulsive motion would be seen in the throat, the angles of the mouth were drawn down, and vomiting would take place with great difficulty, respiration being stopped for about thirty seconds, the lips and face becoming turgid and blue, till at length a prolonged stertorous inspiration would be taken, and the breathing by degrees resume its former regularity. The intervals of these attacks became longer as time went on, till about one P.M., when the eyelids and hands moved slightly on irritation of the eye, and the pulse had risen to 100.

On seeing her at three P.M., she was evidently more sensible; pulse 100; the forearm and fingers livid-looking, and inclined to be cold; feet warm; had been very sick, and thrown up a great quantity of bile.—Six P.M.: pulse 120; able to answer questions; great tenderness at epigastrium; fæces and urine had passed voluntarily, the latter in large quantity; the odour of chloroform was very strong in the breath.—Half-past ten, P.M.: pulse 160; skin warm; no headache; very thirsty, and still inclined to sleep. She said that in consequence of some domestic unpleasantness, she rose at three, A.M., and poured about a wine glassful of chloroform (which she had obtained from the apartment of a lodger) into a tumbler, added an equal quantity of water, and drank it off. She said that she put out the candle and laid down again in bed.

The narcotic effects of the poison having now passed off, efforts were directed to mitigate, if possible, the inflammation of the stomach, set up by its corrosive action, but with very little effect; for in spite of effervescing and iced drinks, counter-irritation, anodynes, etc., she suffered for a week under all the symptons of acute gastritis, and died on the eighth day after taking the poison. Thirty-six hours after taking it the odour was still to be perceived in her breath, showing that the quantity must have been considerable. The attendant's evidence also showed that the quantity she mentioned as having taken was the same they had noticed the day before as remaining in the bottle.

Post mortem Examination, forty hours after death. The body was much emaciated, the skin was of a yellowish-green hue, except on the depending parts, which were much congested; the fingers and nails very dark; abdomen tympanitic; muscles of the natural colour; the stomach and intestines were distended with gas, but in natural position; the liver was pale and finely mottled. The surface of the stomach was much congested, and the organ was much contracted about the middle portion, forming two distinct pouches; when opened, an escape of gas, possessing a very ammoniacal smell, took place; the internal coats were highly inflamed; the rugæ of the depending portion were larger than usual, and very pulpy; the mucous and muscular coats for about a circle of two inches in diameter near the cardiac orifice were entirely eroded, the peritoneal only remaining, with very few vessels remaining on its surface. The surrounding parts, on the contrary, were deeply vascular. Ulceration had also taken place near the pylorus. The lungs, heart, and œsophagus were healthy. The right kidney was sacculated, the tubular portion being entirely absent; the left was larger than usual. No symptoms of renal disease had been noticed in her lifetime. The brain was not examined, intelligence having remained perfect to the last.

The chief points of interest in this case are the large quantity of chloroform taken without causing speedy death; the long time (about twelve hours) of total insensibility; the permanence of odour in the breath; and the entire absence of head symptoms on the recovery from the quasi-intoxication. It is not improbable but that she would have recovered had the chloroform not been taken on an empty stomach, undefended from its erosive action.

Dr. Bain asks whether the anodyne properties of chloroform might not be safely elicited in the old way of administering remedies by the mouth—say in the form of chloric ether, in small quantities, mixed in mucilage, every quarter of an hour, till the anæsthetic action is produced.

SURGERY.

DISLOCATION OF THE THUMB.

The subjoined extracts from Mr. Humphry's excellent *Treatise on the Human Skeleton* contain his views regarding an injury which often gives much trouble to the surgeon.

When this joint is dislocated, which almost always takes place from the phalanx being bent forcibly backwards, the sesamoid bones are carried back with the phalanx, and become placed behind the head of the metacarpal bone, which is pressed forwards between the bellies of the short flexor muscle. This is the cause of the dislocation being often so difficult to reduce; for the displaced sesamoid bones intervene between the hinder surface of the metacarpal bone and the anterior surface of the phalanx, and, being drawn upwards in this position by the contraction of the short flexor muscle, prevent the articular surfaces from coming into contact, and offer an obstacle to their replacement which has often been found insurmountable. That this position of the sesamoid bones and of the short flexor muscle is really the cause of the difficulty, may easily be proved by dislocating the bones in the dead subject. It will be found that one or both the lateral ligaments are torn, and that the sesamoid bones retain their connexion with the phalanx, and with the short flexor muscle, in the manner I have described. (In a dissected specimen in the Berlin Museum, the same thing is seen. The sesamoid bones are thrown back with the phalanx, and the head of the metacarpal bone presents between the bellies of the short flexor muscle.) If now the short flexor be seized with the forceps, and kept on the stretch so as to act only slightly upon one sesamoid bone, very powerful traction may be used without replacing the phalanx; whereas, if the lower end of the sesamoid bone be hitched a little forward upon the head of the first phalanx, or even if the influence of the short flexor be relaxed, the dislocation is at once easily reduced. In the living subject, the difficulty may sometimes be overcome by bending back the phalanx, and so tilting the lower edges of the sesamoid bones downwards and forwards upon the head of the metacarpal bone. If a case resisted traction, tried to a fair extent, I should be disposed to make an incision at a convenient place, sufficiently large to admit a small blunt hook, with which I would endeavour to pull forwards the sesamoid bones. It should not be forgotten that, though the sesamoid bones create so much difficulty in reducing the dislocation, they afford very great protection to the joint against such displacement, extending as they do the area of the osseous surface articulated with the metacarpal bone, and converting it from an almost flat to a deeply concave shape—in short, constituting a quasi-olecranon to the base of the phalanx.

Velpeau has twice seen the first phalanx of the thumb pass in front of the metacarpal bone; and in the first example, which had occurred three days previously, he, as well as MM. Bougon and Roux, failed in their endeavours to reduce it. (p. 434.)

In the case of the second joint of the thumb, also, when dislocation takes place, the sesamoid body is carried with the displaced bone behind the end of the first phalanx. Being here placed between the two articular surfaces, it prevents their coming into contact when attempts at reduction are made; and the greater the force which is exerted, the more tightly is

it wedged between the two bones. I have proved this to be so by experiments on the dead body. In one case of compound dislocation, in which powerful extension and divers expedients to reduce the bones had been made for more than an hour by myself and others without success, I contrived to carry a probe to the back of the joint beneath the sesamoid body, and tilted up its lower edge: the dislocation was immediately reduced, and without any further trouble. (p. 436.)

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, APRIL 30th, 1859.

THE LUNACY LAWS.

We fondly thought that, with the onslaughts of the *Times*, the popular alarm of late excited in the public mind against the proprietors of private asylums would have died out, and that, in the parliamentary discussion which looms in the distance with reference to the lunacy laws, members would at least approach the subject with as much impartiality as the public mind is capable of assuming. We were consequently not prepared for an attack upon the great body of alienist physicians, such as we found in the leading columns of last week's *Lancet*.

Our cotemporary has suddenly discovered that, because popular feeling is against proprietors of private asylums, therefore they must be in fault. Now, popular feeling without doubt is in favour of Professor Holloway and free trade in physic; but we scarcely think that on that score we shall find the somewhat irregular leech of Temple Bar received into the favour of the *Lancet*. Fighting, as the proprietors of asylums will have to do, an uphill game, we think it is scarcely fair to find a journal devoted expecially to the interests of medicine throwing mud at them in place of coming to their aid. The *Lancet* gives it as its opinion that proprietors of asylums have drawn public odium upon themselves by their assumption of the double capacity of physician and "lodging-house keeper"; and that, in the latter capacity their interests must be to retain rather than to cure their patients.

As far as we can see, the same argument will apply to every medical man; inasmuch as, the longer his patient is ill, the more fees he receives. Putting aside this argument, however, we may ask, Would it be for the benefit of the insane that their care and charge should be entirely in lay hands, the alienist physician only occasionally making his visits, as in ordinary hospitals? To believe that such would be the case would be to ignore all the light we have gained during the last thirty years in the treatment of mental affections. The mere prescribing of drugs forms only a portion, and to our minds infinitely the meanest portion, of the duty of the alienist physician. He who succeeds the best in combating mental disease, is undoubtedly he who, *cæteris paribus*, is most profoundly acquainted with the ever varying condition of his patient's mind. It is a popular saying, that "you never know a person until you live with him"; and this homely truth is especially applicable to the insane. The physician who day by day watches the ever changing phases of his patient's mind, is surely better able to read it than a stranger who makes a hurried visit of half an hour's duration twice or thrice a week.

How, again, would the insane obtain philosophical treatment and discipline, if they were left entirely to unprofessional hands? It is the very intimacy which is obtained by having the patient as a guest that gives the physician the key to his case; and we maintain that, if this relation were broken by law, the consequences would be disastrous to him. It is easy enough to stigmatise the members of a thankless speciality by such insulting terms as "lodging-house keepers"; but, we ask, is it fair or honest to do so?

Our contemporary appears to be astonished that such opposition was made, at the late general meeting of the Association of Medical Officers of Asylums, to the proposed appointment of medical examiners; it will not for one moment admit that a general practitioner is not as skilled in lunacy as a man that has pursued the study all his life. Of course, this argument tells against all specialities whatever; and no doubt the writer thinks that any gentleman, who writes M.R.C.S. and L.A.C. after his name, is justly entitled by his experience to sit in judgment upon the opinion of Mr. Bowman or Mr. White Cooper. We beg, however, to demur to this opinion *in toto*; and we fearlessly assert, that to no speciality in medicine is a careful training so indispensable as to the alienist physician. The *Lancet*, however, is of a different opinion: to wit, "In behalf of what we conceive to be the just claims of the medical profession at large, we feel bound to say that the pretensions of the alienists *par excellence* seem to us to partake too much of the self-esteem that is apt to be engendered by a narrow circle of pursuits, and exaggerated by the interchange of ideas among themselves."

Notwithstanding this bold stroke for the profession "at large", we think the public, in their ignorance, will still seek the opinions of such men as Conolly, Winslow, or Sutherland, in preference to those of the first gentleman to be met with whose red bottle shines afar. We should scarcely have noticed, however, what appears to us to be an ill-timed and ill-judged attack upon a large and highly intelligent section of the profession, were it not for one remark in the article, which appears to us calculated to sow dissensions and create distrust where there has hitherto been nothing but unanimity and cordiality. That remark is as follows:—

"It is but fair to the Association of Medical Officers of Asylums and Hospitals for the Insane to state, that these resolutions on the Lunacy Bills, adopted at their recent meeting, cannot be considered to represent the opinions of the members at large, the majority of whom are officers of public asylums. The acting members of the committee, by whom these resolutions were drawn up, consisted entirely of the proprietors of private asylums resident in London; the members of the committee who were not influenced by personal interests having withdrawn their names from it."

It is scarcely necessary to say, that this invidious distinction between the different members of the committee is not even correct; but what we wish to draw attention to, is the totally undeserved imputation it throws upon those gentlemen, who

simply did their duty in accepting a thankless office, and in fearlessly going through with it.

We do not believe for one moment that the officers of public asylums, as a body, have that distrust of their brethren of the private asylums which is here more than hinted at; neither do they, in our opinion, think that they were actuated only by private interest in the advice they gave respecting an obnoxious Bill. As well may the proprietors of private asylums assert that those officers of public asylums who aspire to seats at the Commissioners' Board, and do not think it advisable to speak their thoughts, lest they should spoil their chances of promotion, are thereby seeking their own interest. We regret exceedingly this attempt by hints and inuendos to divide into two hostile bodies an Association which has hitherto gone on harmoniously; and we trust that some member of the public officers of asylums will yet be found to repudiate the assertion, that their brethren of the private asylums are only capable of acting on a great public question in a narrow and odious spirit of self.

THE WEEK.

In another page will be found a letter from "A Fellow of the Royal College of Physicians of Edinburgh," in which the writer seeks to defend the College from the remarks which we last week considered it our duty to make with regard to the recently issued regulations for the admission to the license of that body: and our advertising columns contain a copy of its amended regulations. We are glad to find that one of the most glaring faults which was last week pointed out has been mended; and that persons will not be admitted to the license of the respectable institution to which reference has been made, merely on the strength of having been fifteen years in practice. What the Edinburgh College purposes doing is, it appears, to institute a "year of grace," somewhat after the example of the College of Physicians of London: it intends to admit as licentiates, for one year from this time, all regular practitioners who shall not "derive a profit from the sale of drugs or medicines", and whose qualifications and character shall be such as to command the votes of two-thirds of the College. But there is one marked difference between this proposal and that of the London College, consisting in the requirement of an University degree in medicine on the part of the latter institution, and the absence of any such requirement on the part of the former. Our correspondent observes, that "surely it is not for the interests of the profession that the great mass of its members should remain longer under the tutelage of the Apothecaries' Company." This remark, to which we have no objection to make, goes to confirm a notion which has risen in our mind, that the Edinburgh College wishes to take under its wing, besides the Scotch practitioners, as many non-graduated English practitioners as can meet the regulation regarding abstinence from sale of drugs. The fees during the year are apparently the same as in the case of the London College; and, so long as the last named institution excludes all except graduates from the advantages offered in its recent regulations, the act of the Edinburgh College may be, to a certain extent, approved of as a liberal proceeding. Yet it may perhaps be doubted whether there is not danger that the license of the Edinburgh College may fall into the hands of some whose professional education and standing are not such as are likely to do credit to the institution; for all that will be necessary for a man in general practice to do, in order to obtain the license, will be to give up dispensing and charging for his own medicines. But again, in opposition to this possible evil, we would set forward one certain benefit which would arise if both the Colleges of Physicians were to take the general practitioners under their protection. The disgraceful system of seeking professional profit through the sale of drugs, which we have already condemned, would receive a severe blow. What we have here said is intended to apply especially to the proceedings of the "year of grace"; and our correspondent will see that, in many respects, we are at one with him. As to our article of last week, we repeat, that we have much pleasure in finding that our remarks on one part of the regulations are no longer called for; but as to the prominent feature of the regulations—that of establishing a separate license in physic, independently of all other boards—we still see no necessity whatever for the addition of a new diploma to those which already exist so abundantly, and which are so fairly and conscientiously given, in Scotland.

Colonel Boldero, late M.P. for Chippenham, has retired from the candidature for the representation of that borough. This information will be received with regret by the medical profession, who will remember that the gallant colonel has always been foremost in doing battle to the utmost against granite-hearted Admiralty lords on behalf of the surgeons and assistant-surgeons of the Royal Navy. For the improvement which has been and will be effected in the condition of these valuable public officers, they have to thank, in a great measure, Colonel Boldero; and we are confident that, in retiring into private life, he may rest assured that his name as a public man will be ever mentioned with respect and gratitude, both by the medical staff of the navy, and by every member of the profession, the honour of the whole of which he has promoted in advancing the interests of one of its constituent parts.

Dr. Mackenzie, of Glasgow, the eminent ophthalmic surgeon, has memorialised the General Council of Medical Education and Registration in favour of making the study of ophthalmic surgery imperative in future on all candidates for diplomas or licences in medicine. He observes that such a subject, involving the consideration of many minute particulars, can be but very imperfectly touched upon in any general course of lectures on surgery or medicine; and that the very various diseases of the eye can be studied efficiently only where numerous patients, labouring under such diseases, are submitted to minute and discriminating examination, and to careful and continued treatment. He thereupon prays that the Medical Council would take into their early consideration, the propriety of making the study of the eye imperative on all candidates applying to any of the universities or licensing bodies of the three kingdoms, for a diploma in medicine or surgery.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.

President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

Philip H. Williams, M.D., *General Secretary.*

Worcester, April 26th, 1859.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Wednesday, April 6th, 1859.

Present:—Dr. Smith, in the Chair; Dr. Apjohn, Dr. Williams, Dr. Leet, Dr. Stokes, and Dr. Corrigan; Dr. Maunsell, *Registrar.*

The minutes of last meeting were approved and signed.

The following accounts were examined, and ordered to be paid; viz.—

Mr. Sparks for Office Furniture	£14 12 6
Messrs. Dobbin for Clock	3 10 0
Mr. Morgan for Coals	1 17 6

The Registrar submitted a draft letter to the Registrar for England, respecting the Registration in the English Local Register of Medical Practitioners resident in Ireland, which was approved of.

The Council then proceeded with the examination of the statement, respecting their courses of study and education, returned by the several Colleges and Bodies in Ireland; and it was ordered, that further information should be requested from the Secretary of the Apothecaries' Hall.

It was also directed that copies of the Charters and Acts relating to the educational powers of the several Colleges and Bodies, should be forwarded, with the other documents, to the Registrar for England, for the information of the General Council. C. H. Leet.

Wednesday, April 13th, 1859.

Present:—Dr. Leet, in the Chair; Dr. Smith, Dr. Apjohn, Dr. Stokes, and Dr. Corrigan; Dr. Maunsell, *Registrar.*

The minutes of last meeting were approved and signed.

Read—Letter from the Registrar for England, the following extract from which was ordered to be entered on the minutes:—

"It has been through inadvertence solely, that John Desmond and A. Hawthorne have been registered here (in London), instead of having been referred, as many other similar applicants have been, to you (the Registrar for Ireland). I beg to return into your hands, therefore, the fees of these gentlemen. "I remain, etc., Francis Hawkins."

A case for the opinion of counsel prepared by the Executive Committee was read, and ordered to be further considered on Monday next. C. H. Leet.

Monday, April 18th.

The minutes of last meeting were approved and signed.

Draft case for counsel, setting forth the views of this Council, in reference to the rights of Licentiates in Midwifery of the King and Queen's College of Physicians, and of the Royal College of Surgeons in Ireland, was considered and approved of. Aquilla Smith.

Editor's Letter Box.

THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

Sir,—I take the liberty of requesting your insertion of the following explanations in your next number, as to the design of the Edinburgh College of Physicians in their new regulations for the license. These regulations were, unfortunately, published in a form which has given rise to much misconception, and the publication of which is therefore to be regretted. But I speak from intimate knowledge of the College, when I say that its proceedings have been most completely, though no doubt unintentionally, misrepresented in your leading article of last week.

What the College intend to do, under their new regulations, is this: they intend to recognise as licentiates, for one year from this time, all regular practitioners who shall not "derive a profit from the sale of drugs or medicines", and whose qualifications and character shall be such as to command the votes of two-thirds of the College. The clause which appeared to admit irregular practitioners was intended to be exercised only under the advice of the General Council of Medical Education, and was meant to meet a few very special cases of good foreign qualifications. It was, however, incautiously expressed, and had been, on this account, expunged long before your article was published.

The object of the new regulations may be defined as follows:—The College intend to license the regular "family doctor" by a simple ballot, as a security for character, and subject to the condition that the applicant is not to be a trader in drugs or medicines. What is there in this to merit the hard terms that you have bestowed upon the conduct of the College? Surely it is not for the interest of the profession that the great mass of its members should remain longer under the tutelage of the Apothecaries' Company. But if it is desirable that the general practitioners should no longer rejoice in the name of apothecary, or the magic letters L.S.A., with whom can they become associated, as regards medicine, but with the Colleges of Physicians?

I believe that even the London College is well-nigh prepared to follow this course. But it is difficult to undo in a moment the bad legislation of years; and, having refused to take its proper place as regards the general practitioner in 1815, it finds some difficulty in now meeting the requirements of the age. The Edinburgh College has no such difficulty: in fact, it has always had the door even of the fellowship open to the family doctor, if of sufficient character and professional status. It has never attempted to raise an impassable barrier between the physician and the general practitioner; and in now offering the license of the College to the latter, under fair and reasonable conditions, it is only following out what seems a clear consequence of all its previous policy. It is no secret that Fellows of Colleges and University Graduates have not a monopoly of common sense, or of medical experience; and even if this truth should prove "offensive to the Universities" (which I trust it will not), it is a truth, and, as such, ought to be recognised and acted on by a College which really wishes to do an act of justice to the great mass of the medical profession.

I am, etc.,

A Fellow of the Royal College of Physicians of Edinburgh.

Edinburgh, April 25th, 1859.

REGISTRATION FEES.

Letter from C. McArdle, Esq.

Sir,—For some weeks past there has appeared in your valuable Journal a notice from the Medical Registration Office, ending thus: "The registration fee for persons not qualified before January 1st, 1859, is £5." The same notice states that persons duly qualified before that time may be registered for a fee of £2. May I request to be informed what is the reason of such difference of payment? It appears to me unjust, unless registration confers a greater boon in one instance than the other. And, again, it is evident that the senior members of the profession could more easily afford a larger fee than those who have but just entered upon it; whilst, from the scale of payment, the contrary would appear to be the case

Surely it is too bad to mulct a person of £3 for not being qualified three or four weeks previously, as in my own instance, who obtained my diploma early in January 1859.

The only feasible excuse I can conceive is, to swell the coffers of the Registration Office, which by this time must, I fancy, have attained such dimensions as to justify the proprietors, whoever they may be, to let off struggling juniors a little more leniently, if not *ex æquo* with their more opulent brethren. But even this will, I think, be a failure; for, since registration is not actually compulsory, many who would be willing and able to pay £2, will either abstain from it entirely, or, at all events, for a considerable time, unless obliged to do so from the nature of their appointments, owing to the inconvenience, if not injustice, of having to pay £3 extra.

Hoping to enlist your sympathy and powerful influence in applying a remedy to what every gentleman in the profession will allow to be a great grievance, I am, etc.,

Charles McArdle.

Newport, Monmouthshire, April 14th, 1859.

[Our correspondent should memorialise the Medical Council. But we must inform him that the registration fees have been fixed in the first place by Act of Parliament; and that, as the number of gentlemen admitted into the profession each year obviously does not nearly approach that which existed at the end of December 1858, a higher fee is necessarily required, in order that the objects of the Medical Act may be carried out. Editor.]

THE INDIAN MEDICAL SERVICE.

Sir,—The warrant lately granted to the India Medical Services has, no doubt, been a great boon; but, in my opinion, it is altogether inadequate to redress the evils that exist. At present, owing to the large number of assistant-surgeons, compared to the number of those in the higher grades, about sixteen years are required for an assistant-surgeon to reach the rank of surgeon. The number of assistant-surgeons in the Indian services is, proportionally, much larger than in the English army and navy; and, until there be a large addition made to the number of surgeons in the services of the three presidencies, there can be no real improvement.

The retiring funds in Bengal and in Bombay are also very serious disadvantages to the services of those presidencies; that in Bengal does not pay any annuity until seven years after it ought to do so; that in Bombay is nearly bankrupt; and, besides being so, a law plea is, I believe, about to be commenced by those who have retired, against those who are now in the service; as, owing to the embarrassed condition of the fund, the retiring allowances already granted have been cut down 30 per cent.

Trusting that you will excuse me for again trespassing on your space, I am, etc.,

An Assistant-Surgeon, Indian Army.

April 1859.

PUBLIC VACCINATION.

Letter from W. Husband, M.D.

Sir,—The "Instructions for Vaccinators" lately issued by order of the Privy Council, are calculated to be useful in reminding medical practitioners of various precautions connected with vaccination, which are apt to be neglected. I may be permitted to doubt, however, whether they express, in every instance, the unanimous opinion of those best acquainted with the important subject of which they treat.

There is one of the rules in particular upon which I am anxious to make a few remarks. Under the second head, the vaccinator is instructed to "vaccinate directly from the vesicle of a previous subject wherever there are proper means of doing so"; and no one will question the propriety of this advice. But it is added: "Moist lymph conveyed from case to case in a vial or in other like manner, must not be used for vaccinating later than eighteen hours (or, in very hot weather, twelve hours) after it has been taken from its source."

I have not the slightest objection to this summary disposal of the stoppered phial, which I never used, and have no good opinion of; but the words, "in other like manner", are doubtless intended to apply to the capillary tubes, and to include them in the same condemnation. Whether this prohibition is generally acquiesced in by medical men in England, I do not know; but it has excited not a little surprise here, where the tube method is in common use, and highly valued for its simplicity and efficiency. The "Instructions" are not indeed addressed to us, there being no Vaccination Bill for Scotland; but, high as is the authority under which they emanate, they are not above criticism, from whatever quarter it may come; and one is even doing a service to his medical brethren and to the cause of vaccination, when he states reasonable objections to any portion of them.

My objection to the second rule then is, that *it condemns and actually prohibits the use of a method which has been proved by ample experience to be safe, simple, and efficient, in a very high degree.* Of course, it will be admitted that to restrict the time of keeping the fluid lymph to twelve or eighteen hours, is equivalent to condemning the use of the tubes altogether, just as a similar restriction in the case of the ivory points would be equivalent to suppressing the use of them.

I do not know precisely by what argument this sweeping prohibition is justified, or whether the public vaccinators of England acquiesce in it as so reasonable, so manifestly right, as to need neither argument nor evidence to support it; but, on the other hand, I can refer to the experience we have had of the method for the last ten years in Edinburgh, where it is, as I said, in common use, and is admitted on all hands to facilitate greatly the practice of vaccination, particularly by enabling us to keep reliable lymph by us for indefinite periods, and thus to provide against the scarcity which used to prevail previous to its introduction. I began to use it in the year 1848, at the Royal Dispensary and Vaccine Institution. A year or two later, it was adopted at the New Town Dispensary, and it has been in constant use at both dispensaries ever since. At our Institution, since 1849, we have vaccinated upwards of 5,000 infants, exclusively under the use of the tube method, and with the entire approval of the managers and medical officers. Ten years is a long period, and has afforded time for a large induction of cases, and for putting the method thoroughly to the test of observation and experience.

With me it has been one long experiment, carried on at no small expense of time and labour—the labour, however, greatly lightened by the extreme ease and expedition with which all the manipulations connected with the use of the tubes are performed.

The Institution has never once borrowed from the National Vaccine Establishment, or from any other quarter; but its lymph has been renewed, times without number, from its own stock; scarcely ever from tubes which had been kept for less than three days (for we vaccinate only twice a week).

Indeed, I was for several years in the constant habit, for the sake of testing the method to the utmost, of purposely selecting old lymph which had been sealed up, not for hours or days, but for months and years; some of it, I may add, exposed on purpose for months together to a temperature of 90° of Fahrenheit. And what has been the result? It is this. I find that it does not signify how long the lymph is kept; whether for two hours or for two or more years, it makes no material difference.

My chance of success in vaccinating—that is, of producing perfectly normal vaccine vesicles—is the same, or nearly the same, in every case. It is not perceptibly affected by the length of time the lymph has been kept; and I have in consequence found it impossible to run short of vaccine matter, while at the same time I have distributed it largely both at home and abroad. But I may still be asked: "Is the method safe? Granting that you have proved that lymph retains its activity for years, when preserved in this way, does it not acquire deleterious properties? Is it safe to keep it more than twelve or eighteen hours in a capillary tube, and then to vaccinate with it?" For this is the question which the instructions raise, or rather which they take for granted to have been long ago decided in the negative, to everyone's satisfaction.

I reply, that all my experience has gone to prove that it is quite as safe to vaccinate with old fluid lymph, which has been hermetically sealed up, as with fresh lymph transferred directly from arm to arm.

But I must not trespass further upon your space; and shall therefore conclude with hoping that what I have said may interest some of your readers, and lead them to inquire into the claims of a method which, while it is beyond doubt the easiest and least troublesome of all the methods at present in use, has such evidence as I have indicated to produce in favour of its being second to none in point of safety and efficiency. I am, etc.,

William Husband, M.D., F.R.C.S.E.

Royal Dispensary and Vaccine Institution,
Edinburgh, April 20th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Bégin, M., formerly President of the Council of Health of the Army, Commander of the Legion of Honour, etc., at Gorrigner, in the department of Finistère, of apoplexy, aged 66, on April 13th.

Clark. On April 15th, at Twickenham, the wife of Alfred Clark, Esq., Surgeon, of a daughter.

Dobson. On April 23rd, at Highbury Park, the wife of W. Coyle Dobson, Esq., Surgeon, of a daughter.

Druitt. On April 19th, at Wimborne Minster, Dorset, the wife of William Druitt, Esq., Surgeon, of a son.

Gleeson. On Good Friday, at Knutsford, the wife of *Edward Gleeson, Esq., Surgeon, of a daughter.

Stuart. On April 18th, at Woolwich, the wife of W. Stuart, Esq., Surgeon, of a daughter.

Thane. On April 24th, at 9, Hart Street, Bloomsbury, the wife of George Damer Thane, M.D., of a son.

MARRIAGES.

Beale—Blakiston. *Beale, Lionel S., M.B., F.R.S., of 61, Grosvenor Street, London, to Fanny, only daughter of Peyton Blakiston, M.D., F.R.S., of St. Leonard's-on-Sea, at the Church of St. Mary Magdalene, St. Leonard's, on April 26th.

Fox—Doyle. Fox, Wilson, M.D., of Newcastle, Staffordshire, to Emily Anne, daughter of the late Captain Wellesley Doyle, at Cheltenham, on April 20th.

Goodridge—Howes. Goodridge, Edward, Esq., son of *John Jackson Goodridge, Esq., Surgeon, of Paignton, Devon, to Emma, widow of James E. Howes, Esq., at Paignton, on April 25th.

Lindsay—Reid. Lindsay, Wm. Lauder, M.D., of Perth, to Elizabeth, only daughter of the late William Paterson Reid, Esq., Georgetown, Demerara, at Edinburgh, on April 26th.

DEATHS.

Bevan, John, Esq., Surgeon, at Aigburth, Liverpool, on March 28th.

Bourchier. On April 18th, at 3, Dalby Terrace, City Road, aged 44, Sophia Festing, widow of John Bourchier, M.D., H.E.I.C.S., Bombay Presidency.

Carless, Henry, Esq., Surgeon, late of Beckenham, at Cudham, Kent, on April 21st.

Daniel, Henry, M.D., at 36, Clarges Street, Mayfair, aged 75, on April 19th.

Finch. On April 19th, at Blackheath, aged 2 years and 10 months, Leonard, youngest son of Robert Finch, M.D.

Johnstone. On March 23rd, at Old Square, Birmingham, Maria Mary Payne, wife of *James Johnstone, M.D.

PASS LISTS.

Royal College of Physicians. At the Comitia Majora, held on Saturday, April 23rd, the following gentlemen were admitted Licentiates of the College, under the recently enacted bye-laws:—

Budd, Richard, M.D., Barnstaple
Jervis, Thomas, M.D., Connaught Square
Osborn, Henry, M.D., Southampton
Russell, James, M.D., Birmingham
Sall, William, M.D., Army Medical Department
Stephenson, Robert, M.D., Belfast
Wardell, John Richard, M.D., Mornington Road, Regent's Park

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Monday, April 18th, 1859:—

Barter, Clement Smith, Bath
Batho, Robert, Amesbury, Wiltshire
Candy, John, Holloway
Downs, Peter, Stockport, Cheshire
Evans, Nicholl, Stoke Newington
Farr, George Frederick, Baldock, Herts
Felce, Stamford, Huntingdon
Freshfield, Allen, Harwich, Essex
Gaye, Arthur Charles, Minehead, Somerset
Godfray, Charles Le Visconte, Jersey
Harris, John Charles, Chipping Norton, Oxfordshire
Head, Robert Turner, East Grinstead, Sussex
Herbert, Benjamin Heywood, Edgbaston, Birmingham
Kirby, Thomas Charles, Bodicote, Oxfordshire
Martin, Timothy Henry, Merthyr Tydvil
Pollock, Arthur Julius, Queen's Square House, Guildford Street
Rigby, James Morris, Chorley, Lancashire
Roberts, Charles, Darlington, Durham
Royle, Arnold, Winchester
Saunders, George James Symes, Charmouth, Dorset
Staddon, John Hart, Ipswich, Suffolk
Van, Arthur Ferdinand, Northfleet, Kent
Wales, John, Downham Market, Norfolk
Williams, Humphry, Dolgelley, North Wales
Winterbotham, Washington Lafayette, Stroud, Gloucestershire

Licentiates in Midwifery admitted at a meeting of the Board, on April 21st:—

Barratt, Oglethorpe Wakelin, Birmingham: diploma of membership dated February 11th, 1859
Boulland, Alfred Brocard, Hull: December 13th, 1858
Dyer, John Edward, Islington: May 22nd, 1857
Rawdon, Henry Greenwood, Liverpool: October 8th, 1858
Stone, Thomas Westcott Gale, Lincoln's Inn Fields April 11th, 1859

University and King's College, Aberdeen. The degree of M.D. was conferred on the following, after examination, on April 15th, 1859:—

Blunt, George Vernon, Birmingham
Cardogo, Samuel, London
Cook, John Henry, London
Cronin, James Denis, Royal Navy
Dalby, William Thomas, Surrey
Davies, John, Brecon
Drew, Samuel, Cornwall
Forester, Henry, Barnstaple
Gill, John French, Dublin
Grady, William Grove, London
Hammond, Charles William, Ipswich
Harkin, Alexander, Belfast
Holman, John Ruddall, Royal Navy
Lee, Charles Alfred, Hull
Maltby, John Westbrook, Durham
Munroe, Henry, Hull
Nenham, Thomas, Winslow, Bucks.
Patterson, Alexander Henry, Bowdon
Pollock, Timothy, Middlesex
Ryan, George Henry, Dublin
Sarvis, Thomas, London
Simon, George, Aberdeenshire
Stephens, Henry Oxley, Bristol
Stovell, Matthew, Bombay Army
Sykes, George, London
Thornton, Peter, Shrewsbury

At the same time, the degree of M.B. was conferred on—

Gray, Robert, Aberdeenshire
Richardson, John, Banffshire

Apothecaries' Hall. Members admitted on Thursday, April 14th, 1859:—

Davies, Edward, Llansillin, Denbighshire
Dawson, James Edmund, Sedberg, Yorkshire
Downs, Peter, Stockport, Cheshire
Gregory, Bradley, Exeter
Hill, Thomas Johnson, Melton Mowbray
Horniblow, William Robert, Shipston-on-Stour
Reeve, John Foster, St. George's Place, Camberwell
Sharp, Edward, Truro, Cornwall
Smith, Charles Swaby, Burbage, Wilts
Suffrein, Benjamin Thomas, Indian Army
Thornton, William Terry, Wensleydale, Yorkshire
Wotton, Charles, King's Langley, Herts

HEALTH OF LONDON:—WEEK ENDING APRIL 23rd, 1859.

[From the Registrar-General's Report.]

The total deaths registered in London in the week ending last Saturday were 1126, and exhibit an increase on those of the previous week, which were 1084. In the ten years 1849 58, the average number of deaths in the weeks corresponding with last week was 1069; but as the deaths returned for last week occurred in a population which has increased, they can only be compared with the average raised in proportion to that increase; namely, with 1175. Hence it appears that the deaths of last week were less by 49 than the number which would have occurred if the average rate of mortality had prevailed.

The deaths from scarlatina and diphtheria rose again last week from 51 to 79. Fifteen from diphtheria occurred in sub-districts, as follows:—St. Paul, Hammersmith, 1; Belgrave, 1; Christchurch, Marylebone, 1; St. John, Marylebone, 2; Regent's Park, 1; South Hackney, 1; St. George, Holborn, 1; London City, north-west, 1; Hackney Road, 1; Mile End Old Town East, 1; St. James, Bermondsey, 1; Rotherhithe, 1; Woolwich Dockyard, 1; and Lee, 1. Only four deaths occurred from diarrhœa.

In Camberwell, at 16 and 17, Queen's Terrace, Neate Street, three girls, all belonging to different families, died between the 16th and 20th inst., from "fever with dysentery". One of the informants stated that the water was impure.

Three persons died last week from intemperance. Eight persons, of whom two were men, and six women, died at the age of 90 years and upwards. Three of the women died at the age of 95, and one at 96 years.

Mr. Druitt, Medical Officer of Health for Hanover Square and Mayfair sub-districts, writing on April 18th, makes the following communication:—"At No. 15, Woodstock Street (Hanover Square sub-district), six deaths have occurred in ten days—viz., a female, phthisis; four children in first floor back, measles and scarlatina; one child in second floor back, from the same, or diphtheria. The house large, lofty, airy, not overcrowded, but of the date 1720, and in a neighbourhood where the drainage is all bad, unless quite new. The basement is pervaded with sewer smell at times, and so is the back room on the ground floor, beneath the rooms in which the five children died. There is also a suspicious water-closet in the centre of the house, used by about fifteen persons. But there is no evidence yet of the entrance of sewer air into the rooms in which the children died. The chief thing to complain of, is that close smell and uncleansed state of walls and ceilings, which even the most respectable and well paid artisans still persist in."

Last week the births of 860 boys and 839 girls, in all 1699 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1649.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·568 in. The barometrical readings varied from 29·34 in. on Wednesday, to 29·72 in. on Saturday. The mean temperature of the week was 41°, which is 5·9° below the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was below the average throughout the week, and on the first two days the extent of depression was more than 8°. The thermometer in the shade ranged from 28·5° on Tuesday, the lowest point attained in the week, to 56° on Friday, the highest point in the week. The entire range was therefore 27·5°; the mean daily range was 20·9°. On Friday, the range was 26·3°. The mean temperature of the water of the Thames was 47·7°. The difference between the mean dew-point temperature and air temperature was 9°. The mean degree of humidity of the air was 68. The wind blew generally from the north or north-east. No rain was measured by the gauge.

Epidemiological Society. On Monday, May 2nd, a paper will be read, "On the Successive Epidemics of Yellow Fever among the Garrison of Bermuda during the last forty years," by Gavin Milroy, M.D., F.R.C.P.

The King of Naples. Dr. Manograssi, who is considered a charlatan by his Neapolitan colleagues, is now treating the sick King of Naples. A lotion, which the physician rubs over the whole of his royal patient's body, is said to be distilled from certain herbs, the medicinal qualities of which he discovered some years ago.

The First Public Drinking Fountain. On Thursday week, the interesting ceremony of opening the first public drinking fountain, was performed by Mrs. Willson, the daughter of the Archbishop of Canterbury, in the presence of a large concourse of people. The fountain is situated at the corner of Giltspur Street and Skinner Street, by St. Sepulchre's Church. Shortly before 3 o'clock, Mrs. Willson arrived at St. Sepulchre's Church, where that lady was received by Lord Radstock (who was accompanied by Lady Radstock and the Hon. Miss Waldegrave), the Rev. J. Jackson (the incumbent), Mr. Harvey, the chairman, and Mr. Potter, the vice-chairman of the West London Union, and a large number of other influential personages. Mrs. Willson was conducted to the fountain, which was uncovered, and displayed a crystal jet of water. She then spoke as follows:—"I am deputed to express the hope of His Grace the Archbishop of Canterbury and his family that the fountain now to be opened may be only the first among many similar erections, and that the supply thus given of pure water may prove in every respect as beneficial as it must always be agreeable." [*Loud cheers.*] Mr. Potter then handed to Mrs. Wilson a handsome silver cup, which she filled with water, and drank of. Lord Radstock then briefly addressed the assemblage, pointing out the great good that must result from the erection of these fountains; and, on behalf of the association formed for their construction, expressed a confident hope that many people would avail themselves of this cooling draught; and also that it would be the anxious endeavour of all persons to prevent any damage being done to the fountains. The Rev. J. Jackson also made a similar appeal to the public to protect the fountain from damage. The proceedings, which only occupied a few minutes, then terminated, and the company adjourned to the vestry-room, where a very interesting address was presented by a deputation from the butchers of Newgate Market, to Mrs. Gurney, the wife of Mr. Samuel Gurney, M.P., thanking the honourable gentleman for his kindness and liberality in giving the fountain to the public, expressing a belief that the greatest possible benefit would accrue to those engaged in the market from the existence of so great a boon. The assemblage then dispersed, and a number of people partook of the refreshing liquid. It was computed by persons appointed to watch that the average number of drinkers was eight per minute.

Association of Medical Officers of Asylums and Hospitals for the Insane. The President has received official intimation from Dr. Stewart, the Honorary Secretary for Ireland, that the proposed visit of the Association to Dublin, this year, would, for several reasons, be inconvenient. The unsettled state of the Irish legislation in Lunacy renders it, in the opinion of several influential members of the Irish Branch of the Association, desirable that this proposed visit be postponed to a future occasion. The Annual Meeting for 1859, will, therefore, be held at Liverpool, in July, under the presidency of Sir Charles Hastings, D.C.L., on the day previous to the meeting of the British Medical Association in that town. Further particulars of the meeting will be intimated on the cover of the July number of the *Journal of Mental Science*.

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Mr. R. Wood. Apply to Dr. F. H. Woodforde, Taunton.

Communications have been received from:—A Fellow of the Royal College of Surgeons of Edinburgh; Dr. John Armstrong; Dr. P. H. Williams; Mr. Robt. Jones; Dr. Stirling; Dr. T. Inman; Dr. Hughes Bennett; Dr. C. W. Graham; Dr. Lockhart Robertson; Mr. W. Martin; Mr. R. Wood; Mr. Solomon; Mr. W. J. Moore; Mr. G. Greaves; Mr. T. Holmes; Dr. James Russell; Dr. Wm. Husband; Mr. Augustin Prichard; Mr. Henry L. Bevan; Mr. W. Copney; and Mr. T. M. Stone.

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EDITED BY ANDREW WYNTER, M.D.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

ASTHENIC PNEUMONIA OF AN ENTIRE LUNG, IN AN ADVANCED STAGE, WITH A LARGE CAVITY IN THE APEX RESULTING FROM THE BREAKING UP OF THE PULMONARY TISSUE.

Under the care of JAMES RUSSELL, M.D.

(T. H. BARTLEET, Esq., *Clinical Clerk.*)

P. L., aged 34, single, a shoemaker, was admitted April 15th, 1859. He died the same night. The following particulars were obtained from a fellow-lodger, as the deceased had no near relations living in Birmingham.

He had been ill ten weeks, but up to that time had been quite strong and well. His habits were temperate. He got up one morning, and went to church without taking any breakfast, but at a short distance from home was taken with vomiting, and was compelled to return. He had not suffered from exposure to cold or wet. The sickness continued severely for eight days, and then became less constant; the matter vomited was of a greenish colour, but, about three weeks after the commencement of his illness, he vomited blood, of a dark black colour. He suffered at night severely from cough, and the coughing was often followed by "vomiting of blood;" he expectorated a good deal of phlegm, of a rust colour. He had no pain in his chest. He had not vomited blood for six weeks, but had continued to expectorate, the sputa being nearly free from blood.

For a long time he had been losing flesh, and had not eaten well since his illness began, though he had taken a little meat occasionally. Excepting the first and last week, he had kept his bed throughout his illness; during the last three days he had been much worse, in consequence of a fall, which shook him considerably.

SECTIO CADAVERIS thirty hours after death. The body was in a state of extreme emaciation. *Thorax.* The heart was small and contracted; a clot of colourless fibrine existed in the right ventricle, from which a prolongation extended for a short distance along the pulmonary artery. A scanty recent coagulum was found in the left ventricle. *Lungs.* Old pleuritic adhesions were present on both sides, those on the left side being the firmest. The left lung was of very large size, as if in a state of complete distension; it was perfectly solid throughout; the upper lobe sank heavily in water; the lower, which crepitated slightly at the base and edges, just floated. The whole upper portion of the superior lobe was occupied by a single large cavity, resembling a tubercular vomica, with bands of indurated pulmonary tissue remaining attached to its walls. It was entirely empty, but had been opened in separating the lung from the ribs. The remaining portion of the lobe was extremely friable, breaking up under slight pressure; its section presented an intermixture of grey and purple colours, in varying proportions, and the surface of the section had a minutely granular aspect, as though scattered over with very fine sand. The inferior lobe was much firmer, of a uniform grey colour, and on pressure exuded a plentiful fluid, having the aspect of very diluted pus. The larger bronchial tubes were pale; the smaller ones were occupied by plugs of firm white matter, like fibrine, which in some instances extended into the large tubes. The branches of the pulmonary artery were nearly free from clots. The right lung was healthy throughout, excepting that its apex was puckered, and contained a small cretaceous mass, by the side of which was a small cavity capable of containing half a horse-bean. *Abdomen.* The stomach was healthy. The mucous membrane of the intestines was healthy, nor was there a trace of disease in any of the follicles. The coats of the lower part of the small intestines were greatly attenuated. The mesenteric glands were healthy. The other viscera were healthy.

REMARKS. The cavity in this case resulted no doubt from the breaking up of the pulmonary tissue; the period at which its formation commenced, appears to be indicated in the history of the patient, by the occurrence of what was called vomiting of blood, and of bloody expectoration after the fits of coughing. It is not improbable that the lower lobe of the lung was attacked with inflammation at a late period in his illness, as it was stated that he caught cold three weeks before his death, in going to his medical man, and that on his arrival at home he fainted, and was afterwards attacked with shivering. The cavity had not the usual characters of an abscess, but whether it had contained pus, we had no means of knowing. Although the lower lobe presented the usual characters of grey hepatisation, the upper lobe was entirely free from any infiltration of purulent fluid.

CHORLTON UNION HOSPITAL.

PROCIDENTIA UTERI FROM LACERATED PERINÆUM, CURED BY MR. I. B. BROWN'S OPERATION.

By GEORGE GREAVES, Esq., Surgeon to the Union Hospital.

MARY ANN RIDINGS, aged 40, a widow, who had borne six children, came into the hospital in September 1858. She complained of general debility, and of a bearing-down of the womb. On examination, I found complete procidentia uteri. A tumour larger than the fist protruded from the vulva. At its lowest part was the os uteri, and the everted mucous lining of the vagina which covered it was dry, and in places appeared cracked, and inclined to scale off. The uterus was easily reduced, but again came down on making the slightest exertion.

She told me that she had been subject to this unpleasant complaint since the birth of her last child, about twelve months before. She was at the time living in the country, and could obtain no assistance during her labour, excepting that of a female neighbour. She believed herself to have been much torn. On examining the perinæum, I found distinct evidence of a rent, extending from the free margin of the perinæum to the verge of the anus. When the thighs were in contact, there appeared to be a groove or trench in the situation of the raphe, bounded on each side by the loose and somewhat irregular edges of the torn integument. At the bottom of the groove was a strip of mucous membrane continuous with that of the vagina. The rent, as I have said, extended to, but not into, the sphincter ani. The woman was somewhat emaciated, and had a good deal of nervous debility.

The treatment for the first two or three weeks was purely tonic, with attention to the bowels. She was kept in bed, in order, by perfect rest of the uterus and its appendages, to allow them, if possible, to recover their natural tone. At the end of that time, the mucous lining of the vagina had returned to its natural condition, but there was no other improvement. On coughing, or straining, and still more on attempting to rise from bed, the uterus descended, pushing before it the posterior wall of the vagina, which appeared first at the outlet.

An attempt was next made to keep the uterus in its place by using a pessary; but, as I expected, it totally failed in preventing the displacement. I therefore resolved to treat the patient in the mode recommended by Mr. Baker Brown; and my friend Mr. Lund, surgeon to the Manchester Royal Infirmary, having seen the case, I had the satisfaction of finding my opinion as to the necessity of the operation confirmed by his.

It was done on November 3rd, 1858, with the assistance of Mr. Lund, and of Mr. Westmacott, resident medical officer. The bowels having been well emptied by medicine given on

the previous day, and by an enema on the morning of the operation, the woman was placed on a table in the position for lithotomy, and put under the influence of chloroform. The upper part of the vagina was then stuffed with cotton wool, to prevent any descent of the uterus or of the vaginal walls during the operation. A horse-shoe shaped portion of integument, rather more than an inch in length and in width, was next marked out with a sharp-pointed bistoury, and dissected away. The denuded surface extended quite to the verge of the anus, and encroached so far on the sulcus as to remove the whole of its newly formed mucous lining. The quilled suture was then applied with silver wire at three points, exactly in the mode prescribed by Mr. Brown. The silver wires entered and emerged from the skin at the distance of nearly an inch from the edges of the wound. The cut edges of integument were then brought together by three ordinary interrupted sutures made with twine; and as this could be done without the slightest strain on the surrounding integument, I did not think it necessary to divide the sphincter ani. The cotton wool was then removed from the vagina, a full sized elastic male catheter was introduced into the bladder, the woman was placed in bed on her left side, and the catheter was secured to the left thigh, and closed with a plug, which the nurse was ordered to remove from time to time. Two grains of opium were given at once, and one grain ordered to be given every four hours. Liquid nourishment only was ordered to be taken, with a little port wine.

During the first three days after the operation, the condition of the patient was in all respects satisfactory.

On November 7th (the fourth day), the lips of the wound appeared somewhat swollen and inflamed, and there was some redness and tumefaction on the left side around the orifices made by the deep suture. The silver wires were therefore on this day removed, and from the orifice nearest the pubes on the left side about two drachms of very fœtid and dark coloured pus escaped, proving that the course of that wire had become a sinuous abscess. There was no similar discharge from the other orifices.

November 10th. The superficial sutures were found still to keep the edges of the skin together; but between each suture there was a little tendency in the wound to gape, and, in the raw surfaces thus exposed, the circulation appeared to be languid. The deeper portion of the wound appeared to be firmly united. The bowels had not acted since the operation. She was ordered to discontinue the opium pills, to have a gentle enema, and to have also a mutton chop daily, and a little more wine; a solution of sulphate of zinc to be applied to the wound. The bowels were effectually relaxed by the enema, and continued to act regularly, with very little aid from medicines.

November 13th. The orifices of the deep suture had almost ceased to discharge pus, and some of them had cicatrised. The edges of the wound showed more activity. The left labium was somewhat swollen and inflamed, and there were pain and tenderness extending along the course of the round ligament, as far as the lowest part of the abdomen on the left side. She had also had a well marked rigor. The superficial sutures were removed, and the inflamed parts ordered to be fomented. The quantity of wine was also diminished. The removal of the superficial sutures did not cause any gaping of the wound, which, in the course of the three or four following days, became firmly united. The inflammatory symptoms, on the left side of the pudendum, at the same time subsided. The retention of the catheter in the bladder had before this been discontinued, and, from the end of the first fortnight, the patient was allowed to evacuate the bladder without instrumental assistance. The diet was improved, and she was put under a course of medicine calculated to unload the vessels of the uterus, and to remove any tendency to congestion resulting from the long continued displacement of the organ. At the end of a month, she was allowed to leave her bed and walk about; and she shortly afterwards left the hospital, perfectly cured of an infirmity which had unfitted her for any kind of exertion, and made life almost a burthen.

Four months after the operation, I had an opportunity of examining her, and found that there had been no return of prolapse, even in a slight degree, of either the uterus or the vaginal walls.

Remarks. The result of this case appears strongly to support the opinion, which has been controverted, that procidentia uteri, directly ensuing on laceration of the perinæum, may be radically cured by the restoration of the natural support to the pelvic viscera, by the method now so successfully followed by Mr. Baker Brown. The operation is a beautiful instance of reparative surgery; and in bringing it to such perfection, and so fully making known all its minutiæ, Mr. Brown has added greatly to his other claims on the gratitude of his professional brethren, and of society at large.

WESTMINSTER HOSPITAL.

WOUND OF THE FEMORAL ARTERY AND VEIN.

Under the care of C. Holthouse, Esq.

R. W., aged 25, a fine looking, well made man, by trade a carpenter, was admitted into the Westminster Hospital, under the care of Mr. Holthouse, on January 27th, 1859, with a wound of the right femoral artery and vein as they pass through Hunter's canal.

The history of the case is rather curious. On January 15th —that is, twelve days before the patient's admission—he was shaving a piece of wood, which he held between his knees, with a sharp chisel about an inch wide, when the tool slipped, and penetrated the inner side of his right thigh to a considerable depth. Free hæmorrhage from the wound, to the amount of three pints, the friends say, immediately followed; and the blood came away in a jet which was projected to several inches. It was stopped by pressure, and the man kept his bed the whole of that day; but the surgeon who had been sent for at the time of the accident ordered him to get up and walk about the following day, which he did, going himself to see his "doctor", and walking sometimes as much as a mile. Immediately after the hæmorrhage which followed the infliction of the wound had ceased, a hard swelling formed around the wound, which pulsated so distinctly that it could be seen through the bedclothes. His medical attendant attributed the swelling to "proud flesh", and ordered it to be poulticed and rubbed with sweet oil. Although the man suffered severe pain in the wound, and could get little sleep in consequence, there was no recurrence of bleeding till eleven days after the accident, when a full stream of arterial blood burst from the wound while he was washing himself. This was repressed, as before, by tight bandaging over and above the wound; and he went to bed, and kept quiet for the rest of the day. The following morning, about eight o'clock, the hæmorrhage broke out afresh, and was again stopped by tightening the bandages, which had not been removed from the limb.

Immediately after this, he was brought to the hospital, being exceedingly pale and weak from loss of blood; his pulse 150; skin cool. A large pulsating tumour was situated about the middle and on the inner side of the right thigh, and the whole limb was greatly œdematous, from the pressure which had been made by the bandage to restrain the bleeding. A tourniquet having been placed round the upper part of the thigh, the bandages were removed, in order to examine the swelling. In the centre of this there was a small wound, from which a little venous blood trickled; and, while the patient was being questioned as to its history, a sudden gush of arterial blood took place, which indicated by its size that it came from the femoral artery. The tourniquet was immediately tightened, and preparations were made for securing the wounded vessel.

Operation. This took place at 11.30 A.M., the patient being under the influence of chloroform. Mr. Holthouse commenced the operation by enlarging the original opening upwards and downwards to the extent of four or five inches. This exposed the sac of the false aneurism, which was filled with coagulated blood; and, when this was turned out, a large wound was discovered in the femoral artery, which lay at a great depth from the surface, on account of the œdematous state of the limb, induced by long continued pressure. The arterial stream which issued from the wounded artery when the tourniquet was loosened, was accompanied by a very large venous one, which prevented the operation from being proceeded with till a ligature had been applied tightly below the knee: this effectually commanded the hæmorrhage from the vein; and a ligature was then passed around the artery below the wound, and another above it, which completely stopped all further bleeding from that vessel. A small artery on the side of the wound was then secured; and the wound itself was stuffed with pieces of sponge, in order to keep up pressure on the vein which had bled so freely. The edges of the incision were then brought together by strips of plaister, which completely encircled the limb; and a flannel roller was applied over them from the foot to above the wound; and a hot-water bottle to the foot, which, with the whole limb, had been quite cold from the time of the

patient's admission, in consequence of the pressure to which it had been subjected.

A small quantity of brandy and water was administered upon the completion of the operation, and shortly afterwards the following draught:—

℞ Tincturæ opii ♏xxv; ætheris chlorici ♏xv; aquæ ℥iss.

8 P.M. Reaction had taken place in the limb; and the foot was now warmer than the left. The skin was hot; pulse 156.

January 28th. He had had no unfavourable symptoms; pulse 120. The right foot was still the warmer.

℞ Tincturæ ferri sesquichloridi ♏x; aquæ ℥i. M. Fiat haustus ter die sumendus.

January 29th. He vomited this morning, after taking the iron; but, in other respects, he was doing well. Pulse 106.

January 30th. The wound was dressed this morning. It looked healthy; there was a free secretion of laudable pus. The sponges were removed, and the edges of the wound were brought together by long pieces of the water-strapping pretty tightly applied, the flannel bandage being replaced as before.

February 1st. The wound was looking very healthy. The ligature which was placed on the small artery came away. He was ordered to have some fowl for his dinner.

February 3rd. The lower of the two ligatures placed around the femoral artery came away this morning; that above was still firm. The wound was looking as healthy as could be.

February 5th. The ligature on the proximal end of the artery came away to-day (tenth day). The wound continued to look perfectly healthy; the man was gaining strength and colour, and ate two chops, and took a pint of porter daily.

February 9th. Both feet were of equal temperature; but some œdema of the limb still remained below the wound. The flannel bandage was still applied from the toes to the groin. He complained of some numbness of the foot.

February 20th. The wound was almost healed. Some numbness of the foot still remained, and he complained of occasional pain going up to the groin; but in other respects he seemed perfectly well. He was walking about this day for the first time.

February 25th. He was discharged at his own request, looking and feeling quite well; but he had a small sore on his right heel, caused by pressure while lying in bed.

Remarks. The above case is of very great interest, from the great difficulties which it presented in the way of conservative treatment, and the success which attended a bold and judicious effort to preserve the limb. The case is further of the greatest importance, as being an example, and one almost free from doubt, of a wound implicating both the main vessels, but in which gangrene was not present, and in which the circulation was carried on probably through the wounded vein, the opening being defended by the pressure of a bandage.

The only possible source of doubt which occurs to us is, that it is just within the bounds of possibility that the large venous stream which gushed out from close beside the wound in the artery might have proceeded from a large vein divided close to its entrance into the femoral; but this is highly improbable, since the vein does not usually receive any such branch in Hunter's canal; and the appearance and situation of exit of the stream of blood led Mr. Holthouse to the confident conclusion that the vessel implicated was really the trunk of the vein.

Original Communications.

ON THE CAUSES OF PULMONARY CONSUMPTION.

By James Turnbull, M.D., Physician to the Liverpool Royal Infirmary.

It is a most difficult matter to appreciate rightly the influence of the various causes which are known to have an effect in the production of tubercular disease of the lungs. In various systematic treatises they are fully set forth, but as the different causes act in combination with each other, it is by no means easy to discover how much of the injurious influence of any single cause is due to itself separately. The inquiry is, however, a most important one, as it has a direct practical bearing on the prevention and treatment of the disease. In carrying it out with a view to these practical objects, I shall confine myself as much as possible to the investigation of those causes, the influence of which can be appreciated with some degree of exactness, and proved by reference to statistical facts, such as those recently brought to light by Dr. Greenhow's Papers (*Parliamentary Papers relating to the Sanitary State of the People of England*, 1858), and the Report of the Army Commissioners.

Hereditary Transmission. This is an important predisposing cause of the disease, which is constantly forcing itself on the attention of those engaged in the treatment of pulmonary disease. When we consider how few persons there are who have any exact knowledge of the causes of death of even their near relatives, and that many are willing to conceal, even from themselves, the existence of any hereditary taint, it is not surprising we should find that those who have investigated this subject, numerically, have made statements, as to the influence of hereditary transmission, which are widely different. It would appear to have been transmitted in about 24½ per cent. of the cases admitted at the Brompton Hospital for Consumption; and out of 1,000, analysed by Dr. Cotton, the influence of hereditary taint was proved in rather more than one third. I have observed that the liability to tubercular disease is transmitted in two distinct modes, which may sometimes be observed separately, but are much more frequently seen acting together. One of these is the transmission of the constitutional tendency to the disease, which, if manifested in infancy or childhood, does not show itself so often in the lungs, but in tubercular affections of the brain or its membranes, or tubercular deposits in the glands or the bones, or in scrofulous ulcerations, and affections of the eyes, etc. Along with the constitutional tendency, there is often combined the other mode of transmission, which is a local weakness; a weakness, for example, of the lungs, which in early life, in those free from the constitutional taint, may give a liability to bronchial, and other simple affections of the lungs; but which, if combined with the tubercular taint, is apt, at a later period, to produce the development of consumption, if the individual be exposed to the exciting causes.

It has been stated that the father most frequently transmits the disease to the sons, and the mother to the daughters; but I believe that when one parent only is tainted, the disease is transmitted, in very nearly an equal ratio, to both sexes of the offspring. The liability to the disease is of course immensely increased when it is derived from both parents—a fact so well known to Insurance Companies, that most of them reject such lives, even though there may be every appearance of health in the individual. When a parent is actually affected with tubercular disease of the lungs, the tendency to the disease must necessarily be greatly increased in the offspring, and tubercles sometimes exist at birth even, when the mother is consumptive. I have had many opportunities of observing how it has fared with infants born of tubercular mothers; and, where the disease has been in an active condition, I can scarcely recall an instance in which they have not been cut off within the first two years. Though they have often had an appearance of health, it has seldom been retained long, and they have frequently died from convulsive attacks within a few months after birth, or during dentition.

Sex. It would seem that females are more liable to consumption than males. The number of women that died of this disease in England and Wales, was 26,986 in 1849; and the number of men 23,312. The proportion of men, however, who die of other pulmonary diseases is greater than that of females, and it would seem that whilst men are more liable to acute pulmonary diseases, women are more subject to chronic tubercular affections. That this greater liability does not arise simply from difference of sex, but from the habits, occupations, and more sedentary life of females, is proved by the fact that in many districts and towns, the relative proportions is reversed, the male death-rates, from pulmonary diseases, exceeding the female. In many instances, too, we shall see that the cause of this may be traced to the fact of the women being employed in some branch of manufacture, the prejudicial influence of which may thus be very correctly estimated.

In London, the male death-rate from pulmonary diseases is 758; the female being only 593; and it can also be shown that consumption is more common amongst the men than the women. At the Brompton Hospital the proportion of male patients is 61 per cent., to over 38 per cent. of females. There is the same preponderance of consumption in the male population of most of the large towns where the females are not engaged in some kind of manufacture which has a disturbing influence. On the other hand, there are many towns and districts where the females are largely engaged in such manufactures as silk, lace, cotton, and straw plait, in which we find the female pulmonary death-rate much higher than the male rate, and it can be shown that, in almost every instance, such

increase is due to consumption, proving that in-door occupations have an injurious influence. Above thirteen per cent. of the females in Cheshire are engaged in the silk and cotton manufactures; and the female death-rate exceeds the male in the proportion of 593 to 558. In the towns of Leek and Macclesfield, where the silk manufacture is carried on, it greatly exceeds the male death-rate. In Leicester and Nottingham, where a large proportion of the female population is employed in manufactories, the female mortality from pulmonary diseases exceeds the male; in the former, in the proportion of 549 to 488, and in the latter, in the proportion of 542 to 435.

There are also some small country towns where many of the females are engaged in such sedentary occupations as lace making, in which a manifest increase is thus produced in the mortality from pulmonary diseases amongst the females. Towcester is one of these, in which the male pulmonary death-rate is 475; whilst the female is no less than 573. Here we have not only a reversal of what is common throughout England and Wales, but it has also been ascertained that the excess of pulmonary diseases in the females occurs in adult life, and that it is produced by consumption.

Dr. Greenhow has found that in purely agricultural districts the female is higher than the male pulmonary death-rate, and he has also found, from comparing eight of the most healthy districts with eight of the most unhealthy, that in the healthy ones the female mortality is one-eighth more than the male, the reverse being the case in the unhealthy ones. From the first of these facts we may infer that in agricultural districts the men are employed in healthful out-door occupations, whereas there is something injurious in the habits of the women, or in the dwellings; and from the second fact shewing that the insalubrious influences act most on the men in the unhealthy districts, we must infer that these influences are connected with their employments and habits, and do not arise exclusively from unwholesomeness of the dwellings.

Town Influences. It has been ascertained by Mr. Neison that the agricultural labourer is the longest lived of all classes of the community. He is not the best fed, clothed, or housed, but the one condition in which he differs from all other classes is the amount and variety of exercise he takes in the open air. On the other hand, it is a well ascertained fact that the duration of life is curtailed by residence in towns, and it now appears, also, that there is no class of diseases in which a more decided increase is produced by town influences, than those of the lungs; amongst which consumption stands preeminent. In fact the relation between the pulmonary death-rate and the amount of consumption is so close that we may take the pulmonary death-rate as a sufficiently accurate means of judging of the prevalence of consumption. Glendale, in Northumberland, is the healthiest country district in England, and it is also the one in which there is the smallest number of deaths from pulmonary diseases. The number is 216 per 100,000, annually, and the comparison between this and the number in London, which is 675, gives us a vivid idea of the effect of town influences, which are even more powerful in the towns of Manchester, Liverpool, and Bristol, the rates of which are still higher.

Dr. Greenhow has made a comparison between eight urban districts, where the greatest number of persons die annually of pulmonary diseases; and the eight rural districts where the numbers are smallest; and the difference, which furnishes an accurate and comprehensive means of judging of the pernicious effects of town influences, is thus seen to be very great. The rate of the urban, or unhealthy districts, embracing Liverpool, West Derby, Manchester, Salford, Chorlton, Birmingham, Blackburn, and Leeds, is 811; whilst for the rural, embracing Bootle, Builth, Easington, Garstang, Glendale, Haltwhistle, Houghton-le-Spring, and Romney Marsh, it was 322. We see here that pulmonary diseases are no less than two and a half times more numerous in the unhealthy town districts than in the healthy rural ones. The rate for all England and Wales standing between these two rates at 552.

The effect of town influences though always apparent is by no means uniform. This is at once seen in comparing the death-rates of Bristol and Hull. Though the total deaths in Hull, from all causes, exceed those in Bristol,—and these two seaports are not materially different in respect to size and density of population—we find that there is a wide difference in the amount of pulmonary disease, which in Bristol, the healthiest town in other respects, is at the rate of 851, and in Hull only 556. This proves that there is no fixed relation between the size of towns and the prevalence of pulmonary disease, or between the general and the pulmonary death-rates.

It has also been shewn by a comparison between the pulmonary death-rates, and the density of the population of these towns, and those of Gravesend and Ipswich, that there is an absence of definite relation between the population density and the pulmonary death-rate. Whilst, therefore, town influences, which must embrace impurity of the atmosphere from smoke, the unhealthy emanations always existing in crowded localities, imperfect ventilation of houses and factories, and the more sedentary occupations of an urban population, are injurious, there are other circumstances affecting the inhabitants of some towns besides these, which require further and more minute investigation.

To the influences already mentioned, may be added the effect produced by the absence of the physical and mental stimulus afforded by variety of scene, and especially by rural prospects, the weariness caused by the monotonous character of many occupations; and not least, the cares and anxieties of life; all of which are causes which, it has been justly observed, help to swell the catalogue of illness and add to the register of deaths in great cities.

Occupation. Those occupations which call for much exercise in the open air are the most healthy; whilst, on the other hand, we have seen from some of the preceding facts, that in-door occupations have a direct and obvious tendency to cause consumption.

The relative influence of in-door and out-door employments on this disease, may be still further shown by reference to the statistics of the Brompton Hospital for Consumption; 63 per cent. of the male patients admitted followed in-door employments; only 30 per cent. out-door occupations; and the remainder mixed employments. All the females were engaged in in-door employments. Dr. Cotton has calculated, from his own experience, that consumption is five times as frequent in those engaged in in-door work as in those employed in active out-door pursuits.

Those employments are most injurious which have an effect in restraining the function of respiration, by preventing the free action of the muscles of the chest, and hence one reason of the prevalence of the disease to so great an extent among tailors, shoemakers, printers, milliners, and clerks.

Dr. Greenhow has furnished some statistical data which assists us in estimating the effects of certain kinds of manufacturing occupations. He states that the pulmonary death-rate is usually excessive in towns where both males and females are largely employed in the manufacture of textile fabrics; but that the difference in mortality of the sexes is rarely great.

The pulmonary death-rate is high in all the large cotton manufacturing towns; and that factory labour tends to generate consumption is conclusively shown by the fact that though the pulmonary mortality of Manchester is lower than that of Liverpool for the whole period of life; it is, during adult life, greater in Manchester, in both the sexes, than in Liverpool.

The effect of the silk manufacture in producing a high rate of female pulmonary mortality in Leek and Macclesfield, and of the lace and other kinds of manufacture in raising the female above the male death-rates in Nottingham, Leicester, and other places, has been already adverted to.

The influence of the woollen manufacture on those engaged in this kind of occupation requires more particular notice, as it would seem to be not only less injurious than others, but to produce, through the action of the oil used in many of the processes, a positively beneficial effect upon the health, and which, it has been affirmed, is prophylactic against scrofula and consumption. Dr. Greenhow states that with the single exception of Leeds, where other kinds of manufacture of a more or less pernicious nature are carried on, the mortality in the districts of the woollen manufacture is rather below what prevails in the cotton and silk districts. In Bradford, which is a woollen district, the pulmonary death-rate is 607; whilst in Preston, an exclusively cotton district, it is 722. It is, however, in the woollen factories of Scotland that the prophylactic effect of this kind of employment has been more particularly observed, and to Dr. Simpson is due the credit of making known this fact, and tracing the cause to the beneficial operation of the oil used in some of the processes.

Dr. Simpson has collected the concurrent testimony of many medical men, practising in the woollen districts of Scotland, on this subject, and I condense, from his paper, the remarks of Dr. Dyce.

With reference to the extreme rarity of consumption among the wool-mill girls, this is a fact with which all here have long been familiar, so much so that seldom or ever is a consumptive

tendency met with among the wool-mill girls. Any one accustomed to see the women of the cotton and wool mills, can generally tell, from their appearance, to which mill they belong. The cotton-mill girls are generally, though healthy looking, pale, and bleached; whereas the wool girls are rosy and fat. He also states that it has been customary, when any young girls have been noticed whose looks indicated delicacy, to recommend them to change the mill, and that a remarkable effect has often been noticed from a few weeks' work in the wool mill; from the pale, pasty look, they have become healthy and plump. Dr. Simpson states that the great difference and peculiarity in woollen as compared with cotton mills, consists in the fact, that while the hours, the occupation, etc., are much the same in each, in the woollen mills a very large quantity of oil is used, and the bodies of the workers are brought, in various ways, freely in contact with it. It is, I believe, in this one item that the great difference between cotton working and wool working consists; and it is to this material, the oil, as freely used in some of the processes of the wool factories, that the operatives themselves, universally, and, as I believe, properly, attribute the salutary nature of their occupation. He has also pointed out that the degree of exemption among the operatives is by no means equal in all the processes of the manufacture, but is regulated by the more or less oily nature of the department of work in which they are engaged.

[*To be continued.*]

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By William Addison, M.D., F.R.S., Fellow of the College.

Lecture I (*concluded*).

VI.—The Corpuscles of Blood, in the Performance of their Natural Functions, contain and excrete Matter which is poisonous to the Brain.

Blood is distributed by arteries; it returns by the veins. There is a great difference between arterial and venous blood. This difference is, for the most part, if not entirely, referrible to the corpuscles. The red colouring matter is contained within them, and the bright colour which is communicated to blood by oxygen, as well as the dark shade which is induced by the transmission of carbonic acid through it, are the actual shades of colour which we see in arterial and venous blood. Venous blood is necessary to the well-being of the liver, and also to the normal function of the lung; but, should venous blood be transmitted by arteries to the brain, it is well known that symptoms of poisoning begin.

No suggestion for the recovery of drowned persons has been attended with so much success as the "Ready Method" of the late Dr. Marshall Hall. The principle, therefore, upon which his method is founded, may probably be accepted as true.

"During the circulation," he says, "the oxygen inhaled by respiration unites with the carbon of the blood, forming carbonic acid, which is exhaled in its turn by respiration, except in cases where the respiration is suspended, as in drowning and other forms of apnœa. In apnœa, the carbonic acid retained in the blood poisons it; and the organs, beginning with the brain and spinal centre, are in their turn poisoned by this blood-poison. The circulation," he goes on to say, "without respiration, is a blood-poisoning process; respiration is a depoisoning process. By respiration, the carbonic acid poison formed during the circulation is eliminated from the blood, and evolved from the system."

The consumption of oxygen and the formation of carbonic acid stand in a direct ratio with the number or amount of the blood-corpuscles, and with the number of respirations made in a given time. It is well known that the alteration of colour from arterial to venous, which blood undergoes by circulation, is an alteration which takes place *within the corpuscles*; also, that the re-arterialisation of blood by respiration involves a change in the corpuscles. It must be, then, that the qualities acquired by blood during circulation, and discharged by respiration, are qualities of the corpuscles, inasmuch as the change of colour, which denotes the change of quality, is observed in the corpuscles. When, therefore, symptoms of poisoning arise from the circulation of venous blood through the brain, the poison must be concluded as contained within, and as generated or produced by, the corpuscles.

Urine is a fluid separated from the blood by the kidneys; and urine contains a substance which, when applied to other tissues than those of the kidney, will act as a poison. Sir H. Halford met with five instances of suppression of urine in the course of seven-and-twenty years practice, and in every instance the patient died from poisoning of the brain. It is but reasonable to infer that urea, which is separated in large quantity from the blood by the kidneys, should be a product of the metamorphosis of a substance of an invariably uniform composition.

"Amongst all the higher classes of animals," says Dr. Simon, "and many of the lower, in the most varied forms of existence, and under the most opposite kinds of food, we find urea and uric acid, or one of the two, as a constant secretion of the kidney. It seems opposed to all reason to imagine that, in animals as different in structure as they are opposite in their habits of life, and under every possible variation of circumstances, these fixed and definite compounds should be products of the metamorphosis of the plasma. It is easy, however, to conceive that the corpuscles which, although different in their form, are similar, if not identical, in their chemical constitution, in the blood of all animals, should yield similar products as the result of their metamorphosis."

If this reasoning be admitted—and it is urged with much force and perspicacity by Dr. Simon—it follows that urea, or a nitrogenous substance represented by that compound, and withdrawn from the blood by the kidneys, is an excretion of the corpuscles discharged into the plasma. Hence carbon or carbonic acid is an excretion of the blood-corpuscles discharged at once into the atmosphere; whilst urea is an excretion discharged into the plasma, and withdrawn therefrom by the action of the kidneys. Both these substances, if unduly retained in the blood, act as poisons to the brain; and we must conclude that the corpuscles of blood, in the performance of their natural functions, generate matter which is poisonous to the brain. Halitus within the corpuscles, if not discharged by respiration, and other excretions, if retained in the plasma, are poisonous.

The properties of the corpuscles, then, substantiate the argument drawn from a consideration of the properties of the plasma, as to the necessity for holding the two parts of the blood distinct, pathologically as well as physiologically. The corpuscles are independent organisms, and the plasma is the fluid in which they swim. The properties of the one are very different from the properties of the other.

VII.—Relations of Diet to the Plasma, and of Air to the Corpuscles.

The normal constitution of the blood is preserved by diet and respiration. The alimentary canal and the lungs are the only two channels by which outward material substances are received into the interior of the body. Both have reference to the blood; diet, or food and drink, to the replenishment of the plasma; air to the nourishment of the corpuscles. The alimentary canal is, as it were, the coarser way by which substances are received into the body; whereas, in the structure of the lung, everything is fashioned with special reference to the admission of aerial elements into immediate contact, as it were, with the highest elements of the circulating fluid—the corpuscles of the blood.

As the plasma is subjected to a continuous change and consumption during the nutrition of the body, it becomes a matter of necessity that it should also receive a continuous supply. This is afforded to it by the chyle. Chyle is derived from substances received into the stomach—food and drink; it mingles with and augments the bulk of the plasma; and it is from the plasma that the red corpuscles derive part of their nutriment. There is, therefore, a more intimate relation between diet and the fluid of the blood, than between diet and the corpuscles; that is to say, any substance or poison entering the blood from food or drink must first enter and mingle with the plasma, before it can come into contact with or affect the corpuscles. But the case is different as between the corpuscles and the atmosphere.

From the peculiar distribution of the capillaries, and from the extreme thinness of the walls of the pulmonary air-cells, the blood-corpuscles are brought in the lungs into almost immediate contact with the air, and with the substances contained in

solution in the air. The absorption of air through the humid membrane of the air-cells of the lungs is facilitated by the immense extent of surface presented, over the whole of which a thin stratum of blood-corpuscles is simultaneously exposed to the atmospheric influence. The permeability of moist membranes by fluid and gaseous substances is a well known fact; dark or venous blood, inclosed in a moist bladder, and exposed to the air, soon assumes the arterial tint.

"I asked Mr. Boulderson," says Bishop Heber, in his *Narrative of a Journey through the Upper Provinces of India*, "if it were true that the monkeys forsook these jungly forests during the unwholesome months. He answered, that not only the monkeys, but everything which has the breath of life, instinctively desert them from April to October. The tigers go up to the hills; the antelopes and wild hogs make incursions into the cultivated plains; and those persons, such as dâk-bearers and military officers, who are obliged to traverse the forests in the intervening months, agree that not so much as a bird can be heard or seen in the frightful solitudes; yet during the time of the heaviest rain, while the water falls in torrents, and the cloudy sky tends to prevent evaporation from the ground, the forest may be passed in tolerable safety. It is in the extreme heat, and immediately after the rains have ceased, in May, the latter end of August, and the early part of September, that it is most deadly. In October, the animals return. From the middle of November to March, troops pass and repass; and, with common precaution, no risk is apprehended."

This may be an extreme instance, but it is one of a very numerous class. It is well known that miasms or poisonous substances are diffused through the air, and that they exist in a very concentrated form at certain times, in particular localities. To enter in detail upon this topic is quite unnecessary. The question which arises upon the view we have taken of the constitution of the blood—of the relations of diet to the plasma, and of air to the corpuscles—is, whether the contagious fevers to which aerial poisons give origin are to be referred to the plasma or to the corpuscles.

VIII.—The Corpuscles of the Blood have a Property of Resistance against injurious Agents; they are not disordered or disturbed by every Quantitative Change in the Plasma.

First, as respects symptoms of poisoning through articles of diet, or through substances taken by the stomach, in food or drink: the poison enters the plasma, mingles and circulates with it. Through the plasma it must reach all, but it may affect injuriously one only of the parenchymatous organs: for example, mercury the salivary glands; opium the brain; strychnia the spinal marrow; digitalis the heart; and so on of many other poisons which exhibit their action according to the affinities of the different parenchymatous organs for particular poisons. In all these examples, the symptoms begin in, and may be limited to, some local parenchymatous organ, notwithstanding the general distribution of the fluid which contains the poison. It cannot be disputed that the same poison does not act equally upon all the parenchymatous organs, though all may be exposed to its presence. Some suffer derangement; others do not. And if, to account for these special phenomena in one organ only, we introduce the doctrine of affinity or predilection, we must also allow to those parenchymata which escape a measure of indifference or resistance. This teaching holds a prominent place in chemical philosophy. Affinities and resistances are as often argued of inorganic as of organic or living bodies.

The corpuscles of blood are quite as much a group or community of independent organisms as are the special elements of the liver, brain, or kidney; and, if the elements of one parenchymatous organ can remain indifferent to or resist the injurious action of a poison circulating in the plasma whilst the elements of another are suffering from it, it is not unreasonable to infer a similar property of indifference or resistance in the corpuscles of blood. We have frequently tried the effect upon the corpuscles of substances which, if present in the plasma, will poison the brain or nervous centres, such as solutions of prussic acid, morphia, and strychnia; and we find they produce no other or more effect upon them than so much water.

But, without relying upon experiments of this kind, we take the general principle, and argue for the blood-corpuscles the same kind of properties as is allowed to other cellular elements to the elements of the parenchymatous organs. And we say the blood-corpuscles may resist the action of, or be indifferent to, sundry matters in the plasma, which may nevertheless be producing disorder in some local parenchymatous organ. Let it be observed, the argument does not assume that poisons which first affect the brain or other local organ, will not affect the corpuscles also, if in sufficient or overwhelming quantity; but only that there are many substances which, being present in the fluid of the blood in small quantity, will affect its qualities injuriously in relation to a parenchymatous organ before sensibly disturbing the corpuscles.

Secondly, as respects poisoning of blood through miasms in the atmosphere; it is here to be observed, that the poison is received through the lungs, where the corpuscles are brought into contact with the air, and with the things in solution in it; and where, moreover, as has been shown, the physiological function performed is one specially between the corpuscles and the air. The change which blood undergoes in the lungs is specially a change in the corpuscles.

Through diet, and through the atmosphere, elements of blood-disorder may enter. Through the former the plasma or fluid, through the latter the corpuscles, are first affected. The qualities of the plasma undergo numerous limited changes, from diet, and from various other substances received through the stomach. But it does not follow, necessarily, that the corpuscles must suffer a disturbing change in consequence thereof. They have, up to a certain extent, a property of indifference, non-affinity, or resistance; and therefore maintain their normal constitution and function under various limited alterations of the fluid in which they swim.

On the other hand, from contact of the blood with poisonous substances in the atmosphere, the corpuscles, by reason of the special function of respiration, may be the first part of the blood to suffer disorder; whereupon their disordered condition is reflected upon the plasma, because this fluid is the depository of their excretions. That is to say, from errors in diet, or from poisonous substances taken by the stomach, the blood may be deteriorated in one only, and that the least important of its parts—namely, the plasma; whereas, from poisonous substances in the atmosphere, blood may be deteriorated, commencing with the corpuscles. And, as it cannot be denied that a poisonous quality in venous blood is referrible to the blood-corpuscles, so therefore the question arises, whether pathological poisons—if we may so call them—the virus of small-pox, and other contagious poisons, are not also to be referred to the corpuscles of the blood; and, should this proposition be established, the physical difference between the two parts of the blood rises into great importance.

Let us briefly recapitulate the physiological facts upon which we shall rely in our future discussion of phenomena of fever and inflammation.

The corpuscles of the blood are independent organisms, swimming in the plasma, deriving from it and from the air, materials suitable to their growth and functions, and discharging into it and into the air, the matter of their excretions, namely: carbon, or carbonic acid, into the air, and a nitrogenous compound, or urea, into the plasma. Depurating organs, located at various points of the circulation, withdraw from the plasma the matters which, if retained in it, would injure its qualities or composition, and the elements of the different depurating organs have different or special affinity for different substances in the plasma. We have dwelt specially on the change which the corpuscles experience in their colour by exposure to the air in the lungs, and upon the poisonous quality they acquire if the normal change is not effected; and we have shown that these bodies, if they take or select from the plasma and from the air materials suitable for their maintenance, must have, in common with other cellular bodies, a property of indifference, or resistance to some extent, against deleterious substances.

As respects the plasma, or fluid of the blood, we have noticed the close relation between it and articles of food or drink through the chyle. Substances received into the stomach in diet and poisonous substances taken in the same way may be speedily detected in the secretions, therefore the plasma must be a fluid of variable composition: and its relatively inferior position to the corpuscles was argued from these facts, and from the treatment of cases of cholera in 1832, by large quantities of a saline injection, thrown into the blood.

The conclusions at which we have arrived are:—

That changes in the qualities of blood from errors in diet, or from poisonous substances taken through the stomach, commence in, and may be limited to the plasma; whereas changes in the qualities of blood, from poisonous substances dissolved in the air and inhaled by the lungs, may commence in the corpuscles. In the latter case both parts of the blood

become disordered, not simultaneously, but in succession; the corpuscles first and then the plasma.

These conclusions are not strained to the support of any favourite theory. The great physical difference between the fluid and the corpuscles of blood; the absolute manner in which the fluid depends upon diet, food and drink; the contact of the corpuscles with the atmosphere in respiration; the change in their colour and properties which ensues; the matter poisonous to the brain which arises within venous corpuscles; the action of the depurating organs upon the plasma, exhibiting special affinities;—all these are received doctrines of physiology, or flow logically from them; and we make them the basisof a therapeutical doctrine in blood-diseases, distinguishing between the fluid and the corpuscles.

British Medical Journal.

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FREE TRADE IN PHYSIC.

What is the meaning of a term very frequently employed—"Free Trade in Physic"? Generally, the term free trade is employed to signify the absence of any restrictive duties on the production or importation of any article; so that the article in question comes into the market unfettered by any charges save those of its production and of its carriage to the market. How is this signification applicable to the article under consideration?

The article which we have to consider—physic—means medical and surgical skill, and moral integrity. These we may lay down as essential elements of the article; but it will command a higher price if it be combined with good general education and gentlemanly address, which are the finish and polish of the article. And, to constitute free trade in physic, we can conceive nothing more required than that this article be submitted to the public, who should be left free to choose what they want for themselves, paying the market price.

Well, but is not this already so? In small country places, indeed, there is often no choice in this matter; but it is so too as concerns the butcher and baker of the village; and we have just as often heard complaints of the dictatorial conduct of the only butcher, as of the only doctor. And it is just as open for a new doctor to set up as for a new any one else who ministers to the wants of the community; and if the country folks cannot have a second opinion in their illness, without sending to a distance, and paying extra for it, still this is no more than they have to do when their wants exceed the simple resources of *the* shop of the village. Practically, in this sense of the term, there is now the freest trade in physic.

If the demand for free trade in physic mean anything, then, it means something more than that people shall be at liberty to choose their own doctor; for, as the law and custom stand now, they really may have any one whom they like, of whatever dignity, and of whatever creed, from the President of the College of Physicians to the humblest herb-doctor, by paying the market price. And no one is so humble, but has perfect liberty to take up any branch of the profession he likes. The license to practise will most assuredly follow the acquisition of the necessary knowledge; and the highest dignities in an aristocracy of science are open to all alike who will be at the pains to enter the freest of all competitions.

The only meaning to be attached to the term in question is, that the article itself shall be different. The public are free to choose, and now they generally choose the article with the stamp upon it, though the article without the stamp is to be had, and, indeed, only wants remunerative patronage to be indefinitely multiplied; only a doubt will occur, at the most trying time, as to whether this is the real article. Free trade in physic, to be something which does not exist now, must be the removal of all distinction between the carefully got up article and the thing which goes by its name. Let us briefly consider what would be the result of the abolition of this stamp, still to use the same phraseology; and what this stamp really signifies.

And, first, of the real object of the stamp, which is assumed to be protective of physic.

We are free to go to whatever shop we like for most things of daily use. Things which we understand we get anywhere; things which we feel are beyond our knowledge we trust to some one else to get for us, or we get them from some particular maker whose name is a guarantee that the article is good of its kind, to whom, moreover, we may complain in case of any fraud. Few of us, for instance, could assay our teaspoons; but we buy them on the faith of the Tower mark, by which the article is avowed as coming up to a certain standard. We can judge of the fashion, and finish, and workmanship ourselves; but we need the stamp to attest that of which we are no judges. Such, and no higher if you like it, are the functions of the various medical licensing bodies. They stamp the article as it passes through their hands, before it goes out into the market, to attest that it posseses a certain value.

Next let us see what would probably ensue on the entire rejection of this distinctive mark, if each one were compelled to get his knowledge where or how he could, or allowed to do without it altogether; and calling himself or herself what they liked, were invited to sell their services to the best customer uninfluenced by law.

The first effect of the abolition of legal recognition of all the present licensing bodies, and the titles which they confer, would probably be a vast increase in the number of bodies conferring titles, and some little confusion in the public mind as to which of these bodies were, and which were not, to be trusted. This point settled, the next result would probably be a number of actions for obtaining money on false pretences, on the plea of membership of the well-reputed Colleges, which would thus receive oblique testimony of the estimation in which they were held both by the public and by those who sighed in vain for the stamp of their approval, unless actions of this kind were interdicted as opposed to free trade. For it may be laid down as certain, that the diploma of a well reputed Board would be coveted by those entering into practice, and required by the public seeking advice, whether or not the law required or acknowledged these diplomas. Some, doubtless, would practise without them; but the majority would, without doubt, still obtain them as now.

Assuming that all the educational arrangements went on as they do now, it is almost certain that the mere abolition of the legal rights of the licensing bodies would not affect the general relations of the profession, in the first instance, in any more important way than what has been just now sketched out as probable. On the education of medical men, however, such a proceeding would probably after a while act very injuriously,

and most effectually degrade the profession as a whole. For there are only too many who would shirk the narrow passage of a conscientiously strict examining board. How many a shop apprentice would come out as "late with the celebrated Mr. So and So"? What small experience anyone must have of young men who would cease to *protect* steady industry through the long, expensive education by which only the knowledge of medicine is to be attained! To *protect* him,—that is to give dignity, not pecuniary advantage, to the stamp which attests that he has reached a certain standard of proficiency in the laborious way in which alone it is to be attained.

Only one word more, and this on private grounds. Is there a free trade demagogue, before whose thunders the hustings shake, but who feels, while the excited mob cheers him on, that he must cut short his triumph to attend to the calls of an irritable bladder and all the troubles of an enlarged prostate, and does not rejoice that he has at his call a humane, well-educated surgeon, and not a rascal who extorts money literally at the point of the knife? Did such an one ever feel what it was to get thereby well, and while nervous and exhausted, praying only for rest and quiet, has he not rejoiced that his physician was not a roaring friend of progress? When life, to be tolerated at all, must glide soft and smooth, hour after hour, what a blessing not to have it hourly instilled into one just then that an inactive existence is not life; that the world is rushing noisily on, leaving one hopelessly behind. Has illness ever befallen one very tender and dear to him, bodily or mental, and has he ever felt how confidently he could rest on one whom the old institutions of our country had trained and tried, and then sent forth as a learned, skilful, pure, and honourable man? If so, he will be very careful how he abolishes that stamp which distinguishes throughout the length and breadth of the British Empire the educated practitioner from the pretentious charlatan. And such, if we mistake not, would be the tendency of the so-called doctrine of Free Trade in Physic.

THE WAKLEY TESTIMONIAL.

In this age of testimonials, it is the misfortune, that as a rule, "the round pegs get into the square holes." Second-rate fussy persons, great at vestry boards, or otherwise locally noisy, are sure sooner or later to be beteapotted and besalvered by their too partial friends, whilst the real good men and true have only their own consciences as their exceeding great reward.

We think few persons can rank the Editor of the *Lancet* among the class first mentioned. He has made himself conspicuous neither by the act of dining his friends, nor of jobbing his relatives. He has hewn his way to the head of the hebdomadal weekly medical press in this country by his strong will alone; and we cannot refrain from saying that not only medical journals, but the entire profession, have greatly benefited by the fight, for a long time single-handed, which he has waged against corporate abuses and what may be termed the close-vestryism of our profession. When the *Lancet* first started, everybody's hand was against him; the great lecturers at the powerful endowed hospitals treated his attempts at giving permanency and value to their lucubrations as an insult and a crime. As in the House of Commons in the time of Dr. Johnson, reporters were scouted from their presence. If we only look at the state of the case at present, how extraordinary the change that has taken place! A lecturer of the present date delivers his essays over the heads of his audience—he addresses his thoughts to the press, and thereby enlarges the circle of the class-room to the limits of the civilised world itself.

For a large part of the vast gain both to the medical press and to the medical public, which has taken place, Mr. Wakley can undoubtedly make good his claims. We sail in smooth water now; but the early days of medical journalism were of a far more boisterous character. The *Lancet* and its bold captain suffered and returned rude knocks and buffetings, but generally he triumphed; and triumphed, we believe, where nine out of ten would have failed.

There is a certain Cromwellian strength—rough, if you will, but yet strength—that enabled Mr. Wakley to beat down successfully the many combinations formed against the *Lancet*, which would have triumphed, had they been directed against less stern or more fastidious stuff. Mr. Wakley was the man of his time; he was the ready and strong instrument raised up to do battle with intrenched corruption. For the good fight he fought, and for the bold manner in which he carried aloft the banner of a free medical press, we think he is entitled to the thanks of the medical profession, and that he has well earned a liberal testimonial at its hands. The list of the Committee of this testimonial proves that he has earned golden opinions from all ranks, both within and without the profession; and we heartily hope that such a sum will be collected as will be sufficient, not only to afford a splendid gift to the man to whom honour is due, but also to found a fellowship such as shall keep his name green among succeeding generations of practitioners. It is the intention of the committee, we understand, in case the funds will allow, to institute a Wakley scholarship in the London University, to be competed for by all the world. The idea is a good one, and we wish success most heartily to the fund in process of collection.

THE WEEK.

When Her Gracious Majesty decreed that the order of the Victoria Cross should be shared by the surgeons of the army, a new era was certainly initiated in the Medical Profession. The honour was graciously bestowed and no less honestly deserved. This recognition of the medical element of the army will result in the advantage of the department itself of the service, and, as a consequence, of the public. Our readers will be glad to learn that the artist who has set himself to commemorate the deeds of the Victoria Cross heroes, has included in his gallery at the Egyptian Hall, portraits of two of the surgeons who have been decorated, viz., Dr. Mouat, C.B., and Assistant-Surgeon Sylvester. It is not our business to write on the fine arts; we therefore restrict ourselves to saying that the pleasure of seeing members of our own profession having place in a gallery of heroes, was greatly added to by the brilliancy of the labours of Mr. L. W. Desanges. We can speak as to the faithfulness of Dr. Mouat's likeness; and if Dr. Sylvester's be as good, his friends have reason to congratulate themselves.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.

President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

Philip H. Williams, M.D., *General Secretary.*

Worcester, April 26th, 1859.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-third Annual Meeting of this Branch will be held on Wednesday, June 8th, at Chester, under the presidency of E. Waters, M.D.

Gentlemen who intend to bring forward cases or communications are requested to send notice to the Secretary as early as possible.

A. T. H. Waters,
Honorary Secretary.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

A social and scientific meeting of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on

Friday, May 20th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 12th, 1859.

F. C. Skey, Esq., President, in the Chair.

THREE CASES OF ANEURISM OF OR WITHIN THE ORBIT, TREATED BY LIGATURE OF THE COMMON CAROTID ARTERY; WITH OBSERVATIONS.

BY THOMAS NUNNELEY, ESQ., F.R.C.S.

After mentioning the rarity of the affection, the author alluded to those few cases which have been recorded, of which four have been brought before this Society, and are published in its *Transactions*. Two of those cases were not only the earliest, but amongst the most interesting that have been related, and for a great number of years they stood alone. They are those of Mr. Travers, in the second volume; and of Mr. Dalrymple, in the sixth volume. Many years afterwards, Mr. Busk reported a case of his own, and also mentioned another treated by Mr. Scott, in the twenty-second volume. Two cases occurred in Paris, in 1839; one to Velpeau, and another to Jobert. Mr. H. Walton had published a case of an infant, in which he operated: and three instances had occurred in America, where Dr. Van Buren operated in a case of traumatic aneurism in the orbit, in a young man, who had also symptoms of fracture of the base of the skull; and Drs. V. Mott, and T. R. Wood, had each tied the carotid, for the cure of integumentary nævus, extending into the orbit. There were also three other cases, of doubtful nature, mentioned by Dupuytren, Schmidt, and Frere; one of which, however, if not more, was quite as likely to have been malignant disease as aneurism. Three cases had lately come under the author's observation, in all of which the common carotid artery had been tied. Since Mr. Travers first declared the disease to be aneurism by anastomosis, it had commonly been so regarded; but from this opinion the author dissented, for the reasons given at the conclusion of the paper.

Case I occurred in a healthy man, aged 31. The early history and origin of the complaint were at first very obscure, made purposely so by the patient to conceal the true cause of it—a hard blow upon the left eye in a drunken midnight fight. At first there was some protrusion of the ball, congestion of the conjunctiva, and dulness of vision, but no pulsation. It was suspected that a chronic abscess, or serous cyst, might be forming deep in the orbit. The eyelids gradually became much congested, swollen, and lobulated, as though about to burst. A minute puncture, followed by considerable effusion, clearly showed the distension to be caused by blood. Subsequently, aneurismal thrill and pulsation were detected. As pressure on the carotid at once arrested these, and allowed the protrusion and vascularity of the eyeball to subside, the artery was tied, with the effect of immediately removing some, and materially diminishing all the symptoms. The brain was unaffected on tightening the ligature. The patient progressed most favourably until the twenty-fourth day after the operation, when, without any assignable cause, the symptoms somewhat returned, but were soon checked by venesection and purgation. In a month he had returned to his work, the ligature being still fast on the artery. After continuing at it for the space of three weeks, suddenly, without, as he then said, any known cause, during the night, the injection, protrusion, and pulsation in the eye returned to such a degree as to render necessary consideration what further should be done. The propriety of extirpation of the contents of the orbit; the ignition, by a battery, of wires passed into the orbit; the introduction of threads or wires coated with nitrate of silver or sulphate of copper; the injection of perchloride of iron or tannin; and the ligature of the other carotid, were discussed, and the latter plan determined upon, if depletants did not succeed. Repeated venesection, purgatives, low diet, cold to the orbit, and upright position, were rigorously adopted, and with the best effect. The symptoms all subsided, when, before the case could be said to be complete, the man was put into gaol, and was subsequently lost sight of for some weeks. He then worked hard as an excavator, and housebreaker, for which he was sentenced to penal servitude. When seen, during the last month, in Wakefield prison, it was found that the sight of the eye was lost, but in every other respect he was perfectly well. He then voluntarily stated that he had only himself to blame for the recurrence of the symptoms, as on the first occasion he clandestinely left the house on a very cold day, walked some distance, and ate and drank freely; and on the second occasion he had been out all night poaching. The ligature did not come away until ninety-six days after the operation.

Case II. In a man, aged 38, the affection came on without any assignable cause. It had existed many months. The operation was perfectly successful, and he returned to his work, as a weaver, in a month after it. In him also, while wheeling a barrow, there was a sudden renewal of some of the symptoms, which, however, a few days rest removed; and when seen twelve months after the operation, the eye was perfect, a little bogginess of the lids being the only vestige of the affection.

Case III. In a woman, aged 65, the disease came on "suddenly as the crack of a gun," while she was stooping to take off her shoes. It was attended with more pain and more active symptoms than in the other two; the pain in the head and eye was most distressing. The operation was a difficult one. The neck was short and thick; there was a large bronchocele, with many congested veins, and the carotid divided unusually low in the neck. There was some hæmorrhage from an unseen vessel. The brain was seriously affected on the tightening of the ligature. There was convulsion of the same side of the body, and partial paralysis of the opposite side; the local symptoms, however, disappeared instantly. She sank on the sixteenth day after the operation, having had repeated losses of blood from the wound. There had been paralysis, more or less complete, of the right side of the body, with constant partially controllable movements of the left side; difficulty of speech, and some impairment of intellect. On examination of the body forty-eight hours after death, the external appearance of both eyes was the same. The brain was very pale, containing very little blood; but, so far as could be judged, the same on both

sides. There were no signs of recent inflammation or effusion, but there was old general thickening of the arachnoid membrane. The right hemisphere of the brain was of a natural firmness; the left was soft, and in the lower of the middle lobe, just over the entrance of the carotid artery into the aneurism, was a patch as large as a hazel nut, quite broken down. The carotid artery, on its emergence from the bony canal, was enlarged, and surrounded with a small coagulum, which involved the origin of the ophthalmic branch. The latter vessel was enlarged, and its coats diseased, as were its continuation to the inner side of the orbit, and the lachrymal branch: these were filled with coagulum. All its other branches were so small as hardly to be seen. There was nothing like aneurism by anastomosis in the orbit. All the cranial arteries were very patulous, and studded with atheromatous and earthy deposits. The ligature had been securely placed upon the carotid, but somewhat near its bifurcation; below, the vessel was well filled with coagulum, and the sheath, as low as the sternum, consolidated with fibrine; but above the ligature the vessel and all its branches were quite open, there being neither coagulum nor fibrin. The bronchocele extended nearly to the sternum. The parts were placed upon the table, and also drawings of the appearance of the eyes, just previous to the operation, in all the three cases.

The author commented upon the nature of the affection, stating the points in which, in its origin, progress, symptoms, and treatment, it differed from aneurism by anastomosis, and expressed his conviction that it was an error to so call it; that in reality it might be true aneurism or false, circumscribed, or diffused aneurism, either within the orbit or of the carotid within the cranium, near to the origin of the ophthalmic branch. It was remarked that all these cases occurred on the left side, and that amongst those reported which had arisen spontaneously, the majority were on the left side, and in women; whilst those which supervened upon local violence were, as might be expected, most common in men, and on either side. The cases were, however, too few to justify more than the calling attention to the fact, which may be only accidental, and be reversed on examination of a greater number.

Mr. Curling considered the cases described by the author should not be denominated aneurisms, but pulsating tumours in the orbit. In some cases it might happen that there was aneurism by anastomosis, and afterwards a changed condition of the blood-vessels, giving rise to a pulsating tumour, as well as true aneurism of the ophthalmic artery. Such a change requiring operation might take place, not only in early life, but in adult age. In referring to the recorded cases, the author had overlooked a paper by himself (Mr. Curling), in the thirty-seventh volume of the *Transactions*, where he related a case in which he had tied the carotid artery for a pulsating tumour in the orbit. It was described as "traumatic aneurism of the ophthalmic artery."

Mr. Hulke related a case which came under the care of Mr. Bowman last year. All the capital signs of orbital aneurism were present. The common carotid artery was tied; death ensued; and at the autopsy no aneurism could be found. The patient was a woman, forty years old, of intemperate habits; in a scuffle she received a blow on the left temple, which stunned her, and she fell. Next day she had severe pain in the left temple, which she referred to a spot one inch above, and in front of the ear. This lasted a fortnight, and was then replaced by a rushing noise like the constant beating of an engine. Four months afterwards her sight was troubled when she looked at anything with both eyes, but with either eye singly there was no confusion of vision. A fortnight later, the eye became red and prominent; this frightened her, and she applied at the Royal London Ophthalmic Hospital. A loud, sibilant bruit, was heard over the left temple and eye; and when the stethoscope was placed upon the eye itself, it was perceptibly upheaved by a strong pulsation, which was synchronous with the heart's action. The bruit and the pulsation were at once stopped by compressing the carotid artery. As the symptoms were increasing, the common carotid artery was tied The patient progressed favourably for several days; then the wound became phagedænic; secondary hæmorrhage ensued, and recurred several times after the separation of the ligature; and she sank about three weeks after the operation. At the autopsy, no aneurism or erectile tissue was discovered. The internal carotid artery and its cerebral and ophthalmic branches were carefully traced, and were found quite natural. The ophthalmic vein had a varicose appearance, and seemed larger than natural; but on comparing it with the vein on the opposite side, the enlargement was found to be due to thickening of its walls, and not to increase of its calibre. It was filled by a clot, which was more recent in the branches than in the trunk. The cavernous, circular, transverse, and the petrosal sinuses on the left side contained clots. In the cavernous sinus this was a puriform pulp. A close examination showed that it was not pus, but softened blood-clot. The dura mater covering the sella turcica, the left posterior clinoid process, and the sinuses, were congested, and coated with a tenacious film of lymph, which contained bloody points, but no vessels. The internal carotid artery, and other structures in relation with the cavernous sinus, were bathed in an ichorous serum; the tip of the petrous portion of the temporal bone had a brownish colour, and its vascular foramina were enlarged, but the bone was not soft nor carious. The carotid canal was laid open, but no obvious changes were noticed. The pathological changes were inadequate to explain the symptoms which were present in so marked a degree during life; and a case of this kind, Mr. Hulke observed, threw considerable doubt on the reality of some of the cases which have been placed on record.

Mr. France related the case of a woman who had the point of an umbrella thrust into the orbit, producing great swelling, tumefaction, and protrusion of the globe. The pulsations were synchronous with the heart, and an aneurismal bruit was audible. He and his colleagues not being anxious to have recourse to operative treatment, the disease remaining stationary. the patient was kept tranquil, and cold was applied to the part. In a short time the swelling subsided, the pulsation ceased, and the woman returned home comparatively well. In another case, not of so severe a character, but presenting similar symptoms, the patient recovered without any operation. His own opinion was, that unless the disease was distinctly on the increase, so formidable an operation as tying the carotid ought not to be resorted to.

Mr. Curling remarked that the operation was urgently required in Mr. Scott's case. A tremendous hæmorrhage from the nose took place, and the patient was taken at once to the operating room. In his own case, in which he operated, the vision was being gradually destroyed, the tumour was increasing, and there was distressing pain in the head, besides other symptoms of enlargement of the aneurism. Of course where the tumour was stationary it might be hoped that a coagulum would form, resulting in a spontaneous cure.

Mr. Nunneley apologized for not having referred to Mr. Curling's case, of which, indeed, he was ignorant. Of course no one would think of tying the carotid in these cases unless there was urgent occasion, or if the disease was stationary, and not involving any immediate serious consequences. In the case in which he tied the artery, the patient's life was one of misery. In the second case the patient was under treatment twenty-eight weeks before coming under his care, and the disease was steadily advancing. The case related by Mr. Hulke was a very interesting one; but he thought there might be some aneurism within the cavernous sinus.

EPIDEMIOLOGICAL SOCIETY.

Monday, April 4th, 1859.

E. Headlam Greenhow, M.D., in the Chair.

ELECTION OF OFFICE-BEARERS FOR 1859-60.

After the termination of the preliminary business of the Society, the Annual Report of the Council was read by Dr. McWilliam; and the following were elected office-bearers for the session 1859-60:—

President—Benjamin Guy Babington, M.D., F.R.S. *Vice-Presidents*—Thomas Addison, M.D.; Thomas Alexander, C.B.; Sir B. C. Brodie, Bart., Pres. R. S.; Sir W. Burnett, K.C.B., K.C.H., F.R.S.; Rev. Thomas Dale, M.A.; R. D. Grainger, Esq., F.R.S.; Sir Charles Hastings, M.D., D.C.L.; Sir John Liddell, C.B., M.D., F.R.S.; John Nussey, Esq.; John Propert, Esq.; John Simon, Esq., F.R.S.; Sir Andrew Smith, M.D., F.R.S., K.C.B.; Thomas Southwood Smith, M.D.: Thomas Watson, M.D. *Treasurer*—Thomas Addison, M.D., Vice-President. *Honorary Secretary*—J. O. McWilliam, M.D., F.R.S., C.B., R.N. *Foreign and Colonial Secretaries:* Belgium, A. Sayer, M.D.; East Indies, James Bird, M.D., C. Finch, M.D.; Egypt and Syria, William Camps, M.D.; France, Waller Lewis, M.B., F.G.S.; Germany and Russia, Hermann Weber, M.D., W. E. Swaine, M.D.; Portugal and the Brazils, J. O. McWilliam, M.D., F.R.S., C.B., R.N.; Sweden, Norway, Denmark, and Iceland, R. Gordon Latham, M.D., F.R.S.; West Indies and North America, G. Milroy, M.D. *Other Members*

of Council—C. J. B. Aldis, M.D.; C. L. Bradley, Esq.; A. Bryson, M.D., F.R.S., R.N.; W. D. Chowne, M.D.; Robert Cross, M.D.; Headlam Greenhow, M.D.; Colonel Hough; T. Hunt, F.R.C.S.; C. F. J. Lord, Esq.; J. F. Marson, Esq.; Chas. Murchison, M.D.; E. Murphy, M.D.; R. Nichol, M.D.; W. Odling, M.D.; B. W. Richardson, M.D.; E. C. Seaton, M.D.; Professor Symonds; Spencer Wells, F.R.C.S.

ACCOUNT OF AN EPIDEMIC OF DIPHTHERIA.

BY J. B. SANDERSON, M.D.

The epidemic in question occurred in the small rural parish of Hertingfordbury, in Hertfordshire. This parish occupies a somewhat triangular space between the river Lea and its branch, the Mimeran, which unites with it immediately above the town of Hertford. The epidemic was confined to the village of Hertingfordbury, favourably situated on a gravelly slope on the southern bank of the river Mimeran, and to a few small hamlets on the elevated ground between the two rivers, where the slight inclination and the impenetrable nature of the subsoil are alike unfavourable to the removal of surface water. The outbreak commenced at the end of October 1858, attained its acme early in December, and suddenly ceased towards the end of the year; fifty-three persons were attacked, in a population of 750, of whom forty-seven were children. There were fourteen deaths, all of children under 12.

Characters of the Disease. There was pain in the throat, generally inconsiderable, sometimes severe, either preceded by slight pyrexia or not. Coryza occasionally preceded all other symptoms for some days. The fauces were at first congested. A membranous exudation commenced on one or both tonsils, usually within twenty-four hours from the onset, and spread continuously to the soft palate, uvula, and pharynx, forming, when first seen, a white and perfectly opaque patch, with elevated edges, surrounded by a narrow border of bright carmine. It was soft and inelastic, and could be easily detached, leaving an intensely congested, bleeding surface, free from ulceration. It was capable of separation into layers, and consisted, throughout its whole substance, of nuclei and nucleated cells, imbedded in granular or dotted fibrine. The author inferred from his examinations that the membrane, when first formed, consisted mainly of cellular elements, the later exudations containing more fibrine. In most fatal cases, the countenance became pale; the skin cool; the pulse rapid, and eventually so weak as to be imperceptible; there was no appearance of dyspnœa; the patient remained in a condition of tranquil drowsiness—drowsiness from which, however, he could easily be roused. In one or two instances, there were paroxysms of suffocation, with cyanosis and violent jactitation. During the remissions, there was extreme prostration. The urine was found to be albuminous in most of the cases in which the necessary observations were made. Convalescence was slow, attended by loss of muscular power of the lower limbs, impairment of vision, and complete paralysis of the velum palati, which conditions frequently persisted for some time after restoration to health in other respects. In the only *post mortem* examination which was made, the false membrane did not extend to the larynx. In this case, there had not been the symptoms of suffocation.

Causes. In respect to *drainage*, there was a marked contrast between the village of Hertingfordbury and the other hamlets in which the disease prevailed; the former being dry, the latter damp and ill-drained; the cottages being situated on patches of common land, soaking with moisture. *Offensive emanations* were observed in none of the dwellings, which were all provided with detached cesspool-privies. *Water Supply.* All the cottages are supplied with water from wells from twelve to thirty feet deep. Owing to the diminished rainfall during the autumn, these were dried up, or very low. A family, in which five children were attacked and four dead, being supplied from a well in this condition, the water was examined. It was found to contain living *crustacea*, *protozoa*, and *protophyta*, and vegetable organic *débris* in suspension, and organic impurity in the proportion of fifty-two grains in the gallon. As none of these conditions were either peculiar to the localities affected, or common to all of them, the author did not think that they could be considered of material importance as determining causes of the outbreak; and, as regards the whole district, he maintained that it might be favourably compared with most rural neighbourhoods.

Scarlatina and other Diseases. Several children were attacked during convalescence from measles and whooping-cough. Scarlatina occurred, but did not prevail during the epidemic. In one fatal case of diphtheria, an eruption, resembling that of scarlatina, appeared on the third day. No instances were met with, in which children affected with diphtheria had previously had scarlatina. This the author attributed to the fact that the latter disease had not prevailed in the district for some time past. That the disease was capable of *transmission* by *personal communication*, appeared from the mode of progress of the epidemic. When one case appeared in a family, all the children were usually attacked; and there was no instance in which the disease invaded one family in a hamlet, without extending to others. The origin of the epidemic could not be traced to this cause; but, in the neighbouring parish of Tewin, four miles and a half distant, the only two individuals attacked were in frequent communication with Hertingfordbury.

DIPHTHERIA. BY J. JACKSON, M.D., H.M. INDIAN MEDICAL SERVICE.

[*Communicated by* C. Murchison, M.D.]

The paper was read by Dr. McWilliam.

In the year 1853, a lady and her two children arrived at Calcutta from the upper provinces. These children were suddenly attacked with disease in the throat, said to be of the nature of putrid sore-throat; and, although the affection, apparently, was not particularly severe, they all sank under it with strange rapidity, and unexpectedly. They were supposed to have died from sore-throat, free from any great uneasiness in the throat, or difficulty of respiration or swallowing, until the last.

The first case that came under Dr. Jackson's immediate observation occurred some years afterwards, in a child living in the suburbs of Calcutta. The child's breathing and the stridulous cough at once indicated a disease of a croupy nature. The disease had existed for three days. On closer examination, the throat, soft palate, the uvula, and tonsils, were covered with a firm exudation of plastic lymph, of the thickness and colour of kid leather. An emetic produced slight relief, but had no effect in separating or removing the membrane. The child became speedily worse, and died after a few hours from the time Dr. Jackson was first called in. In the above instance, the disease was very different from the ordinary form of croup. The exudation of lymph on the tonsils, soft palate, and uvula, most probably passing down the air-passages, marked an affection of a peculiar and uncommon character. Dr. Jackson had seen much of croup among natives and Europeans, and at once pronounced the case to be of an unusual nature. Two other cases occurred in a short time afterwards, and they both proved fatal.

The occurrence of a number of cases, many of which had proved fatal, at the Martinière School, under the care of Dr. Webb, led to an inquiry into the nature and causes of the disorder. Thirteen of the school children were attacked by the disease, of whom five died. The *post mortem* examinations revealed exudation of lymph covering the tonsils, and passing down the air-passages into the bronchial tubes, as far as their minute ramifications. The main cause of the disorder was considered to be the existence of extensive sheepfolds to windward of the building, impregnating the atmosphere, and carrying the effluvia into the sleeping-rooms of the children. The sheepfolds were of course removed, and the ground in front of the building was thoroughly cleansed. In none of the cases was there any rash upon the body, or any resemblance to scarlatina; nor was there any proof of the disease being communicable from one person to another.

CASE OF DIPHTHERIA IN THE HARBOUR OF RIO JANEIRO, ON BOARD THE FLAGSHIP CUMBERLAND, IN OCTOBER 1857.

BY EUGENE MACKAY, M.D., R.N.

[*Communicated by* J. O. McWilliam, M.D., C.B]

The paper was read by Dr. McWilliam.

The patient, a naval cadet, aged 13, of delicate constitution, was placed upon the sick-list on October 24th, for what appeared to be simple cynanche tonsillaris. The fauces were injected; the tonsils were enlarged; and there was considerable febrile action. The weather was fine, the thermometer usually above 82°. There was a tendency to slight sore throat among the ship's company generally; but the cases were mostly of a trivial character. Diarrhœa, of a mild nature, was also so prevalent as to be considered epidemic.

October 28th. The patient had so much improved under the ordinary treatment for common sore-throat, that Dr. Mackay intended reporting him for duty on the following day. During the night, however, he was kept awake by a constant necessity to eject what he thought to be saliva continually collecting in the throat. The ship having, on the previous day, proceeded to sea, the temperature fell seven or eight degrees,

and the atmosphere was much more grateful than in harbour.

October 29th. There was an aggravation of all the symptoms; and, on examination of the throat, the uvula was found covered with a yellowish exudation, which was at once recognised to be of a diphtheritic character. Every effort to remove the plastic lymph was ineffectual. The fauces were scrubbed with a strong solution of the nitrate of silver; a linctus of hydrochloric acid and syrup was used; blisters and poultices were applied to the throat; the vapour of hot water and camphor was continually inhaled; and chlorate of potash was freely exhibited in his drinks. Wine was also given, to raise the flagging powers. The exudation continued to extend; and, although large masses of the membrane were from time to time brought up, they were speedily replaced by fresh deposition. Stethoscopic examination indicated that the chest and bronchial tubes were unaffected.

On the evening of the 30th, all the symptoms increased, when an emetic was tried; and it had the effect of bringing away a considerable quantity of mucus and membrane. Only temporary relief was thus obtained; for the pulse shortly became feeble, the countenance was livid, and delirium set in. As a *dernier ressort*, tracheotomy was now performed, with the effect of raising the pulse, and affording so much ease that the patient fell off into a quiet sleep, which lasted two hours. The tube was kept clean by the quill feather, and by suction with the mouth, performed by Dr. Mackay and Mr. Molloy, one of his assistants. Early in the morning of the 31st, the patient again became restless; mucus began to collect rapidly in the bronchial tubes; and he sank at three o'clock.

Dr. Mackay, at the time of the officer's illness, was complaining of sore-throat. Six days after clearing the tube in the patient's windpipe by suction, he had symptoms of diphtheria, with considerable exudation of lymph, and high fever. He recovered under the free application of the nitrate of silver, the use of hot baths, and the administration of diaphoretics. Mr. Molloy, who was in excellent health when he put his lips to the tracheotomy tube, suffered no inconvenience from this procedure.

Dr. Greenhow, with reference to Dr. Sanderson's statement that no instances had been met with in which children affected with diphtheria had previously had scarlatina, observed that he had lately seen, in a country village, a family which had lately suffered from diphtheria, all the members of which had scarlatina in 1851.

Dr. Semple said that, from the papers read this evening, one could arrive at a correct idea of what diphtheria really was. The pathological appearances seemed to be essentially the formation of a false membrane extending over the pharynx, the nasal passages, and the bronchial tubes; and this causes death. This membrane was not a mere fibrinous exudation, like that of pleurisy; but an exudation of separate laminæ, like the leaves of a book—a plastic coagulation, with epithelial scales, of a mucous rather than of a serous character. The cases recorded as having occurred in India and at Rio de Janeiro, were, like those of Dr. Sanderson, true diphtheria. With regard to treatment, he was not aware that much success had attended tracheotomy. A case, however, had been recorded by Dr. Gueneau de Mussy, in which recovery took place after, and probably in consequence of, this operation. When the exudation is hard, it may be removed; but it was often friable, and might be taken away. Aretæus had recommended sulphate of copper in the Egyptian form of the disease, as an emetic; so had Bretonneau. The same system was largely had recourse to in the present day.

Dr. Murchison observed, with reference to the coexistence of scarlatina with diphtheria, that he had collected a series of cases to show the concurrence of many of the exanthemata, proving the views of Hunter on this point to be erroneous.

Dr. Camps considered that, as respected the cause, it was of some importance to bear in mind that the lower animals had suffered from diphtheria. At Boulogne, for instance, it had been alleged that the disease in man originated in eating the flesh of a pig which had had the disorder; and it had further been stated, that the pig had fed upon the flesh of a glandered horse. He thought Dr. Sanderson had ably handled his subject.

Mr. Burge was of opinion that meteorological influences played a main part in the production of diphtheria. It was true we could not control meteorological phenomena; but we had control over many local influences which afford pabula for disease.

After a few observations from Mr. Hunt, with reference to the operation of tracheotomy in diphtheria, Dr. Sanderson replied to the various speakers; and, in the course of his remarks, he observed, that he thought Dr. Semple wrong in saying that diphtheria proves fatal from the membranous exudation passing downwards. In the trachea, the deposition was fibrinous, and on the velum palati it consisted of exudation-cells. He by no means intended to prove the identity of scarlatina and diphtheria; but he was of opinion that diphtheria might follow scarlatina.

The thanks of the Society were unanimously voted to Drs. Sanderson, Jackson, and Mackay, for their communications; and the meeting adjourned.

Editor's Letter Box.

NOTTINGHAM DISPENSARY: PAYMENT OF MEDICAL OFFICERS.

Letter from W. Tindal Robertson, M.D.

Sir,—I have much pleasure in transmitting you the accompanying resolution, which was carried on the 18th inst., at a large meeting of the subscribers to the Nottingham Dispensary, by a majority of about ninety to three. You will perceive by it the principle of payment to medical men has been initiated by the committee, and most cheerfully assented to by the governors of that institution; and though the fee is at first a small one (viz., a guinea for about an hour's attendance and an occasional consultation), I am in a position to state that it is the intention of the committee, whenever the funds will allow them, to increase it to such a sum as will fully repay the medical officers for the time and labour they bestow.

You will see also, by the letter from a subscriber to the Dispensary (which I annex), that half of the first year's surgical fees was at once provided, without taxing the usual resources of the charity, and it is gratifying to be able to add that, immediately upon the publication of that letter in the local papers, the other moiety of the required sum was at once presented by another gentleman of the town, who highly appreciates this (I believe the first provincial) step to do away with a system of gratuitous services by hardworking men; a system, as Mr. Gamgee, of Birmingham, most truly remarks, "contrary to the scriptural dogma, that the labourer is worthy of his hire"; and no less contrary to "every established principle of economical science."

Hospitals and dispensaries are springing up in all our large towns as fast as the population increases to require them. Thus the system of gratuitous advice "seems to have reached its culmination." It is one on which pages might be written, and enormous in the evils it creates. It is sufficient for me to place upon record the *practical protest* of the committee of the Nottingham Dispensary against its continuance. I am, etc.,

Wm. Tindal Robertson, M.D., L.R.C.P.
Physician to the General Hospital, and Consulting Physician to the Dispensary, Nottingham.

P.S. I should not omit to add that the system of payment of the medical officers has long been earnestly contended for, and has at last been mainly secured by the efforts of the senior surgeon, Dr. Massey, to whom, I think, the profession is under no small obligation for his energetic perseverance in this good cause.

The following is a copy of the resolution referred to by Dr. Robertson.

"That one of the honorary surgeons of the institution shall be required to attend in rotation one day in each week for the purpose of being consulted by the resident surgeon on any cases in which his opinion may be thought desirable; and the honorary surgeon shall visit such patient, and see the case or cases through. Each surgeon shall, on the week of his attendance, be entitled to a fee; and the honorary consulting physician shall attend when required by the honorary surgeons, or by the resident surgeon, and receive a fee. The amount of the fee and the mode of payment, and the expediency of continuing it, or the contrary, to be regulated by the committee."

The subjoined letter was sent with the first moiety of the fee:—

"Weekday Cross, Nottingham, April 18th, 1859.

"Rev. Sir,—I so highly appreciate the importance of the result of the last general meeting, relative to the allowance of

fees to the medical gentlemen for 'visiting the patients at their homes, and seeing the cases through', and also the benefit derived by the poor from this valuable charity, that I beg permission to enclose a donation of £26 in aid of those fees, or the fund of the institution. Probably some benevolent individual will contribute the other moiety of the £52.

"I remain, Rev. Sir, your obliged servant,

"Saml. Doubleday."

THE TAUNTON "ATTENDANCE-BOOK."

Letter from E. L. Hussey, Esq.

Sir,—In the report of the meeting at Taunton, when some of the medical officers were dismissed for not signing the new "Attendance-book", one of the speakers, in quoting the answers received from the medical officers of the different County Hospitals, mentions the Radcliffe Infirmary, as one from which an opinion had been obtained against such a book.

Your readers may perhaps think this opinion requires some kind of modification, when they hear that our governors have ordered a book to be kept in future, to be signed by the surgeons in proof of their attendance at consultations, and that I alone of the staff opposed the making of such an order.

I am, etc. E. L. Hussey.

Oxford, May 2nd, 1859.

PUBLIC AND PRIVATE ASYLUMS.

Letter from J. Kirkman, M.D.

Sir,—I desire to convey my unqualified response to your "trust that some member of the public officers of asylums will yet be found to repudiate the assertion, that their brethren of the private asylums are only capable of acting on a great public question in a narrow and odious spirit of self."

I should have thought the simple fact of the two last annual meetings of Asylum Officers (public and private) having been presided over by private proprietors, and attended largely by public gentlemen, would in itself have been sufficient to prevent unworthy inuendos, and to prove that an undivided feeling exists on the grand object of their mutual solicitude, the welfare of the insane. The meeting under Dr. Winslow's presidency in 1857, was the largest I ever remember to have seen, and I have attended almost all since the original formation of the association; there were very few public officers who were not present. The meeting *last* year, so powerfully presided over by Dr. Conolly, drew almost all who could venture on so distant a journey to Edinburgh; and there is little doubt, I think, that both these meetings were only preludes to that which we anticipate under the presidency of Sir Charles Hastings, another private asylum physician, in this coming July 1859, in Liverpool. These associate gatherings are surely progressive steps in development of that unity of feeling which must always be found amongst fellow-labourers in the same field, though it may be in different sections of it, and tend to show the conjoint possession of a common fund of good which extends its benefits to all. I am, etc. John Kirkman, M.D.

Suffolk County Asylum, May 4th, 1859.

MEDICAL ETIQUETTE.

Sir,—The recent case of irregular conduct has induced me to make the following statement.

On Thursday last, I was called to the wife of a respectable tradesman, who had previously *bespoke* my attendance upon her in June. I found her in bed, complaining of slight pains, not expulsive, os uteri undilated; I therefore gave an anodyne, and promised to call again in an hour or two. On my leaving the house, I was met by a messenger on horseback, who requested my immediate attendance on a case about two miles distant in the country. On arrival, my patient was progressing satisfactorily, and strong continuous pains soon brought my services to a conclusion. I returned, after a lapse of rather more than two hours, to the first case, which had advanced so rapidly, that about half an hour before my return, the husband had asked the oldest practitioner in the town to attend for me. He refused; I know not why; however, on being offered his fee, he either went, or sent his fully qualified assistant. The latter (who has since expressed his regret at the circumstance) was at the house when I called. On my hearing the particulars, of course I did not go up stairs, as the case had been so unceremoniously taken out of my hands.

I am, etc., Veritas.

April 27th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Amesbury. On April 29th, at Harlow, Essex, the wife of J. W. R. Amesbury, Esq., Bengal Medical Service, of a son.

Hanks. On April 15th, at Mile End Road, the wife of *Henry Hanks, Esq., Surgeon, of a son.

Payne. On April 30th, at 58, Denbigh Street, Belgrave Road, the wife of G. Burton Payne, M.D., of a son.

MARRIAGES.

Capei—Gamgee. Capei, Lorenzo, M.D., of Florence, to Emma, second daughter of Joseph Gamgee, Esq., of Edinburgh, at Paris, on April 26th.

Davis—MacRae. Davis, John, Esq., Surgeon, Sunderland, to Elizabeth Margaret, only child of the late Kenneth MacRae, Esq., of Her Majesty's Treasury, at Camden Church, Camberwell, on April 28th.

Diver—Fisher. Diver, Thomas, M.D., of London, to Anna Wilhelmina, widow of the late Captain E. A. Fisher, of Bombay, at the Scotch Free Church, Regent Square, on April 29th.

Quain—Midleton. Quain, Richard, Esq., F.R.S., Surgeon to University College Hospital, of 32, Cavendish Square, to Ellen, Dowager Viscountess Midleton, at St. John's Church, Paddington, on April 28th.

Reeve—Sewell. Reeve, Edmund, Esq., Surgeon, of Swaffham, to Kate, eldest daughter of John Sewell, Esq., of North Pickenham, on April 27th.

Reynolds—Dickson. Reynolds, the Rev. James J., M.A., incumbent of Bedford Chapel, Exeter, to Ann Rose Honor, daughter of the late Sir David J. H. Dickson, Inspector-General of Hospitals and Fleets, at Hougham, near Dover, on April 27th.

Tate—Taylor. Tate, William B., M.D., of Hereford Square, London, to Sophia, eldest daughter of W. Garnett Taylor, Esq., of Ashby-de-la-Zouch, on April 30th.

DEATHS.

Bamford, William, Esq., Surgeon, at Rugeley, aged 83, on April 17th.

Bent, Thomas, M.D., at Derby, on April 27th.

Cory. On April 13th, at Holsworthy, Devonshire, aged 45, Frances Amelia, wife of H. G. Cory, Esq., Surgeon.

Guy, William, Esq., Surgeon, late of Chichester, at Bowood, near Bideford, Devon, aged 78, on April 26th.

Laycock, Charles R., M.D., at Bordeaux, aged 54, on April 27.

Lee, the Very Reverend John, M.D., D.D., LL.D., Principal of the University of Edinburgh, aged 79, on May 2nd.

Lemprière. On April 27th, at Vergemount, Dublin, Marianne, widow of the late William Lemprière, Esq., Inspector-General of Hospitals.

Paxon. On April 27th, at Dorking, aged 11, Elizabeth, third daughter of G. K. Paxon, Esq., Surgeon.

*Pruen, W. A., M.D., late Medical Missionary at Penang, at sea, on January 21st.

APPOINTMENTS.

Owen, Professor Richard, F.R.S., appointed Sir Robert Reade's Lecturer in the University of Cambridge for this year.

PASS LISTS.

Royal College of Physicians. At the Comitia Majora, held on Friday, April 29th, 1859, the following gentlemen were admitted Licentiates of the College, under the recently enacted bye-laws:—

Ashton, Thomas Mather, M.D., Ormskirk
Beard, Charles Izard, M.D., Brighton
Bell, William, M.D., George Street, Hanover Square
Cameron, John, M.D., Liverpool
Carter, William Grover, M.D., Clifton

Dickson, Joseph Ritchie Lyon, M.D., Jermyn Street, St. James's
Fleming, Alexander, M.D., Birmingham
Gidley, Gustavus, M.D., Sandgate
Hall, Charles Radclyffe, M.D., Torquay
Hitch, Samuel, M.D., Sandywell Park, near Cheltenham
Hitchcock, Thomas, M.D., Week, near Winchester
Hoskins, Samuel Elliott, M.D., Guernsey
Lawrance, Richard Moore, M.D., Connaught Square
Nash, Joseph, M.D., Box, Wiltshire
Parsey, William Henry, M.D., Hatton, Warwick
Sutro, Sigismund, M.D., Finsbury Square
Tilt, Edward John, M.D., York Street, Portman Square
Vose, James Richard White, M.D., Liverpool
Webb, William Woodham, M.D., Kirtley, South Lowestoft
Wray, Septimus, M.D., Brixton

Royal College of Surgeons. At a meeting of the Court of Examiners, on April 29th, the following gentlemen were reported as having undergone the preliminary examinations for the Fellowship of the College, in Classics, Mathematics, and French, to the satisfaction of the Court, viz.—

Brodie, George B., Salisbury
Couper, John, Mornington Road
Lyell, Henry, Thomas Street, Horselydown
Stone, Thomas Westcott Gale, Lincoln's Inn Fields: diploma of membership dated April 11th, 1859

The following gentlemen, having undergone the necessary examinations in Anatomy and Physiology, at meetings of the Court of Examiners, on April 12th, 13th, 14th, and 20th, will be admitted to the pass examination, when qualified, viz.:—

St. Bartholomew's Hospital.

Andrew, Wm. Wickes W.
Arnott, John Lovell
Butler, Thomas Mapleson
Catt, Alfred
Coleman, Alfred
Collins, John Boniface
Egles, G. M.
Ellice, Thomas Smith
Gimson, William Gimson
Greenhill, Joseph Ridge
Harvey, Octavius C.
Hocking, Joseph
Hunter, Richard H.
Langton, John
Leeds, Thomas
Mead, Harry
Mitchell, T. C.
Pocklington, Evelyn
Scholleck, Thomas James
Sprague, Charles Gordon
Strickland, Edmund
Ward, Samuel Meire
Winkfield, Alfred

St. Thomas's Hospital.

Blake, Thomas William
Braddon, Charles H.
Drake, Thomas
Everett, Benjamin George
Farrant, Samuel
Freeman, Delamare
Harding, J. A.
Hooper, John Harward
Metcalfe, R.
Morris, Samuel
Sissons, William Harling
Ward, Charles Parker

Guy's Hospital.

Appelbee, Edward
Brettell, Joseph
Cann, Francis Mark
Haynes, Allen L.
Lloyd, Edwin
Lovegrove, John Francis
Truman, Edgar Becket
Watkins, Walter
Woodman, John

University College Hospital.

Gannon, John Palmer
Harris, Walter
Hunt, William John
King, William Clifford
Pedgrift, Harry
Tofts, Henry
Truman, William

St. Mary's Hospital.

Belemore, Alfred John
Davis, George Henry
Hocking, T. Edward G.
Hodson, John Clayton
Rogers, Frederick John
Simmons, Benjamin
Young, Edward Parker

London Hospital.

Cumming, John S.
Mitchell, Thomas
Payne, William George
Stillwell, James

Middlesex Hospital.

Collins, Charles Phillips
Horton, Henry James
Muncaster, T. Harbottle

King's College.

Edger, William
Hutchinson, Francis Blake
Macnamara, James

Westminster Hospital.

Adams, T. Rutherford
Middleton, John Wm.
Slayter, William Bruce

Charing Cross Hospital.

Mayon, George
Worley, William Charles

St. George's Hospital.

Eccles, Edmund

Manchester School.

Barlow, William Henry
Dean, Peter Thomas
Dean, Octavius
Hoyle, William
Taylor, David
Walls, William

Dublin.

Hocken, Morland
Mackenzie, Walter F.
Parker, Albany John
Thomas, John Lloyd

Edinburgh.

Homfray, Francis Hamilton
Seabrook, T. E. Fraser

Newcastle-on-Tyne.

Brumwell, George Murray
Wheeler, Henry

Hull.

Nicholson, Robert Hicks B.

Leeds.

Woodhead, William Copley

Birmingham.

Cornbill, John

HEALTH OF LONDON:—WEEK ENDING APRIL 30th, 1859.

[*From the Registrar-General's Report.*]

The deaths registered in London, which had been 1084 and 1126 respectively in the two previous weeks, rose to 1207 in the week that ended last Saturday. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1061; but as the deaths included in the present return occurred in a population that has increased, they can only be compared with the average raised in proportion to that increase; namely, with 1167. The deaths of last week, therefore, exceeded by 40 the number which would have occurred under the average rate of mortality for the last week of April.

The births registered last week exceeded the deaths in the same period by 485.

The deaths from measles, which fell to 15 in the first week of April when the temperature was high, have again increased, and last week were 36. The deaths from scarlatina and diphtheria together were 73, having been 79 in the previous week. The cases recorded as "diphtheria" were 16, and occurred as follows:—one in Berkeley Mews West, Paddington; one in Queen Street, Brompton; one in Chester Terrace, Belgravia; one in North Street, Marylebone; one in Sherborne Street, Marylebone; one in the German Hospital, Dalston; one in Miles Place, Finsbury; one in Ireland Yard, City (south-west sub-district); one in the London Hospital; one in King Street, Aldgate; one in County Terrace, Newington; two in one family in Carter Street, Walworth; one in Aldred Road, Walworth; one in Richard Street, Lambeth; and one in Wickham Street, Lambeth. There were 15 deaths from small-pox, 11 of which occurred to children. The resident surgeon at the Small-pox Hospital states, that "owing to the increase of small-pox in London during the last three months, the hospital has become nearly full of patients; 313 have been admitted this year, of whom 111 were admitted in April." Five deaths occurred in that institution last week.

Fourteen deaths were caused last week by rheumatism and rheumatic fever; nine by syphilis; two by intemperance; besides five, where the cause of death is stated to be "delirium tremens"; 184 persons died from phthisis or consumption. Only two nonagenarians are recorded, both widows, aged 93 and 96 years.

Last week the births of 865 boys and 827 girls, in all 1692 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1633.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·678 in. The barometrical readings varied from 30 in., on Tuesday, to 29·42 in., on Thursday. The mean temperature of the week was 48·2°, which is neither more nor less than the average of the same week in 43 years (as determined by Mr. Glaisher). The lowest point attained by the thermometer was 40·5°, on Sunday; it rose to its highest point, 67°, on Friday. The extreme range in the week was therefore 26·5°. The mean daily range was 12·2°; the range on Friday was 19·5°; that on Saturday was only 5·8°. The difference between the mean dew-point temperature and air temperature was 3·7°. The mean degree of humidity of the air was 88, saturation being equal to 100. The mean temperature of the water of the Thames was 49°. The rain-fall was 0·76 in.

SALE OF MEDICAL PRACTICE: ACTION FOR RECOVERY OF AGENT'S FEES.

Brompton County Court. Before J. L. Adolphus, Esq.

LARA AND WALTERS *v.* WARD.

This action, brought to recover the sum of £30 : 5 : 6, was one of some interest to medical men disposing of their practice, and to medical agents. The plaintiffs were medical agents, of 6, Pump Court, Temple; and the defendant, Dr. Thomas Ogier Ward, was a surgeon in practice at Kensington.

Mr. Doyle appeared for the plaintiff, and Mr. Cooper for the defendant.

In opening the case the plaintiff's counsel stated, that the action was brought to recover commission on the sale of the defendant's medical practice. The defendant had paid into court £3 : 0 : 6, being 10*s.* 6*d.* for the registration fee, and £2 : 15 : 6 for three months advertisements, leaving £27 : 10 : 6 in dispute. The first communication between the parties was upon the occasion of the defendant calling upon the plaintiffs, stating his desire of procuring a practice in the south-west of England. At this interview the defendant also informed Mr. Walters that he wished to dispose of his own practice. Mr. Walters then gave the defendant a paper containing the plaintiffs' terms, and upon the construction of the words of these terms the case would no doubt rest. The learned counsel then quoted from the paper in question. "That on the completion of any agreement for the obtaining, disposing, or transfer of a practice, if the particulars be obtained from the plaintiffs, in whatever way the negotiation may be conducted, the commission shall be paid on all such transactions." On the 18th of December, 1858, these terms were made known to Dr. Ward; and on the 7th January, 1859, the defendant entrusted the plaintiffs to sell his practice for £450, and the lease of his house for £150. These sums the defendant had received from the medical gentleman who had purchased the business and lease, and the commission thereupon, he contended, was fairly due to the plaintiffs. He might remark, that respectable agents like his clients were a sort of guarantee of the respectability of medical men with whom they were effecting the transfer of practices, and on that respectability vendors and vendees depended. He should further state that the defendant, upon another visit to his clients, mentioned to the plaintiffs his intention of employing other agents to effect a speedy sale of his practice; and the plaintiffs then cautioned the defendant that if that course were adopted, Dr. Ward might be called upon to pay two or more agency fees. After this Dr. Ward, on March 12th, called upon his clients, and asked them to withdraw his name from the plaintiffs' books. If that were a *bonâ fide* withdrawal, the plaintiffs could merely claim expenses conditionally that the defendant withdrew the sale of his practice altogether; but on the very day that the defendant had sent £3 to his clients in payment of expenses incurred by them in advertising the defendant's practice, the plaintiffs ascertained that Dr. Ward had disposed of his practice to a medical gentleman named Williams, and was introducing that gentleman to the defendant's patients. Upon this the plaintiff wrote to the defendant, inquiring for what amount Dr. Ward had disposed of his practice, at the same time returning the cheque for £3.

Mr. Walters was called to confirm his advocate's statement, which the witness did up to a certain date.

Mr. Lara, the other plaintiff, said he represented to the defendant the unfairness of employing several agents, and that he would prefer removing the defendant's practice off his books. Dr. Williams called at their office, and said he did not object to £450 for Dr. Ward's practice, but he objected to pay £150 for the lease of the house. Witness then informed Dr. Williams that if he liked to take the house at £75 per year rent, he need not buy the lease. Dr. Williams afterwards said he did not like the practice in question, and, if possible, would like to get one of the same size; and witness gave him an advertisement of another practice. On the 12th of March the defendant called at witness's office, and said he had just called to say, he had made up his mind to stay where he was, at all events for six months; and witness took the practice off his books, and made a memorandum that it was not for sale, and at quarter-day sent in his account. He heard next day that defendant had introduced Dr. Williams to his business.

Mr. Cooper, having urged upon the court that the plaintiffs were not entitled to a further sum than that paid into court, called the defendant, who swore that he never received the paper of the plaintiffs' terms on January the 7th; it was not until the second interview the terms were given to him. On February 24th Dr. Williams called upon witness, and the sale was completed on the 24th March, for £450 for the practice, and £60 a-year for the house, on a term of three years.

Mr. Doyle, in reply, contended that the defendant could not and did not deny that Dr. Williams got the particulars of the business through the agency of the plaintiffs, and that they were entitled to their full claim.

The learned Judge said, that from the plaintiffs' own showing, they had taken the sale of the practice off their books as a termination to the transaction, and he was of opinion they could not receive more than was paid into court.

Verdict for the defendant, with full costs accordingly.

THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

The following letter has been addressed by the Royal College of Physicians of Edinburgh to the President of the London College, in reply to the Resolution and Remonstrance of the latter College in the new regulations for the Edinburgh License:—

Royal College of Physicians, Edinburgh, April 26th, 1859.

Sir,—The Royal College of Physicians of Edinburgh begs to acknowledge the receipt of a letter dated 19th April, and addressed to it through the President by the President of the Royal College of Physicians of London, under authority of his College, relative to recent regulations by the College of Edinburgh for admission of Licentiates into its body.

The College regrets that although the letter in question arrived in Edinburgh on the morning of the 20th, the College has not had an opportunity of considering, until this day, a document of so much importance and urgency.

The College begs to tender to the Royal College of London its thanks for the temperate terms in which the President of the London College has couched the Remonstrance of his constituents regarding a subject which this college can easily understand may have excited strong feelings among them. These feelings it is fortunately in the power of this college materially to allay. And it is the earnest hope of the College that, when the following statement has been calmly considered, the objections of the London College, which have been communicated by its President, will be greatly removed, and that harmony will be once more restored between the two institutions.

The College has, in the first place, to express its extreme regret, that owing to an inadvertence and precipitancy, the causes of which it is unnecessary to enter into, the New Regulations of the College respecting Licentiates were made public before having been duly considered, according to practice, and when they contained articles in a shape which may have been distasteful to the London College of Physicians. Since this premature publication, the Regulations have undergone revision, according to law, at three separate meetings, at which the following alterations have been made:—

1. Licentiates can become such only after having been subjected to the ballot by the Fellows of the College, besides having, as the original Regulations proposed, successfully undergone an examination first, on Preliminary Education, and then on Professional Subjects.

2. The professional examination, instead of being single, will consist of three series of examinations, which will be generally taken at considerable distances of time.

3. During the year of admission of Licentiates without examination, and without a university degree, no one will be admitted without a license from some other medical corporation; and persons in practice for fifteen years without any license, who were admitted under the original Resolutions, will not be allowed to apply for the license of the College at all.

4. All candidates under this act of grace, besides producing testimonials of character and experience, and being subjected to the scrutiny of the Council of the College, must be submitted to the ballot by the Fellows, of whom two-thirds must concur, otherwise the candidate will be rejected.

With these restrictions, and under a conscientious application of all the rules, the College ventures to hope that no person will be admitted into its list of Licentiates who does not deserve to be enrolled as a Licentiate of a College of Physicians.

The only material difference subsisting between the Regulations of the College of London and the revised Regulations of that of Edinburgh, for the admission of Licentiates, regards the age of candidates, and the experience presumed to be connected with age. On this point the College of Edinburgh venture to submit the following statement to that of London:—

Since the commencement of the present century there has gradually sprung up in Scotland, under the demands of society, and on entire forbearance on the part of the medical corporations from enforcing their exclusive privileges, a class of practitioners, now numerous, of high importance, of much public consideration, and as yet comparatively little known in England.

These gentlemen practise essentially physic, some of them the minor operations of surgery, a few midwifery; but none pharmacy. Some in the course of time became consulting physicians. Their fees are intermediate between those of the ordinary class of general practitioners and those of consulting physicians. They are physicians to all intents and purposes, far more than anything else, though they are not physicians according to the legal interpretation of that term in England. Among them are many of the most esteemed practitioners in Scotland. The late Dr. Abercrombie, a consulting-physician for the last twenty-four years of his life, was, for eighteen years previously, a practitioner of the denomination now described. Many of the present Fellows of the Edinburgh College of Physicians belong to the same class with him.

This class of practitioners, in the humble opinion of the Edinburgh College, may belong to a College of Physicians quite as fairly as that class who practise only as consulting-physicians. Indeed, if this College has not been misinformed, there are not wanting practitioners of the same denomination in the London College of Physicians itself. It is surely a class which ought to be fostered in this empire by every reasonable encouragement, and by no means kept down by narrow corporation prejudices. But in truth, it is a class of such importance to the country that it will continue to grow in esteem and multiply in number, especially under the shield of the Medical Act, in spite of all coldness, and in face of all opposition on the part of the corporations.

It is out of this class that the Edinburgh College desires to constitute, in part, its order of Licentiates; under changes in medical organisation in Scotland which it is unnecessary to specify here, the order of Licentiates of the Edinburgh College of Physicians has died out entirely. The College at present consists of Fellows alone. It desires to re-establish an order of Licentiates, and to constitute it in part of the practitioners in question. The College is unanimous in this desire.

Unfortunately, a serious difference of opinion prevails among its Fellows as to whether the stamp of physician ought not to be more distinguishingly impressed on such Licentiates, by requiring them all to be graduates of a University. A majority of the College, however, has lately ruled that this shall not be a necessary condition; and are of opinion that respectable practitioners may be enrolled in its ranks, although not possessed of a University degree. There is no difference of opinion, however, as to the necessity of leaving the license of the College open to all candidates, whether graduates or not, at an earlier age than that proposed by the London College for its Licentiates.

The College is not particularly wedded to the age of twenty-one; but it is the natural limit of manhood, and, on that account probably, it is the age which has hitherto been adopted in Scotland for entering on the learned professions—for the Church, for the Bar, and for Medicine, as well as Surgery. It is the minimum: it can be, and will be, rarely taken advantage of. But, inasmuch as there may be medical men, no less than philosophers, politicians, soldiers, etc., whose talents and assiduity place them, at the age of twenty-one, on a level with others at twenty-six or more, this College cannot see why an arbitrary corporation rule should deprive such men of the advantages with which Providence may have been pleased to bless them. From former experience, the College believes that very few candidates for its license will come forward till at least two years later in life; but it deprecates any rigorous rule on that head, as being calculated to obstruct the progress of talent, and to interfere with the public usefulness of a College whose purpose is to foster, and not to obstruct, merit.

The London College is therefore entreated to consider that the views of this College, in regulating the admission of its Licentiates, rest on the organisation of the medical profession, and the practice of the other learned professions in Scotland, with neither of which does the organisation and practice of England precisely accord, but towards which, nevertheless, that division of the kingdom tends in both respects. With a medical profession so organised as in Scotland, a College of Physicians cannot now exist, if it is to be composed only of consulting-physicians, as the London College seems to desire. Hence, if the London College should still retain its objections to the regulations of this College for its license, as finally altered on the 20th instant, it may be necessary for the College of London to require something more than the simple Edinburgh license for establishing an *ad eundem* admission into its body; such as a greater age, more opportunities of study, and the like. Nor will this College make any factious opposition to such new legislative measures as may be shown by the London College to be necessary or advisable for that purpose.

But, at the same time, as this College has taken in good part the remonstrance and good advice of its sister College so may it hope to find that College not unwilling to listen, in, its turn, to a suggestion; viz., that it may be already full time to consider in England too, whether, under the operation of the Medical Act, a class of practitioners be not certain to arise, or be not already arising, akin to that which has been extensively established in Scotland, with great benefit to the nation; and which, consisting of men differing little from physicians, in a simple and liberal interpretation of the word, ought to be encouraged, in its growth in England, by every reasonable persuasion, to attach itself, through the medium of the license, to the Royal College of Physicians of that country.

I have the honour to be, sir, yours very faithfully,

Alex. Wood, P.

To the President of the Royal College of Physicians of London.

Extension of Ophthalmological Education. The Board of Trinity College, Dublin, has recommended its students to take out a course of ophthalmic surgery. The governors of St. Mark's Hospital, Dublin, in their twelfth report, just published, beg to strengthen Dr. Mackenzie's memorial on this subject, by expressing their entire concurrence with the principles it advocates.

University of Cambridge. Professor Owen, the newly appointed Reade's Lecturer in this University, will deliver a lecture on the Classification and Geographical Distribution of the Mammalia, in the Senate House, on Tuesday, May 10th, at two o'clock.

Suspected Poisoning. On Wednesday last, Mr. Thomas Smethurst, residing in Richmond, who is said to have practised as a surgeon, was remanded to the county gaol by the magistrates of the Richmond police-court, under the suspicion of having caused the death of a woman with whom he was living by administering arsenic to her.

Royal Medical Society of Edinburgh: Annual Dinner. The Annual Dinner of this Society took place on April 30th. Mr. Dignum (in the absence of the senior President) took the chair, and was supported by the other two Presidents, Messrs. Garrington and Bell, and Mr. J. F. Macfarlan, Treasurer. Above forty gentlemen sat down, and amongst those present were Professors Syme, Traill, Bennett, Laycock, Allman, Balfour, and Kelland; the Presidents of the Colleges of Surgeons and Physicians; Drs. W. T. Gairdner, Matthews Duncan, Gillespie, P. H. Watson; and many members of the Society.

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

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Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXIV.] LONDON: SATURDAY, MAY 14, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

I. WOUND OF THE PALM OF THE HAND AND SUPERFICIAL PALMAR ARCH: LIGATURE OF THE RADIAL AND BRACHIAL ARTERIES: AMPUTATION OF THE ARM: PYÆMIA: RECOVERY.

Under the care of H. C. JOHNSON, Esq.

WILLIAM W., a barman, aged 38, was admitted March 15th, 1859. Six days previously to admission, he cut the palm of his hand, just at the ulnar side of the ball of the thumb, with a common table-knife, whilst opening an oyster. He came to the Hospital directly after the accident had occurred: compresses were applied to the part, and he was sent away, the bleeding having been quite controlled. He was ordered to come every morning to have it examined; but each morning, when the dressing was removed, bleeding always recurred; and on the night before admission, it came on with greater severity. On admission, the compresses were removed; and, as on exposure to the air the bleeding ceased, cold water dressing merely was applied, and the arm was well raised. There was some slight cellular inflammation of the forearm, and the wound was in a sloughy state, about an inch in length, and half an inch across.

March 17th. There was no more bleeding. He was ordered an anodyne draught, which was repeated next day.

March 19th. There was a little oozing of blood from the wound, which was more sloughy. The dressing was removed, and the whole wound well exposed to the air.

March 20th. Bleeding having recurred to a considerable extent, Mr. Pollock was sent for. As, however, the house-surgeon had controlled it by means of compresses and a tourniquet applied to the brachial artery, nothing further was done; but he was ordered forty minims of laudanum at once, twenty more in two hours, and afterwards ten every four hours, if required.

March 21st. The man was very weak and pale; there was much cellular inflammation of the arm; no more bleeding had occurred since the previous day. The tourniquet and compresses were still kept on.

March 22nd. This morning the tourniquet was loosened, and the compresses partially removed, when the bleeding recurred. Mr. Johnson was sent for, and tied the radial artery just before it passes to the back of the hand; this controlled the bleeding. The wound was now as large as a crown-piece, filled with dark-coloured clot. The patient was ordered to have ten minims of laudanum in saline mixture every six hours, and twenty minims every night.

March 23rd. He had very much thirst, and some fever; inflammation was spreading up the arm; no more bleeding had occurred.

March 24th. At twelve o'clock (noon), the hæmorrhage recurred; it was not arrested by pressure on the ulnar artery, the blood coming up from the deep part of the hand. At 1 P.M., the brachial artery was tied; there was no hæmorrhage from the wound caused by the incision. The man stated that, whenever he cut himself, he had always been able easily enough to stop the bleeding.

5 P.M. No more bleeding had occurred.

March 25th. Oozing of blood took place from the wound when the artery was tied, and also from the wound of the hand, but especially from the latter. There was a consultation of all the surgeons at 1 P.M., when it was decided that, as the bleeding was but slight, recourse should be had to medicines; and that, if then the bleeding recurred, the arm should be amputated. The man was exceeding low. He was ordered to have half a drachm of dilute sulphuric acid, ten grains of gallic acid, and fifteen minims of sedative liquor of opium, in an ounce and a half of water, every four hours.

March 26th. At 1 A.M., the arm was amputated by the circular method, just above the place where the brachial was ligatured: no great bleeding occurred from the parts. Ice was applied directly, both to the wound and to the upper part of the arm.

11 A.M. Pulse weak, 120. No bleeding whatever had occurred; he had no sleep. The mixture was repeated; and he was ordered to have thirteen ounces of port wine, and six ounces of brandy.

March 28th. Pulse much stronger; the tongue was moist, rather furred; the stump was looking well; there had been no more bleeding.

On examining the limb amputated, the whole of the cellular tissue was found much infiltrated with serum and lymph, and there was also some blood extravasated there. At the wrist there was a large sloughy wound, which extended beneath the skin as far as the finger. On tracing the superficialis volæ artery, and also the ulnar, they were found to terminate in the sloughy mass; but the latter one, after its deep branch, was torn off. The ulnar nerve was healthy, and seen to run through the centre of the wound. The brachial artery was tied just below where the anastomotica magna was given off; and there was only a very small string of clot found above the ligature, looking like a *post mortem* formation. There was no clot above the ligature of the radial, and both arteries were found healthy. There was no abnormal distribution of vessels in the arm.

April 1st. He was daily gaining strength.

April 5th. All the ligatures had come away. There had been no bleeding whatever since the amputation; there was no disposition to heal; the parts were looking very pale and flabby; and there was slight discharge.

The operation was followed in a few days by rigors, and all the other symptoms of pyæmia, followed by noisy delirium, and the formation of an abscess in the elbow-joint, which was opened on the 30th.

May 4th. He was slowly improving, and was likely to recover.

REMARKS. We hope to have occasion to refer to this case again, as an example of cure after secondary deposits. Meanwhile, it is of interest, as shewing the difficulties which will now and then occur in the treatment of hæmorrhage from the palm of the hand. Cases are on record in which, after the failure of the ligature of the brachial, recourse has been had successfully to an operation on the subclavian; but this would obviously have been useless here.

II. HYDROCELE OF THE NECK.

We have had the opportunity of seeing again a little child, a patient of Mr. Prescott Hewett, whose case we related in the JOURNAL for June 5th, 1858, and in whom the injection of iodine into an aqueous cyst of the neck, of large size, appeared to be rapidly successful. We are happy to be able to report that the cure is as permanent as it was rapid. There is still a large loose fold of skin at the root of the neck, though this is gradually contracting. All the hardness which was left after the injection has disappeared; and the child is in perfect health.

DIPHTHERIA.

TABLE OF CASES. (*Continued from p.* 349.)

1. Age and Sex.	2. Hygienic conditions; occupation, food and clothing, purity or impurity of air.	3. Meteorological conditions, date, etc.	4. Presence or absence of contagion.	5. Scarlatina.	6. Appearances and symptoms when first seen.	7. Time and situation of the leathery membrane.	8. Fungus.	9. Any affection of viscera (albuminuria, etc.)	10. Treatment and progress.	11. Indication and success of Tracheotomy.	12. Duration and event.	13. Post mortem appearances.	Remarks.
41. F.16	Healthy girl.	Feb. 4, 1859	Living near the last case.	Had had scarlatina. Before she revrd. little brthr. fell ill with scarlatina.	Feb. 4. Extreme nervous depression and fear, great dysphagia, loss of voice, general feverish symptoms.	February 5. Small white specks over the whole throat and roof of mouth.	....	....	At first chlorate of potash, and hydrochloric acid. Turpentine to the outside and inside of the throat, on the appearance of the membrane, which soon disappeared.	....	Recovered, a fortnight.	....	Jane S. No. Mr. Crossman, White Hill, Hambrook, near Bristol. No. 14.
42. F.13	A delicate girl, living in a healthy situation in same village as cases 40 & 41.	Mar. 5, 1859	....	Had never had scarlatina	Slight sore-throat and low fever for 3 days. March 5. Voice husky; thirst; dysphagia; a papular eruption over several joints.	When first seen, patches of false membrane on tonsils, and spots over the whole throat.	....	A trace of albumen in the urine.	Sesquichloride of iron, internally. Turpentine to the exterior of the throat, and as the membrane extended, also to its interior.	....	Recovered, 9 ds.	....	Miss B. No. 15. Do.
43. F.8	A delicate girl, living near case 41.	Mar. 5, 1859	....	Had not had scarlatina	Had been complaining for several days of headache, sore-throat, and general debility. March 5th. Breathing noisy, face flushed, skin hot, great thirst, bowels costive.	When first seen; both tonsils covered with patches of false membrane.	....	None.	Turpentine to the outside and inside of throat. Chlorate of potash, and hydrochloric acid.	....	Recovered, 12 ds.	....	Miss Julia L. No. 16. Ditto.
44. M. 6	Son of respectable parents, living in a farmhouse in the country.	July 5, 1857 Very fine weather.	No.	No scarlatina in the neighbourhood.	A simple sore-throat.	False membrane was found to be forming over the whole fauces 5 days after the first attack.	....	None.	Nitrate of silver, locally. Chlorate of potash, internally. The false membrane appeared to extend down the larynx, and symptoms of croup came on. Then sulphate of copper, as an emetic, frequently, with much relief; false membrane being detached at each vomiting.	....	Recovered slowly	....	Dr. Bryan, Northampton.
45. F.14	Daughter of a labourer, large family, living in a very crowded dwelling.	Feb. 16, 1859	No.	No	Cold & shivering, sore-throat, etc., quick, feeble pulse, hot skin, great dysphagia.	False membrane over the whole throat.	....	None.	The false membrane removed, and a strong solution of caustic applied. Salines internally, then tonics and stimulants. Improved till the fourth day; then got up and went out of doors; laryngitis came on, and she died next day.	....	Died, 4 ds.	No post mortem examination.	Eliza Upton. Mr. Wood, Woodhouse near Loughborough.
46. F.20	Sister of the above.	Feb. 20, 1859	Attkd. day of sist. death. Had slept with sist.	No	Shivering, sore-throat, dysphagia.	Tonsils covered with false membrane.	....	None.	Nitrate of silver locally. Tonics, wine, and an occasional purge. She recovered gradually.	....	Recovered, 3 wks.	....	Sarah Upton. Ditto.
47. F.7	As above.	Feb. 21, 1859	Sister of the above.	No	The same symptoms. Dysphagia not so great.	On tonsils.	....	None.	The same treatment. The throat got well in four days, and she took food well. She passed two large worms by stool and vomit, on the third day; after this, constant vomiting set in; she exhibited disinclination for food, and sank rapidly.	....	Died, 7 ds.	No post mortem examination.	Johanna Upton. Ditto.
48. M. 5	As above.	Feb. 22, 1859	Brother of the above.	No	Fever & enlarged tonsils.	White specks on tonsils when first seen.	....	No.	Nitrate of silver locally. Salines and ammonia.	....	Recovered, 8 ds.	....	Arthur Upton. Do.
49. M. 50	As above.	Feb. 23, 1859	Fath. of the above.	No	Fever, sore-throat, sickness.	Specks on the tonsil, 4th day.	....	No.	Nitrate of silver locally. blisters to throat; wine and tonics. Slow recovery.	....	Recovered. 1 mth.	....	William Upton. Ditto.
50. M. 2	A scrofulous child, living in a detached house.	Feb. 23, 1859	Gdson of last patnt. Lived in diffl house, but had bn const. in ho. where above patnts resid.	No	Swelled throat and tonsils; rapid sinking.	False membrane extending over the fauces from the first.	....	No.	Chloride of lime to the outside and inside of throat, with nitrate of silver, wine, and liquor cinchonæ. He continued to sink.	....	Died, 3 ds.	No post mortem examination.	Thomas Hyman. Ditto.

1. Age and Sex.	2. Hygienic conditions; occupation, food or clothing, purity, or impurity of air.	3. Meteorological conditions, date, etc.	4. Presence or absence of contagion.	5. Scarlatina.	6. Appearances and symptoms when first seen.	7. Time and situation of the leathery membrane.	8. Fungus.	9. Any affection of viscera (albuminuria, etc.)	10. Treatment and progress.	11. Indication and success of Tracheotomy.	12. Duration and event.	13. Post-mortem appearances.	Remarks.
51. M. 27	Healthy man.	Feb. 16, 1859	Had been examining the throat of case 45.	No.	Enlarged tonsils, with relaxation of the uvula.	None seen.	....	No.	Nitrate of silver locally, quinine internally.	....	Recovered, 10 ds.	....	Edward Fould. Ditto.
52. F. 4	A low, ill-ventilated dwelling in a village 2½ miles from the preceding cases.	Feb. 10, 1859	No	No	Had been ill a week when seen, with sore-throat and fever. The symptoms at that time were those of croup.	"The throat was quite stopped up."	....	No.	Little could be done. She died next day.	....	Died, 1 day.	No post mortem examination.	Maria Thompson. Ditto.
53. M. 35	As above. A spare man, with phthisical symptoms.	Feb. 20, 1859	Father of the above.	No	Dysphagia; bronchitis, with plentiful expectoration.	Specks of false membrane on the right tonsil, which gradually united and left an ulcer.	....	....	Same as above. The throat affection healed; but he died of the bronchitis.	....	Died, 5 wks.	No post mortem examination.	Charles Thompson. Ditto.
54. F. 31	As above. Near her confinement.	Feb. 28.	Wife of the above.	No	Fever and sore-throat.	None seen.	....	....	....	....	Convalescent, 9 ds.	....	Jane Thompson. Ditto.
55. E. W. 5	Child of poor parents, living in a damp, low situated cottage.	None noted Weather damp.	Absent.	No	Feverishness, constipation, fœtid breath, dysphagia, tonsils red, with one or two white spots, rigors.	Third day. The white spots had spread over the whole surface of tonsils, &c.	None to be seen under a microscope of low power.	None.	Nitrate of silver applied as caustic, calomel purge, wine and iron, beef-tea.	If the patient had not got better, I would have proposed Tracheotomy.	Eight days from first seeing patient.	....	Mr. Moore, Halesowen, near Birmingham. No. 1.
56. J. A. 9	Child of poor parents. Cottage in a healthy situation.	Weather damp.	Absent.	No	Exactly as above, with a great amount of prostration, rigors, dysphagia.	The whity coloured exudation gradually spread during 3 days.	As above.	Albumen in urine to a great extent.	Nitrate of silver, as caustic, a purgative, wine and iron.	As above.	In a fortnight the boy was well.	....	This case remarkable for great amount of prostration, and dysphagia present. No. 2. Do.
57. S. W. 15	Living in a healthy locality, and with tolerable comfort.	Weather damp.	Absent.	No	Not seen in first stage. Reported rigors, and general feverishness.	Tonsils and fauces almost obscured by patches of sloughy, ashy exudation.	As above.	Diarrhœa. Albumen present to a small amount	Nitrate of silver, iron and wine, beef-tea.	As above.	Was well in about 9 ds.	....	No. 3. Do.
58. J. S. 4½	Living at a large farmhouse with every comfort.	Damp	Absent.	No	When first seen, slight redness of tonsils, then 3 or 4 white spots. No feverishness, no constitutional symptoms.	Nearly got well in 3 days, when suddenly dysphagia, prostration and exudation took place.	As above.	None.	Nitrate of silver, port wine, beef-tea,	As above.	Well in a fortnight.	....	This was a remarkable case. At first it appeared simply a sore throat; the white spots were the only indications of danger. No. 4. Do.
59. E. S. 7	Child of poor parents; situation unhealthy & badly drained.	Damp	Absent.	No	Not seen in first stage. Reported rigors and feverishness, dysphagia	When seen portions of the tonsils had sloughed away, and other parts seemed likely to do so. Very little membrane.	As above.	Albumen present.	Quinine, port wine, beef-tea.	As above.	Slghg. seemed to stop on the 4th dy. after commencing the wine, quinine, &c	....	This was remarkable for the small amount of ashy membrane seen, and sloughing. No. 5. Do.

[To be continued.]

Original Communications.

CONTRIBUTIONS TO CLINICAL SURGERY.

By Oliver Pemberton, Esq., Surgeon to the Birmingham General Hospital.

IV.—Fissured Fracture of the Cranium.

Probably no part of the body is liable to so great a variety of accidents as the cranium; but, various as are the injuries which it receives, both in civil and military life, their diversity is scarcely to be compared with the unceasing difference in their mode of infliction. The careful recognition of the history of every particular relating to grave injuries of the skull, may, in some instances, justify the surgeon in adopting a mode of treatment which, under other circumstances, would not be suggested; whilst at other times the minutest observation as to the mode in which the accident occurred, fails to guide him to a correct knowledge of the real state of the disordered parts. The succeeding case and observations will illustrate the correctness of these remarks.

Case. L. L., aged 47, a well-sinker, was brought to the Birmingham General Hospital, on the morning of August 6th, 1854, having met with the following accident. Whilst working down the shaft of a well some yards in depth, the bucket, shod with iron, which his assistant was raising by the windlass, suddenly fell, and unhappily alighted on his head. The blow having rendered him insensible, he was carried as soon as possible to the hospital.

On examining him half an hour afterwards, I found the following conditions present. There was an incised wound of the scalp, about four inches long, situated over the right parietal bone, and extending also across the inter-parietal suture to the left; the direction of the wound was horizontal, with the extremities curving forwards, so that the concavity looked towards the front of the cranium. Its superior angle was distant about two inches from the apex of the occipito-parietal suture. On passing the finger into the wound, a fissured fracture of the skull was detected nearly three inches long, having a direction corresponding to the external injury. Small fragments of bone were picked out of the fissure by the fingers, and the parts being otherwise cleared, the dura mater was found to be exposed, but apparently undivided. There was not the least evidence of depression of the margins of the bone along which the fissure travelled, either within or without the cranium. The patient was unconscious, pale, and somewhat cold. His pulse was quick, but the breathing natural, and the pupils rather contracted. I directed that the wound should be covered with lint wetted in cold water; that warmth should be applied to the surface of the body; that a purge of calomel and jalap should be given towards evening, and a stimulating enema four hours afterwards.

He continued in a state of profound insensibility for six days after the accident, and then recognised his wife, who had been watching by his bed-side since his admission into the hospital. During this period, his symptoms never varied. The breathing was not laborious, nor were the pupils otherwise than slightly contracted. His pulse became, however, somewhat quicker and more feeble, as time went on. He swallowed with difficulty, his only nourishment consisting of a spoonful of milk and broth, administered with care and frequency. The bowels were relieved by enemata, and the gums were slightly touched by calomel.

His amendment, after this, though slow, was sufficiently satisfactory. The wound suppurated healthily, and some small portions of bone were picked out from time to time. His mental recovery appeared also favourable; and his answers to questions regarding the occurrence, showed that his memory was not impaired.

He was discharged from the hospital six weeks after his admission. The wound had then healed, with the exception of a small sinus.

I saw no more of him until January 1855, about five months after the accident, when I encountered him by chance in the street, and was struck at once by his altered appearance. He looked weak in body and mind, and replied anything but clearly to my questions. His wife informed me that he had not resumed his work since the occurrence, and that of late he had become restless and irritable to all about him.

He was re-admitted, and at once placed under a course of mercury. During the few weeks he remained in, he greatly improved; and left of his own accord, before I considered it safe for him to do so. The wound shewed a deep sulcus, and had discharged one or two small pieces of bone, but the sinus had entirely closed.

My further knowledge of this poor fellow happened under circumstances somewhat singular. One day, in the month of March, in the last year, Mr. T. H. Bartleet, a highly intelligent student of the General Hospital, requested my attention to a portion of fractured skull which he had recently obtained from a *post mortem* examination of a patient who had died in epileptic convulsions. On examining the specimen, I was at once struck with the peculiar shape of the fissure—rounded, as if done by the iron edge of a bucket; and, on a little inquiry, was soon satisfied of its having belonged to the patient whose injury I have above detailed.

From the patient's wife, and from Dr. Jordan, of this town, I was enabled to gather the following history of his state subsequent to the time of his second discharge from the hospital. Eleven months after the accident, it seems he was so fairly recovered, that he was enabled to resume his employment, and remained at work for a year without hindrance. He was then laid up for a month—being "out of sorts", as the wife expressed it. Afterwards, he again resumed work. In the latter part of 1857, he became irritable; wandered about in odd kinds of places; and at times did not know what he was doing. In the November, he was seized with a fit for the first time.

Dr. Jordan informs me, that when he first knew him, in the early part of December 1857, he was imbecile, or nearly so. He was summoned to visit him one night, and found him in a distinct epileptic fit. The pupils were equal; the pulse feeble. There was foaming at the mouth, and much convulsive movement of the extremities, and the features were much distorted; but no paralysis existed, nor was one side more convulsed than another. Fit succeeded fit, and he remained in this state about four days, being quite comatose in the intervals between the convulsions. He was blistered at the neck and the soles of the feet, a turpentine enema was given, and ammonia administered internally. He recovered, and returned to his now ordinary condition of imbecility. He walked about, and there was no dragging movement of the limbs; but much headache. He was unable to work; and suffered much from headache.

March 10th, 1858. He went out, grew bewildered, and lost his way, and, in returning home, strayed into a neighbour's house, where he soon fell down in a fit. As on the previous occasions, fits succeeded each other, and he died five hours after the first attack.

Dissection thirty hours after death. The head alone was examined. The dura mater was thinned, and adherent round the seat of fracture. The brain was rather softened at the same spot. The ventricles contained a good deal of fluid. The portion of skull involved in the fracture was removed. I will now proceed to describe the appearances presented by this. It comprises an elliptical piece of the vault of the skull, including in its dimensions about equal parts of either parietal, and that part of the occipital where it joins the sagittal suture. From point to point it measures in length seven inches and a half, and in breadth rather more than three. Viewed externally (Fig. 1), the fissure is seen to start from a point in the sagittal suture distant two inches from the commencement of the lambdoid, thence it passes outwardly and curving forwards terminates at a distance of two inches and a half from its commencement. The fissure is not complete throughout, being bridged across by a junction, probably of new ossific material. A probe, passed on either side of this bridge, rests on a ledge of bone, formed by the projection internally of a mass of thickened bony structure; from this there is a ragged aperture opening directly into the cranial cavity. The margins of the fissure are rounded off, and the adjacent surfaces of the external table are without elevation or depression of any kind. Viewed internally (Fig. 2), a mass of bone is seen projecting abruptly in a direction from the external fissure, corresponding to its anterior aspect. This measures two inches in length by three quarters of an inch in breadth, and it extends inwards from the ordinary level of the internal table adjacent half an inch. Its free surface presents the usual appearance of the internal table, or *tabula vitrea*, of the skull—the furrows of the meningeal vessels being yet distinct as they run across it.

Anteriorly, it is bevelled off in a gradual thickening of the bone, and in the presence of numerous irregular elevations and depressions of its structure, similar to the excavations



Fig. 1.—The external view of the fracture—its concavity looking anteriorly. (Reduced one-third the natural size.)
A. Portion of right parietal bone.
B. Portion of left parietal bone.
C. Portion of occipital bone.



Fig. 2.—Interior view of the fracture.
A. The right parietal bone, shewing the depressed inner table.
B. The left parietal bone.
C. The occipital, and the groove for the longitudinal sinus.

observed in some skulls for the so called "glands of Pacchioni". Posteriorly, it presents a rough thickened margin; beneath which, a ragged opening, three quarters of an inch in length, communicates with the outer fissure. A smaller opening, to the outside of this, also opens into the same fissure. The remaining internal surface of the cranium about the seat of injury presents several elevations of the inner table as well as in the neighbourhood of the longitudinal sinus. The walls of the skull are greatly thickened; that nearest to the depressed bone measuring seven lines in breadth; whilst the same aspect presents no appearance whatever of an interval between the tables, it being exceedingly dense, hard, and compact.

Remarks. In reflecting on the history of this patient's condition from the first, especially as to the nature of the injuries received, I have arrived at the following conclusions:—

1. That he suffered from concussion of the brain.
2. That the skull had undergone a fissured fracture of its external table.
3. That the internal table, also, was fractured, and driven in on the dura mater.

The presence of this latter complication was unmarked by the advent of symptoms indicating compression of the brain. During the entire period comprised in the two occasions of his being under my immediate notice, a period of six months, he never had any symptoms which betokened compression of the brain. Irritation of the brain was unquestionably present on his being admitted into the hospital on the second occasion, and, indeed, evidences of some slow inflammatory action in the coverings of that organ, of a marked character, which yielded to the mercurial treatment that was adopted; but, with all this, the symptoms never pointed to the presence of depressed bone, and were fairly explained, in my mind, at the time, by the injury which the dura mater had most probably received from its exposure, as well as from its contiguity to the seat of fracture.

That these symptoms had their origin from an insidious form of inflammatory action, and not from the effects of depressed bone, is, I think, borne out by the restoration to health, which followed his discharge from the hospital—a restoration so complete, that he pursued his employment for twelve months without hindrance.

Three years and four months after the receipt of his injury, this man, having manifested symptoms of irritability, and becoming otherwise strange and unlike himself, is seized with an epileptic fit. He becomes comatose, and the fits are frequent. Yet there is no paralysis, and, what is remarkable, no indication of one side of the brain being the seat of irritation more than another.

Three months after the first epileptic attack, the man dies; and previously he is an imbecile in mind as well as body.

Now, had my friend Dr. Jordan been in possession of the earlier facts relating to this man's injury, as I was, I cannot but think that he would have been led to a consideration of the possibility of relief being obtained for him by surgical interference; but this was not so, and he had only the merest outline of a former history conveyed to him, whereby he could form an opinion as to the probable connexion of the wound, which he could still trace on the skull with the formidable symptoms that were then present. The dissection, however, of the parts after death supplied the deficiences that were wanting to make this connexion apparent. Had this patient fallen under my notice in his later days, I should have felt justified in proposing to his friends that an exploration, by means of the trephine, should be made of the internal margins of the fissure; and I should not have hesitated to have removed the ingrowing table at this stage of his complaint, any more than I should at an earlier one, had symptoms been present to have indicated the propriety of such treatment.

By symptoms I mean the mechanical evidences of depressed bones, not the cerebral and constitutional symptoms of the accident. The advent of these should be anticipated by the removal of that which sooner or later will lead to their production.

Where symptoms manifest themselves, either in the shape of convulsions, continued headache, or in epileptic seizures, subsequent to a former injury of the head, their connexion with the injury is so obvious that surgeons have not hesitated to resort to the trephine. That such treatment may be attended with success, the cases of the elder Cline (*System of Surgery*, J. M. Chelius, Transl. South, vol. i, p. 418) and others testify.

The experience of Mr. Guthrie (*Injuries of the Head affecting the Brain*, page 86) relative to the character of fractures of the cranium, when inflicted by cutting instruments falling perpendicularly, bears strongly on the nature of this case, and points to the methods of treatment and examination that should be adopted. When the inner table has been penetrated, the case assumes, in his judgment, a most serious aspect, inasmuch as "almost always" this table will be found

broken to a far greater extent than the outer; this latter surface merely presenting the separation of the edges of the fissure.

Arguing on the frequency of this occurrence in such injuries, he recommends that the most careful examination should be made with the probe, in order that any depression of the internal table may, if possible, be at once ascertained. If present, notwithstanding the absence of symptoms of compression, the trephine is to be applied, and the portions of bone removed, in order to guard against their occurrence hereafter. He thus sums up his convictions on this matter:—"A patient very often survives a mere depression of the skull; he may, and occasionally does, survive a greater depression of the inner than of the outer table; but I do not believe that he ever does survive and remain in tolerable health after a depression with fracture of the inner table, when portions of it have been driven into the dura mater." (*Injuries of the Head affecting the Brain*, p. 94.)

I cannot but think that, had the symptoms led me to have raised the inner table of this patient's skull when I first examined him, he would, in all probability, have had a better chance of permanent recovery.

That a fracture of the internal table, accompanied by depression, occurred at the outset, I have already stated to be my conviction; and I think that any one who examined the specimen, or who now attentively inspects the woodcuts which illustrate these observations, will arrive at the same conclusion. The pressure on the brain exercised by this could not have been at first to any extent beyond a most moderate amount. After a time, as inflammatory action arose in the bones around the injury, my opinion is that a filling in of the diploe by new bone took place, which, as it grew, had the effect of compelling inwards the broken portion of the inner table more and more, until at length that time arrived when its influence on the brain could no longer be endured.

I would remark, also, that the congestion of the vessels of the head, repeatedly present, would appear to have led to that general thickening of the bones of the cranium which was observable in this case, and which brought portions of them to a breadth almost comparable with the thickness of a skull-cap said to be in the possession of Mr. Quekett, nearly an inch in thickness, and originating in a blow received some years before death, from the effects of which recovery had apparently taken place. (Holden's *Human Osteology*, 2nd edit., p. 110.)

We may fairly, then, derive some practical conclusions from the foregoing case. They are briefly stated thus:—

1. The necessity of making a most minute examination of all cases of fissured fracture of the cranium, especially where the injury has been inflicted by cutting instruments falling perpendicularly, although there are neither mechanical nor other evidences present of depression of the inner table of the skull.

2. Supposing the inner table is found to be driven inwards on the dura mater; and, although no symptoms of compressed brain are present, the surgeon, in my judgment, will give his patient a better chance of avoiding future mischief by at once raising, and, if necessary, removing, that which sooner or later must destroy life.

3. There are sometimes cases of epileptic seizures and imbecility, or of continued headache, occurring at a remote period from a former injury to the head, which call for the use of the trephine.

Drinking Fountains for Westminster. At a meeting of the vestry of St. James's, Westminster, held on Friday, May 6th, the Rev. J. C. Kemp, in the chair, a communication was received from Samuel Gurney, Esq., in which the advantages of public drinking fountains were stated, and the cooperation of the vestry with the association for promoting their erection was invited. The Hon. F. Byng moved a resolution to the effect, that the vestry propose to the Free Drinking Fountain Association to pay for the supply of water to the fountains erected by the association. Mr. Beale seconded the resolution, and Dr. Lankester, the medical officer of health, urged the necessity of such public drinking fountains being established, and hoped they would be made ornamental as well as useful. Mr. Bidgood supported the resolution, which was unanimously agreed to.

Academy of Sciences in Paris. On April 29th, Professor Owen was elected a foreign associate of this learned body, in the room of the late celebrated botanist Robert Brown.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY

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Lecture II.

Healthy Urine. I. Volatile Constituents. II. Organic Constituents. III. Inorganic Constituents.—Volatile Constituents: *Water; Carbonic Acid; Peculiar Organic Acids; Ammonia and Ammoniacal Salts.*—Organic Constituents: *Urea; Quantity; Characters; Circumstances affecting the Formation of Urea; Origin: Creatine: Creatinine: Guanine: Sarcine: Inosite: Uric Acid; Quantity; Detection; Mode of Formation: Urates: Hippuric Acid: Extractive Matters: Mucus: Lactic Acid and Lactates.*

Gentlemen,—After having discussed the general characters of heathy urine, we may now pass on to consider the characters of the different substances found in this excretion. It is convenient to divide them into three classes, viz.:

I. Volatile Constituents;
II. Organic Constituents;
III. Inorganic Constituents.

The first class includes those substances which are volatilised at the temperature of a steam-bath (212° or less). The most important of these are, *water*, *carbonic acid*, and *certain ammoniacal salts.*

The second class contains those organic constituents which are not volatilised at a temperature of 212°, but which are decomposed at a red heat. The most important of these are, *urea*, *uric* or *lithic acid*, *hippuric acid*, with *urates* and *hippurates*, *lactic acid and lactates*, *mucus* from the urinary mucous membrane, *creatine*, *creatinine*, and various indeterminate uncrystallisable substances included under the head of *extractive matters.* The *colouring matters* before described, and perhaps traces of *leucine*, *tyrosine*, and one or two other less important organic matters, would be included in this class.

In the third class are found various *saline matters* which remain fixed after the organic matter has been destroyed by a red heat, and the carbon which results removed by prolonged exposure to a dull red heat in contact with the air. These inorganic constituents consist principally of *chlorine*, *sulphuric* and *phosphoric acids*, and, in some cases, *nitric acid*, in combination with *sodium*, *potash*, *soda*, *lime*, *magnesia*, *iron*, and sometimes *alumina*, with traces of *silica.*

I.—Volatile Constituents.

Water. Healthy urine contains from 940 to 960 grains, or even more, in 1,000. The proportion of water is much influenced by various circumstances, especially by the quantity taken in the food, the activity of the skin, and the presence of various substances which influence the chemical changes going on in the tissues, or affect the secreting action of the kidneys. The mode of estimating the proportion of water has been before alluded to. At first this would be supposed to be a very simple matter, but in practice it is found to be one of the most difficult operations in analysis, because many of the organic constituents of urine are prone to undergo changes at a very moderate heat, and even at the temperature of the air, if the concentration is effected too slowly. Practically, it is the best plan to concentrate the urine at a temperature of 100°, and then continue the evaporation *in vacuo* over sulphuric acid until the residue ceases to lose weight.

Carbonic Acid is held in solution in fresh urine: indeed, traces may be detected in all the animal fluids. Its presence may be shown by passing some pure hydrogen gas through urine. After the gas has traversed the urine, it should be conducted into pure lime water, which will become turbid if there be an appreciable quantity of carbonic acid present. This experiment is founded upon the fact that, if one gas be passed

through a solution of another gas, the latter will be displaced by it. By distillation, also, the presence of carbonic acid might be shown; but, in this process, great care must be taken to prevent the production of carbonate of ammonia, which would, of course, cause a precipitation of carbonate of lime in lime water.

Peculiar Organic Acids. Besides carbonic acid, urine contains, according to the observations of Städeler, a peculiar acid to which the name of *damaluric acid* has been given. It has a powerful odour; but little is yet known of the circumstances under which this volatile acid occurs. *Phenylic* or *carbolic acid*, usually known as *creasote*, has also been detected in urine; but these acids, with the *damolic* and *taurylic acids*, as they occur in urine, have as yet been so little studied, that we know nothing of any practical importance connected with them.

Ammonia and Ammoniacal Salts. Another volatile constituent of urine is *ammonia*. The presence of this substance in healthy urine has been doubted by many; but Heintz has shown that the addition of chloride of platinum to fresh urine causes a precipitate which consists of the potassio-chloride of platinum, with a certain quantity of the ammonio-chloride of platinum; the amount of the latter being estimated by determining the quantity of the potassio-chloride in a separate experiment. Ammonia exists as urate and lactate; it is also found in combination with phosphoric acid and soda, and with phosphoric acid and magnesia. Chloride of ammonium is also present.

Ammonia is likewise given off during the decomposition of several of the organic constituents of the urine by heat, as indeed it is from many other nitrogenous organic substances. Thus, if a portion of the solid residue of urine be exposed to a red heat in a small glass tube, much very offensive vapour will be given off, and a carbonaceous residue will remain in the tube. If a piece of reddened litmus or turmeric paper, moistened with distilled water, be applied to the mouth of the tube as soon as it is heated, the blue colour of the former will be restored, and the latter will assume a dark brown tint—reactions which indicate the existence of volatile alkali or ammonia, which arises from the decomposition of the nitrogenous matters.

II.—Organic Constituents of Healthy Urine.

Many of the constituents of healthy urine may be obtained in a crystalline form by allowing a few drops to evaporate, at a moderate temperature (about 140°), upon a glass slide, or in a shallow oval glass cell. In this manner, crystals of urea, urate of soda, chloride of sodium crystallised in cubes and octohedra, phosphates, and sulphates, may be readily obtained. The observer should make himself familiar with the appearance of these crystals. (*Illustrations of Urine*, etc.; Urine, Plate I.)

The quantity of the organic constituents varies very much, as would be supposed. In healthy urine, about three-fourths of the solid matter consists of organic substances, and there may be found from 12 or 14, to 45 or 50 grains in 1,000 grains of urine. The mode of estimating the amount of solids has been already referred to. The quantity of the organic constituents is easily obtained by burning a weighed portion of the solid matter, and by subtracting the quantity of saline residue which remains. The result is the required quantity of organic constituents.

Urea. The most important of the organic constituents of urine is urea. It is a crystalline substance, very soluble in hot water, and in four or five parts of cold water, soluble in alcohol, but insoluble in pure ether, deliquescent, readily crystallised if pure, but the presence of some organic constituents interferes with its crystallisation. However, good crystals of urea may often be obtained by simply evaporating a specimen of urine upon a glass slide, at a moderate temperature. Urea has a cool saline taste, is perfectly colourless when pure, but has a very strong affinity for the colouring matter of urine. In order to obtain perfectly colourless urea from urine, it is necessary to expose it to the prolonged action of animal charcoal in a diluted state.

Quantity. Urine in health contains from 12 or 15 to 30 or 40 parts of urea per 1,000; and as much as from 400 to 600 grains of solid urea are excreted from the body of a strong healthy man in twenty-four hours. The solid matter of healthy urine contains half its weight of pure urea.

Detection. The presence of urea is very easily detected, if the solution be moderately strong. Here I have some urine which has been slightly concentrated by evaporation, and afterwards allowed to cool. Upon the addition of a few drops of strong nitric acid, a number of beautiful sparkling crystalline lamellæ make their appearance. These are not very soluble in water, and are easily recognised by their microscopical characters. (*Illustrations of Urine*, Plate III.) In this manner nitrate of urea is prepared.

If, instead of adding nitric acid to the concentrated urine, I were to add a concentrated solution of oxalic acid, I should obtain numerous crystals of oxalate of urea, also a very insoluble salt, and, like the nitrate, crystallising in rhomboidal plates; but the crystals are more perfectly formed, and the inclination of the angles is different. (*Illustrations of Urine*, Plate IV.)

A solution of nitrate of mercury also forms a precipitate with urea; but, in order to apply this test, all the chloride of sodium and phosphates must be removed. Liebig has proposed a most simple and highly efficacious plan for estimating the quantity of urea by ascertaining the amount of a solution of pernitrate of mercury, of known strength, which is required to throw down the whole of the urea in a given volume of urine. This process for estimating the quantity of urea, as well as other constituents of the urine, *volumetrically*, will engage our attention in a future lecture.

Characters. Urea crystallises in four-sided prisms, which seem to be composed of a number of acicular crystals. (*Illustrations of Urine*, etc., Pl. II, p. 56.) It melts at 248°, and is decomposed at a higher temperature; cyanate of ammonia and carbonate of ammonia being among the products of the decomposition. It is not decomposed by being boiled in pure water, but mere traces of putrescent animal substances excite rapid decomposition even in the cold. Yeast also exerts the same effect; and mucus and pus produce this decomposition very rapidly, as already remarked under the head of "alkaline urine". The rapid evolution of carbonate of ammonia from urine which has been placed in a dirty vessel, is explained in the same manner.

It is curious that urea causes common salt, which, under ordinary circumstances, crystallises in cubes, to crystallise in octohedra; and chloride of ammonium, which crystallises in octohedra, to crystallise in cubes.

In the laboratory, urea may be formed artificially. By allowing cyanate of ammonia to evaporate to dryness, it becomes converted into urea, in which neither cyanic acid nor ammonia can be detected. Urea is one of the products formed by the action of peroxide of lead on uric acid, and it is also produced by the action of alkalies upon alloxan and creatine. Béchamp stated that he had obtained urea directly from the action of oxidising substances on protein compounds, as permanganate of potash upon albumen. This experiment has been several times tried in my laboratory without success, and several chemists have failed to confirm Béchamp's results; so that we may consider that, up to the present time, no one has succeeded in producing urea directly from the tissues, or from albuminous substances.

Suppose I wish to obtain a specimen of pure urea from urine; an oxalate or nitrate is first prepared, purified by being recrystallised, dissolved in water, and heated for some time in contact with pure animal charcoal. When the solution is colourless, it is decomposed with chalk or carbonate of barytes. The solution of urea is concentrated, so that crystals may form. The pure crystals are very deliquescent; but, with care, they may be dried and preserved for any length of time, if carefully excluded from the air. They form beautiful microscopic objects.

Rich in nitrogen, very soluble in water, readily diffused through large quantities of fluid, and possessing considerable power of permeating animal membrane, urea may be regarded as the principal product resulting from the disintegration of nitrogenous tissues, and as one of the most important excrementitious substances from the animal organism. Not only is urea derived from the products resulting from the disintegration of muscular fibre, but any excess of albuminous materials taken in the food is removed from the body chiefly in the form of urea.

Circumstances affecting the Formation of Urea. The quantity and nature of the food, and all circumstances which affect the nutrition and repair of the tissues, will exert an influence upon the quantity of urea formed in a given time. A liberal diet, rich in albuminous substances, and active exercise, combined with a healthy state of the organs of respiration and circulation, cause the formation of a large quantity of urea; while indolent habits, a diet rich in carbon and poor in nitrogen, insufficient food of any kind, an unhealthy state of the lungs and circulatory organs, and an imperfect supply of

good air, will diminish the proportion formed. I need hardly say that a greater quantity of urea is formed during the day than during sleep; by strong muscular persons, than by weak ones; by men than by women; in winter, when a small quantity of excrementitious substances are removed by the skin, than in summer, when the perspiration is abundant.

In all probability, urea is formed in the organism by the oxidation of uric acid. The latter substance, if the oxidating processes in the body are active, becomes resolved entirely into urea and carbonic acid; but if, on the other hand, these processes are less active than they should be, the uric acid in the urine is increased in quantity; a certain quantity of oxalic acid, and other substances of a lower degree of oxidation than urea, seem to be produced, instead of the whole of the uric acid being resolved into this soluble substance. Wöhler and Frerichs have shown that, if uric acid be taken at night, oxalate of lime is found in the morning urine; and Neubauer found that, when rabbits were made to take a considerable quantity of uric acid with their food, the urea in their urine increased from 1·34 to 4 grammes (from 20·67 to 61·72 grains). Large quantities of fluids cause an increase in the proportion of urea formed in the organism. A dilute state of the solids is favourable to their oxidation; and in certain conditions, where these changes are but imperfectly carried on, and in consequence uric acid accumulates in the blood, or at most is resolved into oxalic acid, the further oxidation is promoted by the administration of increased quantity of fluid, especially of fluids containing alkalies which not only increase the activity of the changes, but effect the solution of the insoluble uric acid and urates. Hence the benefit of alkaline waters, baths, moderate exercise, and plenty of good air, in gout and other conditions in which much more uric acid is formed than can be, under ordinary circumstances, converted into urea.

The quantity of urea excreted is also increased by common salt (Bischoff). It is probable that not only does chloride of sodium, so to say, filter through the different tissues, like other saline substances, and thus drive out other materials which are contained in their interstices; but that it also facilitates the occurrence of chemical change in the body, and directly influences the quantity of urea formed. The importance of chloride of sodium to cell-growth and the development of different textures, and its value in nutrition, are well known.

The beneficial effect of alkalies in different cases is acknowledged by all; and it is probable that this is in part to be explained by the influence they have been proved to possess in promoting chemical change in the body, and especially in favouring the oxidation of albuminous substances. Dr. Parkes has shown conclusively, in an elaborate series of experiments, that liquor potassæ exerts a direct influence of this kind. ("On the Action of Liquor Potassæ on the Urine in Health", *British and Foreign Medico-Chirurgical Review*, vol. xiv, p. 258, January 1853.) The per centage of solids in the urine is increased, the urea is increased, and the proportion of sulphates augmented, owing to the oxidation of the sulphur of albuminous tissues. Franz Simon long ago showed that the sulphates were always increased whenever an increased proportion of urea is formed; and the more recent researches of Dr. Bence Jones lead to the same conclusion. In Dr. Parkes's experiments, the acidity of the urine was hardly affected by the liquor potassæ; and the whole of the potash taken was entirely excreted in the urine, in the form of sulphate, in a very short time; if taken on an empty stomach, in from thirty to ninety minutes. Such facts assist in the most important degree to elucidate some of the most complicated chemical changes going on in the organism, and afford valuable information as to the nature of various morbid changes, as well as suggest the means by which these may be modified or counteracted. For these reasons, I have thought it desirable to dwell upon them rather at length.

On the other hand, both the solids and fluids of the urine are diminished by alcohol; so also is the proportion of carbonic acid exhaled. Tea causes a diminution both in the quantity of urine and fæces, as the beautiful researches of Dr. Böcker have conclusively proved. (*Medico-Chirurgical Review*, vol. xiv.) Coffee exerts a similar effect, which seems to be due, not to the caffein, but to the empyreumatic oil which it contains, according to Julius Lehmann. These substances, tea, coffee, and alcohol, in moderate quantity, affect the disintegration of tissue, and directly diminish the quantity of the excrementitious substances formed in the process. Supposing the food to be insufficient, the loss of weight which must necessarily take place in the body would be lessened; and they may, therefore, be regarded as advantageous, not only in economising the food, but in limiting to some extent the waste of the albuminous tissues.

In disease, the proportion of urea excreted varies very greatly; but upon this head I shall have more to say in a future lecture.

Origin. Urea is not formed in the kidneys, but exists in the blood, and is merely selected or separated from this fluid by the cells of the uriniferous tubes. It is with difficulty detected in healthy blood, because it is prevented from accumulating in that fluid in sufficient quantity by the selective power of the renal epithelium.* If, however, the secreting action of the kidneys be impaired by disease, or if the blood be prevented from flowing through them, the urea will accumulate in the blood to a considerable extent, interfering with the function of other organs, especially the brain; and may in many cases be very readily detected by chemical tests.

Under these circumstances, an incomplete removal of the urea will take place through other channels. It has been detected in the fluids of the intestinal canal, in vomited matters, in the saliva, tears, milk, bile, and sweat, in serous fluids in different localities, in the liquor amnii, and in the fluids of the eye.

Urea cannot always be detected in the muscles, but can be readily produced from several substances found in them; and it is therefore probable that, in the organism, urea forms the last of a series of compounds which results from the disintegration of the tissues. Removed from the body, very slight causes are capable of effecting its decomposition, and resolving it into ammonia and carbonic acid—substances of the highest importance to the growth of plants.

[*To be continued.*]

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By William Addison, M.D., F.R.S., Fellow of the College.

Lecture II.

IX.—Fever.

When a person is inoculated with the virus of small-pox, a poison is introduced into the body—nay, into the blood. That it distempers the blood, is concluded from the generality of the symptoms.

These are, rigors and shivers over the whole body; to which succeed a fever, hot skin, quick pulse, and general illness, accompanied with severe pain in the back and head, inclination to vomit, pain on light pressure at the pit of the stomach, stupor, and drowsiness.

Counting from the first invasion of the fever, the pustules of small-pox arise on the fourth day, rarely sooner. At first very small, they grow greater every day, and rise more and more to a head filled with pus. About the eighth day, the spaces between the pustules look red, and the hands and face swell. On the eleventh day, the swellings are evidently going down, and the pustules have reached their full magnitude. At this time, the fever has greatly diminished or wholly vanished.

Matter taken from any of the pustules will reproduce the fever with certainty in a person who has never had it. The virus, therefore, has been multiplied a myriad-fold—regenerated in the body of the patient. And the question proposed is: To what element of the tissues or of the blood is the reproduction of the virus to be attributed? The pustules do not make their appearance until some days after the fever; excluding them, therefore, from any share in *generating* the virus, the plasma and the corpuscles of the blood remain for examination.

Liebig, it is well known, ascribes the phenomena which succeed the introduction of the small-pox virus into the blood to

* Dr. Thudichum attributes the failures of observers to detect urea in the blood, to their precipitating the albumen by heat. If the blood be treated with strong alcohol, the urea is dissolved, and the albumen rendered insoluble at the same moment. The former can be detected in the alcoholic solution.

a process exactly resembling fermentation. Yeast, he says, is putrefying gluten, and its component particles are therefore in a state of intestine motion or transformation. And he lays down the proposition—that a substance in the act of decomposition, added to a mixed fluid in which its constituents are contained, can reproduce itself in that fluid exactly in the same manner as new yeast is produced when yeast is added to liquids containing sugar and gluten.

Thus the virus of small-pox, which virus is formed out of blood, causes such a change in blood as gives rise to the reproduction of the virus from the constituents of that fluid; and the transformation is not arrested until all the particles of the blood which are susceptible of the decomposition have undergone the metamorphosis.

Admirable as this teaching is, there is another view of the matter. Naturalists insist that yeast is a growing plant; and physiologists insist that changes in a medium in which living bodies grow, are to be referred to other laws than those of ordinary chemical affinity.

In the January number of the *Quarterly Review*, for the present year, the writer of the article "On Bread" says:—"The yeast-*plant* represents one condition of a species of fungus remarkable for its wide distribution and the magnitude of its effects. The forms in which it is familiar to most persons, are yeast, the vinegar-plant, and the common blue mould which occurs on sour paste. Yeast and the vinegar-plant are the forms in which it vegetates under various circumstances, when well supplied with food. Mildew or mould is its fruit. The yeast-plant," he goes on to say, "is a wasteful feeder. Not only does it decompose so much of the liquid as it requires for its own nutrition, but it produces a similar decomposition in the liquid around it; and this *contact-action* is at present a stumbling block to natural philosophers, many of whom are earnestly endeavouring to surmount it. The chemist refers it to the same unexplained force by which inorganic substances cause the combination or separation of substances, without themselves undergoing alteration; as when spongy platinum causes a mixture of oxygen and hydrogen gases to unite and form water."

Many thoughtful and learned men have protested against the prevalent tendency to explain all vital phenomena by physical and chemical laws only, without regard to the order of conceptions specially belonging to vital phenomena. However this may be, the multiplication or increase of a contagious virus—such as that of small-pox in the blood of a living person, its discharge by the pustules of the skin, and the patient's recovery from it—may *à priori* be assumed to be something more than a simple physical fact.

But let us state the argument, from which we shall conclude that—

X.—The Virus of Small-Pox is Generated by Abnormal Metamorphosis or Disease of the Corpuscles of the Blood.

It has been established by unquestioned microscopical observations, that the qualities and secretions of an organ are aggregates of the qualities and secretions of the minute cells which compose it. In vegetable structures, the qualities of the leaf are produced by, and reside in, the cells of the parenchyma of the leaf. The colours of petals and the qualities of fruits are aggregates of the qualities or properties of the cells composing these parts.

In animal bodies, the qualities and secretions of the liver, skin, and kidneys, are known to be produced in the cells or particles composing the parenchyma of these organs. In all cases that are known of the generation of poisons in a living body, the poison is a product of cell-metamorphosis. It is so in vegetable bodies—instanced by opium, strychnia, belladonna, etc.; the properties of the juice of the poppy and of other plants being generated in the cells of the plant. So also in animal bodies; the poisons of wasps, bees, and serpents, are generated by the metamorphosis of cellular bodies.

Analogously of blood, we have shown that some of its most prominent and important qualities are qualities of its corpuscles, of the cellular bodies floating in it. And we have discussed the physiological production of matter in the blood-corpuscles of the human body which is poisonous to the brain, namely, the matter of venous blood. When, therefore, as in small-pox, blood becomes the seat of a contagious poison which has been generated in it, there is a strong inducement to interpret the pathological fact by reference to physiological laws and phenomena. And this consideration has much more weight than might at first appear; if we find contagious fevers arise from exposure of the blood to miasms in the atmosphere, that the infection is received during respiration, and through the lungs, where we have actual proof that the corpuscles are naturally changed in properties and colour; and if not so changed, that they carry within them a poison through the body which disturbs the functions of the brain.

It seems opposed to all reason to infer that the small-pox virus, a matter of definite quality and action, often generated in the blood in very large quantities in a few days, should be referred to the plasma, a fluid of variable composition, when all analogy bases it in the corpuscles.

Upon these grounds, we put forth the following physiological interpretation of the phenomena which succeed the introduction of the small-pox poison into the blood by inoculation. The corpuscles of the blood, passing in the vessels at the moment these are wounded and opened by the instrument which introduces the virus, are the first affected by it; and from them the rest of the corpuscles are infected by contagion, or contact-action. The spreading of disorder from corpuscle to corpuscle throughout the blood, is denoted by the fever, which rises daily greater and greater, until inflammation and pustulation are established.

The physiological demand is here deemed analogous to that where abscess and ulceration is established for the expulsion of a thorn or a slough. That is to say—in thorns, sloughs, and necrosis of bone, the demand is for the expulsion of an injurious body from the solid texture (the common tissue.) In small-pox and other fevers, the demand is for the expulsion of some hurtful matter from the plasma of the blood. In both examples, forms of inflammation are the phenomena.

Life is a state of constant antagonism to the forms of dead matter; and any injury or decomposing tendency excites reaction. The corpuscles of blood, infected with a contagious poison, therefore, react against it; they excrete, throw off, or free themselves from the virus, and their countless multitude gives quantity to the products. The prosecution of the virus then devolves upon the plasma; and in small-pox, inflammation and pustulation in the common tissue of the skin is established for its final expulsion and the patient's recovery.

It is of no consequence to our interpretation of the reproduction of the virus of small pox, how the rival claims of chemistry and physiology are disposed of; for, whether the contagion does spread through the blood from particle to particle in the manner of a chemical ferment, or whether from corpuscle to corpuscle as from one living body to another,—whichever form of words or ideas is chosen, the proposition that the corpuscles are the particles of the blood through which the poison operates is agreeable with, or remains unshaken by the acceptance of either explanation. But, whatever be the order of our conceptions as relates to the regeneration of contagious poisons in the blood, whether chemical or vital, the same ought to be carried out in its consequences. Therefore, if the origin of the small-pox poison be referred to a chemical ferment, the origin of other poisons in plants and animals ought also to be referred to chemical action. Should this be done we may truly dismiss vital action and vital conceptions altogether from the scene. Are we yet prepared to go these lengths? Much consideration, we think, is demanded before an affirmative answer be given.

The assumptions necessitated upon either view of the phenomena of small-pox disease may be considered as in favour of the physiologist. On the one hand, by the chemical philosopher it is assumed that yeast is decomposing gluten; that the growth of yeast is a progress in decay; that the small-pox virus is in a state of intestine motion, and that this commotion is communicated to some unknown particle or ingredient in the blood. On the other hand, the physiologist does no more than state that yeast is a living plant; that the corpuscles of blood are living organisms with the properties of other cellular bodies, namely, growth and metamorphosis, and that some of them, infected by injurious matter imbibed from the air or otherwise introduced into the blood, communicate disorder to the rest by contagion, or contact-action. Of these two interpretations, the chemical one is unsatisfactory, because it breaks up all our ideas of peculiarities in living bodies; it leaves unexplained numerous other examples of contact-action in physiology, and it refers indefinitely to particles in the blood, without distinction between the plasma and the corpuscles; whereas, we point specifically to bodies floating in the fluid of the blood of the same class or kind with other bodies which are known to generate poisons, both in animal and vegetable structures, and which, moreover, in the human structure do unquestionably generate and contain the matter or poison of

venous blood. Lastly, there seems a preponderance in favour of the interpretation which bases the phenomena of small-pox fever upon the corpuscles of the blood rather than on the plasma; because, as we have said, in all instances known of the generation of poisons in living bodies, animal or vegetable, the production of the poison is a function of analogous bodies.

The regeneration of a contagious virus in the blood and symptoms of fever go together; therefore, if the production of the virus be rightly ascribed to abnormal metamorphosis of the corpuscles, phenomena of fever must be based upon the corpuscles. It is to be examined, therefore, by what facts we support this more general conclusion.

Gout is a disorder attributed to altered qualities of the blood. Yet it forms a strong contrast with small-pox and other fevers; and from this contrast the suggestion arises, that if in either of the two diseases, gout or small-pox, the *materies morbi* can be fairly allocated to one part of the blood, the place of the other will have been found.

Now the close dependence of the plasma upon articles of diet, and the argument that the plasma may become distempered without necessarily involving the corpuscles, have been discussed. Gout is a disorder substantiating the argument. For its access is promoted in a very remarkable manner by a full and luxurious mode of living; and the more surely, if this be conjoined with a sedentary and inactive habit, which is known to produce inactivity in the depurating organs. The attack commonly comes on without previous warning. The person goes to bed and to sleep, thinking himself in his usual health, and is awakened in the middle of the night with pain and inflammation in one of his feet. If there be any previous indications of the approaching attack, they are referable to the digestive and depurating organs; such as diminished and high coloured urine, diminished appetite, flatulence, and, perhaps, some slight diarrhœa, or its opposite constipation.

In gout, inflammation is the primary and diagnostic phenomenon. That it is a depurative action is shown by the result. There is no fever. A *materies morbi* is deposited at the place of inflammation; but this is not contagious. By proper medical treatment the natural depurating organs—the skin, bowels, and kidneys—may be stimulated to assist in removing the offending matter from the blood, so that the inflammatory reaction may be either shortened, mitigated, or altogether extinguished.

In contrast with this sketch of the phenomena in gout, contagious fevers arise in a different way; not through errors in diet, but from poisonous substances inhaled by the lungs or ingrafted into the blood. Symptoms of fever are primary features of the disorder. A contagious virus is generated in the blood, and inflammation is consecutive or secondary, following after symptoms of fever, because the plasma is distempered, not primarily, as it is by errors in diet, but consecutively, through the excretions of the previously diseased corpuscles.

These statements, we apprehend, contain the ground of distinction between erysipelas, as a local inflammation, and erysipelatous fever; rheumatism and rheumatic fever. In the local inflammations without fever, the plasma only; in the fevers, both corpuscles and plasma are disordered.

As this is an important point of our subject let us recapitulate the facts:—

Diet replenishes the plasma; and the plasma is the part of the blood from which elements of repair and inflammation are taken. Unwholesomeness of diet disorders the qualities of the plasma, and produces gout, an acute inflammation without fever; and morbid matter from the plasma is deposited at the place of inflammation. There are other inflammations where evidence of a depurative action upon the fluid of the blood appears.

Air acts directly on the corpuscles of the blood, which are bodies with the properties of cells. From substances in the air fever arises; and in fever a contagious poison is generated in the blood. The corpuscles of the blood naturally contain within them the matter of venous blood, which is poisonous to the brain. And in other instances—in vegetable and animal structures—bodies, analogous to the blood-corpuscles, are the organisms in which poisons are produced.

From these facts, we draw the general conclusion that abnormal metamorphosis, or disease of the corpuscles of blood, is the antecedent of fever; and distemperature of the plasma the antecedent of inflammation.

[*To be continued.*]

Transactions of Branches.

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

WHOOPING-COUGH: ITS NATURE AND TREATMENT.

By John Armstrong, M.D., Gravesend.

[*Read September 24th*, 1858.]

The diseases of children are generally regarded as difficult to distinguish, and consequently difficult to treat. I am of opinion that this difficulty is more apparent than real; and to those who will take ordinary pains to acquaint themselves with the peculiarities of diseases in children, their characters will present themselves in very intelligible forms. I hold, then, that not only disease, but its precise conditions or stages, are as readily recognised in infancy as in adult life by any man of fair average observing powers. I deem it right to make these remarks before introducing the particular subject of this paper; because, I conceive, upon the clear appreciation of the stage of the disease and of the powers of the patient entirely depends the success of the treatment. Few diseases have been more perplexing and embarrassing to the young practitioner, and probably for no other disease have a greater number of remedies been prescribed, than pertussis; and so unsatisfactory have been the results, that the old woman and the empiric have often claimed to themselves equal skill with the legitimate practitioner in the management of this disease.

My attention was, I might say, first most earnestly directed to it twenty years ago, when it prevailed extensively and fatally in my neighbourhood. Two children died in one house, in my own practice, within a week of each other. This distressed me exceedingly. I had been most sedulously doing all that I could, guided either by such works as I could get, or at the suggestion of others; but nothing seemed to do, and I had several deaths occur in my practice. The conviction was forced upon me, either that I did not understand the disease, or that it was of a more fatal character than usual. I therefore resolved to study the disease for myself, and the results of that investigation have been most satisfactory; so that I may say that deaths from whooping-cough in my practice have been of rare occurrence. The time allowed for these papers would not permit me to enter into the account of these investigations. These may form subjects for other papers, and are, I assure you, full of interest; but, as my object at this time is to bring before the members the treatment which I have found most useful, I shall confine myself to that part of the subject, connecting therewith such remarks as are necessary for understanding the principles of such practice. Neither shall I occupy your time with any description of the disease; but as my views are associated with and adapted to peculiar phases which seem to arise in its progress, a general outline becomes indispensable to the correct application of the treatment.

Whooping-cough occasionally prevails as an epidemic; at other times, it occurs sporadically, and is, I believe, an animal poison, affecting the pneumogastric nerve, and producing its effects mainly upon those parts supplied by that nerve with nerve-power, or upon the sources of its own origin. It is contagious.

Some writers have divided it into two stages—a catarrhal and a convulsive stage. This is a very good division; but the division into three stages appears to me preferable, and I have adopted that division. They are, a first, or *catarrhal* stage; a second, or *congestive* stage; a third, or *declining* stage.

It appears to me that upon a correct diagnosis and adequate treatment of these stages and their complications, depends the successful issue of the disease. We shall then proceed at once to these parts of the subject.

I may observe, we do not often see children in the first or catarrhal stage, as parents regard the child as suffering from a cold; but if you are fortunate enough to be consulted in the first stage, and manage it correctly, there will probably be a safe issue of the case. I regard the first stage as the most important, because on the proper treatment of the disease at this period depends the character of the subsequent stages. I wish particularly to direct attention to this view of the subject; and, indeed, so confident have I felt for years of breaking the strength of the disease at this period, that I have not hesitated to say to parents, "If you will faithfully follow my directions,

I will undertake that your child shall have very little the matter with him at the end of a month or five weeks;" and I have over and over again made my words good. I am not at all certain that it has a definite time to run, but I entirely reject the statement that, if it begins in November, it will continue till May. The duration of the disease is short or long, severe or mild, in many cases, according to the care and judgment with which the first stage is treated. Let me, therefore, urge you to get your patients, when whooping-cough occurs in their families, to allow you to treat the other members as soon as they exhibit symptoms of the disease.

I shall be met here with the objection, Are not the symptoms of common cold, and of whooping-cough in its first stage, very similar? May you not, therefore, be subjecting children to treatment for that disease, who have only ordinary colds? True: but the treatment will not injure them, if it be merely a cold. But this leads to the inquiry, Are there any signs whereby we can distinguish whooping-cough in its first stage from an ordinary cold? I believe there are. They are these. The cough of pertussis is peculiar; it is paroxysmal from the first; the fits of coughing are most frequent in the night; there is always consciousness of their approach; and the child resists the cough; during the fits of coughing, the head and face are always red, and the veins swollen; and, lastly, as soon as the fit is over, the child is as cheerful and playful as if nothing had been the matter. These signs, taken together, will enable us to diagnose pertussis with tolerable certainty.

Let us suppose, then, that you are requested to take charge of a child in the first period of the disease: what is to be the course of proceeding? I assume to myself that the child is of ordinary strength and health, and not of strumous diathesis. First, if it be the cold season of the year, confine the child to the house, and, if need be, to its room. In the warm season, it may be allowed to go about, avoiding the early morning's and evening's air. The diet should be light, reduced in quantity, animal food not more than once a day, and all stimulants interdicted. The medicines I rely upon are entirely eliminative, and consist of emetics, purgatives, and diaphoretics. The first two are generally combined, and consist of calomel and antimony, or calomel and ipecacuanha: these I give every or every other night, for about three or four times; and afterwards occasionally. Let me suppose a child of three years old, of ordinary power, having no strumous tendency: I would prescribe as follows:—

℞ Hydrargyri chloridi gra. ij; antimonii potassio-tartratis gr. ½; *vel* pulveris ipecacuanhæ gra. iij. M. Fiat pulvis alternis noctibus sumendus per vices tres. Mitte iij tales.

Throughout the day, the following mixture should be used.

℞ Liquoris ammoniæ acetatis ʒiv; potassæ bicarbon. ℈i; vini antimon. potassio-tart. ♏xxx; acidi hydrocyanici (Scheelii) gtt. iij; syrupi aurantii ʒij; aquæ anisi ad ʒij. M. Fiat mistura cujus sumantur ʒ ij 4tis horis.

Many cases treated in this way will become very mild, never whoop, or only occasionally; and will pass through the subsequent stages with comparative ease and comfort. This stage varies in its length from six days to sixteen; and the second stage begins, characterised by its peculiar whoop. It is at this stage that we are most frequently consulted; and it is now that your skill in distinguishing diseases in childhood will be required. The tendency to congestions is very considerable; inflammatory affections also may arise, and exudations of unhealthy matters take place into different structures. The term congestive is especially applicable to this stage of the disease, and upon your skill in detecting, and care in treating, these complications, hangs the life of your patient. Let me then say, keep your eyes and ears carefully on your patient, bearing in mind the principle laid down in the commencement of this paper—that the parts supported by the pneumogastric nerve will be the seat of these congestions. I use the term congestions, because I believe inflammations are of rare occurrence; and therefore the treatment suitable to inflammatory complications is rarely requisite. I find a full statement of this part of the subject would extend this paper far beyond the time allowed: I shall, therefore, direct my attention to a few practical points.

The whoop is now fairly set in; and a clear ropy phlegm is secreted in considerable quantity. If no complications exist, you may begin the treatment as advised for the first stage, after which, give the iodide of potassium with tincture of belladonna or of conium. This medicine, in its proper place, is invaluable. Purgatives, and occasionally an emetic, will be requisite from time to time. If a tendency to congestion occurs, how is it best recognised? I answer, first by the countenance. If you see a child's face full, bloated, and approaching lividity; if the conjunctiva becomes swollen, watery, and bloodshot,—you may expect to find a similar condition in the lungs. The stethoscope reveals extensive *râles* and crepitating sounds, arising from the quantity of the peculiar fluid diffused throughout the air-cells; the entrance of the air is obstructed; the lobules collapse; and a state of things known by the names of atelectasis, pulmonary collapse, or carnification, takes place. It is probable that inflammatory affections of the bronchial tubes may coexist with this state of things: this is one, and *a frequent mode*, whereby life is destroyed in these cases. Cerebral congestion may also now arise; and hepatic and stomach disturbances often occur.

In addition to the above treatment, at this period I use rubefacients; and, I conceive, with considerable benefit. The embrocation I use has for its basis the spirit. terebinth. You may treat with confidence a large proportion of cases on this plan most satisfactorily.

If complications of an inflammatory character arise, a few leeches, derivatives, and counterirritants, will be requisite. But beware of depressing your patient.

The last stage, or stage of decline—and decline it is in the worst sense sometimes—is characterised by symptoms of an improving or grave character, as the case may be. In bad cases, the phlegm now presents a yellowish colour; the pathological condition indicates enlargement of the bronchial tubes; perspirations, a quick feeble pulse, and a variety of other symptoms, arise; and the patient sinks, worn out with disease and suffering. If tubercles existed previously in a quiescent state, they are thrown into a state of activity, and the child dies phthisical; or convulsions and coma occur, hastening the fatal issue. Abdominal disease occasionally is called forth, of a very dangerous character; and yet, notwithstanding all these formidable appearances, it is astonishing how many will be saved by good care. It is in this stage that change of air is so useful, and *not before*. I wish distinctly to state this point. I am sure many children are lost (from the popular, and I might say medical belief too, that change of air is the great remedy for whooping-cough) by taking them from home, its comforts, and protection, in the congestive stage of the disease. In conjunction with change of air, if you can have it, but if not, you may recover many cases by the administration of the iodide of iron and mineral acids, and using externally the acetum destillatum, with a small quantity of acetum lyttæ, good nutritious food, and attention to the bowels. I have sometimes used cold sponging with salt water or vinegar and water. The child should be cautiously exposed to the air.

It is in this state, or towards the end of the second stage, that the nitric acid plan recommended by Dr. Gibb is useful; but if the acid be given earlier, and especially when congestions or inflammatory affections exist, I believe it may do much harm: and with it I would class several other medicines, such as alum, sulphuric acid, steel, and a host of other reputed specifics.

I have not alluded to the statement recently made about the saccharine condition of the urine in whooping-cough, because I believe, in the present state of our knowledge on the production of sugar in the human body, very little can be deduced from that statement; and the difficulty of fixing a saccharine condition of the urine upon pertussis, as one of its invariable concomitants, and therefore cause, would be greatly increased by the fact that, when cough arises in diabetes, it scarcely ever partakes of the characters of pertussis.

I shall now add a few illustrative cases.

Case I. E. B., aged 5, had had whooping-cough for three weeks. Her mother had been using Roche's embrocation, salt of tartar and cochineal, internally, which, she was assured, was a certain cure for the complaint; but, as the patient got daily worse, I was requested to see her. I found her with a swollen face; the eyelids puffed; the conjunctiva injected; a hot skin; quick pulse; whitish tongue; sickness after each fit of coughing; fits of coughing very frequent, particularly at night; anorexia; thirst considerable; she was very fretful. Extensive *râles* were heard over both sides of the chest; percussion was clear. The expectoration was ropy, clear, with occasionally some yellowish mixture.

℞ Hydrargyri chloridi gra. ij; antimonii potassio-tartratis gr. ¼. M. Fiat pulvis statim sumendus et post horam dimidium repetendus, nisi vomuerit ægra.

She was ordered to take the following mixture after full vomiting had been produced.

℞ Liquoris ammoniæ acetatis ʒi; vini antimonii potassio-tartratis ʒi; acidi hydrocyanici (Scheelii) gtt. vj; syrupi aurantii ʒij; misturæ camphoræ ad ʒvi. M. Fiat mistura cujus sumatur ʒss 4tis horis.

Mustard poultices were ordered to be applied to the chest.

At my next visit, the child was considerably relieved. The same treatment was continued for about a week. The chest was rubbed night and morning with an embrocation consisting of turpentine, compound soap liniment, and strong solution of ammonia. The case had then become so far relieved that the issue was no longer doubtful; and I prescribed an aperient of jalap and calomel every other night, and to take three times a day the following:—

℞ Potassii iodidi gra. vj; tincturæ conii ʒss; syrupi aurantii ʒij; aquæ anisi ad ʒiij. M. Sumatur ʒss ter die.

This case steadily progressed to recovery, and required very little treatment after the third week. As there were several other children who had not passed through the disease, I informed the parents of my opinions, and explained to them that, by judicious management, it was very probable the other children would escape so dangerous a condition as their child had passed through. The parents gladly availed themselves of my help. The treatment recommended in the text was adopted, with the most satisfactory results: indeed, I have so frequently adopted this course, and with so much uniformity of success, that I do not hesitate most strongly to recommend it to my professional brethren.

There is another condition which arises in the congestive stage, and which, unless clearly recognised, invariably results in a fatal termination, but if made out in anything like good time, and properly treated, will result in recovery. The following case will prove interesting.

Case II. H. P., aged 6, of strumous constitution and considerable mental promise, was seized with pertussis in a severe form. His parents entertained the opinion that change of air was "the remedy" for the disease, and removed him to the seaside. He did not improve by the change, and medical aid was obtained. The open air, some suitable medicines, etc., were prescribed; but the child became worse. He now became so weak that he was unable to leave the house; but it was considered, as the bedroom looked out on the sea, that all the benefit short of the exercise would be obtained by keeping the window open. Still he got worse; his cough had lost its *whoop*, but was almost constant. He had wretched nights, and wasted daily; and a fatal issue was expected. I was requested to see him, and had the pleasure of meeting his medical attendant, a gentleman of considerable intelligence. The following was the state in which I found the child.

He lay on his back; his nostrils played freely; he had a hot skin, bedewed with slight moisture; a quick pulse, 130; almost incessant cough; he was restless, moaning, very irritable, and thirsty; his respiration was very quick. The abdomen was tumid and tympanitic; the region of the liver was full, and dull on percussion. The bowels had been relieved every day. The left side of the chest expanded freely, the right not nearly so distinctly; percussion of the left side was resonant throughout; the lower part of the right side was very dull. The stethoscope indicated solidification (or carnification, as it is termed) of the lower lobe of the right lung. I could discover scarcely any respiratory murmur in that part; while, in the other parts of the lungs, there were mucous and subcrepitant *râles*. His medical attendant at once felt, with me, that here was the precise point to which we were to direct our attention; and we adopted the following plan:—

℞ Hydrargyri cum cretâ gra. ij. M. Fiat pulvis 6tis horis sumendus.

℞ Liquoris ammoniæ acetatis ʒi; vini ipecacuanhæ ʒi; spiritûs ætheris nitrici ʒi; syrupi aurantii ʒiij; aquæ camphoræ ʒiv. M. Fiat mistura cujus sumatur ʒss 4tis horis.

Applicetur emplastrum lyttæ lateri.

This treatment was to be continued for two or three days; the blister to be repeated when the first had healed. After the gums had become slightly affected, iodide of potassium was to be given in the compound decoction of the sarsaparilla of the *Pharmacopœia*. This treatment was faithfully carried out; and one of the first signs of improvement was the return of the whoop, which occurred on the third day. He went on steadily improving, and was soon quite well, and enjoys now excellent health.

Convulsions occasionally occur in the second or congestive stage, and are traceable to some injudicious meddling. For instance, I have known a fit of convulsions produced by the too free administration of opiates, such as paregoric, to allay the troublesome cough. In one case, a stout boy, four years of age, was taking nitric acid while a state of congestion of the lungs existed: a smart convulsive attack, followed by a very torpid state of brain, occurred; and I think the child was only saved by very determined treatment—leeches, blisters, and purging. I may just say, that the medical man told me he should be very chary of nitric acid again.

I feel I shall be trespassing on the members to give cases of the third stage: the principles of treatment are so clearly laid down in the text. I may just say, the form I use, in this stage, of internal medicine, is, say for a child of five years of age—

℞ Syrupi ferri iodidi ʒiij; acidi nitrici diluti ʒi; acidi hydrochlorici diluti ʒi; tincturæ lupuli ʒiij; aquæ anisi ad ʒvj. M. Fiat mistura cujus sumatur ʒss ter die.

I have no doubt, if the proper time for this be made out, the results will be satisfactory.

P.S. At the meeting where the principal part of this paper was read, a member spoke favourably of the chloride of strontium; and, some time afterwards, another member spoke to me again favourably of it. I therefore resolved to try it. I have tried it in several cases, at various periods of the disease, and on patients of almost all ages. I tried it also in coughs of a convulsive and paroxysmal character; and my opinion does not at all correspond with that of my medical friends: indeed, I believe it is positively injurious under certain circumstances.

Before closing this paper, I wish to direct attention to the benefit of quinine whenever the accompanying fever partakes of the intermittent or remittent form. It speedily alters the aspect of affairs, and a troublesome and obstinate case is soon cured. I again repeat: it is the correct diagnosis and the suitable treatment for the pathological condition which alone constitutes the safe treatment of pertussis.

Reviews and Notices.

Hæmorrhoids and Prolapsus of the Rectum: their Treatment by the Application of Nitric Acid. By Henry Smith, F.R.C.S., Surgeon to the Westminster General Dispensary. Pamphlet, pp. 46. London: Churchill. 1859.

This publication is a further exposition of Mr. Smith's results in the treatment of piles and prolapsus of the rectum by nitric acid. It has for its purpose the corroboration of recommendations and opinions previously expressed on the same subject in the pages of one of our contemporaries. The employment of nitric acid topically is especially advised "in those instances where hæmorrhoidal tumours are small or moderate in size, and not numerous; and where their structure is more evidently composed of morbid texture in which small arteries, rather than the veins, are interested, as shown by their bright red colour, and tendency to bleed whenever the patient is at the closet, or when the tumours are handled." But the utility of nitric acid is by no means confined to such; it is no less useful where there is no palpably isolated tumour, but where general congestion and great relaxation of the mucous membrane of the rectum is accompanied by profuse and constantly recurring hæmorrhage from small rounded or elongated vascular prominences.

It is almost needless to observe, that the remedy recommended by Mr. Smith is one that requires a certain amount of care and judgment in its employment, since its action, instead of being limited to altering the condition of the minute vessels—as the action of nitrate of silver, for example—or even to the production of a superficial eschar, often a desirable result, is quite capable of deeply destroying the texture to which it may be applied.

The nitric acid treatment is, moreover, equally sound in

principle as the mechanical method; it is far less painful and dangerous. Mr. Smith has done well to publish the result of his experience.

A Manual of Medical Diagnosis: being an Analysis of the Signs and Symptoms of Disease. By A. W. Barclay, M.D. Cantab. and Edin., Fellow of the Royal College of Physicians; Assistant-Physician to St. George's Hospital, etc. Second edition. Pp. 616. London: Churchill. 1859.

A Handbook of Hospital Practice: or, An Introduction to the Practical Study of Medicine at the Bedside. By Robert D. Lyons, K.C.C., M.B. T.C.D., Physician to Jervis Street Hospital, Dublin, etc. Pp. 137. London: Longman and Co. 1859.

Of these two books, Dr. Barclay's *Manual* is already too well and too favourably known to require either description or praise. Dr. Lyons's *Handbook* appears for the first time. Both have the same praiseworthy object in view—the making the student acquainted with the phenomena of disease; yet they appear rather to be supplementary of, than rivals to, each other.

Dr. Lyons' treatise consists of a code of directions for the elaborate examination of every organ and function of the body, and for the making of *post mortem* examinations. The student who carefully follows these instructions will find himself in possession of a mass of signs and symptoms which must serve as the foundation for his diagnosis; in the accurate determination of which he will to some extent be assisted by the same *Handbook* that he has been using, but still more by Dr. Barclay's *Manual*, where he will find himself guided to a just appreciation of the diagnostic value of the phenomena he has noticed. Both books are very good; yet, if we were limited to the choice of one only of them for use, we should not hesitate to prefer that of Dr. Barclay.

British Medical Journal.

SATURDAY, MAY 14th, 1859.

FORCEPS PRACTICE.

It is with extreme regret that we learn that a verdict of manslaughter has been found against a surgeon named Thackeray practising at Radford in Nottinghamshire. The charges against him are, that, in a state of drunkenness, he so injured a young woman of the name of Eliza Connor, while attempting to deliver her with forceps, that she died. In the present state of the case, we shall not, of course, do more than draw attention to one or two points of the evidence, which went most strongly to criminate him, but which, it is quite possible, may be completely explained away at the trial.

Elizabeth Elliott, the sister-in-law of the deceased, informed the jury that Mr. Thackeray had been trying for many hours of the night of April 11th to deliver the deceased. During this time, he seemed sober; but, according to the witness, at about 4 A.M. on the 12th, he went for his instruments, and, on his return, in about half an hour, appeared intoxicated.

"I got him," the witness said, "a jug of boiling water, and he put the instruments in, and then he began to use them upon the deceased, and he tried them for about five minutes. He did not succeed in bringing the child forth. Rosanna Fearfield then came, and I went down stairs, as I could not bear to hear her cries. I stayed down five minutes, and then went up again. He was then using the instruments, and he used them for about two minutes. Whilst he was using them, he fell on the floor in consequence of being intoxicated, and he dropped his instruments on the floor twice from the same cause. I then said to him, when he got up, 'Mr. Thackeray, you are drunk.' And he said, 'No, I am not.' He did not use the instruments again. When he fell, he brought the instruments away from deceased in his hand, and the deceased cried out as if he had hurt her. She screamed quite loud."

After this ineffectual endeavour to deliver by the forceps, it appears that Mr. Thackeray left the patient; that he made no further attempt to deliver her; and that that operation was performed in the evening of the same day by Dr. Thomas Wilson of Nottingham, who, in his evidence, says:—

"On Tuesday, the 12th of April, between eight and nine in the evening, I was called upon to attend the deceased. I found her in bed; and Elizabeth Elliott was with her. I examined deceased, and found that she was far advanced in natural labour. The head of the child was presenting about an inch and a half from the external orifice, and was in a natural position. There was also a fleshy substance, about the thickness of my finger, extending about two inches outwardly from the passage; and I called the attention of the last witness to it. Upon examining it minutely, I found it was a portion of the lining of the passage. It was cold, and had lost its vitality. Pains came on about every five or ten minutes; and, about ten o'clock the same night, I delivered her without the use of instruments."

Serious injury had evidently, however, been done to the contents of the pelvis; and, after lingering some days, the patient died. On a *post mortem* examination being made by Drs. Bramwell and Ransom, and Mr. John N. Thompson, there was found in the vagina a lacerated wound, circular, and about an inch in diameter, extending through the entire substance of the part to the submucous tissue; and this tissue, to the extent of four or five inches in each direction from the wound, was sloughy and infiltrated with thin offensive matter. This wound, Dr. Wilson gave as his opinion, must have been caused by the instrument being improperly used. Mr. J. N. Thompson gave similar testimony; and, doubtless on this evidence, a verdict of manslaughter was found.

As we said before, we do not intend to prejudge the case in any way. We only hope and trust that we shall not have to record a second sentence within a few months against a medical man for having, while in a state of intoxication, caused the death of an unfortunate patient in labour by the violent application of instruments: the case of William McHugh, who was convicted in March last of breaking through a woman's uterus with a perforator while in a state of drunkenness, brings disgrace enough, in all conscience, on the profession to last for a dozen years. Our object is to draw attention to the fact that the woman's death arose from the needless application of the forceps.

We are all so accustomed to quote the saying that "meddlesome midwifery is bad", that the majority of us believe there is no such thing as meddlesome midwifery; yet this very case at Radford brings to light a most convincing proof to the contrary. Mr. Thackeray, drunk or sober, either could not or would not deliver without the use of instruments: Dr. Wilson delivered, twenty hours afterwards, with ease. Now, in the majority of cases, this delay would have rendered the delivery more difficult: hence our inference clearly must be, that the use of the forceps in the first instance was quite unnecessary and improper.

We think that Dr. Tyler Smith, when at the Obstetrical Society, a few months ago, he so boldly denounced the use of the perforator, spoke only a portion of the truth; for it is our belief that far more children are sacrificed by the use of the forceps than of the other apparently more formidable weapon. Many a skilful man may go through a long life without finding any ill effects arise from the use of the forceps; but the bungler comes next day and sacrifices a life—it may be two—with his needless fumbling. In cases of protracted labour, there is a temptation, sometimes too great to be resisted, to hurry the event by the use of instruments. But this temptation it is the duty of every honourable man to defy; and it is, we think, the duty of the profession at large to bring its opinion to bear strongly upon what, we fear, is the growing and indiscriminate use of the forceps in labour. We have no doubt whatever, that this instrument is very largely used without any necessity; and any accident which occurs from its employment is therefore open to the suspicion of having been carelessly and unnecessarily—nay, we had almost said criminally—brought about.

THE WEEK.

A letter in the *Times* of last week, which is known to be from the pen of Charles Dickens, dissects all the circumstances connected with the Ramsgate tragedy, with far more minute care, we are sorry to say, than has been bestowed on the question by any medical authority. Mr. Dickens, who, in common with every person who has examined the subject, is thoroughly dissatisfied with the proceedings of the Ramsgate police, and with their *dictum*, apparently given with the idea of saving themselves farther trouble in an investigation to which they are clearly unequal. The slipshod manner in which the coroner appeared to slur over the inquiry ought not, we think, to pass unnoticed. This gentleman is, it appears, a lawyer. This fact will account for the very imperfect manner in which the medical evidence was brought out. We venture to say that, had the coroner been a medical man, many facts connected with the state of the body, that have now passed away for ever, would have been brought to light. The attempts to prove that the cause of death was suicide, and not murder, have, in our opinion, utterly failed; and the chain of evidence so neatly got up by the police of Ramsgate, to prove that the man took extraordinary pains to destroy all identity before committing self-murder, is rotten in every link. We fear that we cannot congratulate the medical witnesses on their evidence. The question, which has not yet been properly solved, is this:—Were the tendons of the forearm, from which the hand had been dissevered, retracted in their sheath, or not? As Mr. Gant has very pertinently said, in a communication to the *Times*,

"On the supposition of suicide, and therefore of mutilation during life, the muscles of the forearm would have contracted as their tendons were divided at the wrist, and then, becoming fixed with the rigidity of death, those tendons would be found drawn high up within their sheaths, and not hanging out at the wrist, as they would be seen were the mutilation made after death."

The Annual General Meeting of the Governors of the Royal Medical Benevolent College was held at the Freemasons' Tavern on Thursday last. Ten members of the Council went out of office, in accordance with the provisions of the Act of Incorporation. Of these, eight were re-elected; viz.: James Bird, M.D.; W. D. Chowne, M.D.; G. T. Dale, Esq.; H. Hancock, Esq.; C. Hogg, Esq.; J. H. Lance, Esq.; G. M. Robinson, Esq.; and F. Webb, Esq. E. Headland, Esq., and J. S. Smith, Esq., were elected to fill the vacant offices. The following resolution was also adopted, on the motion of the Treasurer:—

"That, with the view of completing the College, ladies be admitted as Life-Governors, on payment of five guineas before the 1st of September next."

We hope that many ladies will avail themselves of this opportunity of gaining the power to do acts of benevolence from time to time.

A meeting of the members of the University of London was held on Wednesday last, in the Convocation Room of the University, Burlington House, for the admission of graduates, Earl Granville, Chancellor of the University, presided. In an address on the condition and prospects of the Institution, his Lordship made the following observations regarding the Degrees in Medicine conferred by it.

"With regard to the important and noble profession of medicine the success had, if possible, been still more marked. It was now admitted as an undoubted fact that the University of London offered the best school of medicine in this country; and he believed it was equal, if not much superior, to any other school of medicine in the world. This fact was to a certain degree easily accounted for by the comprehensiveness and strictness of the medical examinations, together with the immense advantages enjoyed by the larger proportion of medical students belonging to the University of London, in the extensive hospitals which abounded in this great city. These examinations, he was happy to say, had now been rendered still more useful and efficient by an arrangement which had been cordially and warmly entered into by all the great hospitals in London, for allowing the practical part of the medical examinations to be conducted successively in their establishments. The position of the medical graduates of this University was shewn, not only by the general estimation in which they were held, but by the rapid manner in which they gained important public appointments, and by the confidence reposed in them in private practice." [*Cheers.*]

In speaking of the dispute between the Senate and Convocation relative to the election of Dr. Storrar as a member of the Medical Council—

"He believed that what had occurred was only the fermentation of a generous liquor, which would leave a wine sound and strong, and of a quality which would give stability to the institution. With regard to the legal proceedings, he believed they had already dwindled into something very like amicable suits; and he rejoiced that one of their results was, that they would be a lesson to all that in no case would the authority of the Senate or the Convocation be allowed to go a step beyond the limits of strict legality. He had himself no doubt as to the issue of the legal proceedings, and he had no excuse to make with respect to the appointment to which they related. He believed Dr. Storrar had already shown himself so useful a member of the Medical Council that, in conjunction with the Crown nominee, Sir James Clark, these appointments would give the University the greatest advantages in effecting improvements in medical education. He might, perhaps, be allowed to explain, what he believed, however, was now well understood—that there was no intention on the part of the Senate to try to pass over Convocation in making the appointment. They believed they had the legal right to appoint, and n that belief, being pressed by the Government to make the

appointment, and being the very last body—except the College of Surgeons, who were prevented by a legal difficulty—to send a member to the Medical Council, it was impossible for them to delay."

We have much satisfaction in directing attention to the regulations recently issued in reference to the Medical Service of Her Majesty's Indian Forces. The warrant refers specially to the relative rank of the medical officer; and, in this respect, is identical in its meaning with the Army Warrant issued last year. Nothing, however, is said on the subject of pay; but we hope to soon see this satisfactorily settled.

AN ACT
TO AMEND THE MEDICAL ACT (1858).

[*April 19th*, 1859.]

Whereas by an Act passed in the last Session of Parliament, chapter ninety, "The Medical Act," provision is made for the registration of members of the medical profession, and certain disabilities are imposed, after the first day of *January*, one thousand eight hundred and fifty-nine, on members of that profession who are not then registered: And whereas, by reason of the time required for the collection and examination of the proper evidence on the first formation of "The Medical Register," it is expedient to amend the said Act as hereinafter mentioned: And whereas it is expedient that Schedule D of the aforesaid Act should be amended: And whereas in sections thirty-one and forty-seven of the Medical Act (1858) the terms "Fellow" and "Member" of the Royal Colleges of Physicians of *London* and *Edinburgh* are made use of, whilst in Schedule A in the same Act "Fellows," "Licentiates," and "Extra Licentiates" of the said Colleges are alone entitled to be registered: Be it enacted by the Queen's most excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

I. The first day of *July*, one thousand eight hundred and fifty-nine, shall be substituted, in sections thirty-two, thirty-four, thirty-six, and thirty-seven respectively of the said Act, for the first day of *January*, one thousand eight hundred and fifty-nine; and the said several sections, and all provisions of the said Act having reference thereto, shall be construed and take effect as if the word *July* had been originally inserted in each of the said sections instead of the word *January*.

II. Section thirty-three of the said Act shall be repealed, and no person shall by reason of the said Act be or be deemed to have been disqualified to hold such office as mentioned in the said section thirty-three, or any appointment mentioned in the said section thirty-six, unless he shall have failed to be registered on or before the first day of *July*, one thousand eight hundred and fifty-nine.

III. The fourth column of Schedule D of the said Act with its heading shall be repealed and omitted.

IV. The term "Member" shall be added after the term "Fellow" to the qualifications described in the first and second heads of Schedule A.

V. And whereas in Schedule A of the said Act there is a reference to section "forty-five", but the word "five" is there inserted by mistake: Now it is hereby enacted, That the words "forty-six" shall be deemed to be substituted in this schedule in the place of the words "forty-five".

VI. Nothing in the said Act contained shall prevent any person, not a *British* subject, who shall have obtained from any Foreign University a Degree or Diploma of Doctor in Medicine, and who shall have passed the regular examinations entitling him to practise medicine in his own country, from being and acting as the resident physician or medical officer of any hospital established exclusively for the relief of foreigners in sickness: Provided always, that such person is engaged in no medical practice except as such resident physician or medical officer.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR SCOTLAND.

Physicians' Hall, Edinburgh, April 30th, 1859.

Sederunt:—Mr. Syme, *Chairman;* Dr. Christison, Dr. Andrew Wood, Dr. Alexander Wood, Dr. Watson, and Dr. Lawrie; Dr. William Robertson, *Registrar.*

1. The minutes of last meeting were read and confirmed.

2. The auditors appointed at last meeting to examine the Treasurer's accounts, made the following report, which it was resolved should be included in the next printed minute:—

Abstract of Account, Charge and Discharge, of Treasurer's Intromissions with the Funds of the Scottish Branch of General Medical Council, up to evening of March 26th, 1859.

CHARGE.	£	s.	d.
1575 Registrations at £2	3150	0	0
5 „ at £2:5	11	5	0
4 „ at £5	20	0	0
2 „ uncompleted, at £2	4	0	0
2 Fees received and returned, at £2	4	0	0
Stamps and Overdrafts, as per Registrar's Cash-book	3	10	11
Sum	3192	15	11

DISCHARGE.	£	s.	d.
Paid Clerk to 18th March, 1859	20	10	0
Paid Messenger	3	0	0
Paid Advertisements to Jan. 1st, 1859..	44	11	10
Paid Stationery, etc., for Office, to do...	23	5	0
Paid Printing to do.	10	4	0
Paid Expenses in buying Consols	11	5	1
Carriage of Parcels, Postages, Stamps, Fees and Overdrafts returned, Commission on Bank-orders, and Petty Sundries, per Cash-book	31	9	1
Invested in 3 per cent. Consols	1907	10	0
In Bank, at Credit of S. B. C.	1133	16	8
Balance in Registrar's hands	7	4	3
Sum	3192	15	11

Edinburgh, April 30th, 1859.—The undersigned have examined the state of Treasurer's account to 26th March, 1859, and find it correct and duly vouched, and a balance of £7:4:3 in the Registrar's hands. (Signed),

Alexander Wood, M.D.
Andrew Wood, M.D. } *Auditors.*

3. A report from the University of Göttingen, relative to the degree conferred upon Dr. Thomas Laycock in 1839, having been considered, a special order was made to register Dr. Laycock as M.D. of the University of Göttingen, 1839.

4. The returns from the Universities of Rostock and Jena, made in answer to Dr. Hawkins' circular, were laid before the Branch Council. They included the names of seven applicants for Registration in Scotland; but as, in each case, the degree had been conferred *in absentiâ*, no special order for Registration was made.

5. A report from the University of Genoa, relative to the degree conferred upon Dr. Albert Monastier in 1855, having been considered, a special order was made to register Dr. Monastier as M.D. of the University of Genoa, 1855.

6. The Registrar was empowered to register the degree obtained by Dr. Day from the University of Giessen, provided a satisfactory report should be forwarded by that University to the General Registrar.

7. An application for Registration was presented on behalf of Mr. P. D. Loeterbagh, a native of Holland, now resident in Lerwick, founded on diplomas as "apothecary", "Surgeon-on-shore", and "naval surgeon", granted by the Commission of Medical Education and Superintendence of Dordtrecht. The Branch Council resolved that they had not the power to recognise these qualifications without a special order of the General Council, as provided by sect. xlvi of the "Medical Act", and in the meantime directed the Registrar to ascertain, by correspondence with the Dordtrecht Commission, the precise nature

of the qualifications in question, and by what authority they are conferred.

8. The claim of Mr. William Hay, of Eskdalemuir, by Langholm, supported by additional testimonials, having been reconsidered and admitted, a special order was made to register Mr. Hay as "surgeon in the public service".

9. The claim of Francis Dawson, parochial surgeon in Rothes, Morayshire, with additional testimonials, was in like manner reconsidered and admitted.

10. A special order was made to register James Lindsay, parochial surgeon of Kilchrenan, as "surgeon in the public service".

11. The claim of John Macfarlane, parochial surgeon at Arrochar, with accompanying testimonials, having been considered, the Registrar was directed to intimate to Mr. Macfarlane, that the Council decline to make a special order for Registration in his case.

12. Letters regarding the legality of appointing an unregistered person to fill the office of house surgeon in an hospital or infirmary having been read, the Registrar was instructed to write in answer:—"That the Branch Council cannot, without exceeding their powers, offer any authoritative or legal interpretation of the provisions of the 'Medical Act', and must simply refer their correspondents to sects. 36, 37, and 40, of the Statute."

13. Returns from all the Scottish Colleges and Licensing Bodies mentioned in Schedule A of the 'Medical Act', were received and examined by the Branch Council, in conformity with minute of General Council Meeting, Nov. 27th, 1858, sect. 7.

It was resolved to request the medical faculty of King's College, Aberdeen, to furnish their regulations in a printed form, uniform with the returns made by the other Licensing Bodies.

The Registrar was instructed to transmit to London, for the use of the General Council, thirty copies of each set of returns made to the Branch Council.

(Confirmed) James Syme.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South Midland. [Annual Meeting.]	Infirmary, Northampton.	Monday, May 30th, 1 P.M.
Lancashire and Cheshire. [Annual Meeting.]	Town Hall, Chester.	Wednesday, June 8th, 12 noon.

SOUTH-EASTERN BRANCH:

SOCIAL AND SCIENTIFIC MEETINGS OF THE MEMBERS RESIDENT IN ROCHESTER, MAIDSTONE, GRAVESEND, DARTFORD, AND THEIR VICINITIES.

A social and scientific meeting of members of the South-Eastern Branch resident in Rochester, Maidstone, Gravesend, Dartford, and their vicinities, will be held on

Friday, May 20th, 1859, at 3.30, at the Town Hall, Dartford.

The members resident in this district will be gratified by the attendance and assistance of any of the members of the British Medical Association.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-third Annual Meeting of this Branch will be held on Wednesday, June 8th, at the Town Hall, Chester, at Twelve o'clock at noon, under the presidency of E. Waters, M.D.

The members and their friends will dine together after the meeting at the Albion Hotel.

Gentlemen who intend to bring forward cases or communications are requested to send notice to the Secretary as early as possible.

A. T. H. Waters,
Honorary Secretary.

Liverpool, May 11th, 1859.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

Philip H. Williams, M.D., *General Secretary.*

Worcester, April 26th, 1859.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

An Ordinary Meeting of the above Branch was held at the Hen and Chickens Hotel, Birmingham, on April 21st, 1859. The Chair was occupied, in the absence of the President, by W. Downes, Esq. (Handsworth). There were also present: A. Allcock, Esq. (Smethwick); E. Bartleet, Esq. (Birmingham); T. Boisragon, M.D. (Birmingham); G. J. Brown, Esq. (Birmingham); Edward Cheshire, Esq. (Birmingham); J. Clay, Esq. (Birmingham); A. Fleming, M.D. (Birmingham); Bell Fletcher, M.D. (Birmingham); T. S. Fletcher, Esq. (Bromsgrove); J. Fraser, M.D. (Wolverhampton); J. J. Hadley, Esq. (Birmingham); H. Hancox, M.D. (Wolverhampton); A. Hill, M.D. (Birmingham); W. Hinds, M.D. (Birmingham); W. Hopkins, Esq. (Handsworth); W. E. Johnson, Esq. (Dudley); G. Jones, Esq. (Birmingham); W. J. Kite, Esq. (West Bromwich); G. H. Marshall, M.D. (Birmingham); J. B. Melson, M.D. (Birmingham); E. D. Moore, Esq. (Walsall); J. R. Nicholson, M.D. (Redditch); O. Pemberton, Esq. (Birmingham); J. Postgate, Esq. (Birmingham); R. Sandford, Esq. (Wolverhampton); J. V. Solomon, Esq. (Birmingham); S. Spratley, Esq. (Birmingham); T. Underhill, Esq. (Great Bridge); W. F. Wade, M.B. (Birmingham); C. Warden, M.D. (Birmingham); T. W. Williams, Esq. (Birmingham); G. Yates, Esq. (Birmingham).

NEW MEMBERS.

Mr. Samuel Spratley of Birmingham, Dr. Vinrace of Birmingham, and Mr. Duncalfe of West Bromwich, having been previously elected members of the Parent Association, were unanimously elected members of the Branch.

CASES AND COMMUNICATIONS.

1. Certain Points in the Operation for the Radical Cure of Reducible Inguinal Hernia. By Oliver Pemberton, Esq.

Mr. Pemberton gave a detail of the particulars relating to eleven cases in which he had performed the operation. Three patients, two men and a boy, were at the same time submitted to the inspection of the members present; their ruptures having undergone complete cure.

2. On Vaccination, and the Laws relating to it and the Registration of Births. By J. S. Fletcher, Esq.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The Ordinary Meeting of this Branch was held at the York House, Bath, on April 21st, under the Presidency of James Crang, Esq. There were present: W. H. Brace, Esq. (Bath); J. S. Bartrum, Esq. (Bath); E. Boult, Esq. (Bath); C. Collins, Esq. (Chew Magna); J. H. Crisp, Esq. (Laycock); W. J. Church, Esq. (Bath); E. Crossman, Esq. (Hambrook); G. W. Dyke, M.D. (Chippenham); J. G. Davey, M.D. (Northwoods); W. Davies, M.D. (Bath); R. S. Fowler, Esq. (Bath); T. H. Hemming, M.D. (Freshford); James Godfrey, Esq. (Bristol); R. F. George, Esq. (Bath); R. C. Holland, Esq. (Bath); Jos. Hinton, Esq. (Charterhouse Hinton); W. Henderson, M.D. (Bristol); Jos. Lawrence, Esq. (Bath); J. Lancaster, L.R.C.P. (Bristol); C. Leonard, Esq. (Bristol); Jos. Metford, Esq. (Bristol); F. Mason, Esq. (Bath); E. S. Mayor, Esq. (Bristol); G. Norman, Esq. (Bath); A. Prichard, Esq. (Bristol); J. K. Spender, Esq. (Bath); R. N. Stone, Esq. (Bath); T. G. Stock-

well, Esq. (Bath); E. Skeate, Esq. (Bath); J. Tunstall, M.D. (Bath). There were present, as visitors, Messrs. Mayor and Winslow.

The minutes of the last meeting were read and confirmed.

NEW MEMBERS.

Charles Randell, Esq., of Westbury, and Matthew Willett, Esq., of Bristol, were ballotted for, and unanimously elected members of the Branch.

PAPERS AND COMMUNICATIONS.

The following papers were read:

1. Treatment of Stricture of the Urethra. By George Norman, Esq.
2. The Application of Strong Nitric Acid in some Forms of Entropium. By Edmund Boult, Esq.
3. On Nyctalopia. By Augustin Prichard, Esq.

These papers, with the discussions thereon, will be published in the Journal.

Mr. J. Godfrey favoured the meeting with some observations on Teale's operation by rectangular flaps.

THE SALOPIAN MEDICO-ETHICAL SOCIETY: PROPOSED AMALGAMATION WITH THE SHROPSHIRE BRANCH.

At a special General Meeting of the Salopian Medico-Ethical Society, held at Dr. Styrap's, Shrewsbury, on Tuesday the 10th instant, Richard Wilding, Esq., in the chair, the following resolutions were, after considerable discussion, unanimously agreed to:—

1. Proposed by J. Y. Arrowsmith, Esq., and seconded by Richard Wilding, Esq.—

"That this meeting, deeply sensible of the importance of union amongst medical men, and solicitous to promote, as far as practicable, the interests of the profession at large, willingly accords its assent to the proposal of the Shropshire Branch of the British Medical Association for an amalgamation with the Salopian Medico-Ethical Society."

2. Proposed by Alfred Mathias, Esq., seconded by Wm. Howlet, Esq.—

"That Mr. Arrowsmith, Mr. Fenton, and Dr. Styrap, be appointed, and hereby fully empowered, to confer with the Committee of the Shropshire Branch of the British Medical Association, and to effect an amalgamation upon such terms as may be found mutually advantageous: conditionally, however, that the General Bye-laws and Rules of the Salopian Medico-Ethical Society be adopted as those of the united Associations; and provided, also, that the existing rights and privileges of membership be conceded to such of the present members as may be unwilling or unable to join the British Medical Association."

3. Proposed by Dr. Styrap, and seconded by T. Fryer Webb, Esq.—

"That, in the event of the proposed union being effected, it will be desirable that the amalgamation date officially from January 1st, 1860, the commencement of the financial year of the British Medical Association."

A meeting of the Council, for the transaction of important business, was also held, at which resolutions were passed directing the solicitor to institute legal proceedings against various unqualified practitioners, and to sue in each case for the full penalty attached to illegal practice.

Jukes Styrap, *Hon. Secretary.*

Shrewsbury, May 11th, 1859.

Dr. Dionysius Lardner. This eminent contributor to science and scientific literature died on Thursday week in Paris, at the age of 66. Few, if any, scientific men have done more than he towards extending scientific knowledge among the people, and none were more eminently qualified for the work. Not only were his acquirements as profound as those of any man of his day, but he possessed in a peculiarly high degree that happy facility of throwing into popular and graphic language the most elaborate theories of science, and leading minds unaccustomed to scientific reasoning to an appreciation of scientific truths, which would have been altogether incomprehensible if involved in the obscurity of technical phraseology. Among his latest works will be remembered the excellent treatise on *Animal Physics*, and the *Physiology* and *Chemistry* for schools.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Berry. On May 8th, at 19, Tysoe Street, Wilmington Square, the wife of Henry Thomas Berry, Esq., Surgeon, of a son.

Collins. On May 9th, at 46, Gloucester Road, Regent's Park, the wife of W. J. Collins, M.D., of a son.

Dolton. On May 2nd, at St. Leonard's-on-Sea, the wife of W. B. Dolton, M.D., of a daughter.

Elin. On May 5th, at Hertford, the wife of George Elin, M.D., of a daughter.

Hewitt. On May 7th, at 17, Radnor Place, Hyde Park, the wife of Graily Hewitt, M.D., of a daughter.

Jefferys. On May 9th, at 2, St. Augustine Road, Camden Square, the wife of William Edward Jefferys, Esq., Surgeon, of a son.

Lawrence. On April 30th, at Wandsworth, the wife of James E. Lawrence, Esq., Surgeon, of a daughter.

McWilliam. On May 8th, at 14, Trinity Square, Tower Hill, the wife of *J. O. McWilliam, M.D., C.B., R.N., of a daughter.

Nichol. On April 28th, at Denmark Hill, the wife of R. Nichol, M.D., of a son.

Nihill. On May 9th, at Lewisham, Kent, the wife of John Nihill, Esq., Surgeon R.N., of a son.

Preston. On April 25th, at Oatlands, the wife of Augustus R. R. Preston, Esq., Surgeon H.M.S. *James Watt*, of a son.

Pugh. On April 25th, at 18, Weymouth Street, Portland Place, the wife of Hugh Lewis Pugh, Esq., Surgeon, of a daughter.

Smith. On April 26th, at 76, Eccles Street, Dublin, the wife of R. Smith, Esq., Surgeon-Major, of a daughter.

Wallich. On May 3rd, at Guernsey, the wife of G. C. Wallich, M.D., Surgeon H.M. Indian Army, of a daughter.

MARRIAGES.

Cahusac—Walker. Cahusac, Basil B., Esq., of Maida Hill, to Marian, daughter of the late R. C. Walker, M.D., 3rd Light Dragoons, at St. Paul's Church, Camden Square, on May 10th.

Corringham—Emerson. Corringham, Robert Ward, Esq., of Gringley, Notts, to Susanna Isabella, third daughter of the late Alexander Lyon Emerson, M.D., Physician to the Forces, at All Saints Church, Hastings, on May 6th.

Knight—Duke. Knight, Henry Alphonsus, Esq., of New Zealand, to Caroline Mary, second daughter of William Duke, M.D., of St. Leonard's-on-Sea, at the Oratory, Brompton, on May 5th.

Mantell—Pelly. Mantell, A. A., M.D., Her Majesty's Bengal Army, to Eliza Eugenia, second daughter of the late John Hinde Pelly, Esq., Bombay Civil Service, at the Abbey, Bath, on May 3rd.

Middleton—Young. Middleton, William Wiley, Esq., of Hitcham Abbey, Norfolk, to Jessie Peters, daughter of Epaphroditus Young, M.D., of Clapham Common, on April 30th.

Potter—Matthews. *Potter, S. Reginald, M.D., of Bradninch, Devon, to Ducibella Jane, eldest daughter of Charles Matthews, Esq., of Earlsland, Bradninch, on May 5th.

Stephenson—Manlove. Stephenson, Thomas Appleby, Esq., Surgeon, of Nottingham, to Annie, second daughter of Thomas Manlove, Esq., of Radford Grove, Nottinghamshire, at Old Radford, on May 4th.

Vernet—Willis. Vernet, Henry, Esq., of Geneva, to Agnes, third daughter of *Robert Willis, M.D., of Barnes, on May 10th.

Williams—Lamb. Williams, William Henry, Esq., Surgeon, of Plaistow, Essex, to Cordelia, second daughter of John Lamb, Esq., of North End House, Little Ilford.

Woodd—Denne. Woodd, Charles George, Esq., Surgeon, of Penge, Surrey, to Harriet, third daughter of the late Thomas Denne, Esq., of Tong, near Sittingbourne, at St. George's, Camberwell, on April 28th.

DEATHS.

Boutflower, John, Esq., Assistant-Surgeon Cape Mounted Rifles, near King William's Town, aged 24, on March 8th.

Bridges, David, Esq., Surgeon, at Riverstown, Essequibo, British Guiana, on March 22nd.

Radcliffe, Derwentwater, Esq., Surgeon, at Devonshire Street, Portland Place, aged 57, on May 1st.

Stebbing. On May 5th, aged 86, Susanna Rebecca, daughter of the late George Stebbing, Esq., Surgeon, of Ipswich.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, April 29th, 1859:—

Davies, James Hamilton, Birmingham
Jennings, Frederick Cook, Wakefield, Yorkshire
Leeson, Thomas Richard, Blackburn, Lancashire

At the same meeting, the following gentlemen were reported to have passed their examinations in Anatomy and Physiology, and when eligible will be admitted to the final examinations for membership under the new regulations:—

St. Bartholomew's Hospital.

Browne, Frank
Davey, Alexander George
Davies, Henry
Dawson, William Henry
Harrison, Charles
Jeaffreson, Horace
Lancaster, Wm. James
Lloyd, Evan
Merry, Robert Rosier
Paine, William
Patten, Charles Arthur
Pridham, John Williams
Russell, George Ireland
Sutton, Henry Grant
Williams, Evan Evans
Williams, John
Williamson, Henry

University College Hospital.

Case, George Henry
Bernard, John Coleston
Gee, Samuel James
Harris, Francis Douglas
Holland, Edmund
Lyon, Isidore Bernadotte
Miller, Richard May
Prince, Charles Edward
Stedman, James

Guy's Hospital.

Bennett, Hugh
Bromley, John Browne
Caldwell, W. T. Duncan
Davy, Richard
Duce, James
Fernie, Edward
Mercer, John Thomas
Morris, Issac
Park, William

London Hospital.

Bush, Danvers Ward
Dawson, H. J. H. F.
Gayton, William
Kitching, Thomas
Reed, Simon Cartwright
Richardson, Timothy
Ruttledge, W. Frederick
Welch, Francis Henry

St. George's Hospital.

Cox, William Henry
Manning, F. Norton
Parker, George Fisher
Olive, Edward
Seaton, Daniel
Stockwell, Frederick
Winterbottom, Edwin J.

Charing Cross Hospital.

Bennett, Charles
Kernot, A. Bowerman
Myers, Charles John
Orwin, Thomas Wm.
Shorto, James Reeves
Thane, Wm. Dancer
Travers, William

Middlesex Hospital.

Dane, Thomas
Hammond, Charles
Rason, C. Hector
Walker, Joseph
Williams, Richard
Wrixon, Robert

King's College.

Baines, Charles Williams
Fortescue, George
Hall, Augustus Robinson
Huxley, Thomas Usher
Ward, Henry

St. Mary's Hospital.

Fuller, William Francis
Knight, Thomas
Scott, William Herbert

St. Thomas's Hospital.

Kettle, Henry
Tanner, Mark Batt

Westminster Hospital.

Smyth, Christopher

Newcastle-on-Tyne School.

Dawson, George
Hume, Henry
Marr, Joseph Benn
Moore, James Foster

Hull School.

Chalmers, John Erskine
Reynolds, H. Fitzgerald
Savage, James

Birmingham School.

Norris, Richard
Walls, Charles

Manchester School.

Brown, David
Cockcroft, John

Bristol School.

Morgan, John Albert

Leeds School.

Gisburn, Jno. Jas. Walker

Liverpool School.

Sheldon, Edwin Mason

Dublin.

Short, John

Edinburgh.

Watkin, John

The Fellowship. The following members of the College having undergone the necessary examinations, were admitted Fellows at a meeting of the Court of Examiners, on Wednesday, May 11th:—

Brodhurst, Bernard Edward, Grosvenor Street: diploma of membership dated June 28th, 1844
Cronin, James Dennis, Royal Navy: June 14th, 1844
Davis, Theodore, Great Russell Street: July 6th, 1855
De la Garde, John Lempriere, Exeter: April 16th, 1855
Duffin, Alfred Rayhard, Langham Place: Oct. 12th, 1855
Fitzgerald, Thomas George, Whitehall Yard: August 6th, 1850
Gray, James Foster, Northampton: April 18th, 1856
Greenhow, Henry Martineau, Garden Court, Temple: December 2nd, 1853
Smith, Samuel M. C. Anderson, Claremont Square: January 22nd, 1847
Traer, James Reeves, Hans Place, Chelsea: December 14th, 1855

The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on Thursday, May 12th:—

Aspland, Alfred, Dukinfield, Ashton-under-Lyne: diploma of membership dated April 20th, 1838
Cutfield, Alfred Baker, Deal: January 5th, 1836
Oldham, Riton, West Hartlepool: December 17th, 1841

Apothecaries' Hall. Members admitted on Thursday, April 21st, 1859:—

Bird, Curtis James, Red River, Hudson's Bay
Brigstocke, Richard Whish, Milford, Pembrokeshire
Drake, Charles Henry, Kingsclere, Hants
Hart, Walter, Church Street, Bethnal Green
Hepworth, Francis, Croft's Bank, Lancashire
Hochee, James, East Grinstead
Mikisch, Ferdinand, Great Suffolk Street, Southwark
Pickford, Newbold, Manchester
Priddle, George Luke, Poplar

At the same Court, the following gentlemen passed their first examination:—

Adams, Matthew Algernon, Margate
Brettell, Joseph, Dudley
Chalmers, John Erskine, Hull
Cookcroft, John, Middleham, Yorkshire
May, Joseph, Stoke, Devonport

Poor-law Relief (Ireland). The expenditure during the year ending September 29th, 1858, was, for in-door maintenance, £266,157; for out-door relief, £3,133; salaries and rations of officers, £97,536; and all other expenses, £90,540; together, £457,367. Compared with the preceding year there appears to be a decrease of £26,527 for in-door maintenance, an increase of £722 for out-door relief, a decrease of £5,209 for salaries and rations of officers, and a decrease of £9,436 under the head of "all other expenses."

Baron von Humboldt. This celebrated philosopher died on Thursday May 5th, at Berlin, at the patriarchal age of 89. His labours, which have extended over more than half a century, will doubtless receive an elaborate recognition from the pen of the historian. But, as has been observed by a contemporary, to write a notice of Humboldt is no easy task. His canvass was the universe, and he used his pencil with a master hand. His mind grasped with iron strength everything it met, and, instead of being weakened by the immensity it was brought in contact with, its appetite grew with what it fed upon. To English readers, Humboldt is best known by his latest work, *Kosmos*, a work which alone would suffice to render his name immortal.

INDIAN ARMY MEDICAL SERVICE.

The following warrant has been lately issued:—

1. The grades of medical officers in our Indian military forces shall be four in number*—namely,

1. Inspector-General of Hospitals.
2. Deputy Inspector-General of Hospitals, 1st class.
   Deputy Inspector-General of Hospitals, 2nd class.
3. Staff or Regimental Surgeon, who, after twenty years service in India in any rank, shall be styled Surgeon-Major.
4. Staff or Regimental Assistant-Surgeon.

2. No candidate shall be admitted to the competitive examination for a commission in the Medical Department of our army who does not possess such a certificate or certificates as would qualify a civilian to practise medicine and surgery.

3. No assistant-surgeon shall be eligible for promotion to the rank of surgeon until he shall have passed such examination as our principal Secretary of State for India in Council may require, and shall have served in India with the commission of assistant-surgeon for five years, of which two shall have been passed in or with a regiment.

4. A surgeon, whether on the staff or attached to regiments, must have served ten years in India, of which two must have been passed, with the rank of surgeon, in or with a regiment, before he will be eligible for promotion to the rank of deputy inspector-general of hospitals.

5. A deputy inspector-general of hospitals must have served three years in India in the first or second grade of that rank before he shall be eligible for promotion to the rank of inspector-general.

In cases, however, of emergency, or when the good of the service renders such alteration desirable, it shall be competent for the Governor-General in Council to shorten the several periods of service above-mentioned, in such manner as he shall deem fit and expedient.

6. Assistant-surgeons shall, as a general rule, be promoted to the rank of surgeon in the order of their seniority in the service, unless unfit for the discharge of their duties from physical or professional incompetence or misconduct. In cases of distinguished service, however, an assistant-surgeon may be promoted by brevet, without reference to seniority; and in such cases, with a view to ensure the responsibility attaching to an appointment made out of the regular course of promotion, the recommendation in which the services of the officer shall be detailed shall be published in the General Orders of our Indian military forces, and in the *Gazette* in which his promotion appears.

7. All promotion from the rank of surgeon to that of deputy inspector, and from the rank of deputy-inspector to that of inspector, shall be given by selection for ability and merit; and the grounds of such selection shall be stated to us in writing, and recorded in the office of the Secretary of State for India in Council, the selection for the grades of deputy inspector being made from the whole rank of surgeons, whether styled surgeons or surgeons-major.

8. With a view to maintain the efficiency of the service, all medical officers of the rank of surgeon-major, surgeon, or assistant-surgeon, shall be placed on the retired list when they shall have attained the age of fifty-five years, and all inspectors-general and deputy inspectors-general when they shall have attained the age of sixty-five years.

9. The relative rank of the medical officers of our Indian military forces shall be as follows:—Staff or Regimental Assistant-Surgeon as a Lieutenant, according to the date of his commission; and after six years service in India, as Captain, according to the date of the completion of such service. Staff or Regimental Surgeons as Major, according to the date of his commission; and Surgeon-Major as Lieutenant-Colonel, but junior of that rank. Deputy Inspector-General of Hospitals of the 2nd class as Lieutenant-Colonel, and Deputy Inspector-General of Hospitals of the 1st class as Colonel, according to the dates of their appointments respectively.+

Inspector-General of Hospitals as Brigadier-General, according to the date of his appointment; if with an army in the field, or after three years service in India as Inspector-General, as a Major-General, from the date of his joining such army in the field, or according to the date of the completion of such service.

10. Such relative rank shall carry with it all precedence and advantages attaching to the rank with which it corresponds (except as regards the presidency of courts-martial, where our will and pleasure is, that the senior combatant officer be always president), and shall regulate the choice of quarters, forage, and prize-money. But when a medical officer is serving with a regiment or detachment, the officer commanding, though he be junior in rank to such medical officer, is entitled to a preference in the choice of quarters.

11. Medical officers shall be entitled to all the allowances granted to our Indian military forces on account of wounds and injuries received in action, as combatant officers holding the same relative ranks.

12. Their families shall, in like manner, be entitled to all the allowances granted, under existing regulations, to the families of combatant officers holding the same relative ranks.

13. Medical officers shall be held entitled to the same honours as other officers of our army of equal relative rank.*

14. A medical officer, retiring after a service in India of twenty-five years and upwards, may, if recommended for the same by the head of his department, receive a step of honorary rank, but without any consequent increase of pay.

15. Six of the most meritorious medical officers of the army shall be named My Honorary Physicians, and six My Honorary Surgeons.

Given at our Court at Windsor, this 1st day of February, 1859, in the twenty-second year of our reign.

By Her Majesty's command, Stanley.

* In substitution for the existing grades; namely—

Inspector-General of Hospitals	for Director-General of the Medical Department.
Deputy Inspector-General, 1st cl.	for Inspector-General.
Do. do. 2nd cl.	for Superintending-Surg.
Surgeon-Major	for Senior-Surgeon.
Staff or Regimental-Surgeon / Do. Assistant-Surgeon	as at present.

+ Deputy Inspectors-General of Hospitals of Her Majesty's British Forces of less than five years service will have local rank as colonel while serving in India from the date of their arrival in that country, but without any consequent increase of pay.

* This clause does not extend to the compliments to be paid by garrison or regimental guards, as laid down in pages 20 and 30 of the Queen's Regulations for the Army.

THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

The following reasons of dissent against the resolution of the College of April 20th, refusing to restrict the licence to University graduates, have been forwarded to us for publication. Their date is April 26th—the same as that of the letter of the President of the College, published in last number.

1. Because the evident tendency, if not the purpose of the resolution, is to lower the constitution of the College, by creating in it a new order of general practitioners, who, not being medical graduates, nor surgeons, nor physicians, in the sense hitherto understood in Scotland, will have neither a distinguishing name nor a legal standing in this division of the United Kingdom.

2. Because the creation of such new order of general practitioners is not called for by the public interest, nor by any known circumstances in the condition of medicine or of society in Scotland.

3. Because such creation is not called for by the interests of the College.

4. Because, on the contrary, the measure is dangerous to the welfare of the College, as being of a kind to engender estrangement on the part of the graduates of Universities, to whom alone the College has been hitherto indebted for its prosperity and its reputation.

5. Because the creation of the new class of practitioners, which will be the result of the resolution in question, must give umbrage to other medical corporations in the United Kingdom, and more especially just cause of offence to the Royal College of Physicians of London, with whom this College has hitherto acted harmoniously in organising its constitution. R. Christison.

We, the undersigned Fellows, adhere to the above reasons of dissent.

Thos. Stewart Traill.	J. Hughes Bennett.
William Robertson.	Robert Paterson.
J. Brown.	A. Peddie.
Alexander Jackson.	R. Bowes Malcolm.
John Young Myrtle.	William Cumming.
J. Begbie.	

Royal College of Surgeons. Professor Hewett will commence a course of lectures in the Theatre of the Royal College of Surgeons, on Tuesday next, at 4 o'clock, on Tumours and other Diseases of the Head.

TO CORRESPONDENTS.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

A SUBSCRIBER. There is a College of Dentists in London, the offices of which are at 5, Cavendish Square. The laws and regulations are contained in the *Dental Review* for May 1859, published by Baillière, 219, Regent Street, W.; price one shilling.

LINCOLNSHIRE. A Member of the Royal College of Surgeons of England, not being a graduate of any University, British or foreign, but admitted a Licentiate of the College of Physicians of Edinburgh under Clause 8 of the new regulations, would have no right to affix M.D. to his name; though he might be permitted to call himself Dr. We do not think that a licentiate so admitted, who in public documents should affix M.D. to his name, would be liable to a penalty under Clause 40 of the Medical Act. That clause is directed against persons *who have no legal qualifications of any kind whatever*, and who use titles implying registration.

Communications have been received from:—MR. G. M. HUMPHRY; MR. J. K. SPENDER; MR. H. TERRY, JUN.; DR. J. THORBURN; DR. HUGHES BENNETT; MR. WATERS; THE LONDON MEDICAL REGISTRATION ASSOCIATION; MR. BARTRUM; MR. TAPLIN; MR. A. G. WALTER; DR. L. BEALE; DR. W. ROBERTSON; MR. T. HOLMES; DR. J. M. BRYAN; MR. LANGSTON PARKER; MR. T. M. STONE; MR. OLIVER PEMBERTON; DR. DAY; DR. STYRAP; MR. KESTEVEN; and LINCOLNSHIRE.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. A Treatise on Syphilis in New-born Children and Infants at the Breast. By P. Diday. Translated by G. Whitley, M.D. The New Sydenham Society: London. 1859.
2. Gooch on some of the most important Diseases of Women: with other Papers. Prefatory Essay by Robert Ferguson, M.D. The New Sydenham Society: London. 1859.
3. Memoirs on Diphtheria: from the Writings of Bretonneau, Guersant, Trousseau, Bouchut, Empis, and Daviot. Selected and Translated by Robert Hunter Semple, M.D. With a Bibliographical Appendix, by John Chatto. The New Sydenham Society: London. 1859.
4. Hufeland's Art of Prolonging Life. Edited by *Erasmus Wilson, F.R.S. Second Edition. London: Churchill. 1859.
5. The Treatment of Obstinate Ulcers and Cutaneous Eruptions of the Leg without Confinement. By Henry T. Chapman, F.R.C.S. Third Edition. London: Churchill, 1859.
6. Practical Observations on the Nature and Treatment of Sciatica: with an Introductory Dissertation on Spinal Irritation, and Inflammatory Disease of Nervous Structures in General. By Henry Crowhurst Roods, M.D. London: Churchill, 1859.

ADVERTISEMENTS.

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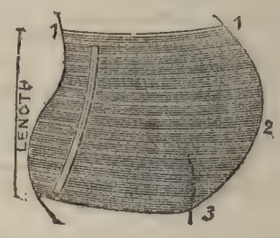
☞ *See Advertisement in last week's issue.*

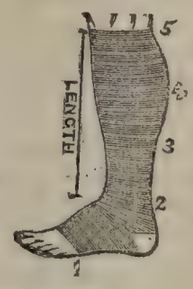
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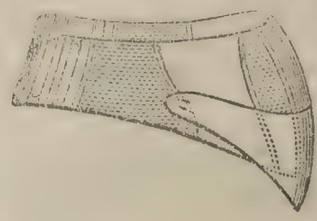
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXV.] LONDON: SATURDAY, MAY 21, 1859. [New Series.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

FIBROUS TUMOUR OF THE THIGH.

Under the care of T. Tatum, Esq.

We had an opportunity, a few days ago, of seeing a very interesting operation for the removal of a large tumour situated at the back of the thigh, which was of such great interest, both pathologically and surgically, that it deserves insertion, although the unfortunate event of the case rendered it less instructive than it would have been had the patient survived. The patient was a boy, 14 years of age, William C., an agricultural labourer, of very healthy appearance, and who had always enjoyed sound health. The tumour had been noticed about three years, and was slowly growing. It had attained an enormous size on admission, reaching from a short distance below the trochanter down to within about three inches of the popliteal space, and measuring more than six inches in length. It was also of considerable thickness, and had made the parts so tense that it was difficult to judge of its connexions. On relaxing the muscles, which were prominent and tense below, it became much more moveable, and appeared as if unconnected with the bone. Its structure was hard, and the surface smooth. There was no interference with the functions of the limb. Various opinions were entertained, both as to the nature of the tumour, and the proper course to be adopted in its treatment. On the former head, the comparatively slow growth of the tumour, and the perfect health of the patient, appeared to negative the supposition of malignant disease. The tumour seemed too moveable to be growing from the bone; its large size, and the want of any symptoms of paralysis or disordered innervation, were against the idea of its being a neuroma of the sciatic nerve; its smooth surface was not very like the lobulated outline of an enchondroma. On the whole, it was taken to be an innocent tumour, probably of the fibrous or fibroplastic nature, and not growing from the femur.

As to the treatment, it appeared evidently necessary to remove it, since its size already prevented the free use of the limb; the veins over it were beginning to enlarge; and it seemed clear that, in a short time, it must ulcerate, and thus cause the patient's death. Whether, however, it would be possible to dissect it out, or whether is would be necessary to resort to amputation, was a difficult problem to solve. The great size of the tumour, and its situation close upon, if not surrounding, the great sciatic nerve, rendered it doubtless very hazardous to attempt to dissect it out; still the cruelty of sacrificing the whole limb in so young a subject (for the close approximation of the tumour to the top of the thigh would have rendered it necessary to amputate at or just below the hip-joint) determined Mr. Tatum to cut down on the tumour, and, if it were found innocent, to do his best to remove it. This was accordingly done. The posterior surface of the tumour having been exposed, the sciatic nerve was found imbedded in it, and the muscles stretched over it. A small piece of the morbid growth was cut out, and found to be of the ordinary fibrous character. The removal of the growth was now resolved on. The first thing was to secure the integrity of the sciatic nerve. Six inches in length of this large nerve was deeply inclosed in a wide groove on the back of the tumour. It was dissected out with care, and apparently without any injury to its sheath. The muscles were then dissected off the tumour, and the soft parts separated from it down to the femur. The tumour dipped down to the periosteum, but seemed to have no organic connexion with it. The size of the growth was so great that it was impossible to get it out entire without injuring the nerve; so that Mr. Tatum was obliged to slice it up, and remove it in pieces. It hardly yielded a drop of blood when divided. Five successive portions were removed, and thus the whole growth seemed to be taken away. The operation was necessarily protracted, and a good deal of blood was lost, but not a very large quantity. The boy was kept under the influence of chloroform during the whole period. He never fairly recovered, and died on the fourth day after the operation; gangrene having made its appearance in the edges of the wound, and in the skin of the upper part of the calf of the leg.

The *post mortem* examination revealed nothing remarkable, except that the firm contraction of the heart, and the fact of all its cavities being filled with firm clot, appeared inconsistent with death from hæmorrhage. Numerous portions of the tumour were examined, and found to consist of fibrous tissue only.

The exhaustion of so protracted an operation, the great loss of blood necessarily occasioned in exposing such a vast surface, the isolation of so large a portion of the principal nerve, and perhaps the depressing effect of the prolonged exhibition of chloroform, were probably the causes of the gangrene. It is to be regretted that the case turned out so badly; still there can be little doubt that the course adopted was perfectly justifiable; and the bold and dexterous attempt which was made to preserve the limb deserved, and would probably on another occasion have met with, better success.

ROYAL FREE HOSPITAL.

HYPERTROPHY OF THE CLITORIS, WITH CONDYLOMATA.

Under the care of V. De Méric, Esq.

[*From Notes by* N. Hall, Esq., *House-Surgeon.*]

We subjoin notes of one of the most extensive cases of this disgusting ailment which we have seen lately; one in which the new growths were so extensive as to constitute a really formidable malady, and which it would have been difficult to attack by any less severe measure than the one adopted by Mr. De Méric. In fact, the inefficiency of the methods usually adopted (by saturnine applications, caustics, etc.), in many cases, is well known; and now that the universal use of chloroform has diminished the unwillingness of surgeons to resort to such painful methods of cure, it has caused a much more free recourse to the knife than used to be the practice some years ago. It has seemed to us, however, to be of little use to remove the vegetations, unless that be done entirely, and the tissue from which they are growing be freely destroyed. The hæmorrhage is generally copious, although not alarming. In France it has, we believe, become very usual to make use of the *écraseur* for the performance of these operations on the clitoris and labia; and they are of the class of cases where this instrument may be used safely, and with tolerable certainty of avoiding hæmorrhage; but, as some caustic must afterwards be used to avoid the reproduction of the morbid growth, and this process is certain to easily check the hæmorrhage, there is no particular motive for avoiding the use of the knife. As to the precise caustic to be used, it is probably a matter of no great moment. In two cases recently under Mr. Cutler's care at St. George's Hospital, we have seen the actual cautery used, and with very good effect; and perhaps this agent is the most rapid and powerful; and it has, besides, the additional advantage, that its action is at once limited to the parts touched—an object which is more difficult to effect with deliquescent caustics. There are few cases in which the great advantage of chloroform is more strikingly shown than in the treatment of this troublesome and obstinate disease.

Elizabeth G., aged 22, was admitted on February 28th, 1859,

under the care of Mr. De Méric, on account of hypertrophy of the clitoris, and enlargement of the left labium, with a large crop of vegetations. The clitoris was of the size of a hen's egg. There were little scars of chickenpock about the thighs and legs.

History. She had been on the town eighteen months. She was born in Kent. She had been in service in the country, and at that time there was no hypertrophy. Six months ago, she had a discharge, with a small sore about the fourchette. There were indolent enlarged inguinal glands. She was treated with pills, mixture, and lotion; and got well for a few days, but the tumour used to enlarge or diminish in proportion as she had more or less sexual intercourse. The hypertrophy of the clitoris and enlargement of the labium went on very rapidly: in fact, they reached their present size in about six weeks, from a comparatively ordinary bulk. She had not had intercourse for the last three months. She used to be pretty cleanly in her habits.

The treatment was merely palliative, until the removal of the hypertrophied parts was undertaken, on March 21st. The peduncles of the hypertrophied clitoris were tied close to the pubis separately, a kind of arch being formed by them. It is probable that the pillars of the arch were the continuation of the prepuce of the clitoris. The latter was then removed by the knife; and the same treatment was used, beginning from below, to remove the warts with a portion of the cellular tissue of the labium. The hæmorrhage was considerable; but no vessels were tied, as compression sufficed. In passing the finger into the vagina, a kind of polypoid growth was felt, of the length and thickness of the first phalanx of the index finger: this was tied at its juncture with the mucous membrane of the vagina, and allowed to slough away. When the hæmorrhage had been controlled with cold water, the part was freely brushed with potassa fusa, especially between the labium and thigh, where the scissors could not play well.

March 24rd. The patient had a severe fit of fainting. Wine and ammonia revived her.

March 25th. There had been but little hæmorrhage, which was arrested with cold water. She had had warm water dressing. She was now in pretty good condition. The parts were suppurating nicely.

After this, we are informed that the case did well, and the exposed surface healed kindly.

ST. MARY'S HOSPITAL.

CASE IN WHICH THE PENDULUM OF A CLOCK WAS IMPACTED IN THE RIGHT EAR.

Under the care of J. Toynbee, Esq.

[Mr. Lawrence, *House-Surgeon.*]

Ferdinand H., aged 35, was brought to St. Mary's Hospital on March 4th, 1859, with a pendulum of a clock projecting from the right ear. He stated that he was a clock-maker; and that, while walking in the street, about half an hour previously, and picking the ear with the hook end of the pendulum of a clock, a drunken man passing by, with a basket upon his head, reeled against him with considerable violence, and forced the pendulum into the ear, bending it to a right angle. Upon endeavouring to withdraw the pendulum, he found it so firmly impacted that it resisted all his efforts; and he was brought to the hospital by a policeman, and admitted under Mr. Toynbee's care.

Upon examination at the time of his admission, by Mr. Lawrence, the pendulum was found to be inclined inwards and rather forwards. Upon attempting to withdraw it, considerable force was required; and, when it was withdrawn, a crack was felt, as if some bone had been chipped. Upon examining the extremity of the pendulum, the cause of the difficulty in its removal was found to be the presence of a hook, which was not only turned back, but the extremity was again turned outwards. After the withdrawal of the hook, there was a slight oozing of blood for about five minutes. The patient stated that he suffered great pain when the hook was thrust into the ear; this was followed by a sensation of hammering in the organ, which was succeeded in a few minutes by the sound of bells ringing very violently. Whenever the pendulum was moved, the pain, hammering, and sound of bells ringing, returned. Although the pain was very severe at the time of the removal of the hook, it quite disappeared on its withdrawal, and it did not recur. The hearing of the left ear was greatly diminished while the pendulum was in the right. He was ordered purgatives and lead lotion.

March 5th. He complained of a constant humming in the right ear, and of a sound as if water were falling from a height; he also had a slight headache. The hearing power of the left ear was natural: the watch, however, could not be heard with the right ear, but the crack of the nail was distinguished. The meatus was so swollen that the parietes were nearly in contact. A blister was ordered to be applied behind the ear.

The patient gradually improved; a slight discharge took place, and the tumefaction of the meatus diminished. The watch was heard at a distance of about two inches.

March 14th. Mr. Toynbee removed a considerable quantity of epidermis from the surface of the meatus; and the membrana tympani became visible. Its surface was red; and the dermoid layer was so thick that the malleus could not be distinguished. A lead lotion was ordered to be applied on cotton to the orifice of the meatus; and the blister to be continued.

March 17th. The upper part of the membrana tympani was still very red and much tumefied; and, although no orifice could be detected in it, still, when the patient blew the air forcibly through the Eustachian tube, it was heard to rush into the meatus through the membrana tympani.

Mr. Toynbee remarked, that most probably the round end of the hook had been forcibly struck against the upper part of the membrana tympani, possibly separating it from the bone, and driving it inwards; and he added, that the occurrence of this accident might offer some explanation of the manner in which the handle of the malleus could be fractured—a lesion which had taken place in a preparation that he had recently dissected.

The patient did not return to the hospital.

Original Communications.

ON A NEW MODE OF RELIEVING RETENTION OF URINE.

By Langston Parker, Esq., Surgeon to the Queen's Hospital, Birmingham.

Within the last few days I have succeeded, in two separate instances, in relieving retention of urine in the following manner.

A gentleman lately entered my consultation-room in great pain from retention of urine. He had not passed water for many hours; the bladder was much distended. He stated that ineffectual efforts had been made to pass a catheter, during which operations he had lost a considerable quantity of blood. I attempted to relieve him by the catheter, but failed to do so; I tried instruments of various sizes and various curves, but could not succeed in passing one into the bladder. I then took a No. 2 wax bougie, and inserted a small portion of potassa fusa into the end of it, after the manner proposed by Mr. Whateley, and practised by Mr. Wade in the treatment of permanent stricture of the urethra. I well moulded the wax over all but the extreme point of the caustic, and passed it rapidly down to the point of obstruction: by pressing against this for a short time, it yielded, and I had the satisfaction of finding the bougie easily enter the bladder. I directed the patient to strain as I withdrew the instrument: a stream of urine followed, and the bladder was emptied. The retention did not again occur, and very little irritation accompanied or followed the proceeding. On the next day, the patient made water freely, but in a small stream.

The second case was very similar. The patient had travelled some distance by rail. The bladder was much distended, the symptoms urgent, and a catheter could not be made to enter the bladder. A small wax bougie was armed as in the last case, passed down to the stricture, and firmly pressed against it. It yielded very shortly; the instrument entered the bladder, and a stream of urine followed its withdrawal. This patient had a second attack of retention two days afterwards, which was completely relieved in the same manner.

A modification of this plan might be attempted by inserting a small piece of potassa fusa into the extreme point of a small gum-elastic catheter, and using it without the stilette. I am sanguine enough to hope that many cases of retention of urine might be easily and quickly relieved by the simple means I have suggested, and more formidable and dangerous operations thus frequently avoided.

THE USES OF BLEEDING IN INFLAMMATION AND OTHER DISEASES.

By John Hughes Bennett, M.D., F.R.S.E., Professor of the Institutes of Medicine, and of Clinical Medicine, in the University of Edinburgh.

The admirable paper read by Dr. Markham to the Medico-Chirurgical Society of London, and inserted in two recent numbers of this Journal (April 9th and 16th), appears to me deserving of special notice. I have little doubt that he has correctly stated what ought to constitute one of the indications for bleeding in diseases.

Twenty years ago, it was supposed that the primary cause of inflammations was an increased action of the vessels, but more especially of the arteries, which sent forwards or determined to the parts a greater amount of blood than the veins could carry away. As a result, the smaller vessels became blocked up and distended, while the fluid part or lymph was squeezed through their walls, and infiltrated into the surrounding tissues. The remedy for this was the removal of blood from the part, either by local or general bleeding, by which it was thought this condition could be at once removed. But it is now understood that not only is this theory wrong, but facts have shown that the practice which flows from it is not effective. Instead of the morbid action beginning in the vessels, it truly begins in the tissues outside the vessels. These, in health, are continually attracting and selecting from the blood such of its constituents as are necessary for their own nourishment. Thus the cells of the liver select what is necessary to form bile; the salivary glands what is necessary to form saliva; the muscles what is required to form muscle; and bone what is wanted to form bone. If these parts are injured, healthy nutrition does not take place; but instead of it there is attracted from the blood that lymph, or fluid part of the blood, which is so essential a feature in all inflammation. Instead of being pushed out by a *vis a tergo*, it is drawn out by a *vis a fronte*—the active force causing the disturbance is not in the vessel or in the blood, but in the cells and tissues to which these are distributed.

Again, when the living fluid part of the blood has in this way got outside the vessel, a wonderful new growth of cells takes place in it, whereby what is unnecessary is removed by absorption and excretion, and what is required is developed into new texture. This stage of the process is accompanied by more or less excitement; an increased flow of blood is drawn to the part; more nourishment is required, and nature supplies it. In the same manner that when the leaves bud in spring, more sap exists in and is drawn from the vessels in plants; that during the annual growth of the stag's horn, all the vessels in the neighbourhood are turgid with blood; that when new teeth appear in the infant, the gums are red and tender; that when, in short, all active processes of local growth are proceeding, the pulse is strong, the blood flows with increased velocity, and the neighbouring tissues are congested; so, for the wisest and best purposes, does nature set up a similar action in inflammation, and turns to use that exudation which has been poured out, by transforming it into cells.

According to this theory, we must look upon such excitement in the neighbourhood of an inflamed part as salutary, whereas formerly it was regarded with apprehension. The increased force of the pulse was thought dangerous, and the rapid flow of blood which used to be looked upon as injurious to the individual we now regard as necessary for a cure. Instead, therefore, of diminishing or lessening these useful changes by blood-letting and antiphlogistics, it is clear that theoretically they ought to be left undisturbed, and even supported when necessary. The correctness of this theory has been proved by actual experiment and experience on a large scale, a marked improvement in the recovery from severe inflammations having everywhere resulted from abandoning a lowering treatment in that class of diseases. Inflammations of the lungs, of the pericardium, of the pleura, and so on, have been proved not only to be much less fatal, but to get well in a much shorter time, since bleeding and antiphlogistics were replaced by nutrients and stimulants.

But this is not saying that blood-letting can never be useful in diseases, and may not occasionally be beneficial even in inflammations. Though it has been industriously circulated that I am opposed to bleeding under all circumstances; so far is this from being the case, that I have carefully maintained the contrary. Thus, in my original paper in the *Edinburgh Monthly Journal* for February 1857, pp. 782-3, I observe:—"But whilst large and repeated bleedings, practised with a view of arresting the disease, appear to me opposed to a correct pathology, small and moderate bleedings, directed to palliate certain symptoms, and especially excessive pain and dyspnœa, may reasonably be had recourse to, and unless there be great weakness, without any fear of doing injury. I have often been struck, especially in cases where large thoracic aneurisms cause these symptoms, with the small loss of blood which will occasion marked relief. The same result may be hoped for in other cases where the congestion is passive, even when that is associated with active repletion of blood, followed by exudation. But I need scarcely remark, that this mere palliative object of blood-letting is not the ground on which the practice has hitherto been based, and that in this point of view it requires to be very differently explained." Again, at page 795, I say:—"There are cases, which were formerly mistaken for inflammation, in which blood letting may still be useful. I allude to those where an obstruction to the circulation exists in the heart and lung, *dependent on over-distension of the right side of the former organ*, and cases of venous congestion, engorgement, and perhaps œdema of the latter; also, certain cases of bronchitis preventing aëration, of aneurisms, and of asphyxia. Although even here the true value of the remedy has yet to be positively ascertained, the special cases demanding it more carefully discriminated, and the mechanical principles which justify the practice determined." These same passages are given *verbatim* in the second and third editions of my *Clinical Lectures on the Principles and Practice of Medicine.*

It follows that, in the very class of cases in which Dr. Markham says he has bled with advantage, I have always maintained the utility of employing general blood-letting with moderation. So with topical blood-letting, wherever it can directly operate on the inflamed or congested part, it may be beneficial, as in certain external inflammations, conjunctivitis, or hæmorrhoids; but in deep-seated internal inflammations it can be of little benefit. This is a widely different method of employing the remedy from what was formerly practised; viz., by repeated large bleedings, which lowered the pulse and exhausted the patient, at a time when he required all his strength and vigour to support the new changes in growth required by the economy. I believe that an equally good effect would have resulted in some of Dr. Markham's cases, from the extraction of one-half or even one-fourth of the amount of blood he took away. So far, however, is the proper use of blood-letting as a palliative in inflammation, and as a curative measure in congestion of the heart, asphyxia, and so on, opposed to pathology, that it is quite in harmony with it; and, in all these cases, its good effects fully explain the benefits, temporary and permanent, which have been recorded in its favour by practitioners both ancient and modern.

ON THE CAUSES OF PULMONARY CONSUMPTION.

By James Turnbull, M.D., Physician to the Liverpool Royal Infirmary.

[*Concluded from page* 367.]

Occupations producing Inhalation of Irritating Particles. There are many occupations, which, it can be shown, have a direct tendency to cause chronic pulmonary disease by the local irritation they produce on the lungs, in addition to the injurious effect which is often, at the same time, caused by the sedentary nature of the employment itself. It has long been known that stone masons, who are engaged in cutting stones, suffer from inhalation of the silicious particles, and become affected with pulmonary disease; and also that the grinders employed in manufacturing cutlery suffer in a similar way, especially when the processes are carried on in confined workshops, and without the aid of water, which prevents the diffusion of the silicious and metallic particles in the atmosphere. Under the head of metal manufacture, Dr. Greenhow has given some statistics which prove very clearly the injurious influence of such employments; and, in respect to the operatives of Sheffield and Birmingham, it is made apparent by the great divergence of the pulmonary death-rates in the male and female population. The men, being almost exclusively engaged in such employments, suffer most; and in Sheffield we find that the male pulmonary death-rate is 839, whilst the female is only 670; and in

Birmingham the male rate 838, and the female 699. The coarser kinds of metal manufacture, such as ironfounding and nail making, seem to be much less injurious.

Dr. J. C. Hall, of Sheffield, has given a very good account, in the volume of this Journal for 1857, of a peculiar form of chronic inflammation of the lungs, to which the grinders are subject.

It has been found that the linen and flax manufacture produces an injurious effect on the operatives, by causing them to inhale an atmosphere charged with dust. I have myself observed the tendency of dust to cause consumption in the cornporters and warehousemen of Liverpool, whose employments are of a dusty nature. It can be shewn by a comparison of the male and female pulmonary death-rates of Hendon, an agricultural district between London and Harrow, where the men are chiefly employed in binding and cutting hay for the London market, that the inhalation of the dusty particles must have a pernicious influence on the lungs; for whilst in most of the purely agricultural districts the female is at least as high as the male death-rate, in Hendon we find that the male exceeds the female rate in the proportion of 434 to 372.

Mining. Lead-mining is a kind of employment which appears to have a very distinct and decided effect in the production of pulmonary disease. Tin and copper-mining produce a similar though less pernicious influence. The injurious effects of these employments fall chiefly, or almost exclusively, on the men; so that a comparison of the male and female death-rates of some of the districts gives us an accurate mode of estimating their respective influences. In all the lead-mining districts, the male death-rate from pulmonary diseases greatly exceeds the female; and in Alston, which is the most exclusively lead-mining district in the kingdom, the male death-rate is 877, whilst the female is 494. The injurious effect of the occupation on the men is such, that a larger annual proportion of the grown-up men die of disorders of the chest than in the most unhealthy towns in the kingdom; and in consequence, Alston has been found to be the place in which there is a larger proportion of widows than in any other in the kingdom.

The injurious effect of copper-mining is shewn in the fact of the male pulmonary death-rate of Redruth being 670, whilst the female is 450; and the injurious influence of tin-mining in the male rate of Penzance being 560, whilst the female rate is 456. It would appear that whilst lead, copper, and tin-mining, are certainly dangerous to health, coal-mining is at least not unhealthy, so that we have reason to suppose that there must be metallic particles inhaled during the working of the ores, which injure the lungs.

M. Lombard (*Report on the Laws and Ordonnances in force in France for the Regulation of Noxious Trades and Occupations*) found that in 1000 deaths from consumption, the occupations were as follows:—

With vegetable and mineral emanations	176
With various dusts	145
With sedentary life	140
With workshop life	138
With hot and dry air	127
With stooping posture	122
With sudden movements of arms	116
With muscular exercise and active life	89
With exercise of the voice	75
Living in the open air	73
With animal emanations	60
With watery vapour	53

Soldier's Life in Barracks. There is no occupation which can be shown to have so direct and powerful an influence in producing consumption as the life of a soldier. Though they are men picked out as the soundest and healthiest, it has been found that the mortality among soldiers is extremely high, being in the infantry of the line 18·7 per 1000 from all causes, or double that of the general population of the whole country, which is only 9·2. This applies to the army at home, and does not include the officers, who are not affected in a corresponding ratio. In the foot guards, the mortality is even higher, being 20·4 per 1000. Not only, however, do we find that the mortality among soldiers is far greater than in any other class of the community, but we also discover on further examination that there is scarcely any fact in reference to pulmonary diseases, more striking, more important, or more clearly proved, than this, that the excessive mortality is caused more by the development of pulmonary than any other class of diseases. The form of disease to which an impulse is thus given is almost entirely chronic, and of tubercular nature. Dr. Farr has pointed out, with the aid of a diagram, that whilst in the male population of England of the soldier's age, only 4·5 die of chest and tubercular diseases; in the infantry of the line, there are no fewer than 10·1. The deaths in the general population from all diseases being only 9·7. We see, therefore, that in the army, a greater number perish from pulmonary diseases alone. In the guards, the proportion is even higher, being 12·5 from consumption and allied chronic affections, exclusive of the acute.

The facts and statistics brought to light by the commissioners have further proved that the higher the mortality of each particular branch of the service, the greater is the proportion of pulmonary disease; and also, that the ratio of deaths from consumption to the deaths from other pulmonary diseases, increases in proportion as this class of diseases is more prevalent; so that if it were wished to make a great experiment to discover the causes of consumption by its actual production, it would be difficult to devise a more complete one than has been made by the neglect of the health of soldiers in barracks. For it is not in the field that the great mortality from pulmonary disease occurs, but while the soldier is at home; and it is therefore in his mode of life that we must look for a solution of the causes of his great liability to consumption.

The soldier's life is monotonous, and he is under restraint, to which circumstance we may attribute some influence; but in these respects he is not materially different from the sailor in the navy on the home station, in whom the mortality is only at the rate of 6·8 per 1000, or considerably less than that of the general population. Neither can night duty, which has been assigned as one of the causes, have any great effect; for the mortality in the police force, who have a larger amount of night duty, does not exceed that of the population of the country.

The intemperate and debauched habits of soldiers undoubtedly have a very considerable influence; but we must look beyond all these; and there is reason to believe that want of proper exercise and suitable employment are quite as efficient causes; but that crowding and insufficient ventilation of the barracks, and defective sewerage, are the most important.

The mortality is least in the cavalry and dragoon guards, who have varied exercise in the stable, as well as the sword exercise, which calls into action the muscles of the chest in a manner unknown to the foot soldier, whose attitudes are monotonous and restrained; so that when on duty and drill, he is often loaded with knapsack and other accoutrements, which constrain and hinder the free action of the muscles of the chest, and seem to act injuriously on the respiratory organs.

The commissioners appear, however, to think that of all the causes the most important in the production of the excessive amount of consumption in the army, has been the confined ill ventilated condition of the barracks. They seem to think that the breathing of the unwholesome air of the crowded dormitories has laid the seeds of consumption—the minimum cubic space allowed to each soldier having been only 450 cubic feet. We have reason, therefore, from this and other facts to believe, that when impure air is habitually respired, it acts like a blight upon the lungs. Some influence may also be attributed to the monotonous and unvaried nature of the soldiers' diet, and to the meat being always cooked by boiling.

It is sad to think that such an amount of disease and mortality should in time past have been allowed to occur amongst our soldiers from neglect of ordinary sanitary laws. But the attention of the country has been fully roused by the facts published in the Report of the Army Commissioners: and we may now hope that what was done towards the end of last century for our sailors, by sanitary improvements in respect to diet, the use of lemon juice, ventilation, cleanliness, and the preservation of the water in iron tanks—measures by which scurvy, fever, and dysentery, were almost extinguished, and the mortality reduced below the level of that of the general population—will be shortly effected for our soldiers, by the introduction of such changes as may reduce the disgraceful pulmonary mortality to a level with that of the general population of the country.

Confinement. It is a well-known fact that many of the lower animals, when confined in menageries and deprived of proper exercise, light, and fresh air, become subject to consumption and frequently die of tubercular disease. Dr. Baly has demonstrated that the same influences operate on man; and that, in prisons, though the food, ventilation, and other hygienic conditions are unexceptionable, the proportion of scrofula and consumption in criminals is remarkably increased, and that the

rate of mortality from these diseases augments with the extension of the period of confinement. In the Millbank Prison he has shown that the mortality is double that of the metropolis, and that the deaths from consumption are three times as numerous. We have seen that soldiers suffer from the constrained life they lead in barracks, and there can be no doubt that various other constrained modes of living, as, for example, in workhouses, have a similar effect. I have seen the same injurious effect exemplified in the development of consumption in pupils subjected to the confinement and restraint practised in some boarding schools. A constrained monotonous mode of life is unquestionably a fertile cause of consumption, and especially when to this is added privation of the stimuli of exercise, light, and fresh air; and their influence is aggravated by insufficient or unwholesome diet and exposure to damp and cold.

Mental Influences. The mind and the imagination have a wonderful action on the body; but it is extremely difficult to appreciate accurately their effects on diseases. I believe that the depressing mental emotions and affections have a directly sedative effect on the lungs, and as certainly reduce the intensity of the respiratory function, as exercise and muscular action increase it; and, whilst I think that cheerful mental occupation and a hopeful condition of mind have both a prophylactic and curative tendency, which it is most important not to overlook in treating the disease, I feel convinced, from my own observation as well as from some of the facts already adduced, more especially those in reference to criminals, that the depressing mental influences, such as grief, disappointment, anxiety, and the loss of fortune, and especially of friends, have an influence greatly beyond what is commonly attributed to them. I have never seen anything that would lead me to believe that consumption is at all a contagious disease, though I think it is injurious for a healthy person to sleep with one who has active pulmonary disease; but we not unfrequently find a husband, and more frequently a wife, attacked soon after nursing the other. In all such cases, where I have seen one relative attacked after another, I have attributed it to mental depression, and the trial of the feelings which must necessarily be experienced in watching, often for months, the fatal progress of this wasting and distressing disease in a near relative. In the case of a brother or sister, we have also to take into account that these influences act with double force on a constitution hereditarily predisposed.

Defective Diet: Insufficient Clothing: Cold and Damp. These are well known causes, the influence of which has never been underrated. It is difficult, however, to bring forward facts proving clearly the operation of these causes separately, as they generally act in combination with each other, or with some of those already mentioned. I look, however, on them as minor causes; and I may state that, whilst soldiers in barracks are more subject than any other class of persons to consumption, this is not the disease from which they suffer in the field, where they are exposed to all these causes. The Crimean experience proved this, and showed that exposure to cold, wet, fatigue, and insufficient food, caused the development of scurvy and the zymotic class of diseases, fever, cholera, and dysentery; but not consumption. It is also known that the extreme cold of very northern latitudes does not render consumption a more prevalent disease, but has the opposite tendency. This class of causes acts powerfully, however, in conjunction with others.

Intemperance and Irregularities of Living. Though consumption is not the disease to which the habitual drunkard is most liable,—those of the nervous system and of the digestive organs being more common in intemperate persons—yet I have so frequently seen tubercular disease of the lungs in persons of dissolute habits, that I believe it has a powerful influence in conjunction with other causes and irregularities of living, in producing this disease.

On this subject a writer, from whom I have already quoted, observes very justly, that of all vices none are so apt to lead on to consumption as the unnatural or unrestrained indulgence of the sensual passions. To this cause, indeed, the germ of tubercules are very frequently traceable; and I am convinced that the many bearings of this subject upon the physical and mental energies have a much closer and more frequent relationship to phthisical affections than we can ever expect, from their peculiar nature, to see fully demonstrated. It is probably in this way that so much evil appears in the sequel to marriage contracted at too early an age either for the due estimation of its responsibilities or the perfecting of the constitution, the penalty for the violation of such a natural law being exacted in the subsequent establishment of phthisis in the parent or in the offspring, or, perhaps, in both.

Effect of other Diseases. Tubercular deposits are most apt to be formed in the lungs during debilitated states of the constitution, and we know from experience that consumption is not unfrequently developed during convalescence from fevers and other diseases. Scarlet fever and measles are especially liable to stir up the tendency to the disease in children of delicate constitution; and, therefore, in such cases the greatest care should be taken to remove completely the attacks of bronchitis and inflammation of the lungs, which are so frequently induced by these diseases, and to restore the health by suitable tonic treatment, and those means best adapted to prevent the tubercular tendency.

Influenza, bronchitis, and pneumonia, and chronic pleurisy, have also, I believe, in many cases, a direct influence in exciting the deposit of tubercular matter in the lungs. Their influence is most frequently observed in those predisposed, hereditarily, or by the action of the causes which have been already mentioned, and I believe that it has been rather underrated by many medical men, who have appeared to think that these diseases act merely by exciting into activity preexisting or latent tubercles, or are themselves produced by the irritation of the tubercular deposits. In a practical point of view, we must not, however, overlook the fact that tubercle is nearly allied to the lymph effused by healthy inflammatory action, and though ordinary tubercle is usually deposited independent of an inflammation, we know that the products of chronic pneumonia are so nearly allied to tubercle, that they often run precisely the same course; and I believe that when the blood is in a fit condition to cause tubercular deposition, inflammatory irritation will readily determine it in the part so affected.

CASE OF DIPHTHERIA.

By John M. Bryan, M.D., F.R.C.S.Eng., Northampton.

Master B., aged 6, the son of respectable parents residing at a farmhouse in a healthy situation, one mile out of Northampton, was seized with sore-throat on July 9th, 1857. I prescribed an aperient powder of jalap and calomel to be taken every night, without seeing him.

July 12th. I was hastily summoned to the patient, and found the whole fauces intensely swollen and transparently red. Deglutition was painful and difficult; there was high fever; and the pulse was rapid. His bowels had been opened by the powders; and I now ordered eight grains of chlorate of potass to be taken in water every three hours, and the following liniment to be applied to the throat on spongio-piline:

℞ Aceti cantharidis ʒi; spiritûs camphorati ℥ss; olei olivæ ʒi. M.

This soon blistered severely. He was extremely intractable in taking medicines, or in allowing an examination to be made of his throat: the attempt to do so threw him into violent paroxysms, almost amounting to convulsions.

July 12th. The symptoms were much more severe; there was a pale appearance of the whole internal fauces, and a false membrane was forming. I applied freely, twice a day, a solution of nitrate of silver (ten grains to the drachm); and continued the chlorate of potass.

July 14th, 6 A.M. He was much worse, the fauces being quite coated with ash-coloured false membrane. I applied the solution of nitrate of silver, and gave four grains of jalap and a grain of calomel—to be repeated in four hours. The following mixture was also prescribed:

℞ Infusi rosæ compositi ʒij; acidi sulphurici diluti ♏xv; spiritûs ætheris nitrici ʒi; syrupi ℥ss. M. Fiat mistura cujus sumatur cochleare i medium 3tiis horis.

1 P.M. I again visited him, and applied the caustic solution freely. Some considerable portions of false membrane, of fœtid odour, came away, with some relief. Beef-tea and small quantities of port wine were ordered.

8 P.M. I again applied the solution of nitrate of silver to the fauces.

July 15th, 5 A.M. The symptoms were very extreme, having also become those of decided croup. I applied the caustic solution very freely, by means of a piece of sponge fastened to the end of a pencil, and detached a good deal of very fœtid membrane. Breathing and deglutition were very difficult; and, as there was apparently no chance of recovery, I gave him a grain of sulphate of copper in a teaspoonful of syrup every hour. After he had taken one or two doses, retching and vomiting came on, attended with detachment of quantities of false membrane and tenacious mucus; and a clearing of the throat took place, with

great relief to the breathing. The sulphate of copper was continued at longer intervals for thirty-six hours, together with beef tea, port wine, etc.

July 16th. He was much improved.

July 17th. The improvement continued. The sulphate of copper was given once every four or six hours: sickness followed each dose, with more or less detachment of membrane. His swallowing being now more free, beef-tea and port wine were given largely; and this day he was prevailed on to use the following gargle:

℞ Acidi hydrochlorici ♏xv; mellis rosæ ʒss; aquæ ʒv. M.

From this time he gradually improved, and would have been soon convalescent, but for considerable sloughing of the external fore part of the throat, that had taken place from the vesicating application used at the onset, so that he was not off my hands, quite well, until August 2nd.

His mother, a young widow, who was in constant attendance upon him, had a smart attack of sore-throat, evidently of the same character, but of a slighter degree; it was removed by the use of hydrochloric acid gargle, with external counterirritation on the throat, and saline aperients.

Remarks. In the foregoing case, although little had been made public at that time of diphtheria, and no case of the disease had previously come under my notice, I had no doubt that it was a more formidable disease of the throat than I had met with for some time, if I except cases of croup. From the intractable state of the little patient, there was not a good chance of using remedies; and although, from having seen many milder cases since, in which the tincture of sesquichloride of iron has appeared of service, yet I feel certain that the sulphate of copper saved this child's life, as I have frequently found in severe and hopeless croup cases, and which, I think, is worth a trial where other remedies fail. There was in this case no evidence of contagion; scarlatina was not prevalent in the neighbourhood; nor was there affection of any internal organs.

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By William Addison, M.D., F.R.S., Fellow of the College.

Lecture II (*continued*).

XI.—Inflammation as a Therapeutical or Depurative Reaction, in Cases of Fever.

In some fevers, or in some cases of fever, the natural depurating organs are sufficient; or, by proper medical treatment, they may be roused to a sufficiency for the elimination and discharge of the morbid matter made over to the plasma from the diseased corpuscles. If this can be accomplished, there will be no call or necessity for any preternatural depurative reaction between the plasma and the common tissue. In such case, therefore, the person has, and must go through, the fever; that is to say, the blood corpuscles must pass through the phases of their disorder; but he is saved, by judicious medical treatment, from a local inflammation, because distemperature of the plasma, consequent upon disorder of the corpuscles, is met and relieved by the natural working of the depurating organs. These organs act upon the plasma; and inflammation is an action between the plasma and the vessels. By one or the other, or by both ways, the fluid of the blood may be relieved of hurtful matter: and, as the severity and duration of symptoms of fever are a measure of the severity and duration of disorder in the corpuscles, so, we apprehend, the severity and duration of the consecutive inflammations are a measure of ease or difficulty with which the morbid matter separates, or sloughs off, from the rest of the fluid, and is made over to the common tissue for discharge. But, in cases of fever, we apprehend that neither the natural organs nor inflammation can effect this depurative purpose, so long as disorder is limited to the corpuscles.

The *materies morbi* of the corpuscles—of whatsoever nature this may be—must leave them, and be discharged into the plasma, before any depurative means can come into play for the final expulsion of it from the fluid of the blood. This appears to be the *rationale* of our inability, by any means which have hitherto been tried, to cut short the progress of a fever.

The argument respecting the therapeutical properties of inflammation in distemperatures of the fluid of the blood was partially discussed in the first lecture; and we now proceed with what further we have to say on this subject.

Case. At 8 o'clock in the morning of Dec. 28th, a physician, who was assisting at the *post mortem* inspection of the body of a lady who had died of puerperal peritonitis, unfortunately pricked his finger. Twelve hours afterwards, he felt some pain at the part; and he had it touched with nitrate of silver. During the night, shiverings came on, and he felt extremely restless. On the morning of the 29th—the next day—the finger was swollen, and red lines extended up the arm. In the evening of that day, the symptoms were not abated, and there was great prostration. On the 30th, the hand and arm were greatly swollen, the glands in the axilla were affected, and the pain was very great. On the 31st, the pulse beat from 90 to 100 in the minute; and the breathing was heavy and irregular, with torpor and drowsiness. In the evening, all the symptoms were increasing; and now an erysipelatous blush from the axilla extended over the side of the chest. During the night, the breathing became difficult, and the drowsiness passed gradually into deep stupor. Death took place at six o'clock in the morning of January 1st, not quite four days from the infliction of the wound.

In this case, the phenomena, in all important respects, are similar to those observed in traumatic erysipelatous fever, and in puerperal fever. The circumstance of the disease arising in the manner related—namely, from inoculation of a poison from the body of another person who had had puerperal fever—establishes the relation between it and the contagious fevers, and shows that the fatal termination in so short a period is to be attributed, not to inflammation, but to disease of the blood. If this be assented to, the case is taken out of the category of inflammatory diseases, and is placed in that of blood-diseases.

But if this and analogous cases—if erysipelatous fever, puerperal fever, gout, small-pox, and the other exanthematous fevers—be considered as blood-diseases, a great step indeed will have been taken, in the direction we are arguing, towards removing inflammatory reactions altogether from the pathological list; and a wide avenue is opened for a reconsideration of their true import.

Moreover, much doubt is thrown upon the value of the labours of the pathological anatomist, who may regard effects left by internal inflammation in fatal cases of blood-poisoning as showing anything whatever of the nature or seat of the disease. For the question arises, whether inflammation, and the suppurations which may appear in contagious fevers, are not appropriately placed in the same class with inflammation and suppuration in small-pox, sloughing carbuncle, and necrosis of bone; all of which are indisputably therapeutical reactions, the only difference being that, in the one class of cases, the actions arise for therapeutical purposes in the solid parts—the common tissue; in the other, for therapeutical purposes having reference to the fluid of the blood.

If we impartially review phenomena of inflammation as a matter of natural history, and begin with the simplest cases—scalds, burns, sloughs, and fractures (injuries to the common tissue), and boils, eruptions, gout, and small-pox (from injury to the qualities of blood)—we can scarcely fail of perceiving, in both classes, that the forms and amount of the action depend upon, or are governed by, the amount or extent of injury sustained. And, if hindrances protract the process of repair, so also analogous difficulties protract depurative forms of inflammation. If keeping peas in a sore protracts granulation and discharge, so also perseverance in unwholesome articles of food will protract ulceration. In mechanical injuries, the cause of the injury (the heel of the horse, or the cart-wheel), the part injured (the torn flesh, or the broken bone), the extent and nature of the hurt (contusion, laceration, and comminution),—all these, and also the subsequent reaction (the process of repair), are objects either of sight or of touch, or of both. On the other hand, in injuries to the blood, all these things are, and to a great extent must remain, matters of reasoning and deduction. We have said, that very little can be demonstrated of the vital and depurating processes constantly going forward in the blood of the living person. In the engrafted small-pox, it is true, the poisonous matter introduced into the blood, and the consequent inflammation and suppuration in the skin, are seen; but the essential part injured—the elements of the blood—the extent of their injury, and the depurative reactions

going on amongst them, and which connect the introduction of the virus with the fever, and the subsequent inflammation and suppuration, are not seen. Likewise, in the fatal case just related, there was evidence of the introduction of poisonous matter into the blood through the wound of the finger; but the rapidity with which it spread throughout, and destroyed the normal quality of the blood, was only to be proved by the rapid course of the symptoms and the fatal termination. In this case, we argue that the inflammation and swelling of the glands in the axilla were reactionary efforts to arrest the course and eliminate morbid matter, though they failed: and they failed upon the same ground that similar efforts fail in cases of severe mechanical injury; namely, because the injury inflicted on the blood was so great that life succumbed before measures of relief could come effectually into play. In severe mechanical injuries, persons sometimes die before, or soon after, a process of repair is established; so likewise, in injuries to the blood, persons will die before any inflammation appears.

XII.—Diseases of the Corpuscles of Blood.

With respect to disease or abnormal metamorphosis of the corpuscles of the blood, and its association with symptoms of fever, numerous observers have described their darker colour, and the easy transudation of their colouring matter in typhus. Denis, for example, describes the blood in typhus fever as deficient in fibrine. He says that air had no effect in reddening it; and, on analysis, it was found to contain ammonia. Dr. Armstrong observed the blood in typhus from the temporal artery as dark as that from the veins.

The general appearance of blood in malignant fevers has been described by Huxham and Fordyce. At the first commencement of symptoms of fever, the blood was sometimes buffed; but the clot beneath was always of a loose texture, scarcely cohering, and very dark in colour. If the patient was bled two or three days after the onset of fever, the blood was found incoagulable, having the appearance as when spirits of hartshorn is added to blood as it runs from the vein, which darkens its colour, and prevents coagulation.

In the yellow fever of the West Indies, blood has been observed to be hotter than in health. As fever progresses, it becomes black and thin. Dr. Blair says that, in many instances, the corpuscles were found so much dissolved that, in several specimens of fever-blood, but few of them could be observed.

It has been found that a diminished amount of carbonic acid is discharged from the blood by respiration in cases of fever; and this fact, taken in conjunction with the dark colour of blood, is conclusive as to one, at least, of the functions of the corpuscles being disordered in fever.

Rokitansky, Simon, Perry, and many other accurate observers, all speak of the dark colour and changed state of the corpuscles of blood in malignant fever, of the incoagulability of the plasma, and of the staining of the tissues and of the serum by the colouring matter which transudes the corpuscles.

As regards the microscopical appearances of the corpuscles of blood in fever, we hesitate at present to lay any stress upon them; because in persons in health, they very speedily change their figure and outline in a very uncertain manner. Some of them become notched with projecting points, and otherwise changed in outline; others assume globular forms; they are influenced as respects these changes, it would appear, by the temperature of the glass upon which they are received for examination, and by the way in which they are covered by the thin glass. Some are seen paler, and some smaller than others; some adhere closely together in rolls, others float about separately without the least disposition to adhere to their neighbours. All these varieties may be seen in the same small quantity of blood which is alone available for microscopical inspection, especially if the exterior edges of the film of blood be brought into the focus of the microscope.

Notwithstanding these obstacles to the drawing any positive conclusion from the microscopical appearances of the blood-corpuscles in cases of fever, it is quite as likely to be by the microscope as by chemistry that future advances in the pathology of these bodies will be made. For how can any bulky chemical manipulation satisfactorily eliminate results from the plasma from results from the corpuscles? especially if, under the influence of reagents, as we shall show, they throw out matter from their interior into the fluid in which they swim, and yet preserve their integrity or individuality. "Hitherto, at all events", as Rokitansky has well observed, "chemistry cannot be said to have excelled, as respects the pathology of these bodies, the achievements of a circumspect anatomical survey, notwithstanding the limited resources at the disposal of the latter."

Experiment i. Take a slip of glass, such as is used for mounting microscopical objects, receive on it a very small drop of blood, and place close to it with a pipette a drop of any fluid, chloroform, ale, weak sugar and water, etc., and the quantity of the extraneous fluid should not exceed the quantity of blood. Upon now dropping on the two fluids a thin piece of glass, their nearest edges will mingle, but in various proportions.

In these experiments we find the *outline* and the *interior* of the corpuscles of extremely various appearances in the same experiment, but nothing appears thrown out from them.

Experiment ii. Proceed as in the last experiment, but let the fluid used be sherry wine. The corpuscles, along the line where the blood and wine mingle, will soon begin to throw out molecules around their circumference, many of which pass away into the fluid; others grow out into long tails, which remain attached to the corpuscles, and terminate in a knob. They also wave about in a very singular manner. After some time (half an hour), the tails or filaments become nodulated, and then break away from the corpuscles, and when they have done so, they continue their singular movements in the fluid.

Some years ago, when making observations on the plasma or liquor sanguinis of blood, drawn by venesection in cases of fever and inflammation, we observed in the fluid a vast multitude of minute molecules. (*Medical Gazette*, vol. ii, 1841-42.) And the molecules seen in the experiment here related, are precisely the same in magnitude and appearance as those we saw in the fluid of blood drawn in the cases of fever. Now we believe that the blood-corpuscles do not immediately lose their vital or chemical properties when withdrawn from the body. Therefore, we regard the remarkable forms and actions they exhibit under the influence of sherry wine, as phenomena of a species of reaction, which, amongst multitudes of them, is various or unequal, hence the various appearances presented. In some, the resistance offered to the extraneous fluid is more easily overcome than in others.

We have frequently examined with the microscope blood taken from persons affected with scarlet fever, with reference to the appearances in the plasma, and have always noticed the following facts. The colourless or plasma corpuscles are much more numerous than in persons in health, and especially so if the blood be drawn from the skin as the fever is passing off and the epidermis beginning to exfoliate. They are of different sizes and present different appearances. In the open spaces between the rolls of the red corpuscles, irregular masses of granular matter and numerous free molecules are seen floating in the fluid.

In cases of diphtheria, we find that the plasma presents the same appearances as are seen in scarlet fever. Formerly we supposed the free molecules observed in the plasma of blood, drawn in cases of fever and inflammation, to be derived from the colourless corpuscles; but now that we have seen them thrown out by the red corpuscles, there is actual proof that these corpuscles, in their reactions upon extraneous substances, do themselves throw off matter into the fluid in which they swim. The appearances, then, which we have seen in the fluid of the blood in cases of fever, and the behaviour of the corpuscles in the experiment we have related, appear to corroborate our conclusions respecting the excretions of the corpuscles passing into the plasma, and the association of these excretions with phenomena of fever.

Before proceeding with our argument, it will be convenient now to refer to some collateral incidents which require our notice.

First, it may be objected to our proposition respecting the antecedent of fever, namely, disorder or disease of the blood-corpuscles, that in venosity of blood, where a poisonous element of the corpuscles fails of being discharged by respiration, the symptoms are those of brain disturbance, and not of fever. In *morbus cæruleus* there is no fever necessarily.

To this objection it may be replied, that the presence of a venous quality in the corpuscles does not imply disorder or disease in them, in the same way that it is concluded to arise from miasms in the air. The substance—carbon or other matter—which gives to the corpuscles their venous character, is a substance natural to them, an essential ingredient of their composition in certain parts of their course in the circulation. Therefore, it is to be expected, it would occasion no unusual reaction on the part of the corpuscles themselves, though the brain suffers; whereas, a poison from the air may be presumed something quite heterologous to the corpuscles, and doubtless they react with more energy against a foreign injurious

matter, than against anything which is a part of their normal composition.

In cases of blood-poisoning through the stomach, such as drunkenness from alcohol, narcotism from opium, and salivation from mercury, the locality and character of the symptoms point out which organ it is that suffers first or most from a particular poison diffused through the plasma. And if in these examples fever be absent, the argument is, that the parenchymatous organ is affected before the corpuscles of the blood, fever appearing when they partake of the disorder.

In cases of blood-poisoning through the lungs, on the contrary, the symptoms begin with fever, and the argument is, that the corpuscles of blood are here affected first, before the plasma or any of the local parenchymata; fever denoting an abnormal metamorphosis of the corpuscles.

A venous state of the corpuscles of blood is not an abnormal metamorphosis. The condition comprehended in the term venous is one natural to them. Misplaced venous corpuscles disorder the brain; but fever does not appear, because the venous state is natural to the corpuscles. The absence of symptoms of fever, when venous blood circulates arterially, is therefore no valid objection to the proposition we are arguing.

Again, we have hitherto purposely abstained from any reference to the brain or nervous system as causes of fever and inflammation, not because we underrate their powerful influence over blood and the secretions, but because so important a part of our subject requires a special consideration, which we can here but briefly indicate.

It has been argued in the former lecture, that the elements of the parenchymatous organs and the corpuscles of blood have the common properties of other living cellular bodies; and among these are properties of affinity, which differ in relation to different substances. And there can be no doubt that the corpuscles of the blood, as respects the various substances they encounter in their course during circulation, have much more intimate relations with (or a greater affinity for) some than others. For example, in the lung, a special reciprocal action takes place between the corpuscles which are within the vessels and the air which is outside them. And, as if to facilitate this action, the coats of the blood-vessels in the cells of the lung are reduced to an extreme degree of thinness.

Now, it may be argued of any other special organ, where the coats of the capillary vessels are reduced to a still greater degree of thinness than in the lung, that they are so for a similar purpose. Thus, in the brain, an organ very largely supplied with blood, the coats of the extreme vessels are so thin that we fail to trace them in all their various ramifications: indeed, so entirely are they altered that the elements of the organ have but a slight coherency. And, unless the contrary can be shown, we may infer this disappearance of the ordinary properties of blood-vessels to be for the purpose of removing all obstacle to the closest possible contact between the corpuscles of the blood and the parenchyma of the brain. This inference is corroborated by the fact that the brain is the organ specially affected by an abnormal circulation of venous corpuscles. That is to say, the brain is the organ which first detects the presence of an abnormal venous quality in the corpuscles.

If, then, we may regard the thinning away of the coats of the capillaries of the brain as facilitating a contact-action between the corpuscles of blood and the substance of the brain; and if, moreover, we are able to appeal to the known effect of venous corpuscles upon the functions of the brain denoted by drowsiness, stupor, delirium, and coma, as proof of a special action between the brain and the corpuscles, then we may claim the constant occurrence of similar cerebral disturbances in fever as corroborative of the view which bases phenomena of fever upon abnormal metamorphosis of the corpuscles of blood; the brain—to use a chemical phrase—being the test of the condition of the corpuscles.

All the functions of a living body may be comprehended as a series of actions and reactions; and, if it be admitted that the corpuscles of blood do perform a special function in the brain, there must necessarily be reaction from the brain upon the corpuscles.

Case. A young married woman, aged 19, was delivered of her first child. The labour was natural, and she went on favourably until the fourth day from her confinement, when her husband stayed out late at night, and returned home drunk from a fair, very much knocked about. By this she was thrown into a state of great nervous excitement. Very shortly after, she was seized with a numbness of the legs and shivering, and then with pain in the head and wandering of the mind. The secretion of milk was interrupted; the skin became hot and dry; no sleep could be procured; and the pulse beat 120 in the minute. The wandering of the mind passed into furious delirium, and all the symptoms of fever and excitement continued for several days. It was only by judicious medical treatment and careful nursing that the disorder was subdued on the seventeenth day.

In this case, we argue that the fever arose, not immediately from the nervous shock, but from disorder of the blood-corpuscles; and, as our researches have led us to interpose distemperatures of the fluid of the blood between errors in diet and inflammation, and disorder of the corpuscles of blood between aërial miasms and fever, so analogously of mental emotions and nervous shocks, when they occasion or aggravate fever or inflammation, we conclude they do so by disordering, or adding to the disorder, of one or other, or both parts of the blood. Errors in diet do not produce inflammation, unless the fluid of the blood be distempered: also a miasmatous air does not produce fever, except the blood-corpuscles be affected; so, too, great convulsions and loss of consciousness (in epilepsy, etc.) pass away without fever, if the blood be not affected. The close sympathy between states of the corpuscles of blood and the brain, then, supports our proposition that symptoms of fever and the generation of poisons in the blood are to be based upon disorder of the corpuscles.

[*To be continued.*]

Abstract of a Lecture

ON THE

CLASSIFICATION AND GEOGRAPHICAL DISTRIBUTION OF THE MAMMALIA.

DELIVERED IN THE SENATE HOUSE OF THE UNIVERSITY OF CAMBRIDGE, MAY 10TH, 1859.

By Richard Owen, D.C.L., F.R.S., etc.

The learned Professor expressed his sense of the honour which had been done to him by the appointment to the Sir Robert Reade's Lectureship,* and the pleasure it would afford him to give to the members of the University a brief account of some of the prominent features of one of the divisions of the animal kingdom. He had selected the subject of the Classification and Geographical Distribution of the Mammalia, because it afforded an opportunity of taking a general survey of one of the most interesting domains of nature in the short period allotted to a single lecture.

He detailed briefly the principles and peculiarities of the classifications which had been respectively formed by Aristotle, Ray, Linnæus, and Cuvier. The first of those naturalists had evinced a very extensive and correct knowledge of the mammalian group, by including the cetaceans in it, and by the manner in which he had divided it into the three great classes of Bipoda, Tetrapoda, and Apoda. From the time of the publication of his remarkable treatise, Αι περι τα Ζῶα Ἱστοριαι, a period of more than two thousand years elapsed without any advance in the subject; and nothing indicated more forcibly the decadence or dormant condition of the human intellect, during a great part of that period, than the dearth of new facts and generalisations in natural history. To Ray, a member of the University of Cambridge, was due the merit of again opening up this interesting field of knowledge, of adding many new facts, and especially of pointing out clearly the distinctions of class, order, genus, and species; but in his generalisations he was, in some points, inferior to his great predecessor, whose classification he in the main adopted. Cuvier had given a great impulse to the science; and, by dint of vast research and unusual capacity for generalisation, had worked a far more complete and satisfactory classification than had hitherto been attained. His classification had been generally followed in the

* The endowment for this lectureship was given to the University in 1524, by Sir Robert Reade, Lord Chief Justice of the Common Pleas in the reign of King Henry VIII. A statute approved by Her Majesty, by order in Council, April 6th, 1858, directs that the lecturer shall deliver one lecture in term time in every year. The lecturer is to be appointed by the Vice-Chancellor during the Lent Term in every year, and to deliver his lecture in the Senate House, on a day to be fixed by the Vice-Chancellor. The present Vice-Chancellor accordingly appointed Professor Owen, being desirous that the office should be held for the first time under the new statute by one who would shed a lustre upon it, and who at the same time is not a member of the University.

early part of this century; nevertheless, there were felt to be some defects in it, and the minds of anatomists had been preparing for some modification of it. It was the lecturer's good fortune to have the opportunity of examining many animals which had not before been dissected, especially those from Australia, which had been brought over to our Zoological Gardens; and he had been enabled to establish the separation of the marsupials and monotremes as a distinct class. Nevertheless, he did not feel quite satisfied, and had bestowed much labour for many years upon the investigation of the characters of the brain in the different classes of animals; and, two years ago, he felt himself strong enough to draw out a classification of mammals founded upon the differences in the characters of the brain. That organ consists, in mammals, of four parts—the cerebellum, the optic lobes, the cerebral hemispheres, and the olfactory lobes.

In the lowest order of mammals—the non-placentalia—which includes the monotremes and the marsupials, there is no connecting medium or commissure (*corpus callosum*) between the cerebral hemispheres; and these parts are very small. These animals, therefore, he names Lyencephala, or loose-brained. He had paid particular attention to the habits and characters of these animals, to ascertain with what peculiarities the absence of so important a part of the nervous centre is associated; and he found that there is in them a remarkable want of *memory*. The keepers in the Zoological Gardens observe that these creatures do not become familiarised with them, or recognise them. And though, in external features, some of the non-placentals resemble certain of the members of the placental class, yet the following difference may usually be remarked. The member of the latter—a carnivorous animal, perhaps—when put into his cage, will at first seek to discover means of escape, will try every panel, and search every corner; but, having spent a day or two in this way, he gives up the search as useless, and resigns himself to the occupation of walking to and fro in his den. The lyencephalous animal, on the contrary, unable to profit by the experiences of former trials, continues over and over again to repeat the same fruitless efforts to liberate himself.

The metropolis of the marsupials is Australia; and the pouch, into which the young is conveyed immediately upon birth to be protected and fed, serves as a sort of portable nursery, enabling the mother to carry her offspring about with her. This must be associated with the remarkable dearth of water which is often experienced in Australia; one or two, or even nine years, sometimes passing, during which there is scarcely any rain. In this time, the pools, and even the rivers, become dried up; and the animals must travel many miles in search of that necessary of life—water. Were they, under these circumstances, obliged to leave their young behind, these would perish ere their return.

As an evidence—one to his mind the most striking—of design in the work of creation, Professor Owen instanced the provision for the feeding of the young marsupial. While in its mother's pouch, it is too young and feeble to make any effort to provide for itself. The milk must be forced down its throat, and would find its way into the trachea, as well as into the œsophagus, were it not that, during the process of feeding, the larynx is carried forward to the back of the nostrils, so that the milk can pass safely down on each side of it while respiration goes on. There is a provision in the mother to propel the milk into the mouth of the young; and there is this provision in the young to secure the proper transit of the milk into the œsophagus. If, in the coincidence and adaptation of these provisions to one another, there is not design, where are we to look for it?

The next class of animals he calls Lissencephala; because in them the cerebral hemispheres, though larger than in the preceding class, and united by a transverse commissure, are quite smooth—that is, without convolutions. This includes the rodentia, bruta, insectivora, and cheiroptera. They are cosmopolitan, being found in all parts of the world, though a large number of them are natives of South America, and some are confined to that region. The instincts are commonly much developed in them.

Under the name Gyrencephala he classes the animals in which the increased amount of grey matter requires for its packing that the exterior of the cerebrum be thrown into convolutions or *gyri*. This part of the brain is also much larger than in the former classes. The cetacea, sirenia, toxodontia, proboscidia, terissodactyla, artiodactyla, carnivora, and quadrumana, are included in this class.

The Professor pointed out some of the chief distinguishing features of the several orders, particularly with reference to the locomotive organs and the teeth. He drew attention to the fact that, in animals where the numbers of the toes are even (as in ruminants, where there are two; and in the hippopotamus, where there are four), the stomach is complicated in its structure, and the colon is simple; moreover, the articular surface of the astragalus is divided into two equal, or nearly equal, parts; and the structure of the teeth is symmetrical: whereas in the animals, where the number of the toes is uneven (as in the horse, where there is one; in the rhinoceros, where there are three; and in the elephant, where there are five), the stomach is a simple bag; the colon is more complicated; the articular surface of the astragalus presents unequal facets, or only one; and the structure of the teeth is unsymmetrical. Further, in the even-toed animals, it is very curious that the horns are always in pairs, usually two; or, if more than two, there are four, two being placed behind the others: whereas, in the uneven-toed animals, there is rarely more than one horn, which is in the middle line; and if there be more than one, as in the two-horned rhinoceros, they are still not in pairs, but in the middle line, one behind the other. Thus some countenance is given to the Platonic idea of the prevalence of numbers.

The highest class, Archencephala, which comprises only man, is distinguished by the great development of the hinder lobes of the cerebrum; these quite covering the corpora quadrigemina and the cerebellum. The posterior horns of the lateral ventricles, and the hippocampus minor, are peculiar to man, not existing in any other animal. Coincident with this perfection of the brain, we find a corresponding perfection in the other organs, as evinced by the more complete manner in which particular parts are devoted to particular purposes. This is especially seen in the case of the foot, which, by the strength and conformation of its components, and by the construction of the great toe, is enabled to do the whole work of bearing and propelling the body, so that the upper pair of limbs are left free to minister to the intelligent will.

The Professor concluded by an eloquent appeal to his audience to set a proper value upon that marvellous mechanism with which they were gifted, and which was fitted to be, and which ought to be, the tabernacle of the Holy Spirit.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

THE APPLICATION OF STRONG NITRIC ACID IN SOME FORMS OF ECTROPION.

By Edmund Boult, Esq., F.R.C.S., Surgeon to the Bath Eye Infirmary.

[*Read April 21st*, 1859.]

In the spring of 1854, F. P., a young girl, aged about 14 years, apparently of a strumous diathesis, with large prominent eyes, applied at the Bath Eye Infirmary, for the relief of an affection of the conjunctiva lining the lower lid of either eye, which had existed as long as she could recollect. It consisted in a chronic hypertrophy of the mucous membrane, which was of a bright scarlet colour, and by its morbid growth appeared to evert the tarsal edges of the lids themselves, and then superadded a state of ectropion, the bulbs of the lashes were, for the most part, destroyed, but below the tarsal edges the integument was normal. In other respects, the eyes seemed healthy, and the patient's present condition was tolerably good. It did not appear that the girl had hitherto undergone much treatment, but she was now anxious to have the disease removed, for the appearance she presented was singularly unsightly.

Though constitutional treatment is usually recommended for this affection, I did not think it promised much in this case; the disease had probably originated in some constitutional error, which might not now exist, but the faulty nutrition of the parts continued.

It at once occurred to me that, by the cautious and persistent use of nitric acid locally, the abnormal structure might be effectually removed; and the result did not disappoint me.

Strong nitric acid was applied freely over the affected part of one eyelid, at intervals of seven or eight days, or more, accord-

ing as the eschar produced was disposed of; and, in a very short time, a very sensible difference was perceptible in the relative appearance of the corresponding lids. The operation was very painful, and ultimately the girl became tired of it; and she ceased to attend at the Eye Infirmary, and she was lost sight of for a period of five years. A few months since, she again appeared at the Infirmary; one lid perfectly cured, and looking quite healthy (with the exception of the want of the eyelashes, and the absence of epithelium on a small portion of the tarsal margin). The other eye still showed the original affection much as it was five years previously.

The girl stated that she had been out of Bath, and had visited London and other places; and she had consulted several surgeons, who gave her no hope of a cure; but she told them she knew she *could* be cured, but did not fancy the pain.

On reflecting the lid that had been subjected to the action of the acid, there was no hypertrophy perceptible; the only traces of the disease were strong bands of membrane, something like those produced by the application of lime to the conjunctiva, but not so thick or "fleshy".

At her own request, she was now subjected to a repetition of the nitric acid treatment on the right eye; and the result has been precisely the same as on the former occasion—a gradual destruction of the abnormal tissue, and a subsequent contraction of the parts acted upon. She may now be pronounced "cured" of a very troublesome and unsightly affection, not amenable to any other treatment that I know of. Of course, the hair-bulbs being destroyed, and there being some partial denudation of the epithelia on each tarsal edge, the eyes do not look perfectly natural, but are, no doubt, wonderfully improved.

Remarks. I do not suppose there is anything like novelty in what I have now described; but I wish to call attention to this mode of treatment, which, so far as I am aware, has almost fallen into desuetude. It is alluded to by Mackenzie and other systematic writers; and, in Guthrie's work on *Ophthalmic Surgery*, a full account of the treatment of ectropion, and other cognate affections of the eye, by the use of caustic acid, is given. The acid he was in the habit of using was the sulphuric.

There does not appear to be any difficulty or danger to the eye itself in the cautious application of these acids to the conjunctiva; their corrosive action seems to be strictly limited to that part of the tissue to which they are immediately applied. The purest anhydrous nitric acid is the best for the purpose. The operator using this, will be less liable to annoy the eye with fumes; and, the destruction of tissue being more immediate and effectual, the operation will be proportionately less painful. To apply it, let an assistant place a piece of lint, soaked in olive oil, over the eye, and pass it down between the ocular layer of the conjunctiva and the part to be destroyed, taking care that the oil shall not touch the latter. Then let the surgeon, having first dried the parts, take a glass-brush dipped in the nitric acid, and pass it slowly over them, allowing it to remain sufficiently long to form a thin white eschar. Let the tissue then be exposed to the air (still separate from the reflected layer of the membrane) until it be quite dry. Afterwards, if he like, he may wash the parts with a weak alkaline solution (though I do not consider this necessary); and, lastly, let him smear the whole with olive oil.

The immediate effect of the acid is to swell up the lids, and to produce a great deal of severe pain and lachrymation, which, however, soon subside. It will not be necessary to destroy the whole of the diseased structure, as a good deal of allowance must be made for subsequent contraction: indeed, Mr. Guthrie cautions us to remember this after effect, and recites a case in which he produced the opposite affection ("entropion") by his too great anxiety to cure the disease effectually.

I am of opinion that, applied with care and discrimination, strong nitric acid will be found as useful a remedy in several affections of the palpebral mucous membrane, as it is in some of those diseases of the same tissue in the neighbourhood of the rectum.

Discussion. Mr. George, when attending the hospitals at Vienna, some years ago, had seen the greatest advantage derived from the practice advocated by Mr. Boult. Free application of the strong acid, whether nitric or sulphuric, was more successful and advantageous than the removal of the parts by the knife.

Mr. Bartrum had been gratified by observing the progress of improvement in Mr. Boult's case.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

ON VACCINATION, AND THE LAWS RELATING TO IT AND THE REGISTRATION OF BIRTHS.

By J. S. Fletcher, Esq., Bromsgrove.

[*Read April 21st*, 1859.]

The honorary secretaries having kindly complied with my request to insert in their notice of meeting a copy of some of the propositions I intend to offer, I forward them for your perusal, and if thought worthy, I wish them to be recommended for consideration in the framing of any new law on vaccination. Much good might also arise from a resolution, expressive of the extent of the inability of vaccination in conveying other diseases, and that when small-pox occurs after vaccination, it arises (as small-pox does after small-pox) rather from a power in the constitution to re-form a peculiar principle in the blood, which had been destroyed by the vaccination, than from any co-existing disease of the skin at the time of vaccination.

These views are at variance with those of Jenner, who says: "I cannot account for failures, unless from the co-existence of cutaneous diseases." "One herpetic pustule is capable of deranging the whole vaccine pustule: subdue it, and all goes on correctly." "If the vaccine pustule goes through its stages correctly, the person is secure. If not, how can they be?" "I am convinced herpes is the great and grand impediment to successful vaccination." "Do not forget to look sharp after tinia capitis, sore eyelids, ears, etc." "The more," says Jenner, "I reason upon it, the more I am convinced that it is correct, that poisonous animal fluids are *not* absorbed and carried into the blood."

Opinions like the above are not only erroneous; but when circulated, as some of them recently have been, by high authority, are calculated to mislead and alarm the public, and prejudice people against vaccination.

At present, the person who registers the birth is practically the only individual against whom proceedings can be taken if vaccination is neglected. We therefore find "that many persons avoid having their children registered, to escape the law relating to vaccination." (*Registrar General's Report.*)

I propose that any parent or person having the care or custody of a child above three months old, whose vaccination has not been registered by the registrar of the district where the child was born, and on forms supplied to him according to Form A, shall, on conviction, pay a fine not exceeding ——.

By adopting forms according to Schedules A and B, all other bookkeeping will be dispensed with. By going over Book A, the registrar at once sees who is and who is not vaccinated, and who are exempt or dead; and the duplicate of Schedule B gives him a true *uncomplicated* return of all vaccinated gratuitously. No appointment of public vaccinator or districts or stations will be required; for the poor will no longer be debarred selecting their own medical man for the gratuitous vaccination of their children.

It is impossible to estimate the number of children born whose births have not been registered. The Registrar-General, in a letter to me some years ago on the subject, said: "Perhaps half a million may have escaped registration." The birth of not one of my five children has been registered; and I have in the country portion of my district in one afternoon vaccinated seven whose births had not been registered.

The law at present limits the period of registration to six months; and if the child is six weeks old, 7*s.* 6*d.* must be paid for its registration. The birth of a child may be registered *without a name.* None but the parent or householder can register a birth. I would propose that the father, if living with his wife, shall register the birth and name within days; and if the father cannot register it, then those present shall themselves be responsible. A fine of should be paid for neglecting to register.

The law expects the birth of children when born alive to be registered, but it refuses to allow of still-born children; hence it creates a very strong inducement for a class of females to commit infanticide, which the registration I propose would most materially tend to prevent. To register all births would cause unnecessary trouble; but as the eyelids of the fœtus uniformly open by the sixth month, and as a child if born alive before that time cannot live, I would propose that if the eyelids cannot be separated, the fœtus shall be considered as an abortion, and the woman said to have miscarried: but if

the eyelids *can* be separated, the fœtus shall be looked upon as a child, the woman as having given birth to a child, and dead or otherwise it must be registered.

[SCHEDULE A.]

Register of Vaccination.

Name of district.
Name of registrar.
Name of child.
Residence of child.
No. in Register of Births.
Date of registration of birth.
Date of registration of vaccination.
Name of medical man.
Residence.
Date of exemption from inability to take vaccination.
Date of exemption from state of health.
Date of death.

[SCHEDULE A.]

Certificate of Vaccination.

Name of district.
Name of registrar.
Name of child.
Residence of child.
No. in Register of Births.

This is to certify that the above child was vaccinated by , on , and I have this day seen the above child, and the vaccination has taken a successful effect.

Date. Name of medical man.
Title.
Residence.

[SCHEDULE B.]

For Gratuitous Vaccination.

Name of district.
Name of registrar.
Name of child.
Residence of child.
No. in Register of Births.
Date of issue.
Date of return.
Date of payment.

[SCHEDULE B.]

For Gratuitous Vaccination.

Name of child. | Residence. | No. in Register of Births.

This certificate is for the gratuitous vaccination of the above child, and *any* qualified medical man shall, on returning it to me properly filled up, receive the sum of [*a uniform fee*] within 28 days of quarter day.

Date. | Name of registrar. | Name of district.

N.B.—If above a mile from my residence, the quarter's account will be sent by post-office order, unless otherwise requested.

I have this day certified to the vaccination of the above child, and having made no charge to the parents or other person, request payment of the above fee.

Date. | Name of medical man. | Title and residence.

To be kept by the Medical Man till paid.

Name of child. | Residence. | No. in Register. | Name of district and registrar.

I have this day received the fee for the gratuitous vaccination of the above child.

Date. Name of medical man,
Residence.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Wednesday, April 20th, 1859.

Present:—Dr. Smith, in the Chair; Dr. Stokes, Dr. Williams, Dr. Apjohn, Dr. Leet, and Dr. Corrigan; Dr. Maunsell, *Registrar.*

The minutes of last meeting were approved and signed.

It was then resolved—

"That this Council having considered the Draft Case for Counsel prepared by the Executive Committee, are of opinion that it does not set forth the points relating to the question of the Registration of Licentiates in Midwfery in such a way as to elicit a satisfactory opinion; and that this Council decline to make any observations upon it in detail, as the Executive Committee, in transmitting the case for the observations of this Branch Council, have stated in their resolution of the 8th of April, that in communicating a copy of the case they claim the right of deciding in what form it shall be submitted to counsel; but that this Council desire to direct attention to an inaccuracy in point of form in the wording of the case, in the statement it contains, that it has been prepared 'on behalf of the General Council.'"

It was then proposed by Dr. Apjohn—

"That having carefully considered the entire question, we have placed upon paper our ideas on the subject, in the form of a case for counsel, and do direct the Registrar to transmit this document to the Executive Committee for its information."

The motion was seconded by Dr. Stokes, and the question having been put from the chair, a division was taken, when there appeared—*Ayes:* Dr. Apjohn, Dr. Stokes, Dr. Leet. *Noes:* Dr. Smith, Dr. Corrigan, Dr. Williams. The Chairman having then given his casting vote against the motion, it was decided in the negative.

Dr. Stokes then proposed—

"That having carefully considered the entire question, we have, with a view of assisting the Executive Committee in this matter, placed our views on the subject on paper, in the form of a case for counsel, and that the Registrar be directed to forward this document to the President of the General Council."

The motion was seconded by Dr. Apjohn; and the question having been put from the chair, a division was taken, when, the same councillors voting as in the former division, the motion was decided in the negative. C. H. Leet.

British Medical Journal.

SATURDAY, MAY 21st, 1859.

ILLEGAL PRACTITIONERS: WHAT SHALL WE DO WITH THEM?

It is clear that, if we wish the profession weeded of the innumerable quacks that still flourish among us, we must look out for other machinery for performing that operation than the Medical Council. It was too fondly believed that, upon the passing of a Medical Act, these gentry would at once disappear like ghosts at cockcrow.

But how does the matter stand? Not only do we find the old quack names stuck up in their accustomed filthy corners; not only do we see their advertisements at length in the London and provincial press, filling hundreds of columns, and meeting the eye of thousands of our youth; but some of them have actually the effrontery to boast that their names will not be found in the forthcoming Register. The very compilation of this Register has brought to light the fact that there are a multitude of persons at present practising in this country without any license whatever; and there is every reason to believe that, for many years past, a regular system of successful frauds, such as that which came to light in the Evans Reeves and Protheroe affair, has been carried on with impunity in this country—and not only in this country, but in foreign countries also.

We have now upon our table the particulars of a transaction of this character, in which the persons surreptitiously seeking a degree had recourse to an agent in the United States. The machinery by which, as it appears, the honour is to be obtained—for the matter is still under negotiation—is, of course, the "almighty dollar"; a certain number of the professors of a given university being reported to wink favourably in consideration of a certain sum paid down. So many cases of a similar character have, we hear, been discovered, that we fear that agencies of this nature are in too successful work; and that "smashing" of this kind has grown into a regular trade between the knaves of the two countries.

Independently of these concealed manœuvres by which ignorant quacks manage to place themselves on a level, so far as diplomas go, with regular practitioners, there are a number of mean and pitiful "dodges" by which less adventurous persons manage to poach upon the medical manor. Thus, country places and the suburbs of the metropolis are infested with a swarm of persons who style themselves "surgeon-dentists"; leading the public to believe that, although practising a mechanical art, they have the advantage of belonging to a College of Surgeons. Another class, who more boldly fly at all game, manufacture a qualification by simply taking the word "surgeon" as a prefix to their names: thus we have met with brass plates resplendent with the names of "Mr. Surgeon Brown", "Mr. Surgeon Robinson", and the like.

With all this mass of fraud patent before us, the question is —How shall we get rid of it? The Medical Council will not, we believe, interfere actively for suppressing it; that is to say, by prosecution. The evil is so great, that they plead the impossibility of attacking it unless they transform themselves into a club for prosecuting illegal practitioners, to the exclusion of their other duties. The Registrar is aghast at the frightful state of things he has discovered; and, like a character in a popular German tale, he seeks hastily to shut the lid, the opening of which has disclosed to him the presence of such a legion of foul fiends.

But, if the Council will not undertake the task, must it remain undone? Are legal and illegal practitioners to remain as heretofore, like wheat and tares in the same field? Is our only protection to be the Register, which the public, our employers, will not, as a body, consult for a considerable time at least, and which, for all purposes of protection against a certain low form of quackery, might as well be written in the cuneiform character? The answer, we fear, cannot be in the affirmative. We must manage to destroy, with a strong hand, the weeds as they spring up. The delicate inference that a practitioner must be illegal because his name is not to be found in the regular list, will kill the trade of no quack. We must be prepared to throw stones, failing this polite kind of inferential turf. And we must do this by means of local societies organised for the purpose, the model for which is the London Medical Registration Association.

This Association, by the suppression of the "Bennett Gang", has proved that it can bite as well as bark. The manner in which it rooted out the obscene creatures who had been so long fatting upon the fears and miseries of their fellow men, was most admirable. The vermin dared not even face their accusers in a court of justice; and a complete victory crowned the maiden efforts of the Association. There is no reason why the same process may not be brought to bear upon hundreds of others, who are playing as profitable a game at the expense of the public as these Bennetts did.

We must, however, multiply our Association for this purpose. The very success, indeed of the London Medical Registration Association ought to warn our country friends to be on the alert; for, as sure as day follows night, the eradication of quacks from the metropolis will be followed by their appearance, under new disguises, in the provinces. We may be sure that the Bennett gang are already setting their springes in some one or other of our great country towns.

In connection with our own Association, there are already established a number of Registration Societies throughout the country. We venture to suggest that these may so enlarge the sphere of their duties, as to include the duty to themselves of seeing that knaves and quacks in their neighbourhoods are not reaping the harvest, while they are reduced to the condition of mere gleaners. Even in cases where the law will not reach individuals who have usurped medical titles, such Associations would prove very useful in keeping the public well informed as to their real characters; and we have no doubt that, if their powers of offence were vigorously put in action, quackery would find it difficult to hold its own, and much more to flourish as it has hitherto, in the most glaring manner, among us.

THE WEEK.

A case is at present undergoing judicial investigation, which promises to become one of the *causes célèbres* of our medical jurisprudence. The point to be ascertained is, whether or not a person named Smethurst, residing at Richmond, and alleged to be a member of the medical profession, is guilty of having caused the death of a lady named Banks by administering to her, from time to time, small doses of arsenic or antimony. As far as the results of the examinations of the accused before the magistrates and the coroner have been made known, it appears that the deceased had resided at a boarding-house in Bayswater; that Smethurst had resided in the same house with a female whom he called his wife; that, in a short time, he married Miss Bankes, with whom he thenceforth resided at Richmond; that soon afterwards (towards the end of April) the deceased was seized with obstinate diarrhœa and vomiting; that, notwithstanding the endeavours of Drs. Julius and Mr. Bird of Richmond, and Dr. Todd of London, who saw the patient, the disease increased, and presented symptoms which could with difficulty be explained, except on the supposition that poison had been administered; and that the deceased expired on May 3rd. It has been stated also by a sister of the deceased, that Smethurst was in constant attendance on the patient, and apparently very desirous that she should have the best medical aid; but that the administration of tapioca, soup, arrowroot, or the like, from his hands, was invariably followed by severe vomiting; while this never occurred when food was administered by her sister. At the last report, the examination was postponed, in order that the result of a chemical analysis, which was being made by Dr. Taylor, might be known.

In the Apothecaries' Hall of Ireland, it is a custom to hold an annual examination of apprentices at the Hall in the first week in May, on some subject in chemical analysis, announced at the commencement of the previous winter session; and a prize of five guineas is awarded to the successful competitor. This year, the subject was "The Inorganic Constituents of Animals and Vegetables: their chemical and physical characters, the changes which they undergo in the organism in health and in disease, and the mode of analysing and detecting their presence." The prize was awarded to Mr. Elliott; and Mr. Burke gained a certificate of honour for distinguished answering.

We desire to direct the attention of our readers to the letter of Dr. Richardson, published at p. 415, and to express an earnest hope that the appeal which he there makes will be cordially responded to. Many in the profession, besides those who had the pleasure of enjoying Dr. Snow's friendship, must have recognised the value of his labours for the promotion of medicine; and we are sure that they will, one and all, not fail to contribute their share towards a simple manifestation of respect for his memory.

The new Parliament, so far as we have been able to ascertain, will contain three medical men, viz., Mr. Brady, member for Leitrim; Dr. Michell, member for Bodmin; and Dr. Noble, member for Leicester. A Dr. Lyons is said to be about to contest the representation of Cork, which has become vacant; but whether he is medical, we do not know. Of the three members already elected, Mr. Brady is one whom we are glad to see in his place again; Dr. Michell has to undergo penance for past misdeeds, and to be thoroughly reformed, before his name can be mentioned with favour by the profession; and it yet remains to be proved of what stuff Dr. Noble is made. The medical profession will have two more members in the newly elected Parliament than the last: yet the number might still be and ought to be greater.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
East York and North Lincoln. [Annual Meeting.]	Hull Infirmary.	Thursday, May 26th, 2 P.M.
South Midland. [Annual Meeting.]	Infirmary, Northampton.	Monday, May 30th, 1 P.M.
Lancashire and Cheshire. [Annual Meeting.]	Town Hall, Chester.	Wednesday, June 8th, 12 noon.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, May 1859.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.

President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

Philip H. Williams, M.D., *General Secretary.*

Worcester, April 26th, 1859.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

Edward Hart Vinen, M.D., in the Chair.

Thursday, February 3rd, 1859.

LIGHT THE ONLY CAUSE OF PURULENT OPHTHALMIA OF INFANTS. BY T. BALLARD, ESQ.

After some observations on the frequency of the disease, especially among the poorer classes, and the various degrees of injury to the eyes that resulted from it, Mr. Ballard stated his conviction that the sole cause of the affection was the exposure of the infant to the bright light during the day. He called attention to the circumstance of the distress adults even suffer when their eyes are exposed to a bright light while asleep and on awaking, and to the common practice of obscuring the light from our sleeping-rooms; whereas new-born infants, whose eyes had but just known their natural stimulus, had to sleep and awaken from their slumbers, frequently during the day, exposed to a strong glare of light. This was especially the case among the poorer classes for two principal reasons; 1. Because they live in small rooms, and the bed is consequently near the window, and it was inconvenient to keep the room darkened; 2. Because many were confined in the lying-in wards of public institutions, where it was usual to have white-washed walls, and large and lofty windows without blinds. Cases of ophthalmia occurred also among the higher classes, when the furniture of the room happened to be particularly favourable for the reflection of light, or when the bed was placed directly opposite the window, or, indeed, under any other circumstances which permitted of the infant being exposed continually to the daylight. The generally received doctrine that the disease results from contact with vaginal discharges was disputed; 1. Because the disease did not appear until several days after birth. 2. The author had notes of several cases of extreme leucorrhœa during pregnancy, where the infants had not been affected, the light having been obscured from the lying-in chamber by a green blind. 3. He had notes of other cases where there was no leucorrhœa, and yet the infant suffered with ophthalmia, there being no green blinds to the windows.

The proofs offered in favour of light causing the disease were: 1. The occurrence of it could be prognosticated when the circumstances were favourable for the free exposure of the infant to the light. 2. No cases had occurred where these conditions were prevented. 3. All cases, including some of the most severe, had been cured by obscuration only, no lotion or application of any kind being employed.

The author urged that in all lying-in chambers a green blind should be used, and that it would be a great boon to the poorer classes if, in all public lying-in wards, the upper half at least of the beds were shaded by a green blind, and that when cases of purulent ophthalmia were to be treated, caustics and astringent lotions should be dispensed with, together with that forcible opening of the eyelids, which must be so painful to the infant, and always causes distress in the mind of the parent. The worst cases would recover in a week, if only a green blind were placed before the window of the room in which the infant passed the day.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 26th, 1859.

F. C. Skey, Esq., President, in the Chair.

ANEURISM OF THE THORACIC AORTA, OPENING INTO THE TRACHEA AND LEFT BRONCHUS: HÆMOPTYSIS FOUR YEARS AND EIGHT MONTHS BEFORE DEATH: WITH REMARKS ON THE RUPTURE OF ANEURISMS.

BY W. T. GAIRDNER, M.D., F.R.C.P. EDIN.

The subject of the history was a merchant, of robust frame, of more than average intelligence, and who, at the time of his death, was about forty years of age. He was under Dr. Gairdner's care during the latter four years of his life. Ten years before the fatal result, he first complained of pains in the left side and shoulder, which were regarded as rheumatic, and were always relieved by violent exercise. They were, however, unaffected by treatment; and after continuing in very much the same state for more than three years, he was for the first time informed that there was some affection of the great vessels. Pulsation became evident in the following year, and the sputa, though occasionally yellow, were never distinctly blood tinged till the autumn of 1853, when alarming hæmoptysis occurred twice in the same day. After this he submitted to a variety of treatment; and came under the care of the author in April, 1854. He then exhibited every sign of a large aneurism of the aorta, presenting itself in the left front, just under the clavicle, and passing upwards and backwards so as partially to involve the left subclavian. The left pulse was at this time weaker than the right, and in the end became nearly lost. He was directed to take gentle exercise, and partially to resume business, which he had abandoned; to take light nourishing diet, and abstain from medicine; now and then, when the pain was severe, to put on two leeches over the tumour; and to think as little as possible of his complaint, except by way of caution against violent movements. Under this plan his general health improved, but the disease slowly made progress: and he continued to bring up a more or less tinged expectoration—sometimes rusty, sometimes purple,—with only the intermission of a few weeks at most, during the remainder of his life. During the last year he had severe pain, almost like angina pectoris; he lost flesh; had occasional difficulty in swallowing; and brought up blood more copiously, though never in large quantity nor unmixed. At length a small gush of blood, which probably did not exceed nine or ten ounces, occurred, which terminated his life by suffocation in a few minutes.

On *post mortem* examination, the aneurism was found involving the descending aorta from the origin of the left subclavian to the extent of several inches. It lay behind and above the left lung, to which it was firmly adherent. The left bronchus was stretched over the sac, and its posterior wall was absorbed throughout, the coagulated fibrine being freely exposed to view from the interior of the bronchus. Another small opening, with smooth edges, evidently of long standing, existed at the bifurcation of the trachea, and also rested upon firm, solid, laminated clot.

The chief interest of the case consisted in two circumstances—first, the very long period which existed between the occurrence of rupture of the sac and the ultimate fatal event; and secondly, the occurrence of hæmorrhage, in a modified form, at intervals, during the whole of that very long period. The author then discussed the question of hæmorrhage from aneurism generally, pointing out that the case of the late Mr. Liston, recorded in the *Lancet* for December, 1847, was perhaps the first to call the attention of the profession to the possibility of hæmorrhage occurring from this source so long as five months before death, the minor discharges of blood which had occurred being before this time referred to other causes than perforation of the sac. Dr. Gairdner had been able to trace nine or ten instances only in which severe hæmorrhage was recorded to have occurred more than one month before death, and only one exceeding the period in Mr. Liston's case—namely, a preparation in Guy's Hospital, pointed out by Dr. Sibson, in which the patient had severe hæmoptysis seven years before death. It happened to the author, some years ago, to be able to place on record another instance, in which an aneurism of the superior mesenteric artery had given rise to hæmorrhage from the bowels twenty-two months before the patient's death. (*Monthly Journal of Medical Science*, vol. x, p. 83.) Dr. Gairdner recited cases in which aneurisms, opening externally, had ruptured, and given rise to very severe hæmorrhage at long intervals before death. One was communicated to Mr. Syme (*Monthly Journal of Medical Science*, vol. x, p. 89), where the man lived four months, and died of typhus fever. Another was recorded by Dr. Stokes (*Diseases of the Heart and Aorta*, p. 82), in which frequent hæmorrhages took place during a year, after which the tumour became dense and hard, the cough and dyspnœa abated, and three weeks after the last attack, the patient left the hospital, saying that "he felt quite well." Dr. Gairdner attributed the minor hæmorrhages, in almost all cases, to rupture of the sac; and this cause of hæmorrhage was very apt to be overlooked when it amounted to no more than an inconsiderable leakage, which might last for weeks, or even months. He described four varieties of hæmoptysis likely to occur, and endeavoured to associate them with differences in the site and relations of the tumour, and the changes occurring in the lung structure. These he characterised as being very rarely of an inflammatory character, but more commonly either of the nature of collapse from pressure on a bronchus, or of chronic infiltration of blood directly, or indirectly, from the aneurism. He called in question the explanation usually given of these minor hæmorrhages, that they are produced by venous congestion—1st: because, when pressure on a vein has occurred, hæmorrhage has almost always been associated with direct pressure of the aneurism on the trachea or bronchi; 2ndly, because, in his experience, some of the most characteristic cases of slight and continuous hæmorrhage had been from aneurisms in which no pressure on the pulmonary veins was possible. He would not venture to assert that blood in the discharges of a patient affected with aneurism *always* indicated the communication of the sac with a mucous membrane, but he believed it generally did so, more especially when hæmoptysis occurred, if the aneurism pressed on the trachea, and if it were unaccompanied by indications of pulmonary change.

Dr. Gairdner next pointed out the great importance of this conclusion, with reference to diagnosis in obscure cases. In aneurisms characterised chiefly or exclusively by laryngeal symptoms, it was often extremely difficult to arrive at a satisfactory conclusion as to the cause of the very distressing dyspnœa. In this class of cases, the repeated presence of even small quantities of blood in the sputum was a most valuable means of diagnosis; for if there were laryngeal dyspnœa and stridulous respiration, if the epiglottis were not thickened, if the mucous membrane of the larynx, so far as it was within reach of the finger, were sound, and if with these signs, positive and negative, there were a persistent tendency to even the slightest amount of blood in the sputum, while auscultation and percussion gave negative results, both as regards the lungs and heart, aneurism might be predicated with as much certainty as was possible without the physical signs of tumour. Further, such an aneurism might be assumed to be small, arising from the back part of the arch, or from the commencement of the innominate artery, and so placed as to entangle either the left or the right recurrent nerve. He concluded his communication by some remarks on a case which, he thought, exemplified the mode in which these minor hæmorrhages usually occurred. Five or six papillary eminences marked the surface of the trachea where its wall was thinned by pressure of the aneurism, and on each of these, distinct pale orifices existed, only one of which was actually perforated; and the discharge of blood had been in this case very inconsiderable.

Dr. Sibson assented to the position laid down as to the value of hæmoptysis and stridulous breathing as diagnostic of aneurism of the descending aorta. In one-fourth of the cases of aneurism which he had collected there was hæmoptysis; in another fourth, stridulous breathing. He thought these symptoms were more frequently connected with aneurism of the descending arch, than of any other part of the aorta. The dyspnœa might not depend always on pressure on the recurrent nerve; but sometimes on pressure of the pneumogastric: the latter would act constantly in producing dyspnœa, the former only occasionally, as during speaking, coughing, etc.

Dr. Markham mentioned a case of aneurism, indicated by physical signs and the expectoration of large quantities of blood, which had occurred in a porter of St. Mary's Hospital, who had been employed in most laborious work. The hæmoptysis took place three or four years since; but the patient had recovered completely, and was now in the artillery.

Dr. Sibson had no doubt that this was a case of aneurism; but not, he thought, of the descending aorta.

Dr. Gairdner had inspected the preparation in Guy's Hospital to which he had referred in his paper. He saw no reason to doubt that this was a case of aneurism which had existed seven years after the occurrence of hæmoptysis. The woman was 54 years of age, and was a patient of Dr. Bright. She was subject to palpitation, and to pain between the shoulders. The report of the case did not state how much hæmorrhage there had been six or seven years before. There were no tubercles in the lungs, nor disease of the heart. The point of his (Dr. Gairdner's) paper, was to shew that the occurrence of persistent but not great hæmoptysis, with stridulous breathing, was a diagnostic mark of the existence of aneurism. When such symptoms were present, and the lungs and heart were sound, it might be almost positively concluded that aneurism was present.

POPLITEAL ANEURISM SUCCESSFULLY TREATED BY FLEXION OF THE KNEE-JOINT. BY ERNEST HART, ESQ.

[*Communicated by* Alexander Shaw, Esq., *Treasurer.*]

J. S., aged 41, consulted Mr. Hart in September 1858, having an aneurism in the right ham. It was globular, of the size of a small apple, and situated at the lower and outer part of the popliteal space. It had a full beat, but was not very near the surface. Placing the patient on the sofa, and baring the leg in order to make a careful examination of the tumour, Mr. Hart found that its pulsation was affected by the angle at which the leg was bent upon the thigh; and that, when very complete flexion was effected, its thrill almost wholly ceased. Concluding that in this position the course of the blood through the tumour was greatly retarded, he conceived the hope of effecting the cure of the aneurism by the deposition of active clots, if the leg could be retained for a sufficient length of time in the bent position. After a week's preliminary rest, treatment was commenced by bandaging the leg from the foot to the knee (not covering the tumour), thoroughly flexing the leg on the thigh, and retaining it in that position by the application of a stout roller. The patient was a thin, wiry man, and the flexion produced no inconvenience to him at the time. He passed a better night than during the previous week, when severe pain had been present in the aneurismal sac. What pain or annoyance was complained of during the treatment, was referred to the knee-cap, but it was very trifling, and "barely deserving to be called pain". The tumour was examined on the morning of the third day (about forty hours after flexion was enforced), and considerable solidification had occurred. On the fifth day, the tumour was hard and solid, and neither pulsation nor thrill could be detected. The leg was lightly attached to the thigh at a right angle. On the seventh day, the patient was allowed to move about, the foot being slung. On the twelfth day, the leg was completely straightened, and the patient walked on it with ease, limping from stiffness at the knee-joint consequent upon confinement. Six weeks subsequently, the tumour was hard and firm, and much smaller. After three months, it was barely perceptible, and there was pulsation in that part of the artery. The patient was seen at various stages by the author's friends, Mr. White Cooper, Mr. Coulson, Mr. Holmes of St. George's Hospital, Mr. Flower of Middlesex Hospital, and Mr. Buxton Shillitoe.

The treatment by flexion in this case was perfectly and immediately successful. It was unattended with any difficulties, it offered no inconveniences, and was not followed by any other than satisfactory results. The case, however, was one particularly well suited for the essay of such a plan of treatment. The patient was not stout, which renders flexion difficult; nor was he aged, which makes it painful. The tumour was of average size and of average prominence; when the knee was bent, the aneurismal sac was below the line of flexure. Cure was evidently effected in this method by the retardation of the current of blood, and the consequent deposition of active clots in the sac—the only manner in which satisfactory cures could be anticipated. This result was probably effected by the combined influences of pressure on the sac by the surrounding fascial and muscular tissues, and acute flexion of the artery. In so far as it was due to pressure, it appeared to be a return to the old method of treatment by direct pressure, but was free from the inconveniences of the screw and pad, which were open to the reproach of occasioning gangrene of the skin, rupture of the sac, and other accidents. Its simplicity and its success in this case appeared to strongly recommend it for further trial. If it were not always successful, there was not any other method free from the same objection; and there seemed reason to hope that the principle might admit of efficient application to a number of cases in which aneurismal tumours were developed opposite to the joints of the limbs.

POPLITEAL ANEURISM SUCCESSFULLY TREATED BY CONTINUED FLEXION OF THE KNEE-JOINT. BY ALEXANDER SHAW, ESQ.

This communication consisted of the narrative of a case of popliteal aneurism, cured by continued flexion of the knee-joint, according to the method described in the preceding paper by Mr. Hart.

The patient, aged 30, first perceived a pulsating tumour in the left ham a week before his admission into the Middlesex Hospital. It was of the size of a lemon, occupied the centre of the popliteal space; was easily compressed; the pulsation was strong, and there were other signs of its being a recent aneurism. On December 1st, the knee was secured in the bent position by a band brought round the foot and thigh, and fixed near the hip. The immediate effect of the flexion was that the patient ceased to feel the beating of the tumour, and that on inserting the oiled finger into the flexure behind the knee no pulsation could be discerned. On the fourth day, when the limb was unbound, the tumour was found to have lost about a third of its original size; its walls were thicker and denser, the force of the pulsation was considerably diminished, and the sac had receded more deeply into the popliteal cavity. Gradual improvement continued to take place. Between the third and fourth week from the commencement of the treatment, the sac had become greatly reduced in size; its walls appeared nearly solid, and the pulsation was so faint that it was expected at each day's visit to find it extinct. The treatment was varied by occasionally undoing the strap, which confined the knee, for several hours together; but, owing to the stiffness caused by the long continuance of the flexion, the position of the joint was not much altered by the relaxation. It was not till the thirty-eighth day that the pulsation in the tumour altogether ceased. The sac was at that time about the size of a walnut. The patient gradually recovered the power of extending the joint. On the fiftieth day, he could walk with only a slight halt, and on the fifty-sixth day he was discharged. During the first ten days, the patient complained of the pain, as well as the irksomeness, of keeping his knee constantly bent; and for a slight swelling of the joint, a lead lotion was applied. Afterwards, he made light of the inconvenience, and he never at any time asked to have the belt relaxed.

At the close of the case, the author offered a few brief remarks on the principle on which the cure was effected; and, in illustration, added the observation that, by extreme flexion of the knee-joint of a sound limb, the force of the current of blood through the popliteal artery can be weakened to such a degree as to cause stoppage of pulsation in the tibial arteries.

Mr. Fergusson regarded the proceeding described by Mr. Hart as a valuable addition to the practice of surgery. He spoke of the value of pressure generally in the treatment of aneurism, and also of "manipulation,"—modes of treatment which he thought would set aside, in many instances, the necessity for the knife. In the plan pursued in the cases before the Society, there might be failures, but this was no reason why we should discard the operation; but should rather encourage us to persevere, to determine the real value of the proceeding. The plan was not altogether novel, for it had been tried three or four years since in King's College Hospital. One of his house-surgeons had ascertained, in a case of popliteal aneurism, in a man aged 60, that when the leg was flexed upon the thigh, the pulsation in the tumour ceased. The aneurism was of the size of the fist, and was treated by pressure in the groin, and by flexure of the leg upon the thigh. This was persevered in for some time, but without benefit. The man, being impatient of treatment, left the hospital, and died of some other disease. To show the influence of position in certain cases of aneurism, he related a case of that disease in the politeal space, in which the employment of pressure gave encouraging, but tardy, results. It was found in this case that on extending the leg to its full degree, after the employment of pressure, all pulsation in the tumour ceased.

Mr. Birkett briefly referred to three cases of aneurism, treated by pressure, which had come under his notice in Guy's Hospital. In one case, ordinary pressure in the groin was applied; then pressure by flexion. Neither did good; but it must be admitted that they were not fairly tried. The femoral artery was afterwards tied, and the patient recovered In the second case, ordinary pressure was applied, at first with success; but suddenly the tumour became much enlarged, the femoral was tied, and the patient did well. In the third case, the patient, a young man, had an aneurism in the right popliteal space.

Pressure was tried, and in fourteen days he appeared well. The tumour contracted, and felt like a small hard ball. Flexion was then resorted to, but not persevered in, and ordinary pressure was again employed. The aneurism, however, gave way, and the femoral had to be tied. The man subsequently had a small aneurism in the left popliteal space: he would not submit to flexion, so the femoral vessel was secured.

Mr. Savory said that these cases were specially interesting and instructive in their relation to the physiology of the blood-vessels. It was familiarly known that a transverse wound of an artery gaped widely, and that when an artery was completely divided, the ends retracted. Yet these important facts had seldom received more than a passing notice. They had never been explained. To what was this retraction due? The muscular tissue was in no way concerned in it; for it occurred at a long period after death, as well as during life. Neither would elasticity alone explain it. Another condition was required, and that was tension. The arteries were elastic tubes, always tense; so that, when divided, by no management of posture or position could the retracted ends be brought into apposition. The extent of their retraction was a measure, then, not of their elasticity, but of their tension. This constant state of tension was obviously connected with their purpose; by it their patency, under every variety of movement and position, was secured. But this rule had its exceptions, and these were to be found at the knee and elbow-joints. At these parts, when an artery was divided, extreme flexion would bring their ends into apposition; but in this position, and for this very reason, the course of the vessel was interrupted; the course of the blood through it was impeded; the pulse ceased in the limb beyond. Thus, he conceived, was explained the principle upon which the cure of aneurism by this means was accomplished. It was not due to pressure, in the sense in which that term had been employed. It was due to the fact that the circulation through the artery at a short distance on the distal side of the sac was arrested; so that, as far as the principle was concerned, it would probably succeed, whatever part of the popliteal space the aneurism occupied. Now, in connection with this interesting fact—the arrest of the current through the artery by extreme flexion of the limb—Mr. Nunn, in some observations on the arrangement of the arteries of the limbs, recently published, had alluded to the remarkably free anastomosis which existed around these joints. They were clearly for the purpose, as he said, of compensating for the occasional interruption through the main channel. He (Mr. Savory) added, that this plan of treatment appeared free from one grave objection to the ordinary treatment by compression—namely, of interfering with the venous circulation. For although, in extreme flexion, the current through the main vein was interrupted also, yet here there was also an abundant superficial venous anastomosis around. The veins, like the arteries, were elastic, and, to say the least, were equally tense.

Editor's Letter Box.

INSTRUMENT FOR APPLYING DROPS TO THE CONJUNCTIVA.

Letter from J. C. Savery, Esq.

Sir,—Will you permit me to call the attention of those interested in the treatment of diseases of the eye to a little instrument I have found very useful in applying drops to the conjunctiva; it consists of a glass tube, three inches long and about one-eighth of an inch bore, and the ends fused, to take off the sharp edges. Attached to one end of the tube is a flat India-rubber bulb, by compressing which, and dipping the free end of the tube into the solution, the tube is filled, and by again compressing the bulb, the drop is thrown into the eye. The advantages I believe to be possessed by this instrument over the scoop and brush are: 1, its greater cleanliness; 2, the power of exactly adjusting the quantity of drop wished to be used; and, 3, the retaining the drop in the tube until the eye has been exposed, without danger of its being thrown over the child's clothes or your own, if treating one resenting the application of the remedy.

The tube and bulbs may be obtained from Messrs. Baker, Holborn. I am, etc. J. Charles Savery.

Surgeon to the Hastings Dispensary.

Marina, St. Leonard's, May, 1859.

LARA AND WALTERS *v.* WARD.

Letter from T. Ogier Ward, M.D.

Sir,—As you have published a report of the above trial, which, owing to the plaintiffs' case having broken down, went no farther than their counsel's version of it, and is calculated, if uncontradicted, to injure my character as a man of honour, I shall feel much obliged by your inserting the following statement of facts, which would have appeared in evidence, had my defence been called for. On the 24th of February, Dr. Williams was introduced to me by Mr. Orridge, medical agent, and we negociated together, at several interviews, for the sale of my practice.

On the 4th of March, Dr. Williams for the first and only time saw Mr. Lara, who mentioned my practice; but on Dr. Williams saying that he already knew the particulars, and had declined purchasing on my terms, he gave him an introduction to another party.

On the 12th of March, having come to the resolution not to sell my practice, I withdrew it from the hands of all the agents I had employed: Mr. Orridge, Mr. Bowmer, the plaintiffs, and others. But Dr. Williams having subsequently renewed negociations, and come to terms with me, I felt Mr. Orridge was entitled to the commission, which I accordingly paid him.

When I received the plaintiffs' extraordinary demand for commission, I stated the above facts in a letter to them, which their counsel handed in in evidence. On the judge reading it, their case broke down.

I shall be content, if you will kindly make this statement public, to leave it to the profession to judge whether I was not justified in honour, as well as in law, in resisting a demand for commission made under such circumstances.

I am, etc., T. Ogier Ward.

Kensington, May 1859.

FORCEPS PRACTICE.

Letter from W. Tyler Smith, M.D.

Sir,—You have mentioned my name in your leading article of last week, in commenting upon a case of malpraxis; and I therefore feel bound to remark upon the assertions and conclusions contained in the last paragraph of the article in question.

Surely it is illogical to draw any argument against the employment of the midwifery forceps from the fact that a drunken man had, in a particular case, used them improperly; yet, remarking on this case, you declare it to be "the duty of the profession at large to bring its opinion to bear strongly" upon what you fear to be "the growing and indiscriminate use of the forceps in labour". You add, that you "have no doubt whatever that this instrument is very largely used without any necessity". It is as much proved as any fact in obstetrics, that the forceps is less used in Great Britain than in any other country having pretensions to a scientific midwifery. The forceps is resorted to in France and Germany more than twice where it is used once in British practice. It is, indeed, a common reproach to us on the continent of Europe and in America, that we neglect the employment of the forceps.

You observe, "Many a skilful man may go through a long life without finding any ill effects arise from the use of the forceps; but the bungler comes next day, and sacrifices a life—it may be two—with his needless fumbling." This is no argument against the use of the forceps, but against the abuse of the instrument. Raise obstetric education, if you will; but do not assail the greatest invention ever made in midwifery, because drunken men and bunglers make it an instrument of mischief.

The assertion of "your belief that far more children are sacrificed by the use of the forceps, than of the other apparently more formidable weapon" (*i. e.*, the perforator), must strike all accoucheurs. The midwifery forceps is so constructed, that it is absolutely almost impossible to kill a child with it, during labour. I am, etc., W. Tyler Smith.

7, Upper Grosvenor Street, W., May 19th, 1859.

[Our observations arose entirely out of the cases of M'Hugh and Thackeray. We meant only to protest against the use of the forceps in natural cases, for the purpose of saving time to the practitioner. We had no intention of pronouncing any opinion other than favourable, as to the substitution of the forceps, turning, and the induction of premature labour, in place of craniotomy, in difficult cases, as proposed by Dr. Tyler Smith. Editor.]

THE LATE DR. JOHN SNOW.

Letter from B. W. Richardson, M.D.

Sir,—A few professional friends have been kind enough to join with me in undertaking to place in the Brompton Cemetery, a plain but durable monument over the grave of the late Dr. Snow, as a last and fitting memorial of the esteem in which he was held by those of his professional brethren who had the pleasure of his friendship.

Having ascertained that such mark of remembrance would be congenial to the feelings of Dr. Snow's relations, I take the opportunity of making the project widely known through your columns, feeling sure that a great many members of the medical body will be glad to co-operate in paying this simple tribute to the memory of our late estimable and distinguished brother in science.

A committee will be organised shortly to carry out this object to completion; meanwhile, subscriptions for the memorial may be forwarded to Dr. Hawksley, 26, George Street, Hanover Square, or to myself. I am, etc.,

B. W. Richardson.

12, Hinde Street, May 18, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Bristowe. On May 17th, at 3, St. Thomas's Street, Southwark, the wife of J. S. Bristowe, M.D., of a daughter.

Cholmeley. On March 8th, the wife of Henry Cholmeley, M.D., Staff-Surgeon, Rangoon, of a son.

Coates. On May 16th, at 10, Circus, Bath, the wife of *C. Coates, M.D., of a daughter.

Collyns. On May 16th, at Moreton Hampstead, Devon, the wife of G. N. Collyns, Esq., Surgeon, of a son.

Fleming. On May 16th, at Holbrook, Suffolk, the wife of Albert Fleming, Esq., Surgeon, of a daughter.

MARRIAGES.

Blake—Ainsworth. Blake, Charles Paget, M.D., of Beulah, Torquay, to Mary, daughter of the late William Ainsworth, Esq., of Birkett's Bank, near Wigan, at Kimbolton, Hunts, on May 12th.

Chalmers—McEwen. Chalmers, William Kelman, M.D., 2nd Battalion 19th Regiment, to Eliza Crichton, eldest daughter of the late David McEwen, Esq., of Westfield, Dundee, at All Saints, Knightsbridge, on April 6th.

Locock—King. Locock, Sidney, Esq., Attaché to Her Majesty's Legation at Constantinople, fourth son of Sir Charles Locock, Bart., M.D., to Abbie, third daughter of the Rev. Jonas King, D.D., at Athens, on May 5th.

DEATHS.

Floyer. On May 12th, at 144, Bishopsgate Street Without, Herbert Henry, son of C. A. Floyer, M.D., aged 7 months.

Galen. On May 11th, at Aberdeen, Ann, fourth daughter of John Galen, M.D., aged 16.

Jeston. On May 9th, at Malmesbury, Robert Charles Humphrey, eldest son of *Alfred W. Jeston, Esq., Surgeon, aged 16.

Jones, Charles, Esq., late Surgeon H.E.I.C.S., at Brompton, aged 73, on May 7th.

Proudfoot, Thomas, M.D., at Kendal, aged 68, on May 14th.

Seymour. On April 3rd, on board the *Nemesis* steamship, in his return to England, Lieutenant-Colonel Seymour, H.M. 84th Regiment, aged 38, eldest surviving son of E. J. Seymour, M.D., of Charles Street, Berkeley Square.

PASS LISTS.

Royal College of Surgeons. The following gentlemen, having undergone the necessary examinations in Anatomy and Physiology at meetings of the Court Examiners, on May 3rd, 4th, and 7th, will be admitted to the pass examinations when qualified; viz.—

King's College.

Brown, John Barr
Bubb, John
Coalthrop, Edward
Jeffery, Edward
Long, Robert Godolphin
Pout, Frank
Sansom, Arthur Ernest
Workman, Charles John

Middlesex Hospital.

Birch, George
Fowler, Francis Baker
Landsberg, J. P. Von
Langdon, John

University College Hospital.

Bastian, Henry Charlton
Corin, William John
Gibson, Francis William
Sheldon, Thomas

Guy's Hospital.

Lomas, Henry Wright
Major, George Aylwin
Owens, Henry
Wise, William Clunie

St. Thomas's Hospital.

Pembrey, Thomas
March, Henry Colley
Williams, John

St. Bartholomew's Hospital.

Cotton, Thomas
Haslam, George Herbert
Menzies, James Irvine

London Hospital.

Davey, Edward Myhill

Westminster Hospital.

Wallis, Albert William

St. George's Hospital.

Blenkinsop, William Henry

Manchester School.

Barr, Joseph Henry
Emmett, William Henry
Jones, William Owen
Roberts, Edward Stokes
Stanfield, William

Birmingham School.

Iliffe, Robert
May, Henry
Overton, Arthur
Waterson, John

Edinburgh.

Jameson, George William
King, J. H. C. Elliott
Racey, John

Dublin.

Alcock, Daniel
Kynsey, Josiah Frederick
Stafford, Patrick Walter

Newcastle-on-Tyne School.

Pyburn, James
Watson, John

Leeds School.

Foster, John
Mann, David

Glasgow School.

Griffith, Samuel

Sheffield School.

Hall, Marriott

University of St. Andrew's. List of gentlemen on whom the Degree of Doctor of Medicine was conferred on May 6th, 1859:—

Adcock, John, M.R.C.S., Guy's Hospital
Allen, David John, M.R.C.S. and L.A.C., Carmarthen, South Wales
Bainbridge, William, M.R.C.S. and L.A.C., London
Baker, Thomas H., F.R.C.S.I., Lic. King and Queen's Coll. Phy., Ireland, Parsontown
Bancroft, Joseph, M.R.C.S. and L.A.C., Stretford, near Manchester
Barber, Henry, M.R.C.S.Ed., Eastwood, Nottingham
Bird, George, M.R.C.S., London
Blest, Samuel B., M.R.C.S.I., Dublin
Bullmore, William K., M.R.C.S. and L.A.C., Falmouth
Conran, Charles G., Madras
Cooke, William B., M.R.C.S. and L.M., Gloucester
Cordwent, George, M.R.C.S. and L.A.C., Taunton
Craddock, William, M.R.C.S. and L.A.C., Her Majesty's Bengal Army
Drysdale, Charles R., M.R.C.S., London
Fergusson, Andrew, M.R.C.S.Ed., Dumfriesshire
Garstang, Walter, M.R.C.S.Ed., Blackburn, Lancashire
Gill, John B., M.R.C.S. and L.A.C., London Hospital
Griffith, John T., F.R.C.S. and L.A.C., Peckham, Surrey
Hadden, Henry R., M.R.C.S.I. and L.A.C., Wexford
Henderson, James, M.R.C.S.Ed., Aberdeenshire
Hewitt, Frederick H., M.R.C.S. and L.A.C., Clapham, near London
Horrocks, John, Lic. Phy. and Surg. Glasgow, Bolton, Lancashire
Howitt, Francis, M.R.C.S. and L.A.C., Heanor, Derbyshire
Kinahan, John, M.R.C.S.I., Staff Assistant-Surgeon, Army

Kirkman, William P., M.R.C.S. and L.A.C., Melton, Woodbridge, Suffolk
La Fargue, George F. H., M.R.C.S. and L.M., London
Lindsay, James M., M.R.C.S.Ed., Edinburgh
Lynes, William, M.R.C.S. and L.A.C., L.M., Wednesbury, Staffordshire
Mott, Charles G., M.R.C.S. and L.A.C., London
Mott, Marcus W., M.R.C.S., Her Majesty's Bengal Army
Parker, Thomas D., M.R.C.S., L.A.C., and L.M., Sevenoaks, Kent
Roberts, David Lloyd, M.R.C.S. and L.A.C., Manchester
Smith, Charles Edward, M.R.C.S. and L.A.C., Army Medical Staff
Smith, Frederick H., M.R.C.S., L.A.C., and L.M., Blackheath Road, Greenwich
Soulby, Henry, M.R.C.S. and L.A.C., Spilsby, Lincolnshire
Tizard, Henry, M.R.C.S. and L.A.C., Weymouth, Dorset
Vintras, Achille, M.R.C.S., St. Mary's Hospital, London
Woolfryes, John A., M.R.C.S. and L.A.C., 6th Battalion Military Train
Wotton, Charles, M.R.C.S. and L.A.C., King's Langley, Herts
Yarde, William, M.R.C.S. and L.A.C., London

Apothecaries' Hall. Members admitted on Thursday, April 28th, 1859:—

Abbey, Walter, Wellingborough
Aubin, Frederick George, London
Barrett, Charles Albert, Kingston, Berks
Blackman, Charles Thomas, London
Corbet, Rea, Orsett, Essex
Harley, Thomas, Cleobury Mortimer
Heath, William Ravenscroft, Manchester
Hellicar, Charles Joseph, Clifton, Bristol
Hocken, Thomas Morland, Dublin
Howe, John, Marple, near Stockport
Kennard, David, Lambourne, Berks
Mercer, Arthur Wyatt, West Drayton
Procter, William Birket, Kirby Lonsdale
Sawkins, William, London
Taylor, William Henry, London
Tiffen, Robert, Wigton, Cumberland
Tylecoate, John Horton, Great Heywood, Staffordshire

At the same Court, the following gentlemen passed their first examination:—

Griffith, Samuel, Tremadoc
Waring, William, Brixton

Thursday, May 5th:—

Mackenzie, Walter Fawkes, Wigan, Lancashire
Roberts, Charles, Darlington
Smith, Eustace, Leamington
Smythe, William Dumville, Richmond, Surrey
Thompson, Samuel, Knottingley, Yorkshire
Woodward, Martin, Pershore, Worcestershire

The following gentlemen also, on the same day, passed their first examination:—

Caudle, Adolphus William Wisden, Henfield, Sussex
Michell, Thomas, Redruth, Cornwall
Smith, Gordon Sydney R. W., Princes Terrace, Caledonian Road

Thursday, May 12th:—

Barber, Henry, Eastwood, Nottinghamshire
Cribb, John, London
Gover, Robert Mundy, Andover, Hants
Langford, Samuel Charles, Higham, Norfolk
Martin, Henri Ferdinand Theophile, Gaudens, France
Waring, William, St. Ann's Terrace, Brixton Road
Wood, William Peacock, Ashton-under-Lyne

At the same Court—

Howse, William, Burford, Oxfordshire, passed his first examination.

HEALTH OF LONDON:—WEEK ENDING MAY 7TH, 1859.

[*From the Registrar-General's Report.*]

The total deaths in London, which were 1207 in the last week of April, declined to 1108 in the week that ended last Saturday. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1060; but as the deaths returned for last week occurred in a population which has increased, they should be compared with the average raised in proportion to that increase; namely, with 1166. The comparison shows that the deaths that occurred last week were less by 58 than the number which would have been returned if a rate of mortality equal to the average for the first week of May had prevailed.

The births registered last week exceeded the deaths in the same period by 795.

Small-pox, which had been fatal in about sixteen cases in each of the three previous weeks, was fatal in twenty-six cases last week. Fourteen of these occurred in the east districts, chiefly in Bethnal Green. Scarlatina and diphtheria still maintain a high rate of mortality; the deaths from the two complaints last week were 69. Fourteen of these are referred to diphtheria, and occurred as follows:—one at 17, Victoria Place, Paddington; one at 33, Westbourne Terrace; one at 9, Queen Street, Brompton; one at 4, Carey Street, Westminster; one at 7, Grace Street, Islington; one at Helmsley Terrace, Hackney; one at 1, George Street, Hackney; one at 5, Miles Place, Finsbury; one at 283, Bethnal Green Road; one at 64, Wootton Street, Lambeth; one at 10, James Street, Kennington; one at 9, Manley Place, Kennington; one at 13, Charles Street, Peckham; and one at 4, Craven Place, Old Kent Road.

By comparing the results of the last two weeks, it will be seen that the decrease in the total mortality to the extent of nearly 100 deaths, as shewn above, arises from a reduction more or less under each of the five classes in which all diseases are arranged:—the deaths referred to zymotic diseases declined from 278 to 258; those caused by "constitutional diseases", from 274 to 243; those by "local diseases", from 480 to 458; those by "developmental diseases", from 131 to 108; and those by violence, from 39 to 34. These 34 violent deaths were all from accident or negligence, except two, which were cases of infanticide. Amongst the causes of death, is mentioned a case of porrigo, which was fatal to a child after four months illness; and a boy, of six years, died from "the effects of a stone lodging in the larynx, and an operation for the removal of it."

Last week the births of 956 boys and 947 girls, in all 1903 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1645.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·775 in. The extreme variation of readings was from 29·59 in., on Wednesday, to 29·94 in., on Friday. The mean temperature of the week was 48·5°, which is 2·9° below the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was below the average until Saturday. The thermometer in the shade fell to its lowest point, 33·1°, on Friday, and rose next day to its highest, 72°. The entire range in the week was therefore 38·9°; the mean daily range was 21·9°. The difference between the mean dew-point temperature and air temperature was 8·7°. The mean degree of humidity of the air was 72; complete saturation being represented by 100. The mean temperature of the water of the Thames was 50·5°. The wind blew from the north-east till Thursday afternoon; it then changed to south-east; and on the afternoon of Saturday was in the south-west. No rain fell during the week.

WEEK ENDING MAY 14TH.

The deaths registered in London, which were 1,207 in the last week of April, and 1,108 in the first week of May, show a further decrease for the week ending last Saturday, when they were 1,070. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1,051; but as the deaths that are returned for last week occurred in a population which has increased, they can only be compared with the average raised in proportion to that increase, namely, 1,156. From these figures, it appears that the deaths that occurred last week were less by 86 than the number that would have occurred if the average rate of mortality for the second week of May had prevailed.

From zymotic diseases in the aggregate 214 deaths occurred last week; the average, corrected for increase of population, is 257. The deaths referred to phthisis or consumption number 163; the corrected average is 157. Those referred to other pulmonary complaints are 154, the average being 192. Small-pox carried off 18 persons. The deaths from scarlatina and and diphtheria together declined from 69 in the previous week to 60 last week. Thirteen cases, in which diphtheria is recorded as the fatal disease, occurred as follows:—one at 2, Brompton Place, Brompton; one at 1, Clara Cottages, Hammersmith; one at 21, Lillington Street, Westminster; one at 19, Durham Terrace, Agar Town; one at 17 A, Ann's Place, Hackney Road;

one at 28, Backchurch Lane, Goodman's Fields (where two other deaths have occurred, within seven days, from scarlatina maligna, and where there is a large accumulation of dung, frequently smelling offensively, near the back of the house); one at 13, Royal Mint, Aldgate; one at 5, Lemon Street, St. Saviour; one at 12, Vine Terrace, Lambeth; one at 8, Moor Place, Lambeth; one at 7, Cumberland Row, Kennington; one at Fernside, Wandsworth Common; and one at 1, Dennett Terrace, Queen's Road, Deptford.

Two boys, aged respectively 3 and 6 years, and a girl, aged 8 years, the children of a journeyman blacksmith, died, all on the 7th inst., in Brewhouse Lane, Putney, from "typhus, following measles." Another child died, also in the same family, very recently. The typhoid symptoms were well marked in three of the four cases, and set in some days after the children had apparently recovered from measles. The house occupied by the family is in a most unsatisfactory state, from defective drainage and other causes.

A woman, aged 82 years, died at 25, Goulston Court, Whitechapel, from want of food and exposure to the night air.

Last week the births of 993 boys and 823 girls, in all 1,816 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1,593.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·024 in. The mean daily reading was above 30 in. on four days of the week. The extreme barometrical variation was from 29·86 in. to 30·13 in. The mean temperature of the week was 51·2°, which is 0·3° below the average of the same week in 43 years (as determined by Mr. Glaisher). The *lowest* temperature was 38·0°, on Monday; the *highest* 67·5°, on Wednesday. The entire range of the thermometer, in the shade, was therefore 29·5°. The mean daily range was 22·4°. The difference between the mean dew-point temperature and air temperature was 7·5°. The mean degree of humidity of the air was 76. The mean temperature of the water of the Thames was 53·8°. The wind blew almost constantly from the north-east. No rain fell except on Sunday, when the amount was 0·30 in.

LONDON MEDICAL REGISTRATION ASSOCIATION.

The sixth of the meetings convened by this Association in different districts of the metropolis took place on the evening of Saturday, May 7th, in the theatre of the Literary and Scientific Institution, Edwards Street, Portman Square. Mr. Propert, Vice-President of the Association, took the chair. He was attended on the platform by the Treasurer, Mr. Bottomley, and many other members of the Committee of Observation. Dr. Ladd, Hon. Secretary, read the Report of the Proceedings of the Association.

Mr. Guy, of Dorset Square, moved the first resolution, which was seconded by Mr. Gerrans, of Wyndham Place, and carried unanimously—

"That this meeting, having heard the report of the progress hitherto made by the London Medical Registration Association, thoroughly acquiesces in the principles by which the course of that Association has been guided, and recognises the importance of its receiving the support of all qualified medical practitioners in the borough of Marylebone."

Mr. Bottomley remarked, that they were greatly honoured by the presence of Mr. Propert. Few men could have done what he had, and his active support of this Association greatly entitled it to general encouragement. He hoped that the endeavour would be made to render the Association a powerful body, so as to have influence both with the Medical Council and the Government, to the extent of rendering the Medical Act hereafter perfect.

Mr. Nunn knew that the sons of some notorious illegal practitioners had become qualified, and had registered, and that their fathers practised under cover of the sons' names. What power had the Association, the Medical Council, or the Government, over them in virtue of the Act?

Dr. Ladd stated that if a man were duly qualified, unless any gross case of immoral conduct were proved against him, he (Dr. Ladd) apprehended that the Registrar could not legally refuse his admission upon the register.

Mr. C. Clark could not consider such a proceeding as that of one person practising with the diploma of another as otherwise than immoral conduct, involving in such cases as those instanced, a complicity on the part of the qualified man, and therefore coming under the cognizance of the institution to which the latter belonged. Mr. Clark suggested that the names of all such persons should be given to the Secretary of the Association, in order that they might be communicated to the institutions to which they belonged.

The Chairman warmly urged upon the meeting the suggestion of Mr. Clark.

Dr. Willis, of Kensington, moved the second resolution; "That in the opinion of this meeting it is highly desirable to augment the number and influence of the members of the London Medical Registration Association, so as to enable it effectually to carry out its objects, and to give weight to its proceedings with the Medical Council; and this meeting pledges itself to use every exertion to secure that end."

Dr. Thorn seconded the resolution.

Mr. Clark did not think that the Council could be a prosecuting body; it was appointed for a specific object, and was not empowered to go beyond that; but he trusted that the profession would actively sustain this Association, and enable them to extirpate the harpies which take hundreds of thousands of pounds out of the pockets of the profession. He proposed the third resolution, which was seconded by Mr. Ballard;—"That this meeting recognises the exceeding importance of obtaining, and submitting to the London Medical Registration Association, all possible information concerning persons practising medicine illegally in the borough of St. Marylebone and its vicinity, both by the individual efforts of all present, and, if advisable, by the formation of an independent committee of practitioners in the neighbourhood."

Dr. Kirby moved the fourth resolution, which was seconded by Dr. Harling, and unanimously carried;—"That this meeting, having heard with great satisfaction of the success which has attended the efforts of the London Medical Registration Association in putting down the notorious Bennetts, considers it highly desirable that the means of the Association should be enlarged by liberal contributions to the prosecution fund, believing that the prosecution of quacks would be beneficial to both the profession and the public."

A vote of thanks to the Chairman, proposed by Dr. Thorn, seconded by Mr. Bottomley, terminated the proceedings.

ROYAL COLLEGE OF SURGEONS OF ENGLAND: EXAMINATION PAPERS.

Anatomical and Physiological Examination of Candidates for the Diploma of Member, May 5th, 1859. 1. What are the muscular agents by which the urinary bladder is evacuated? Are the actions of the muscles employed voluntary or involuntary? Further, describe the muscular coat of the bladder, and whence it derives its supply of nerves. 2. How is the boundary of the upper opening of the glottis formed? What is the unconstrained position of the epiglottis? What is the position of the epiglottis in breathing, and what in the act of deglutition? And how is the closure of the opening of the glottis effected? 3. What is meant by the "oblique bearing" of the pelvis, as seen in a well articulated skeleton? What is the consequent direction of the openings of the pelvis in the erect posture? And what is the reason assigned for the oblique position of the pelvis? 4. What are the muscles of the leg and foot which contribute to raise and sustain the body on the toes or tip-toe? 5. What are the communications between the ventricles of the brain? 6. What is the physiological explanation of sighing? 7. What are the origin and course of the spermatic artery? What is the disposition of its branches in the testicle? And, again, what are the course, disposition, and termination of the veins by which the blood is returned?

Examination on Pathology, Surgical Anatomy, and Surgery, of Candidates for the Diploma of Member, May 10th, 1859. 1. What is the progress, from the commencement to the completion, of the process of union in a simple fracture? and what are the principal causes which may retard or wholly prevent bony union? 2. What are the circumstances which, without the aid of surgery, may be effectual in arresting hæmorrhage, and in permanently closing the vessel, when a large artery has been divided? 3. What is the process of healing by granulation? What is meant by healthy granulations, in respect of their organic condition? And how is a granulating wound finally cicatrised? 4. What are the causes of varicose veins in the lower limbs? Are the deep seated veins liable to the same affection? and, if not, what is the explanation? And what is the principle of the treatment of varices of the lower extremity, exclusive of surgical operations? 5. What is the character of the pulse, in respect of its fulness, force, and frequency, in in-

flammatory fever dependent upon acute local inflammation? and, on the other hand, in hectic fever dependent upon exhausting suppuration? 6. What is the process by which extraneous bodies are encysted?

Queen's College, Birmingham. The following letter has been received by the Council of this institution from Mr. Sands Cox.

"Queen's College, Birmingham, May 7, 1859.

"My Lords and Gentlemen,—I beg leave most respectfully to resign my office as Principal of the Queen's College; and in order to prevent any difficulties as to future arrangements, I have to request you to relieve me from the office of Warneford Trustee. I received the sum of £500 in May last (1858), the first instalment from the testimonial committee, which was paid over to Mr. Barnsley, the builder, on account of the new buildings, at the same date. I hope, in accordance with your resolution of the 3rd of April, 1857, you will forthwith found a medical scholarship, and grant gratuitous admission to the Museum, once a week, to the artisans. If I may be permitted to express a wish, it would be that the scholarship (rooms rent free) should be competed for on the following conditions:—

"The scholarship to be open to all matriculated students of the Queen's College and the Queen's Hospital, at the commencement of their first winter session. The examination to be in the following subjects:—Latin and Greek classics, mathematics, English history, and the modern languages. One hundred marks in the examination to be assigned to each of the above subjects. No scholarship to be awarded to any candidate who does not obtain an aggregate at least of 250 marks. The scholarships to be held for three years, provided the scholar shall produce to the council, at the close of his first and second academical years respectively, a certificate signed by the warden, the chaplain, and the dean of the faculty, on behalf of the medical professors, of daily attendance at Divine service in the chapel, of due attendance at lectures and examinations, and of satisfactory progress in his medical studies during the year then passed. If any scholar shall fail to produce such certificate at the close of each academical year, the scholarship shall be deemed vacant. The particulars of each year's examination shall be published by the Council six months before the day appointed for the examination.

"I have the honour to remain, my Lords and Gentlemen,

"Your obedient servant, William Sands Cox.

"To the Council of the Queen's College, Birmingham."

Mortality of Children in Russia. A terrible picture of the mortality of children in Russia is given in a journal called the *Rousky Dnevnik*. It appears that a vast proportion of this premature death is assignable to the carelessness of mothers, which continually exposes children to fatal accidents. "The indifference of our peasantry", observes a writer in the journal above mentioned, "with respect to their children exceeds all belief. They give themselves not the least concern about their offspring. The consequence is, that only a very small proportion of the children brought into the world reach maturity. The mortality of children under five years of age is, no doubt, considerable in all countries, but in Russia it is frightful. Many more than one-half of the children born in this country die in the very earliest period of infancy. One-eighth die between the ages of five and ten, and another eighth between ten and twenty: thus three-fourths perish before reaching mature age. Where are we to look for the cause of this mortality? It cannot be referred to climate, for throughout the whole extent of Russia there is no climate more inimical to health than that of St. Petersburg; and yet in the capital the deaths in infancy are not, as in other parts of the empire, in the proportion of one-half, but only of one-third, to the births. The reason is, that children are more cared for, and their physical development is better attended to in St. Petersburg than in the provinces. The ignorance and superstition of the lower classes of the people have, in many instances, a most fatal influence on the management of children. Of this the following facts afford a melancholy example. Last August, small-pox of a very malignant character broke out in several villages of the government of Voronetz, and made fearful ravages among children of both sexes. The activity of the disease was considerably heightened by the humid climate, the uncleanliness of the people, the bad quality and scantiness of food, and the ignorance and negligence of mothers in the treatment of the patients. A physician, residing in one of the infected districts, found a young child suffering under a most terrible attack of small pox. He offered his professional assistance, which was obstinately rejected by the mother, who observed that, if it were written that her child must die, no doctor could save him. However, the poor woman was fondly attached to her child, and at length she yielded to the doctor's recommendations, and said, 'Well, you may try to cure him; and may God help you.' On being asked why the child had not been vaccinated, she replied that, when the men came into the village to vaccinate the children, she hid her boy; and, though the men came into her hut several times, they could not find him. Vaccination, she observed, was an impious practice, and she would not charge her conscience with the sin of making her child a victim to it. 'But,' said the doctor, 'you could have been compelled to have your child vaccinated.' The woman shook her head sorrowfully, and wept. Another woman, who happened to be present, said that she had a child; and that, if any doctor were to vaccinate it, she would suck out the matter, or even bite out the piece of flesh with her teeth, to prevent the diabolical operation taking effect. This opinion on the subject of vaccination is general among the *Ruskolniks*, or schismatics, of the district of Korotoiak; but it also prevails in districts in which there is no schism. The Russian peasantry generally look upon a doctor with distrust; and, in cases of illness, they invariably prefer the assistance of the village sorcerer." (*Bulletin.*)

Testimonial to Dr. Marcus Dill of Ballykelly. The *Londonderry Sentinel* of April 22nd, contains an address to Dr. Dill, of Ballykelly, on the occasion of a presentation to that gentleman of a handsome brougham and a purse of sovereigns. The pecuniary value of the present is about £200 in all. It is highly creditable to Dr. Dill that he occupies such a favourable position in the estimation of those among whom his labours are exercised.

German Hospital, Dalston. This institution, which has been in existence for thirteen years, was, in the first instance, opened for giving medical relief to poor Germans, but now extends its benefits to all who require its aid. It lies under the incubus of debt, to the amount of £1,500. In order to liquidate this, the directors have arranged for holding a bazaar, in St. James's Hall, on the 23rd, 24th, and 25th of June, under the patronage of her Majesty.

Lunatics. The select committee of the (late) House of Commons appointed to inquire into the operation of the Acts of Parliament and Regulations for the care and treatment of lunatics, and to whom certain lunacy and lunatic Bills were referred, made a report before the dissolution, which has appeared in the form of a bulky blue book. The committee, although they have examined many witnesses, do not consider the inquiry as altogether complete, and, under these circumstances, decline to offer any definite opinion on the questions to them referred. They hand over to the House the minutes of evidence. The witnesses examined before the select committee included the Earl of Shaftesbury, Dr. H. H. Southey, Mr. F. Barlow, Mr. Norris Wilde, Dr. J. Connolly, Dr. Sutherland, Mr. M. Milnes, M.P., Dr. C. Hood, Admiral R. Saumarez, Sir A. Y. Spearman, Mr. C. H. Cottrell, Sir G. Robinson, and Colonel Sir J. Jebb.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Communications have been received from:—Mr. G. M. Humphry; Mr. T. Holmes; Mr. J. A. Locking; Dr. T. Ogier Ward; Dr. E. Smith; Mr. Fleming; Mr. J. Charles Savery; Mr. T. M. Stone; Dr. Turnbull; Mr. E. Boult; Dr. P. H. Williams; Mr. W. F. Spoffforth; Mr. Augustin Prichard: Dr. Tyler Smith; Dr. B. W. Richardson; Students; Devonshire; and Dr. Althaus.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

HOSPITAL FOR SICK CHILDREN.

CEREBRAL DISEASE: AMAUROSIS.

Under the care of W. JENNER, M.D.

[*Reported by* FREDERICK BOWREMAN JESSETT, ESQ., *House-Surgeon.*]

ELLEN C., aged 7, was admitted on November 27th, 1858. Vomiting was first noticed six weeks before admission. When three years old, she had had whooping-cough, measles, chicken-pox, and lastly diarrhœa, all in the space of three months. When she had measles, the mother stated that the child would scream and kick about; so much so, that it was as much as her father could do to hold her. The mother also says that the patient has never had fits. Leeches were applied to her neck, and a blister to the nape of the neck. The mother was obliged to rub the child's knees, because, when the patient stooped to pick anything up, she could not get up again—the mother says, on account of weakness. It was not till six months after this illness that she could play about at all: she then "picked up", and, about twelve months after her illness, returned to school. From that time until six weeks before admission, she enjoyed very good health; then she complained of her head, by putting her hand to it; and vomited constantly from 12 P.M. until 7 or 8 A.M. The mother took her to Guy's Hospital, and was ordered to have the child's head shaved, etc. The child did not entirely lose her sight until a fortnight before admission; for a fortnight before that time, she would lose her sight for some time, but it always returned again at longer intervals, until a fortnight before admission, when she lost her sight altogether. The mother knew this by the child not knowing whether there was a light in the room or not. About a fortnight before going to Guy's Hospital, the child would complain of her head, and said it came over quite dark as she went along the street, and she was obliged to stop for fear of falling. She used to walk to and from Guy's Hospital (about two miles). "Her sight went gradually." When she lost her sight entirely, she would cry night and day, and cried out, "Oh, my head!"

January 26th, 1859. *Present State.* She is constantly in bed, and unable to stand; lies on her back or side indifferently, usually on her back; answers questions intelligently; and says that she has frontal headache, "weak sort of pain in head very bad". Her hearing is good; there is no great heat of head; the cheeks are a little flushed; the lips are full and red; there is no strabismus; the pupils are large, and do not act with light. She maintains that she can see, but really cannot. She has no idea when a candle is brought to the bed. There is a little wandering motion of the eyeballs. There is no paralysis of the face or muscles of the eye. The tongue is moist, a little fissured transversely. There is no thrusting back of the head; no hyperæsthesia. She has just commenced crying, and complains of her head. There is no rigidity. She can lie with her legs drawn up or straight. She passes her stools in bed, at times unconsciously; at times calls for the nurse. Pulse 120, very small and weak. At times she is very impatient. There is no evidence of tubercle in the lungs; no dulness at bases. Her manner is a little foolish. There is no sighing or grinding of the teeth. She has had no convulsion since admission. There is but little change since admission. The nurse says, that at one time she could not straighten her legs, but can now. Until last week she has never asked for the bed-pan. At times she flushes in the face.

On examining the state of the pupils during sleep, I observed that they were contracted, but dilated when exposed to a light, and contracted again when a still stronger light was thrown on the eye. The nurse says that she is much thinner than on admission. Now and then the nurse gets her into a chair during meal times. She has no notion of feeding herself. She could walk on admission.

January 27th. The patient is evidently not so well as on the previous day. She does not talk at all as usual, and lies in a drowsy condition. The eyelids are partially closed. The pupils are still dilated. She complains much of her head. The saliva runs from her mouth during sleep.

January 30th. She has been getting worse, and is more drowsy. The tongue is covered with aphthæ. The right pupil is larger than the left. There is no paralysis or convulsion. The legs are usually drawn up, but she can straighten them. She says she has pain in the head, and points to her forehead. There is occasional flushing of the cheeks. The fæces and urine pass involuntarily sometimes.

She continued in the same state until the middle of February, and then began to improve. In the early part of March she began to improve, and could evidently see a little, so as to distinguish light from darkness. The mouth is now entirely healed; and the pupils are much smaller than they used to be.

From this time she improved rapidly; and, on March 28th, she got up and could sit in a chair. A week afterwards, she could walk about with assistance; and, in a few days longer, by herself.

On April 10th, it is noted that she now walks, sings, and plays about. The pupils are somewhat sensible to light.

She was soon afterwards discharged from the Hospital.

She was next seen on May 18th. She was then much stronger, and had gained flesh. Both pupils then acted tolerably well; the right pupil was still larger than the left. The head was very broad behind.

May 23rd. Her mother brought the child to the Hospital to-day. Her general condition is good; she is well nourished. She seems very intelligent. Her mother thinks she is quite as sensible as she was before the attack. She never sighs, and is very merry. During the state of repose, the mouth deviates a little to the right; and, when she laughs, the right side acts more quickly than the left. She closes both eyes well, but the right a little firmer than the left. The masseters and temporals act equally. She grasps equally well with both hands, and uses them well. She walks well; no dragging of either leg. She hears well. The tongue deviates a little to the left; the uvula to the right. The right pupil is larger than the left, but acts; when turned to the window, decidedly one pupil acts as well as the other: they act more strongly with daylight than with candlelight. Her mother says that she is sure that she sees; as, when told it is dark and time to go to bed, she says that she can see the light. Her eyes dazzle with the sun. There is no strabismus, and no ptosis. The pupils are generally large; but in a light room they are small.

REMARKS. This case is of interest on account of the child losing her sight gradually; showing that there was probably gradual effusion of fluid into the ventricles, and so pressure on the optic nerves (there is no history of tubercle in any of her family); the child's intellect remaining unimpaired; the pupils being contracted during sleep, and then acting with light; the child persisting that she could see, whereas really she could not see at all; that, at the commencement of the disease, the pupils did not act at all with the light, but latterly acted tolerably well, although the sight was but slightly improved; and lastly, that at the last report there was evidently some paralysis of the left side of the face.

ST. GEORGE'S HOSPITAL.

WOUND OF PALMAR ARCH: AMPUTATION OF ARM.

IN the JOURNAL for May 14th, we reported a case of Wound of the Palmar Arch requiring amputation of the arm, and followed by pyæmia. It was there erroneously reported as an instance of recovery: the patient has sunk from bed-sores, the symptoms of pyæmia having ceased.

DIPHTHERIA.

The following reports, though not exactly in the same form as the remainder of the table of cases of this disease which we are publishing, are of too great interest and importance to this inquiry to be omitted. We shall resume the publication of the table of cases in our next number.

I.—Diphtheria at Crowle, in Lincolnshire. By Henry W. T. Ellis, Esq.

[The first report from Mr. Ellis bears date Feb. 24th, 1859.]

Diphtheria has prevailed here sporadically for upwards of four months, but it is only within the last two that it has assumed an epidemic form. During this period, there have been sixty-nine well marked cases, displaying the characteristic exudation, not including many of simple tonsillitis, which, had they not been early attended to, might perhaps have put on the same appearance. The disease has affected all classes, and nearly all ages; chiefly prevailing, however, amongst the small farmers, the labouring population, and children under seven years of age. Eleven adults have been the subjects of it.

There have been ten deaths. An agricultural labourer, aged 34, sank in eight days, from the extension of the disease to the larynx, trachea, and bronchial tubes. He expectorated several pieces of adventitious membrane, one of which formed a perfect cast of the larynx. Of the other nine who succumbed, three were children under six years of age, of whom two died from syncope, and the remaining six from the croupal variety. In some of these cases, the nasal fossæ became involved. In one family, three children died in ten days, convulsions having preceded the complaint in one of them.

In two of the favourable cases, a miliary eruption was present, scarlatina not having been seen here for some time. The urine in several contained albumen, but, in the last fatal one, presented no traces of it.

As regards the sequelæ, paralysis of the soft palate occurred in three cases; one an adult female, who complained much of the regurgitation of the food, but especially liquids, through the nostrils; two others had enlargement of the submaxillary glands, ending in suppuration; and in all there was more or less debility.

The most successful treatment seemed to be, locally, a strong solution of the nitrate of silver (a drachm to the ounce); and in addition, with adults (for children cannot use them), gargles of hydrochloric acid. Beaufoy's solution was tried in a few instances, but scarcely answered so well. Externally, mustard and bran and vinegar poultices were used. In one case, where, from neglect, ammonia was kept on too long, the vesicated part became covered with diphtheritic deposit. Internally, the chief remedies were the tincture of sesquichloride of iron, chlorate of potash, and hydrochloric acid; with a gentle purgative at the onset; and, in the croupal form, emetics. In some instances, the good effects of these means seemed almost magical. Quinine, wine, porter, etc., were also given; but, in many cases, there was great difficulty in using the remedies indicated; and, in some of the fatal ones, it was most unsatisfactory.

It does not appear that site, meteorological or hygienic conditions, had much, if anything, to do with the visitation of this frightful disease. This place is situated in the midst of a level country, mostly covered by what is here called *warp*, the alluvial deposit of the Trent and Ouse. It is very fertile, well drained, and highly cultivated. Since the early part of November, when the weather was unusually severe, the temperature has been mild and pretty equable; the prevailing winds being from the south-west, rarely from the north-west or south-east. The standard of health here is good; the people are not of the poorest, and certainly, in their habits, the reverse of uncleanly. It appears rather remarkable that the neighbouring villages have hitherto been exempt from the disease, although, in this place, fresh cases are daily occurring.

As regards the prevalence of the disease, it was, in a very large proportion, amongst the young, the preponderance being slightly amongst the males. The leathery exudation generally appeared on the third or fourth day (in a little girl of my own, on the third); but, in several cases, a week or more elapsed before I saw the little patient, and the parents were not aware of its presence. The average duration of the disease would be eight or nine days. I have a good specimen of the adventitious membrane, the only one which I have examined with the microscope; it was about the twelfth of an inch thick, presenting points or corpuscles of blood, several very long fibrils, and a distinct fungoid growth.

As to the communicability of the disease, I can scarcely venture an opinion; but, in several cases, two and three in a family were attacked by it.

Tracheotomy was indicated in some cases, but not performed; neither was a *post mortem* examination obtained; for, owing to the prejudice and ignorance of people in these country districts, the obstacles are almost insuperable.

[A second communication from Mr. Ellis is dated April 25th, 1859.]

I have to report sixty-four more cases of diphtheria, seven of which have terminated fatally. In the majority of instances, the patients were seen soon after the patch appeared on the tonsils; and, consequently, they have been more amenable to treatment. Nitrate of silver was used in severe cases only; for it was found that the internal use of chlorate of potash, hydrochloric acid, tincture of the sesquichloride of iron, and gargles when the patients were old enough, had in many instances almost a magical effect in removing the adventitious membrane.

Of the fatal cases, one, a stout healthy looking servant girl, aged 15, and weighing eleven stones, sank on the ninth day, from the extension of the disease into the air-passages; although, during its progress, she got rid of several pieces of the exudation, and an immense quantity of muco-purulent secretion. The poor girl showed symptoms of the disease on Saturday, April 9th; but was not seen by me until the following Tuesday evening. The tonsils, uvula, soft palate, and back part of the pharynx, were then covered by the membrane; and there was much constitutional disturbance. A strong solution of the nitrate of silver was repeatedly applied, combined with the remedies before named; emetics of ipecacuanha were also given, for a time with good effect. Subsequently, Beaufoy's solution was used; and, during the progress of the disease, wine, eggs, beef-tea, and quinine, were administered—unfortunately, however, without avail, as she died asphyxiated on the succeeding Monday. The other deaths were in children under six years of age, all within a period of seven or eight days.

Eighteen of the sixty-four cases occurred in persons above the age of thirteen; and, of this number, eight were married people. The complaint has chiefly prevailed amongst the labouring classes; and there has been no scarlatina.

Amongst the consequences of this epidemic, regurgitation through the nostrils has not been uncommon; and, in three instances, diplopia ensued, which yielded to the citrate of iron and quinine, with generous diet. In most of the cases, convalescence has been very protracted. There has been great loathing of food amongst children; and in one of my previously reported cases of recovery from the disease, the patient, a little girl, sank from debility.

II.—Diphtheria in Canterbury. By Geo. Rigden, Esq.

[The subjoined report, furnished by Mr. Rigden, is dated March 8th, 1859.]

The age and sex of the patients, together with the hygienic conditions, will be found in Table I.

The disease did not appear to be contagious, inasmuch as, although in some families several members were attacked, they were generally suffering from the disease at the same time; and there were several other families in which only one member was attacked, and yet there seemed no reason for the immunity of the others. Some of the patients had had scarlatina previously, but several had not. Scarlatina had been, and was, prevailing at the same time in this city. In one family only were some members attacked with the one disease, and some with the other. The two diseases were perfectly distinct. The scarlatina patients had no false membrane on the fauces, etc.; the diphtheritic had no eruption nor scurfing.

The first symptoms were generally those of the throat, with more or less false membrane before medical assistance was sought; great depression of vital power; with other symptoms of low fever. In several instances the urine was examined, but always with negative results as regards albumen.

The treatment consisted in the application, at once, of nitrate of silver to the entire surface of the fauces and tonsils, repeated daily; a dose of calomel, sufficient to act as a quick purgative, and often as an emetic; with wine and brandy in considerable quantities; quinine, chlorate of potash, and tincture of sesquichloride of iron.

Where the disease terminated fatally, the duration is given in Table III. The recoveries were generally very lingering. I had no opportunity of making *post mortem* examinations.

Table I.—*Cases of Diphtheria occurring in the practice of G. Rigden, during* 1857 *and* 1858.

Date.	Sex & age.	Result.	Sanitary state of residence.
1857.			
a*Sept. 21	M. 6	Died, Sept. 28	Bad; near the shallow banks of a river
a Sept. 28	F. 2	Died, Oct. 12	Ditto ditto
Oct. 5	F. 6	Died, Oct. 12	Crowded
Oct. 6	F. 7	Cured	Bad; near to where pigs are kept
Oct. 8	M. 3	Cured	Satisfactory; no evident defect
Oct. 12	F. 9	Died, Oct. 18	At a public house, in a crowded neighbourhood
Oct. 13	M. 38	Cured	Bad; near an offensive cesspool
b Oct. 31	F. 8	Died, Nov. 13	Dirty; house in a healthy neighbourhood
d Nov. 2	F. 6	Died, Nov. 20	Drainage defective
c Nov. 5	F. 24	Cured	Satisfactory; no evident defect
d Nov. 8	M. 4	Cured	Drainage defective
b Nov. 11	F. 42	Cured	Dirty house, in a healthy neighbourhood
d Nov. 12	F. 25	Cured	Drainage defective
b Nov. 13	F. 10	Cured	Dirty house, in a healthy neighbourhood
b Nov. 13	F. 6	Cured	Ditto ditto
b Nov. 13	M. 3	Cured	Ditto ditto
Nov. 20	M. 7	Cured	Drainage defective; soil damp
e Nov. 21	F. 27	Cured	Satisfactory; no evident defect
1858.			
e Jan. 8	F. 7	Died, Jan. 15	Ditto ditto
f Jan. 11	M. 8	Died, Jan. 17	Ditto ditto
e Jan. 16	F. 31	Cured	Ditto ditto
e Jan. 20	F. 11	Cured	Ditto ditto
f Jan. 21	M. 35	Cured	Ditto ditto
f Jan. 23	F. 12	Cured	Ditto ditto
e Jan. 25	M. 1½	Cured	Ditto ditto
e Jan. 30	F. 30	Cured	Ditto ditto
g Feb. 1	F. 41	Cured	Crowded; no other evident defect
g Feb. 12	F. 14	Cured	Ditto ditto
g Feb. 23	F. 4	Cured	Ditto ditto
Mar. 4	F. 36	Cured	Drainage defective; soil damp
g Mar. 6	M. 16	Cured	Crowded; no other evident defect
c Mar. 20	M. 13	Cured	Satisfactory; no evident defect
Mar. 22	M. 3	Died, Mar. 27	Ditto ditto
c Mar. 24	M. 26	Cured	Ditto ditto
Mar. 26	M. 6	Died, April 7	Ditto ditto
Mar. 29	M. 8	Died, April 9	Privy close to the house; offensive. Extra urbem
Mar. 29	M. 7	Died, April 15	Satisfactory; no evident defects
April 19	M. 2	Cured	Ditto ditto
h April 25	M. 23	Cured	Ditto ditto
h April 30	M. 21	Cured	Ditto ditto
May 3	F. 23	Cured	Ditto ditto
May 11	F. 10	Cured	Ditto ditto
May 13	M. 4	Cured	Ditto ditto
May 14	F. 6	Cured	Privy close to the house; offensive
May 18	F. 5	Cured	Satisfactory; no evident defect
May 20	F. 8	Cured	Ditto ditto
May 23	M. 23	Cured	Ditto ditto
June 19	F. 9	Died, June 28	Ditto ditto
June 22	M. 6	Cured	Ditto ditto
i July 8	M. 42	Cured	Crowded; near to where pigs are kept
i July 8	F. 15	Cured	Ditto ditto
i July 9	F. 41	Cured	Ditto ditto
July 10	F. 29	Cured	Bad; near to where pigs are kept
July 21	M. 40	Cured	Satisfactory; no evident defect
Dec. 9	F. 30	Cured	Ditto ditto

* The letters denote the members of the same family.

Table I (*continued*).

Table II.—*Number of cases of the following diseases occurring in the practice of G. Rigden.*

1857.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals (2 years).
Diphtheria									2	6	10		
Pharyngitis		3		3	4	2		1	1				
Stomatitis						1	4						
Croup						1							
Cancrum oris							1						
Scarlatina	7		2	2	3	2	10	8	1	2	2		
Totals	7	3	2	5	7	6	15	9	4	8	12	0	
1858.													
Diphtheria	8	3	8	3	7	2	5					1	55
Pharyngitis													14
Stomatitis													5
Croup	1										1		3
Cancrum oris													1
Scarlatina	5				1			10	2				57
Totals	14	3	8	3	8	2	5	10	2	0	1	1	135

Table III.—*Mortality from Diphtheria in the City of Canterbury. From the Register of Deaths. Population* 18,398.

Date.	Sex & age.	Cause of death.	Attended by.
1857.			
a June 30	F. 9	Diphtheritis.	
a July 4	F. 4	Diphtheritis, 4 days.	
Sept. 10	F. 3	Diphtheritis, 10 days. Tracheitis, 3 days.	
b Sept. 28	M. 6	Diphtheritis, 1 week.	Mr. Rigden.
Oct. 12	F. 6	Diphtheritis, 7 days.	Do.
b Oct. 12	F. 2	Diphtheritis, 2 weeks.	Do.
Oct. 18	F. 9	Diphtheritis, 6 days.	Do.
Oct. 19	F. 4	Diphtheritis, 5 days. Purpura hæmorrhagica, 2 days.	
Nov. 13	F. 8	Diphtheritis, 13 days.	Do.
Nov. 20	F. 6	Diphtheritis, 18 days.	Do.
Dec. 27	F. 6	Diphtheritis, 11 days.	
1858.			
Jan. 13	F. 7	Diphtheritis, 5 days.	Do.
Jan. 17	M. 8	Diphtheritis, 6 days.	Do.
Jan. 20	M. 8	Diphtheritis, 10 days.	
Feb. 4	F. 6	Diphtheritis.	
Feb. 5	M. 10	Diphtheritis, 2 weeks. Pneumonia, 1 week.	
Mar. 5	M. 6	Diphtheritis, 10 days.	
Mar. 27	M. 3	Diphtheritis, 6 days.	Do.
April 7	M. 6	Diphtheritis, 12 days.	Do.
April 9	M. 2m.	Diphtheritis, 11 days.	
April 15	M. 7	Diphtheritis, 17 days. Anasarca, 2 days.	Do.
June 19	F. 7	Diphtheritis, 5 days.	
June 23	F. 4	Diphtheritis.	
June 28	F. 9	Diphtheritis. Purpura.	Do.
July 31	M. 5	Diphtheritis, 2 weeks.	
Oct. 13	M. 28	Diphtheritis, 5 days.	

Table IV.—*Mortality in the City of Canterbury from the following diseases. From the Register of Deaths. (Population* 18,398.

1857.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals (2 years).
Diphtheria						1	1		2	4	2	1	
Pharyngitis			1										
Stomatitis								1					
Croup	2	1		1									
Cancrum oris					1		1						
Scarlatina	4	2	2	2	1		1		1		2		
Totals	6	3	3	3	2	1	3	1	3	4	4	1	
1858.													
Diphtheria	3	2	2	3		3	1			1			26
Pharyngitis													1
Stomatitis									1				2
Croup	2	1			1						2	1	11
Cancrum oris													2
Scarlatina						1		1	2				19
Totals	5	3	2	3	1	4	1	1	3	1	2	1	61

Original Communications.

FIVE CASES OF OVARIOTOMY—THREE SUCCESSFUL; WITH PRACTICAL REMARKS.

By I. Baker Brown, Esq., F.R.C.S., Surgeon to the London Home for Surgical Diseases of Women.

[*Read before the Harveian Society of London.*]

It is not my intention to enter fully on the subject of Ovariotomy in this paper, but merely to relate five cases of ovarian disease in which extirpation has been effected, each possessing peculiar features, and therefore worthy of some practical remarks. The consideration of this dangerous operation has, during the past year, attracted the attention of many surgeons; and I believe, in this city, all the cases have been recorded faithfully. To further this plan, I now desire to record my experience of the past few months; my more extended experience on ovarian diseases generally, since 1830, has been from time to time honestly placed before the profession, either in the medical journals, or in my work *On Surgical Diseases of Women.* In that work, I have entered so fully into the most minute points of the operation, that it is not necessary to take up your time or attention by recapitulation. The work is in the library of this Society; and therefore every member can refer to it hereafter, if he pleases to do so.

Case I. *Ovarian Dropsy, Multilocular; Extirpation; Cure.* Laura P., aged 20, married, without children, soon after marriage, two years ago, noticed an enlargement of the abdomen, which went on increasing until March 1858, when she had an attack of peritonitis, from which she soon recovered, but had a relapse. Again, at the end of May, she had a third attack. After this, I saw her with the late Dr. Engledue, and found her suffering from great debility, and the results of the peritoneal inflammation. I ordered tonics of quinine and iron; and these had the effect of much improving her general health. An examination now showed a great enlargement of the abdomen, which evidently was multilocular ovarian dropsy. It appeared to have adhesions on the anterior and right lateral parts. The menstruation was irregular.

It was evident that extirpation was the only thing which offered a hopeful result. I placed its dangers fairly before her; and, after due consideration, she elected to undergo the operation. She was accordingly admitted into the London Home on October 12th, 1858. After a few days preparatory treatment, I proceeded to operate on October 20th, assisted by my colleagues Dr. Priestly, Messrs. Nunn, Philip Harper, and others. Dr. Kidd administered chloroform. One hour before the operation, she took two grains of opium, and a glass of port wine. I made an incision from the umbilicus to the pubes, and gradually cut down to the peritoneum, which I then opened, and the cyst presented itself. I grasped it with strong vulsellum forceps, and let out a large quantity of thick albuminous fluid through a large trocar. Introducing my hand, and gradually working around the cyst, I broke down the adhesions, which were especially situated low down on the right side. There was only one of any importance, and this I tore through. The mass of cysts was now gradually emptied and drawn out of the abdomen. The pedicle was long and thin; a pair of calipers was tightly fastened around it, and the cystic mass was cut off. The whole of the fluid which had escaped into the abdominal cavity was carefully sponged out, and the edges of the wound brought together with iron wire sutures, inserted at intervals of half an inch. The pedicle was secured at the lower end of the wound, and retained there by the calipers, which were left on. The wound was now covered with wet lint and long strips of plaster; a broad flannel many-tailed bandage was fastened around the abdomen; and the patient was removed to bed. Hot bottles were put to her feet. As soon as the effects of the chloroform had passed away, she had one grain of opium, and was ordered to be kept well under its influence. Pulse 92. Iced port wine was given occasionally.

October 21st. She passed a quiet night; pulse 120; slight sickness. In the afternoon she had some pain, apparently from flatus; for which a tube was occasionally introduced into the rectum, when a good deal of wind was discharged.

October 22nd. Pulse 106. There was no pain. She had slight sickness. She was ordered to have some partridge, and brandy with soda water.

October 23rd. Pulse 100. She slept pretty well. The catamenia appeared.

October 24th. Pulse 90. The dressings were removed, and the wound was found healed by the first intention. She was ordered to take dilute nitric acid and decoction of cinchona three times a day.

October 27th. The calipers were removed.

She went on perfectly well, and without a single bad symptom; and now (March 1859) is in perfect health and has grown stout and ruddy, and menstruates regularly. At each epoch, the skin just over where the pedicle was secured breaks, and there is a vicarious discharge during the whole period; but, as soon as that is over, the skin heals up again.

Remarks. The practical observation in this case is, that the patient was so ill from the repeated attacks of peritonitis, that, when I first saw her, I thought there was but little hope of her ever being well enough to undergo the shock of an operation, and nothing but generous diet and a course of quinine and iron would do her any good. Under this treatment she steadily improved; and, feeling most anxious to undergo the operation, had strong faith in a successful result. The nature of the cyst, which I now exhibit, will satisfy the members of the Society that no other mode of treatment could have offered any hopes of benefit; whereas tapping simply would have hastened death.

Case II. *Ovarian Dropsy, Multilocular; Extirpation; Cure.* A. P., single, aged 26, in the early part of June 1857, perceived a slight swelling low down in the right side, accompanied with an oppression at the chest, and some pain between the shoulders. The swelling increased rapidly for the first month; and after that period much more slowly, though perceptibly. There was a good deal of nausea and sickness, especially in the morning. At different intervals she expectorated blood, but without cough. She underwent various kinds of treatment, but without benefit. In August 1858, she was placed under the care of Mr. Jackson of Sheffield, who immediately discovered that she had ovarian dropsy, and recommended her to apply to me. On October 2nd I examined her, and found that she was suffering from multilocular ovarian disease, and that there were probably no adhesions. Her general health appeared a good deal broken; I therefore ordered her some quinine and iron, together with a generous diet. I explained to her that there was no means of cure except extirpation; and, after due consideration, she elected to undergo an operation. Accordingly, her health much improved, on the 24th, she took some pills to open her bowels, and had a warm bath: and at 3 P.M. on the 25th, I proceeded to operate. An hour previous to the operation, she had two grains of opium and a glass of wine. The temperature of the room was raised to 70°. There were present Drs. Jackson and Aveling, and Mr. Barker, of Sheffield, and Messrs. Nunn, Philip Harper, Wratislaw, and Richards. Dr. Kidd administered chloroform. I made a small incision between the umbilicus and pubes in the mesial line, about four inches in length, and carefully divided the various tissues until I came down upon the peritoneum. This bulged out, from the amount

of effusion which was present in it. On making an opening into it, a large quantity of fluid escaped, and a large mass of cysts immediately appeared. I now punctured this with a large trocar, and emptied what cysts I could; but a very small quantity could be drawn off. The walls of the mass were so rotten as to break down under very slight pressure: I therefore was obliged to enlarge the opening, and then, with some trouble, managed to draw it out. The pedicle, which was very thick and soft, I enclosed in a pair of calipers squeezed as tight as possible, and then cut off. I then removed all the fluid which had escaped into the peritoneal cavity, and brought the edges of the opening together with iron-wire sutures, inserted at intervals of half an inch. The pedicle was retained at the lower end of the wound, and the calipers were left on. The wound was covered with wet lint and strips of adhesive plaster. A broad many-tailed flannel bandage was applied tightly around the abdomen; and the patient was put into bed with hot bottles to her feet. After the operation, the pulse was 100, and weak. She had port wine and iced water to drink; and when the effects of the chloroform had passed away, two grains more opium were given.

10·30. Her pulse was 110; she had no pain or distension.

October 26th. She had dosed at intervals, and had been sick three times. Pulse 115. The skin was warm. She had a little pain at intervals, apparently from flatus. Beef-tea, milk, and soda-water were ordered as diet; and two grains of opium were directed to be taken every six hours, if necessary, to keep her well under its influence.

She went on very well, having no untoward symptoms; and, on October 30th, I removed the dressing, and took out one suture and the calipers.

November 1st. I removed two more sutures. She progressed as satisfactorily as possible in every respect; and in six weeks left her lodgings quite well. At the present time (March 1859) she has since grown stout, and is in robust health.

Remarks. This case was one of quick growth and of a bad form, so closely bordering on the malignant, that another three months would have produced so much mischief to the omentum and bowels, as to have precluded any hope of affording relief by extirpation. The nature of the mass, a sort of honeycomb, rendered any other mode of treatment quite out of the question; and the serious effect on the general health was so rapid and so severe as to threaten a speedy termination of life. We may, therefore, fairly consider that a life has been saved by the operation.

Case III. *Ovarian Disease; Extirpation; Death.* Miss N., aged 21, unmarried, from Lubeck, in Germany, came under my care in August 1858. The account received from the medical attendant in Germany gives a clear account of her case, and is as follows:—

"Miss N. complained in her eleventh year of periodic returning pains in her stomach; though, by external examination, nothing could be perceived. After a long pause, in the spring of the year 1849, severe pains were again felt; and in the right epigastric region a swelling was discovered, which had a rough uneven surface, and did not change its position in different movements of the body. It was free from pain. The unevenness of the swelling gradually became less perceptible; and the presence of fluid showed itself, and assumed the appearance of encysted dropsy. The urinary secretion was good. In the summer of 1857, she fell, and pains came on in the abdomen, which on examination was found less pointed, and had become more level, the sides being expanded, and the parietes softer and less stretched. After some days, a flux came on, and after a time the collection of water decreased. The swelling in the right side was less to be felt than formerly. Gradually the water collected in the abdomen; and she complained much of the left epigastric region, where the swelling and pain have since remained." In addition to this, it may be remarked that she had never menstruated, and her general health was a good deal broken.

In August 1858, she came over to London, and consulted me. She was then in very tolerable health. On examination, a large multilocular ovarian tumour with fluctuation was found, more prominent on the left side than on the right. It filled up the abdomen, and was to a certain extent movable. There was no crepitation; and probably there were few adhesions. Upon a careful review of the whole case, I arrived at a conclusion that the removal of the cyst was the only thing which offered any hope of real benefit. I clearly pointed out the danger of the operation, and said that her case was not a favourable one; but that, on the other hand, no palliative treatment could be of any real benefit. The patient went away to consider about it, and did not return again for six months, when the tumour was much increased, and her general health a good deal broken up, she having been seriously ill during that time, with pain, etc., in the tumour. She was now very anxious to have an operation performed, and was accordingly admitted into the London Home, and underwent a course of mild tonics and preparatory treatment. On examination *per vaginam*, the tumour could not be felt by the finger, and the os was very high up, as if the uterus were drawn up by the tumour. The hymen was complete.

1859. Feb. 10th. At one o'clock, two grains of opium and a glass of wine were given. At 2 P.M., she was placed under the influence of chloroform by Dr. Kidd and Mr. Edwards. I proceeded to operate, assisted by my colleagues Messrs. Nunn and Philip Harper, and the visiting surgeons, Messrs. Wratislaw, Hubbard, Spencer, and Giles. I made an incision from the navel to within two inches of the pubes, and carefully cut down to the peritoneum, which was then opened to the same extent. The cyst then presented itself; and, rapidly passing my hand around it, I found that there were hardly any adhesions. I now punctured the cyst; and about ten pints of thick steatomatous fluid flowed away through the cannula. This fluid was mixed with a thick, pasty, fatty substance, which obstructed the cannula. I now attempted to draw the cyst out; but, not succeeding, punctured it a second time, and let off about five pints more fluid. As the cyst could not even now be withdrawn, I lengthened the upper end of the incision about two inches; and, by puncturing a third cyst, then succeeded in drawing the mass out by strong vulsellum forceps. There were three points of adhesion with the omentum, which were torn through. When the tumour escaped through the incision, it dragged the uterus out with it; and examination showed that there was no connexion of the body of the uterus with its cervix. The clamp invented by Mr. Harper was now fastened on to the pedicle close to the cyst, and the latter cut off. The uterus was returned to its proper position, together with the omental adhesions; the latter having been carefully wiped, and examined for any bleeding vessels. The pedicle was now brought to the lower end of the wound; and its edges were brought together with metallic sutures, inserted about every half inch and carried deep through the aponeurosis of the muscle, but avoiding the peritoneum. It was covered with wet lint and a few long strips of adhesive plaster. A broad flannel bandage was fastened around the abdomen; and the patient was put into bed. There was no escape of the intestines at any time of the operation. It was the left ovary which was removed. The operation was finished at 3 P.M. She now had two grains of opium, and was to have a grain every six hours. Pulse 80.

10 P.M. The pulse was 90. The skin was soft and moist. She had no sickness. Half an ounce of wine was ordered. She had a little sleep at intervals during the night, but was upon the whole restless, feeling that she could not breathe freely.

February 11th, 8 A.M. The pulse was 100. She had occasional pains in the abdomen, apparently from flatus. The stomach was slightly tympanitic.

3 P.M. The pulse had risen to 140; and there was occasional hiccough. She had no pain. The belly was tympanitic; the breathing more free, and without pain; and she could straighten her legs, which she could not do the previous night.

6 P.M. She suddenly fell into collapse, and sank at 10·20 P.M., being sensible to the last.

These notes were kindly taken by Mr. Wratislaw, the visiting surgeon in charge of the case.

A further examination of the removed mass showed it to contain a large quantity of loose hairs, mixed with a thick steatomatous matter. Hairs were also developed, in various proportions, over the whole internal surface of the cyst, and in many places thickly massed together. In the centre of the cyst there was also a development of bone, and more or less perfect teeth.

On the following day, at three o'clock (seventeen hours after death), Mr. Nunn made a *post mortem* examination, there being present Messrs. B. Brown, Philip Harper, Wratislaw, and Dr. Giles. On dividing the wires used in bringing the abdominal walls together, incipient adhesions were found, as well as pus in the track of two of the wires. The omentum was a good deal discoloured, of a darkish colour, also thickened and injected, and as though clotted. The parietal peritoneum was inflamed and scarlet in patches for some distance around the incision. Peritonitis seemed to have existed chiefly on the left side, where the small intestines were slightly agglutinated together. The recto-vesical pouch contained a little bloody serum. The pouch was intensely injected. A small quantity

of cheesy matter, which was contained in the ovarian sac, appeared on one of the intestines. No pus was found. The liver was adherent to the under surface of the diaphragm. The adhesions were evidently old, and not to be broken down. The kidneys were healthy. The heart was very small, and on the right side very thin—about the eighth of an inch thick. The lungs were perfectly healthy. The os uteri was situated in its normal position, and admitted a sound for about an inch. The neck of the uterus was situated about an inch from the body, and was connected with the latter by a small impervious band of membrane. The uterus itself thus floated in the pelvis, having no direct or continuous communication with the os itself, except through this membranous band. The mammæ were well developed.

Remarks. This case is one of the greatest interest. The disease was evidently congenital, as evidenced by the bony growth; and the rapidity of its development, during the last twelve months, too clearly showed that death would soon follow. At the same time, no tapping could have relieved her, and no palliative treatment could have been of the slightest benefit. Although but little hope existed of successful result from extirpation, still it was the *only* hope; and the patient and her friends elected to run the risk—I think wisely so, because experience proves that, if there be no other organic disease, life is often prolonged or saved by extirpation. In this case, the small and weak heart evidently had a great deal to do with the death.

[*To be continued.*]

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By William Addison, M.D., F.R.S., Fellow of the College.

Lecture II (*concluded*).

XIII.—Two Species of Fever.

In the last Lecture, we said that the corpuscles of the blood derive materials of their growth and nourishment from two sources, namely, the atmosphere and the plasma; and that their excretions are discharged in two ways—partly into the atmosphere, as carbonic acid, and partly into the plasma. It follows necessarily that the blood-corpuscles may be disordered in two ways; namely, by injurious matter in the air, and by injurious matter in the plasma. Wherefore, if fever be the expression of disorder in the corpuscles of the blood, we should expect—because they may be injured in two ways—two forms of fever. And there are two forms of fever, designated respectively contagious and hectic fever. Having discussed the phenomena of contagious fever, we have now to speak of hectic fever.

The corpuscles of the blood, in common with other cellular bodies, have within certain limits a power of resistance against injurious agents. It is not every passing impurity of the atmosphere, nor every injurious change of quality of the plasma, that establishes symptoms of fever. Nevertheless, poisonous substances in the air do, we know, occasion contagious fever; and we propose to show that a sufficient debasement of the qualities of the plasma, by disordering the corpuscles, will produce hectic fever.

In necrosis of bone, it has been shown for what purpose inflammation arises; and why it fails, or is hindered of cure. The persistence of the hindering cause—the dead bone—gives chronicity or permanence to suppuration, ulceration, and fistulous openings in the flesh. It is notorious in these cases, and in the analogous ones of diseased joints, that hectic fever sooner or later appears; and the sooner, if the person with his permanent source of illness (the chronic suppuration), be also exposed to privations, hardships, or unwholesomeness of food. Again, in pulmonary consumption, where the blood is continually passing and repassing numerous places of suppuration, hectic fever appears. Numerous other examples might be given; but these are sufficient to show that protracted forms of inflammation—namely, chronic suppurations and ulcerations—are in some way antecedents of hectic fever. Now, when inflammation, suppuration, and ulceration are hindered and protracted, spoiled material from the places of suppuration may ebb back by the roots of the veins into the plasma.

In proof of this, we may refer to the great work of Rokitansky, his *Pathological Anatomy;* and we shall quote the thirtieth experiment related in the third series of our own experimental researches.

"Experiment 30. Select a small light coloured frog, with as few pigment-spots as possible, because these obscure what is going on in the vessels. Irritate the web of one of the feet by immersion in tepid water (97° Fahr.) for thirty seconds, and afterwards gently scratch it with the point of a needle, taking care not to wound or open any of the blood-vessels. At the expiration of an hour or two, upon examining with a microscope, several of the capillaries and small veins will be seen crowded with colourless corpuscles. Now let a weak solution of potash—one part of the alkali to three of water—be lightly brushed over the web with a camel's-hair pencil, immersing the foot in cold water immediately after. In blood-vessels thus treated, we have seen red corpuscles glued together, and lumps of colourless matter passing away from the sphere of irritation along the widening channels of the small veins. Or these morbid matters, becoming stationary, have been the means of dividing the current of the blood into two streamlets within the vessels."

Such an experiment as this proves that local changes in the qualities of blood may be produced in places of irritation; and if in places of irritation, then also in places of inflammation and suppuration. And it shows, we think, in a satisfactory manner, how the mass of the plasma may become distempered by any continual ebbing back of spoiled material from places of protracted suppuration.

No one can doubt that the fluid of the blood is altered, and may be distempered, by unwholesomeness of diet, and by neglect of the daily excretions by the skin, bowels, and kidneys. It is also evident that these common sources of distemperature of the fluid of the blood must operate not only in persons in health, but also in persons who may be afflicted with chronic forms of inflammation, such as are present in necrosis of bone, in diseased joints, pulmonary consumption, etc. And if, in these last mentioned examples, distemperature of the fluid of the blood from errors in diet, or other such causes, concur with distemperature from absorption of spoiled matter from places of chronic suppuration, then there will be *deuteropathy of the plasma*, or disturbance of the qualities of the fluid of the blood from two points at the same time; namely, unwholesomeness of food and absorption of morbid matter. And it follows from the physiological relations subsisting between the corpuscles and the fluid of the blood, that an increasing debasement of the qualities of the fluid *must* at length disorder the corpuscles.

But one of the chief points we have been arguing for, is the therapeutical relations of inflammation to the fluid of the blood. We have said that suppuration is a means whereby injurious matter is eliminated from the plasma; that granulations and pus may perform the office of a depurating organ vicariously. Now we are saying that chronic suppuration and ulceration will occasion deuteropathy of the plasma, and thereby fever. This seems an incongruity. A little consideration, however, will show that it is only seeming incongruity. Diet sustains life and health only by measure; it is pathological in excess and by deficiency. Heat or temperature contributes to life and health only by measure. Oxygen, an essential constituent of the atmosphere, is an element of health and life only by measure; any great variation from a mean amount is pathogenetic. Too much or too little would equally occasion disturbance of health.

So likewise of the matters we are discussing: the process of repair in the commonest injuries has its pathological as well as its therapeutical aspects. The reaction upon which cure depends may be too much, or too little, or too long about. Granulations may be languid, or indolent, or deficient; or they may luxuriate, and usurp the place of fibrous tissue when fibrous tissue is needed for reparation. And fibrous tissue may hold its ground when osseous tissue is demanded for cure. This is sometimes the case in fractured bones. In ordinary contusions, great swellings appear and disappear. In their appearance, matter from the plasma of the blood must have become stationary in the part. In their disappearance, this matter must have been absorbed again into the blood. There must be, therefore, in these cases, in some way or other, a ready passage for elements from the injured tissue into the fluid of the blood.

Analogously, inflammation, as a depurative reaction in distemperatures of the fluid of the blood, may be hindered and interfered with in various ways. There may be too much or

too little of it; and certainly it is very often protracted by the persistence of the blood-distempering causes. If, then, there be a ready passage—to and fro, as it were—between the fluid of the blood and the common tissue, it is not difficult to perceive that interference and hindrances may interrupt, or even reverse, the action in this particular.

The ordinary process of repair, then, has a double aspect; and so, also, has inflammation. And our argument is, that protraction or chronicity in either of them introduces the liability to absorption of spoiled material, and that thus therapeutical reactions may operate retroversely and pathologically upon both parts of the blood; the fluid first, and then the corpuscles.

But, that we may give an outline of the argument as it relates to hectic fever, we take as examples necrosis of bone, gout, and scurvy; and, in contrast with these, scarlet fever.

Necrosis of bone produces inflammation. There are hindrances to the removal of the dead bone; therefore inflammation passes into protracted suppuration and ulceration. These gradually weaken the patient; they disable him from taking exercise; digestion is impaired; and the functions of the depurating organs are disturbed.

This is one source of distemperature of the plasma. Distemperature of the plasma aggravates the existing inflammation; but the antecedent—the dead bone—cannot, in the case we are contemplating, be removed. Therefore disorder must proceed, until at length, from the places of suppuration, morbid matter ebbs back into the circulation; and the plasma, thereby thoroughly disordered, reacts upon and disorders the corpuscles, and hectic fever, more or less, appears. Upon this interpretation of the sequence of events between dead bone and fever, to cure the fever the blood-corpuscles must be relieved from their disorder; to relieve them, the qualities of the plasma must be improved; to amend the qualities of the plasma, the chronic suppuration must cease; and that chronic suppuration may cease, the dead bone must be taken away. We all know that the effectual removal of the dead bone will cure the fever.

Errors in diet by excess produce distemperature of the plasma. And if the depurating organs, or some of them, fail in removing the distemperature, inflammation arises. In gout, the patient is surrounded with every comfort. The error in diet is most probably one of excess; it can, therefore, be easily interdicted; the antecedent can be readily removed; and, by medicine, the depurating organs can be stimulated to a more active working. For these reasons, distemperature of the plasma is concluded to be simple; its qualities are disordered from manageable sources, which may be attacked and abolished before disorder is communicated to the corpuscles. Inflammation in gout is, therefore, acute, and without fever.

On the other hand, in scurvy, the errors in diet are those of deficiency or unwholesomeness, and are much more difficult to deal with, especially where persons are crowded together in unhealthy localities, or limited to camps or ships. The individuals are poor, or, from other circumstances, cannot command the necessaries of life. Therefore, forms of inflammation, which in the rich are simple and acute, are here (or in the poor) chronic, and pass on to suppuration and ulceration, as in the sailors before mentioned, whose bare legs and feet were bitten by mosquitoes; upon which example we observed, that, because the unwholesome diet and confinement could not be changed, therefore the bitten parts passed into chronic ulcers. And if, in persons thus situated, with forms of chronic ulceration from continued unwholesomeness of diet, or other privations, morbid matter should be continually ebbing back into the circulation from places of chronic ulceration, the elements of fever, from a double debasement of the plasma, would exist; and fever thus arising would obviously be different from fever arising through miasms in the air.

In scarlet fever, it is concluded, from premises which have been argued, that disorder of the blood begins, not with the plasma, but in the corpuscles. The illness commences, not with forms of inflammation, but with symptoms of fever. There has been no error in diet: a miasmatous air has acted on the blood; a specific poison is generated; and the plasma is distempered posteriorly to disorder of the corpuscles. But (here as in small-pox) no natural depurating organ seems adapted for the removal of the poison of scarlet fever from the plasma; therefore, inflammation arises—that is to say, reactions between the plasma and the common tissue. The forms, amount, and duration of inflammation in scarlet fever, indicate the amount and severity of the disorder of the blood. Without these reactions, the patient would die from a poison shut up in the blood; with them, in their severest forms, there is a battling for life. When a joint has been crushed, death would take place from mortification, were there no reaction; but, this established, the patient is saved from the first and most pressing danger, though afterwards he has to pass the ordeal of inflammation, abscess, suppuration, ulceration, and very probably hectic fever too, as best he can, or suffer amputation for a chance of life. In scarlet fever, to cure the inflammation, the plasma must be freed from poisonous matter; and no more must enter it. That no more may enter it, the corpuscles must cease to generate and excrete a poison. Now, from the course observed in normal cases of an exanthematous fever, we may probably conclude that the corpuscles pass through their disorder in from four to six or eight days. When their disorder has passed, no more poisonous matter is discharged from them into the plasma; and, no more poisonous matter mingling with the plasma, the inflammatory reactions and the natural depurating organs together succeed in restoring the plasma to its natural state; whereupon, the blood regaining its normal constitution, inflammation comes to an end, and the patient is cured. The pathological and therapeutical sequences are the same as in small pox.

In the midst of these therapeutical actions and reactions for the depuration of the blood in fever, it would seem that a depurating organ is sometimes coerced, as it were, to an increased and incongruous working; matter not naturally found in the secretion of the organ appearing in it at the crisis of the fever. In the performance of this enforced duty—the elimination of poisonous matter from the plasma—the parenchymatous elements of the organ may be overtasked and injured. Thus, in scarlet fever, the poison in the blood sometimes occasions parenchymatous disease of the kidneys; and, in such cases, there is evidence also of inflammatory reactions in the common tissue of the organ. This complication may have the same reflex effect upon the blood as chronic ulcerations. Spoiled material from the overburthened kidneys may ebb back into the circulation; and a new blood-distemper may be inaugurated from elements of urine retained in the plasma. Such being the case, there would be present the antecedent of a second or reactionary fever; namely, deuteropathy of the plasma—that is to say, distemperature—from disease of the kidneys, superposed upon the remnant of the poison of scarlet fever. And it is in perfect accordance with the argument, that a secondary fever from disease of the kidneys should be more apt to appear as a consequent of the primary fever, where the inflammatory reactions in the skin are too slight or insufficient for the full and effectual discharge of the poison. But it is to be observed, that the second fever is not a relapse or reappearance of the first; it is another fever of different origin. The first fever was occasioned by an aerial miasm; the second is occasioned by a debasement of the plasma acting injuriously on the corpuscles of the blood.

Let us, in concluding this lecture, give a brief summary of the facts and of the arguments.

In necrosis of bone, the pathological series begins with dead bone. If this cannot be taken away, it ends with fever, from deuteropathy of the plasma disordering the corpuscles of the blood.

In pulmonary consumption, the pathological series begins with tubercles in the lung. There are hindrances and difficulties in their discharge: suppuration is made chronic; and the phenomena end with fever from deuteropathy of the plasma.

In scurvy, the series begins with unwholesomeness or deficiency in diet, or other privations which cannot be changed. Ulcerations arise; and the series may end with fever, from deuteropathy of the plasma.

In these examples—namely, hectic fevers—disorder of the blood-corpuscles is posterior to a debasement of the fluid in which they swim; and forms of inflammation, protracted for longer or shorter periods, precede the fever.

On the other hand, in the contagious primary fevers, the pathological series begins with disorder of the corpuscles. It ends with forms of inflammation; because distemperature of the fluid of the blood is, in these fevers, posterior to disorder of the corpuscles. Thus we interpret the relations of fever to inflammation, and of inflammation to fever, by the difference between the two parts of the blood. The facts are, that sometimes fever precedes inflammation, sometimes forms of inflammation precede fever; because sometimes (from aërial poisons) the corpuscles are disordered before the plasma; and sometimes (from unwholesome diet, privations, and chronic ulcerations) the plasma is disordered before the corpuscles. If you accept these interpretations, the whole subject of repair, in-

flammation, and fever, presents a coherency which is worthy of your attention. Thus:

Mechanical objects injure the common tissue; and the process of repair arises.

Errors in diet disorder the plasma; and inflammation appears.

Miasms in the air affect the corpuscles of blood; and primary fever is the result.

Both the process of repair and inflammation, from hindrances and difficulties, may pass into chronic or protracted forms of suppuration, ulceration, and discharges; whereupon, if spoiled material should enter the circulation, and, by reiteration or quantity, thoroughly debase the plasma, the corpuscles suffer, and fever appears; namely, reactionary, hectic, or a plasma fever.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY

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Lecture II.

Healthy Urine. I. Volatile Constituents. II. Organic Constituents. III. Inorganic Constituents.—Volatile Constituents: *Water; Carbonic Acid; Peculiar Organic Acids; Ammonia and Ammoniacal Salts.*—Organic Constituents: *Urea; Quantity; Characters; Circumstances affecting the Formation of Urea; Origin: Creatine: Creatinine: Guanine: Sarcine: Inosite: Uric Acid; Quantity; Detection; Mode of Formation: Urates: Hippuric Acid: Extractive Matters: Mucus: Lactic Acid and Lactates.*

[*Concluded from page* 386.]

Creatine exists in small quantity in urine. Its presence in this secretion was discovered by Heintz. Dr. Thudichum has obtained from 3·45 to 6·32 grains of creatine from the urine of a healthy man in twenty-four hours. Creatine has a pungent taste, is very soluble in hot water, but requires about seventy-five parts of cold water for its solution. It is very slightly soluble in alcohol, and quite insoluble in ether. It crystallises in right rectangular prisms and rhomboidal crystals. (*Illustrations of Urine*, Pl. vii, Fig. 3.) By being boiled with baryta water, it is converted into urea and sarcosine; with strong acids, into creatinine.

Creatine may be obtained from urine by the following process, proposed by Liebig. Lime water and chloride of calcium are first added to the urine, which is then filtered and concentrated by evaporation, in order to remove most of the salts. The liquid from which the salts have been separated is decomposed with one-twenty-fourth of its weight of a syrupy solution of chloride of zinc. After the lapse of some days, a number of round granules make their appearance. These consist of chloride of zinc and creatinine, with which creatine is mixed. (*Illustrations of Urine*, Pl. vii, Figs. 1 and 2.) They are dissolved in hot water, and treated with hydrated oxide of lead until the reaction is alkaline. The oxide of zinc and chloride of lead are to be removed by filtration; and, after being decolorised by animal charcoal, the solution is evaporated to dryness. The residue is to be treated with boiling alcohol, which dissolves the creatinine very readily, but leaves the creatine, which may be recrystallised by solution in hot water.

Creatine is obtained from all kinds of lean meat, but exists in larger proportion in that of mammalia than in birds, reptiles, and fishes. Gregory obtained ·14 from 100 parts of bullocks' heart, ·08 in 100 parts of pigeons' flesh, and ·06 in the same quantity of the flesh of the skate. Although the flesh of fishes contains less creatine than that of the higher animals, it is more favourable for extraction. I obtained more than seventeen grains of creatine from two pounds of the flesh of the crocodile. The presence of creatine has been detected in the blood by Verdeil and Marcet. Traces of it have been discovered in the amniotic fluid.

Its existence in the juice of muscular tissue, and its presence in the urine, would lead to the conclusion that creatine was one of the nitrogenised products resulting from the disintegration of muscular tissue; and such a view of its nature is supported by the readiness with which it is decomposed into urea, creatinine, and sarcosine. It is found in greater quantity in muscles which have been in active exercise during life, than in those which have been quiescent. The heart yields a large quantity; and more is found in animals which have been hunted to death, than in those destroyed without being subjected to violent exercise. Creatine may, like urea, be regarded as an excrementitious substance.

Creatinine is also crystalline. The crystals take the form of right rectangular prisms, according to Robin and Verdeil. It has a strongly alkaline reaction, and is soluble in water. It is very soluble in warm alcohol. It combines with different acids to form salts. With chloride of zinc, a crystalline compound is formed, composed of roundish wart-like masses, made up of minute radiating crystals, which have been already referred to.

Creatinine is found in the urine in larger proportion than creatine, and must be considered as an excrementitious substance. It is not destroyed in the decomposition of urine, while the creatine undergoes conversion into creatinine. Dr. Thudichum obtained as much as from five and a half to nearly ten grains of creatinine from the urine of a healthy man in twenty-four hours.

Guanine, Sarcine, Inosite. Strahl and Lieberkühn have discovered a substance in urine which they considered to be xanthine, but which, from its behaviour with reagents, may probably be regarded as guanine. Strecker has detected in urine a substance closely resembling sarcine, found in muscular fibre; but its exact nature is at present doubtful. Inosite has been found in the urine of a man suffering from Bright's disease by Cloëtta, but it has not yet been detected in healthy urine.

Uric Acid. The organic constituent of the urine which ranks next in importance to urea is uric or lithic acid. In healthy urine, its presence cannot be detected, unless a small quantity of a stronger acid, as nitric or hydrochloric, be first added to decompose the soluble urates. After the mixture has been allowed to stand for some time, the uric acid separates in the form of small red crystalline grains, which adhere to the sides of the glass vessel. Upon microscopical examination, these are found sometimes to be composed of separate crystals, and sometimes of small stellate groups; the individual crystals varying in form from the lozenge-shape to that of an elongated crystal with sharply pointed extremities. (*Illustrations*, Pl. iv, Figs. 2, 3, 4, and 5.) Uric acid is a very weak acid, and is perfectly separated from its salts by acetic acid. It is soluble in solutions of alkaline lactates, acetates, carbonates, phosphates, and borates. Uric acid has the power of decomposing the alkaline phosphates. It takes a part of the base, forming a urate, and leaves an acid phosphate, as I mentioned when speaking of the acid reaction of urine. The colour of the crystals of uric acid which have been obtained from urine is derived from the proper colouring matters of the secretion, and must, therefore, be regarded as an impurity. It can easily be obtained perfectly pure and colourless; and, in three or four instances, I have observed perfectly colourless crystals of this substance, which have separated spontaneously from urine holding in solution scarcely a trace of colouring matter.

Pure uric acid crystallises in the form of very thin rhomboidal laminæ; but the sides of the crystals, instead of being perfectly straight, are usually more or less curved. The angles, again, are often rounded, so that the crystal has an oval form. In Plate iv, Figs. 2 and 5, and Plate v, Fig. 7, of the *Illustrations*, some pure crystals of uric acid are represented. Some of these crystals were obtained by the addition of acid to the solution. Although uric acid may be perfectly pure, the crystals vary much in size and form. Experiments show what very slight variations in the conditions under which they are produced are sufficient to determine great alterations in the form of the crystal.

Quantity. Healthy urine contains from half a grain to a grain of uric acid in 1,000 grains of urine. The solid matter contains about 1·3 per cent. of this substance, and probably from five to eight grains are excreted by a healthy adult man in twenty-four hours. Dr. Thudichum gives the latter as the average quantity.

Detection. The chemical characters of uric acid are well marked.

1. If to a deposit consisting of uric acid, placed on a glass slide, a drop of nitric acid be added, a brisk effervescence en-

sues; and when the mixture is slowly evaporated over a lamp, a reddish residue is left. Upon the addition of a drop of ammonia, a rich purple tint is produced, owing to the formation of murexide, the so called purpurate of ammonia. This test is exceedingly delicate: it was first applied by Dr. Prout. One other substance possesses a similar reaction, and this is caffeine; but uric acid is at once distinguished from it by its microscopical characters.

2. The deposit suspected to contain uric acid or a urate may be dissolved in a drop of solution of potash, in which it is very soluble. Upon adding excess of acetic acid, and leaving the mixture for some hours, small crystals of uric acid will form. These may be recognised by their microscopical characters.

3. Uric acid may be detected in animal fluids, when mere traces of this substance or of urates are present, by a plan proposed by Dr. Garrod. The fluid suspected to contain the urate is treated with a few drops of strong acetic acid (glacial acetic acid is best) in a watch-glass. A few filaments of tow or very thin silk are placed in the mixture, and the whole set aside under a glass shade, in a warm place, for twenty-four or forty-eight hours. Gradually uric acid crystals are separated, and deposited upon the filaments. Their characters may be recognised by microscopical examination. Some crystals of uric acid upon a hair are represented in Plate xxi, Fig. 6, of the *Illustrations*.

The quantity of uric acid is estimated by collecting the crystals separated by the addition of an acid, and weighing them after they have been carefully washed and dried. Dr. Thudichum recommends the use of nitric acid, because the uric acid is less soluble in it, and there is not so much tendency to the development of fungi as if hydrochloric be employed.

Mode of Formation. Uric acid is found in the urine of most carnivorous animals, and in that of young herbivora while sucking, and therefore feeding upon a diet rich in nitrogen. It is not found in the urine of the pachydermata, not even in that of the omnivorous pig. It is abundant in the urine of birds, and is found in that of many reptiles and insects. Uric acid exists in the blood, and is only *separated* from that fluid by the kidneys. Dr. Garrod has detected it in the blood of men in health, and in cases of gout in considerable quantity. In such instances, uric acid crystals may be separated from the fluid obtained from a blister, according to the plan I just described. It has been detected in the juice of the spleen in considerable quantity by Scherer, but Mr. Gray has failed to confirm these observations. Cloëtta has found it in the pulmonary tissue of bullocks' lungs, associated with taurine, inosite, and leucine.

Uric acid is one of the products resulting from the disintegration of albuminous tissues. Prout held "that a very large proportion of the urate of ammonia found in the urine on common occasions appears to be developed from the imperfect albuminous matters formed during the assimilating processes". This is rendered probable by the researches of later observers, especially by those of Bidder and Schmidt. In the healthy organism, it is probable that the greater quantity of the uric acid formed is soon afterwards further oxidised and converted into other compounds, especially urea; but, in certain conditions of the system, these changes do not take place to the full extent, or a much larger proportion of uric acid is formed. In either case, this substance exists in largely increased quantity in the blood. It is deposited, in combination with soda and lime, in various structures. It may accumulate beneath the skin, so as to form large collections, which are familiar to us under the name of chalk-stones. It is curious that these depositions should take place in areolar tissue, in white fibrous tissue, and in connexion with cartilage. Perhaps this may be connected with the very slight vascularity of these tissues; and it must be borne in mind that the deposits usually occur at a time of life when they are fully formed, after which they probably undergo very slight changes, and the processes concerned in their decay and regeneration are slowly, and perhaps, in sedentary persons, very imperfectly carried on. All these circumstances would favour the separation of a slightly soluble substance from the blood, and its deposition in an insoluble state. Lehmann has shown that, after attacks of disturbed digestion, the proportion of uric acid in the urine becomes increased. Alcoholic liquors seem to have the same effect. In normal conditions of the system, the urine contains about 1 part of uric acid to 28 or 30 parts of urea; but, under the circumstances just mentioned, the ratio becomes 1 to 23 or 26. This increased proportion of uric acid appears to be formed in consequence of the usual proportion not being converted into urea. In all cases where imperfect oxidation takes place in the organism, the quantity of uric acid excreted in the urine undergoes an increase. Alcohol causes a diminution in the quantity of carbonic acid exhaled; and, in such cases, an increased proportion of uric acid, urates, and usually oxalates, is found in the urine.

A highly nitrogenised diet, with insufficient exercise—confinement in ill-ventilated rooms—all circumstances interfering with the healthy action of the respiratory apparatus—or preventing the proper amount of blood being carried to the pulmonary surface, active exercise in confined air, etc.,—are conditions favourable to the formation of an increased quantity of uric acid and urates. The formation of urea and oxalic acid from uric acid in the organism, or artificially by the action of peroxide of lead, has been previously alluded to. Ranke has shown that, at a high temperature, in the presence of yeast and an alkali, uric acid also becomes converted into urea and oxalic acid.

Urates. Uric acid is separated from the blood by the kidneys, in the form of a urate, which is readily soluble in water. After its separation, however, this salt may soon undergo decomposition, and insoluble uric acid will be deposited. In the majority of cases, this decomposition does not take place until after the urine has left the bladder; but sometimes it occurs in the bladder itself. The causes of the precipitation of uric acid are well worthy of attentive study, as they are intimately connected with the formation of uric acid calculi. The quantity of urates in healthy urine is very small, but not unfrequently enough is present to form a very abundant deposit after the urine has been allowed to stand for some time. I propose to describe the characters, and allude to the composition, of these salts, when we consider the subject of urinary deposits.

Hippuric Acid was first detected in horses' urine by Liebig, and was proved by him to exist in healthy human urine in small quantity—a statement which has been confirmed by Lehmann, and recently by Kühne and Hallwachs. It is not found in the urine of carnivorous animals, but among herbivora it occurs in considerable quantity. It does not exist in large quantity in the urine of calves while sucking, but cows' urine contains as much as 1·3 per cent. Lehmann has detected it in considerable quantity in the urine of the tortoise (*testudo græca*).

Hippuric acid is soluble in about six hundred times its weight of cold water. It is very soluble in hot water, and also in alcohol; but is insoluble in ether. It crystallises very readily in various forms, which are derived from the right rhombic prism. (*Illustrations of Urine*, Plate ix, Fig. 1.) It is very easily decomposed into benzoic acid, especially in the presence of extractive matters, and other constituents of the urine. In testing for this substance, the perfectly fresh urine only should be employed. It is curious that benzoic acid, when taken into the organism, is eliminated in the urine in the form of hippuric acid—a fact which was first made known by Mr. Ure.

It may be prepared by adding milk of lime to fresh cows' urine. The mixture is to be boiled for a few minutes, strained, and exactly neutralised with hydrochloric acid. The solution is next to be boiled down to one-eighth of its original bulk, and considerable excess of hydrochloric acid added, when brown crystals of the acid form. These may be purified by solution in water, through which a current of chlorine is to be transmitted, in order to decolorise the liquid. It may always be readily obtained from human urine after taking ten grains of benzoic acid.

The quantity of hippuric acid is increased when a purely vegetable diet is taken; but it is certain that the whole of the hippuric acid formed in the organism is not derived from this source. The proportion of hippuric acid in human urine was formerly considered to be so small that it was scarcely possible to make a satisfactory quantitative determination; but Hallwachs has lately shown that as much as *thirty grains* or upwards are excreted in twenty-four hours.

Very little is known with reference to the formation of hippuric acid; and, although the subject has been very carefully investigated by Kühne and Hallwachs, who have published two very elaborate memoirs, there still remains much to be discovered. These observers hold that the hippuric acid is produced from the glycocol formed in the liver. Hallwachs is led to conclude, from numerous experiments, that the production of hippuric acid is determined rather by the chemical changes going on in the organism, than by any peculiarities of the food; for, if a purely animal diet was taken, hippuric acid

was still found in the urine.* Lehmann found much hippuric acid in the urine of fever patients, and always detected it in diabetic urine.

Robin and Verdeil give drawings of some crystals which they found in the urine of a man aged 30, who took little exercise, but lived on a highly nitrogenised diet; and which they considered to be hippuric acid: a statement apparently founded upon their resemblance to crystals produced by the decomposition of hippurate of soda. They do not mention that the crystals were subjected to any chemical examination; and, in the absence of stronger evidence than mere resemblance in form, it seems to me that we are hardly justified in assuming that the crystals were composed of hippuric acid. It is very doubtful if this acid ever crystallises in urine spontaneously.

Extractive Matters. Under the head of extractive matters are included certain organic substances which have never been obtained in a state of perfect purity, which are uncrystallisable —not volatile without decomposition—and incapable of being isolated. Chemists have described several kinds of extractive matters characterised by their behaviour with solutions of acetate of lead, bichloride of mercury, tincture of galls, etc. Within the last few years, however, several bodies, formerly included under the indefinite term of extractive matters, have been separated, and their chemical properties accurately determined. As instances, I need only mention albuminate of soda, binoxide and teroxide of protein, creatin and creatinine, hippuric acid, lactic acid and lactates, and certain colouring matters. The extractive matters in urine are entirely excrementitious; but it seems most probable that those present in the blood represent a certain stage of the metamorphosis of some of the constituents of that fluid—either a state intermediate between the nutritive pabulum and the tissue into which it is to be converted (progressive metamorphosis or histogenesis), or a condition resulting from the disintegration of tissue previous to its elimination from the body in the form of urea, creatine, uric acid, etc. (regressive metamorphosis or histolysis). The extractive matters of urine may be divided into three kinds.

Water Extract. The first is called water extract, because it is insoluble in absolute alcohol, and in spirit of specific gravity ·833, but is soluble in water. It exists only in small quantity. Infusion of galls and bichloride of mercury produce scarcely any effect upon it, but neutral and basic acetates of lead give copious precipitates.

Spirit Extract. The second kind of extractive matter is termed spirit extract, because it is insoluble in absolute alcohol, but soluble in water, and in spirit ·833. It contains much chloride of sodium. The solution of this extract is unaffected by infusion of galls, bichloride of mercury, and neutral acetate of lead; but a bulky precipitate is caused by basic acetate of lead.

Alcohol Extract. The alcohol extract is soluble in water, in spirit ·833, and also in absolute alcohol. Its chemical reaction appears to be very similar to the last.

These are the extractive matters which are met with in healthy urine. In certain diseases, however, extractives drain off from the blood, and sometimes in very large quantity, which are not present in a state of health. My friend Dr. G. O. Rees many years since showed that this extractive could be detected in morbid urine by adding tincture of galls; and that the proportion varied greatly in different cases. Healthy urine is scarcely affected by tincture of galls, but this blood-extractive is at once precipitated by it. In order to detect it, tincture of galls is to be added to the filtered fluid; and, if this extractive is present, a precipitate is *at once* produced. Should the urine contain albumen, this must, in the first instance, be separated by boiling and filtration. It is only the precipitate which *immediately* follows the addition of the tincture of galls that must be noticed. In some cases, the extractive drains away from the blood, without the escape of albumen. (Lettsomian Lectures, by G. O. Rees, M.D., F.R.S.; *Medical Gazette*, 1851.) I shall have occasion to recur again to this interesting subject, when discussing the characters of the urine in disease.

One thousand grains of healthy urine will contain from fifteen to twenty grains of extractive matters. The solid matter contains from 15 to 40 per cent. of these substances.

The physiological importance of extractive matters is quite unknown, and hitherto no one has been able to ascertain their nature or discover the part which they play in the animal economy. Their presence in the blood, and in all the animal fluids, as well as in the solid organs and in the excretions, clearly prove them to be substances of great importance; and it must be remembered that, in the urine, the proportion of extractive matter is often greater than that of the urea itself. The amount of extractive matters in the different fluids and secretions of the body is a subject well worthy of investigation, and likely to yield valuable results.

Vesical Mucus. Vesical mucus exists in very small quantity in healthy urine. It forms a faint flocculent cloud, which settles towards the lower part of the fluid, after the specimen has been allowed to stand for some time. Under the microscope, it is seen to consist of granules, with a little epithelial *débris*, nuclei, and a few imperfectly formed epithelial cells. I shall have to allude to the nature of the so-called mucus-corpuscle when speaking of pus.

Lactic Acid. Lactic acid is not constantly present in healthy urine in quantities sufficient to be recognised; but sometimes it is found in the urine of persons who may be considered to be in tolerably good health. Liebig denied its existence in healthy urine altogether; but its presence in this fluid—at least, under certain physiological conditions, as stated many years ago by Berzelius—has been confirmed by Franz Simon, Lehmann, and others: although, on the other hand, it appears nearly certain that the salt assumed to be lactate of zinc by many observers was not really of this nature, but probably consisted of a combination of another acid, which, unlike lactic acid, contains nitrogen.

In order to ascertain the presence of lactic acid, a baryta salt should be first prepared, as Lehmann has recommended, from which a lime salt is easily formed by the addition of sulphate of lime. The lactate of lime crystallises in double brushes, as seen by the microscope. From the lime salt a copper salt is prepared by the addition of sulphate of copper. (*The Microscope, in its Application to Clinical Medicine*, 2nd edit., Figs. 123, 124, p. 123.) This is examined by the microscope. The lactate of copper is decomposed by placing a small bar of zinc in the solution; and upon this, in a short time, crystals of lactate of zinc are deposited, whose angles may be measured in the microscope. (*The Microscope*, etc., 2nd edit., Fig. 125, p. 123.) For the details of this process, I must refer to Lehmann's *Physiological Chemistry*, translated by Day, vol. i, p. 91.

According to some observers, the phosphate of lime and the ammoniaco-magnesian phosphate are held in solution by the lactic acid. They may also be dissolved by the chloride of ammonia, according to Dr. G. O. Rees. MM. Cass and Henry have endeavoured to prove that the lactic acid exists in the form of lactate of urea. Lactates of soda and ammonia are also most probably present in the majority of cases. Lactic acid is occasionally met with in urine; and I have already referred to some other organic acids which are sometimes found.

Before we discuss the characters of the saline constituents of healthy urine, it is desirable to consider how a specimen of urine may be systematically examined.

Systematic Qualitative or Quantitative Analysis of Healthy Urine: Organic Constituents.

1. In the first place, the reaction and specific gravity of the specimen are to be taken, and any general points noticed. (Lecture I.)

2. Two portions of urine (500 or 1,000 grains) are to be placed in separate porcelain capsules, and evaporated to dryness with the cautions previously given. In the first portion, A, the *organic constituents* are to be estimated; in the second, B, the proportion of *salts* is to be ascertained.* A, when dry, is to be weighed; and thus the quantity of *water* is obtained. The residue is known to be quite dry when *two successive* weighings exactly correspond. The solid matter is to be treated with successive portions of boiling alcohol, until nothing more is taken up. These are decanted into another basin, or passed through a filter; and the alcoholic solution, containing urea and extractives, is to be evaporated nearly to dryness—alcohol extract—C; the residue insoluble in alcohol—D.

C. The alcohol extract is to be treated with a few drops of water, and placed over the water-bath. Crystals of oxalic acid are to be added until they are no longer dissolved. It is important to add *excess* of oxalic acid crystals. The mixture is allowed to cool, and the impure crystals of oxalate of urea and excess of oxalic acid are to be slightly washed with ice-cold water, and pressed between folds of bibulous paper, to absorb

* An excellent review of these researches will be found in vol. xlv, p. 156, of the "Medico-Chirurgical Review".

* B will be examined in Lecture III.

the extractive matters. The crystals are to be redissolved in a small quantity of water, placed in a large vessel, and carbonate of lime added until effervescence has entirely ceased. After the mixture has been allowed to stand for some time, it is to be thrown upon a filter.

The solution separated from the oxalate of lime consists of *urea*, with a little colouring matter. It is to be carefully evaporated to dryness, and weighed. If the residue is not entirely soluble in alcohol, it contains impurity which must be deducted from the weight of the urea.

Or, the alcohol extract, C, may be treated with a few drops of water, so as to form a thick syrup; and nitric acid added by drops, while the basin which contains the extract is plunged in a freezing mixture. When sufficient nitric acid has been added to combine with all the urea present, the whole is to be allowed to stand for some time; the crystals carefully washed with a very little ice-cold water, and carefully placed on a porous tile, which will absorb the excess of nitric acid the extractive matters, leaving crystals of *nitrate of urea*, which are to be carefully dried and weighed. By a simple calculation, the quantity of urea is easily ascertained.

D. The residue insoluble in alcohol is to be treated with boiling water, and thrown upon a filter. There remain upon the filter, *mucus* from the bladder and other parts of the urinary mucous membrane; *uric acid; phosphate of lime;* and *ammoniaco-magnesian phosphate*, with a mere trace of *silica*. This residue is to be carefully dried and weighed. It is then to be incinerated; and, after the ash has been completely decarbonised, its weight is to be deducted from that of the residue insoluble in alcohol; and thus the proportion of uric acid and vesical mucus is ascertained. By deducting the united weight of all these different substances—urea, uric acid, mucus, and earthy phosphate—from the solid matter, we calculate the quantity of extractive matter present. According to this plan, we have ascertained the proportion of the following constituents in 500 or 1,000 grains of urine.

Water .....
Solid matter.....
Urea .....
Extractive matters .....
Mucus and uric acid .....
Earthy phosphate and silica .....
Fixed salts .....

Many of the processes above described are imperfect, and likely to give results which are not quite accurate; still the plan is one which is practically useful, and, when a series of results is required, answers very well. In the analysis of animal fluids, it is impossible to attain to perfect accuracy, owing to the changes taking place in the ingredients of the fluid, which are produced by the analytical processes to which they are subjected. Moreover, in such inquiries, it is far more desirable to know the general change which takes place, under various circumstances, in the quantities of the different constituents, than to be acquainted with the exact absolute proportion of each present. In a future lecture, I shall allude to the *volumetric analysis* of healthy urine, which can be more quickly performed, but, at the same time, does not yield perfectly accurate results. (See also *Archives of Medicine*, No. 1, p. 34.)

Periscope.

EPIDEMIOLOGY, HYGIENICS, AND STATISTICS.

PRISON DIETARY.

Dr. Edward Smith has published in the *Transactions of the Association for the Promotion of Social Science* for 1858, and in the *Dublin Quarterly Journal of Medical Science* for May 1859, some important observations on the diet of the inmates of prisons.

In the English gaols, there is a different dietary for county prisoners and for convicts, the latter being usually much in excess of the former. The government has provided a scheme for county prisoners, but has not compelled the magistrates to adopt it; so that, in one-half of these gaols, there is still no uniform scheme of dietary. The author's attention has been chiefly directed to the government scheme, and he considers it to be based upon wrong principles, and unjust in its details. Increase of food with duration of imprisonment is unnecessary, provided the prisoners are supplied with sufficient food from the commencement. Variation in the quantity of nutriment from day to day (the conditions being unchanged) is absurd; and the allowance of one pint of soup per week, as a distinction between no labour and hard labour, is manifestly ridiculous.

The chief defects in the existing scheme are, the deficiency of food in short, and excess of food in long imprisonments; and the apportionment of one, and that an insufficient, amount of food to all kinds of hard labour. It is upon these two points that Dr. Smith has prosecuted a series of experiments.

In the existing scheme, the amount of food supplied varies through five classes from one pound of bread and four ounces of oatmeal daily for the shortest sentences, to twenty-two ounces of bread and one pound of potatoes daily, four ounces of oatmeal four times and two ounces thrice per week, a pint of cocoa thrice per week, with four ounces of cooked meat without bone four times, and three ounces thrice per week, in the sentences of four months and upwards.

Dr. Smith adopts the dictum of Sir James Graham, in his letter of instructions to the Commissioners, that the dietary shall not be made an instrument of punishment; and proceeds to state what is the true amount of food required under different circumstances. He discards the basis of duration of imprisonment, and adopts that of the degree of labour enforced. He suggests that four classes should be established—1. For all cases without labour; 2. Those with light labour, as in ordinary manufactures and trades; 3. In the heavy manufactures, as weaving wide widths of cocoa-matting, and with the use of the lighter cranks and the shot-drill; and 4. With the full pressure of the crank and the treadwheel labour.

In the first classes, he has found, as the result of eight experiments, that eight ounces of carbon and two hundred grains of nitrogen are lost by the system daily (he has not yet determined the amount of hydrogen consumed); and that, in the other classes, the addition is one-fifth, three-fifths, and four-fifths of that quantity, respectively. From this he has deduced the amount of food which must be supplied to meet this waste; and, taking bread and cheese as offering a good basis for comparison, the quantities required in the four classes are as follows:—

1. In rest, twenty-three ounces of bread and two ounces and a quarter of cheese.
2. With light trades, twenty-seven ounces and a half of bread and three ounces of cheese.
3. With heavy trades and light crank labour, thirty-six ounces and three-quarters of bread and four ounces of cheese.
4. With full treadwheel and crank labour, forty-one ounces and a half of bread and four ounces and a half of cheese.

On this plan, a dietary is provided which meets the wants of each man separately, and which is adapted to every prison, notwithstanding the extraordinary diversity which, in a former paper, printed in the *Transactions of the Association for the Promotion of Social Science*, and in the *Philanthropist*, 1858, he has proved to exist in prison discipline.

Dr. Smith states the proportion which other ordinary articles of food bear to bread and cheese, so as to enable any one to vary the kind of food, and yet retain the due proportion of nutritive elements. This is given in the following table, chiefly compiled from Playfair's data, which shows the proportion of carbon contained in various articles of food, as compared with that in ten parts of bread, the quantity of nitrogen contained in each ounce avoirdupois, and the cost per pound at contract prices.

	Parts of various substances equal in carbon to 10 parts of fresh bread.	Nitrogen in each oz. — Grains.	Cost per lb. Oct. 1858. — s. d.
Bread		5¾	1 1-12
Wheat flour . . .	8	7¾	1¼
Peas	8	15¾	1½
Rice	8	4⅓	1½
Oatmeal	7½	8¾	1½
Scotch barley . .	—	—	1⅜
Molasses	—	—	2
Meat (fresh) . .	10	8¾	4½
Cocoa	5	8¾	1 1½
Potatoe	⅛	1½	¾
Suet or butter . .	4½	—	
Sugar	7½	—	4½
Indian corn . . .	7½	7¾	
Cheese	8	19½	6

This table is equally applicable to workhouse dietary.

Dr. Smith then describes the influence of certain modifying circumstances, determined in part by his own labours, and in part by the observations of Mr. Milner, surgeon to the Wakefield County Gaol, given in a paper read before the British Association, and published in the *Sanitary Review*. These are, age, sex, size, season, conformation, and employment. Mr. Milner has shown, in reference to age, that a dietary better than that of the highest class in county prisons was excessive in old age, whilst it was insufficient to maintain the due growth of the body at the age of seventeen. Persons of unusual height, and of a girth of thirty-four inches and upwards, lost weight in a rapidly increasing ratio. The duration of imprisonment had no marked influence. In reference to the waste of carbon by the treadwheel labour, Dr. Smith has proved that, with a quarter of an hour's work, the increase over that of the state of rest was more than five times; and, with alternations of work and rest during seven hours and a half, it was three times.

In reference to seasons, Dr. Smith has proved that the system is at its lowest state of vital action at the end of summer; and Mr. Milner has shown that his prisoners gain weight from May to September, and lose during the other months.

The general regulations recommended by the author, are as follows:—

1. The supply of food must meet the wants of the system.
2. Variations in quantity of nutriment with duration of imprisonment, and from day to day, are unnecessary; provided the quantity at first supplied be suited to the wants of the system.
3. Growing persons must have a sufficient excess of food to maintain the development of the system, whilst to old persons less food may be supplied. Persons of unusual size demand an increased supply of food.
4. From December to April, both inclusive, the quantity of food should be one-sixth greater than during the other months.
5. The supply must vary day by day with the labour exacted. The breakfast should be as good a meal as the dinner, and especially with hard labour; and the treadwheel should not be worked before breakfast.
6. With hard labour, the meals should not be too bulky, so as to impede respiration.
7. Other things being equal, the cheapest articles should be preferred; and hence potato should be supplied more sparingly, and peas more plentifully. Dr. Smith commends the use of unsifted flour, ground and made into bread, under efficient superintendence, in the prison.

Reviews and Notices.

Clinical Lectures on the Principles and Practice of Medicine. By John Hughes Bennett, M.D., F.R.S.E. Third Edition, with Four Hundred Illustrations on Wood. Pp. 1005. Edinburgh: Adam and Charles Black. 1859.

It is only a few months since we reviewed the second edition of this admirable work; and now we have a third edition, its bulk augmented by some fifty pages—an ample testimony to the opinion of the profession as to the sterling merit of the work.

There is but one other work on the principles and practice of medicine which can for a moment be compared with Dr. Bennett's; and that, of course, is Dr. Watson's now celebrated work. We think, however, that Dr. Bennett has one advantage over his great rival: his form is more practical, and, as we think, more likely to impress students. It does not do, it is true, to rely too much upon individual portraits of disease, if we may so term the cases given in the former work, inasmuch as no two cases are exactly alike. On the other hand, it will not do to generalise our descriptions too widely, as we may do this to such an extent that the student may not be able to diagnose a disease when he sees it. The happy medium is, we think, hit by Dr. Bennett: he first gives the general features of a disease, and then he describes two or three well marked illustrative cases. To the student of medicine this is by far the most satisfactory method. Another valuable feature in his method of teaching is, that he gives the treatment in full, even to prescriptions. This may seem to be teaching too much; but we should like to know how the young medical man, who has just left the lecture-room, is to treat disease at all, unless he have some guide to direct his unused steps. We venture to say that the few years between actual studentship and full practice form the most uncomfortable and the most unsatisfactory portion of a medical man's life; and then it is that he requires, if you will, even routine practice, until he sees and learns how to act by the bedside.

The philosophical and inquiring spirit in which this volume is written adds not the least charm to it. As Dr. Bennett well says, "Our previous impressions of the action of drugs and of various modes of the treatment have become altogether changed;" and we may add, that Dr. Bennett has not been one of the last to point out that many of our old gods are false gods; and that we must no longer rely upon precedent or tradition, but that we must apply a new system of therapeutics to a new and advanced knowledge of physiology and pathology. In this sense, this volume blows the first note of the revolution that is coming in the practice and science of medicine.

Outlines of Human Osteology. By F. O. Ward. Second Edition. Pp. 440. London: Henry Renshaw. 1859.

This little volume has for so long a time been the pocket companion of the medical student, that it requires little aid from our pen. In these days of illustrated editions, many may prefer Mr. Holden's volume on anatomy, as affording, through the means of its woodcuts, a shorter cut to a knowledge of human osteology than any other. Possibly so; but, if clearness of description, beauty of language, and philosophical thought, ought to be ingredients in a book for students, we can say confidently that no book ever published on this subject at all approaches this volume by Mr. Ward, which is now presented to the profession in a new and improved form.

A System of Dental Surgery. By John Tomes, F.R.S. With 208 Illustrations. London: John Churchill, New Burlington Street. 1859.

If a man could make himself a dentist simply by reading, we should say that this volume would be all that was necessary for the student of this speciality. We have rarely met with a book which combines the theoretical with the practical more admirably than does this one; in fact, it exhausts the subject. To the very large class who practise dentistry, whether as a speciality in surgery or as a merely mechanical art, Mr. Tomes's volume will be invaluable; inasmuch as it not only gives the last word of science, but the last products of mechanical skill as regards implements connected with the subject, which have been brought to light by Continental, as well as by American and British dentists. The woodcuts are admirably executed; and the paper and type are as excellent as in the rest of Mr. Churchill's valuable manuals.

The Treatment of Obstinate Ulcers and Cutaneous Eruptions in the Leg, without Confinement. By Henry Chapman, F.R.C.S. Third Edition. Pp. 161. London: John Churchill. 1859.

This little volume has now reached a third edition, and has deservedly become popular with the profession. There are no slight surgical diseases which produce a greater amount of discomfort than obstinate ulcers; and we think Mr. Chapman has done good service in devoting a little volume specially to the subject.

Reports in Operative Surgery. Series the Third. By Richard G. H. Butcher, M.R.I.A., Surgeon to Mercer's Hospital, and Lecturer on Clinical Surgery. With numerous Illustrations. pp. 50. Dublin: M'Glashan and Gill. 1859.

This pamphlet is a reprint from the *Dublin Quarterly Journal of Medical Science* for February 1859, and contains an account of some interesting cases operated on by Mr. Butcher. The limitation of our space prevents us from giving an analysis of the cases related; we therefore will merely commend the book to the favourable notice of all operating surgeons.

British Medical Journal.

SATURDAY, MAY 28th, 1859.

MEDICAL SOCIETIES AND OUR BRANCHES.

If the reader will only run his eye over the list of provincial Medical and Scientific Societies to be found in the *British Medical Directory*, he will become aware of the fact that there are a large number of small associations throughout the country, whose objects, to a certain extent, are identical with those of the British Medical Association. In nearly every county, besides the Branch of the Association, there is to be found either a local Medical Society, meeting at stated times for the reading of papers and the discussion of medico-chirurgical topics, or a Medico-Ethical Society, established for the purpose of maintaining professional honour among its members. Now, it does strike us, that there is much loss of power in this duplicate system, which is disadvantageous to the progress of medicine. Surely one large provincial Medical Society would be infinitely better than two or three small ones; and, as far as we can see, consolidation would lead to a considerable saving in working expenses.

Let us take the county of Yorkshire, for instance. In this district there are at least six medical societies; viz. the York Medical Society; the York Medico-Ethical Association; the Bradford Medical Society; the Bradford Medico-Ethical Society; the Huddersfield Medico-Ethical Society; and the Sheffield Medical Society. Yet all these scientific bodies, which must lose much of their power and utility by isolated existence, are within easy call of one of the largest Branches of this Association—the Yorkshire Branch; and what is more remarkable, in the majority of cases, very many of their members are also members of the larger association. It certainly does strike us that, with a little management, a concentration of all this dissociated power might be made, very advantageously for all parties. Why should not these various societies affiliate themselves to the Association as sub-branches of the Yorkshire Branch? By so doing, their power, both in a scientific and in a social point of view, would be greatly augmented. The Salopian Medico-Ethical Society has already given notice of its intention to join the Shropshire Branch of the Association; and we hope its example will be taken by the numerous other societies of a like nature throughout the country.

We require to localise, as far as possible, medical meetings; but to centralise and organise their power. Now, this can readily be accomplished by means of the machinery our Association already has in existence. Our Branches would easily accommodate all the working bees to be found among us. We are convinced that it only requires a little exertion on the part of individuals to amalgamate a large number of these outlying societies with the British Medical Association. Like separate globules of mercury, they would coalesce with the larger body on a very slight provocation. Why, for instance, should not the Brighton and Sussex Medico-Chirurgical Society form the nucleus of a sub-Branch of the South-Eastern Branch? The Chester Medical and Ethical Society, again, is too provokingly near the Lancashire and Cheshire Branch to hold itself aloof. The West Kent Medico-Chirurgical Society must find itself crossing the path of the Rochester and Gravesend District Meetings of the South-Eastern Branch, which have of late so increased its members. The East Sussex Medico-Chirurgical Society moves also in the orbit of the South-Eastern Branch, and might well resolve itself into the central system. The Leicester Medical Society, and the Nottingham Medico-Chirurgical Society, should each properly belong to our Midland Branch. The Manchester Medico-Ethical Association would act with far greater weight if it were a part of the Lancashire and Cheshire Branch. The Southampton Medical Society, again, would dovetail very well with the Reading Branch; and the Plymouth Medical Society with the South-Western Branch.

What we mean is, not that these local societies should absolutely have no action beyond that imparted by the general movements of the Branches into which they were incorporated; but that each should form, as it were, a division of a Branch, subject to the regulations and enjoying all the privileges of the larger body and of the Association; but having the power of meeting as often as convenient for the discussion of subjects connected with medicine. How this plan has worked for the good of the profession and of the Association, may be inferred from the success of the district meetings in West Kent, held in connection with the South-Eastern Branch.

We most certainly wish there was a greater spirit of the Propaganda among our associates; if so, we need only to point out the innumerable points afforded by the Association for friendly aggression upon neighbouring societies, to ensure a very large augmentation of our power. The Association has of late taken upon itself a fresh growth. We have been making new wood, if we may so speak, both in Scotland and Ireland; and the time is come, we think, for a vigorous attack upon our own provinces—these floating nebulæ should be attracted into the central sun of our Association. The order of the day among medical men is organisation and centralisation. Without this latter principle, we shall never become a powerful body in the state; and with it, we may do nearly what we like. The law and the church have from time immemorial acted upon this knowledge, and we see the consequences—the two Houses of Parliament permeated by their influence. If vigorously worked, we see in the future of this Association a much larger share of influence than it has yet enjoyed; but to bring this to bear, we must not neglect to strengthen our tent-poles and to lengthen our tent-cords. We have pointed out one way in which our associates can work towards this desirable end, and we trust that "annexation" will be a more familiar term among us than it has yet proved to be.

THE WEEK.

The examination of Thomas Smethurst, suspected of the murder of Isabella Bankes, was resumed yesterday (Friday) week, before the Richmond magistrates. Dr. A. S. Taylor deposed to the examination of certain bottles which he had received. One bottle contained about six drachms of chlorate of potash. Another contained a saline solution, which, on careful examination, was found to contain, in each ounce, one grain of arsenic and seven grains of chlorate of potash. On examining portions of the body, Dr. Taylor found antimony in one of the kidneys, in the small intestines, in some blood taken from the heart, and in some blood obtained from the jar in which the viscera were contained; but not in the stomach, large intestines, liver, or spleen. None of the viscera contained arsenic. He believed the cause of death to be the administration of arsenic and antimony in small doses at intervals; the arsenic being probably removed by the eliminative action of the chlorate of potash. The medical attendants on the deceased stated that they had never administered arsenic or antimony, nor chlorate of potash, in any form, to the deceased. The accused was committed for trial, on the charge of wilful murder.

The opulent and benevolent Parsee, Sir Jamsetjee Jejeebhoy, Bart., died at Bombay, on April 15th, at the age of nearly 76; and his remains were conveyed on the same day to the Tower of Silence. The *Bombay Gazette* states that the funeral procession was most numerously attended, and that during the day business was almost at a standstill in the town. The dockyard and factories were closed, as were also the schools and colleges; the Parsee clerks in the Government offices were allowed leave of absence; most of the Parsee shops and places of business were shut up; and in the afternoon the banks were closed. These honours were paid to the memory of the deceased, not on account of his wealth or his ability in business, but of his liberal spirit and willing hand. His benevolence was confined to no class or creed, but was exerted for the general benefit of the poor and the public of Bombay. Among the numerous acts of benevolence in which he has been engaged for upwards of a quarter of a century, and which render his name honourable, medicine will especially recognise the foundation and endowment of the hospital which bears his name.

Now that an impulse has been given, people are finding that public drinking fountains are really valuable and necessary institutions. Their erection is proceeding, principally at the expense of benevolent individuals, in several of our cities and towns: for instance, ten or a dozen of these fountains are to be opened in Manchester, by Mr. Robert Barnes; while one is also to be presented by Mr. Alderman Heywood. Our transatlantic brethren have heard of the movement, and are beginning to agitate for carrying it out in the States. The *New York Times* makes some excellent remarks, which will, we trust, lead either individual philanthropy, or the good sense and go-a-head spirit of the American people, to develope an institution which will do more good than all the Maine Laws in the universe. Our contemporary says:

"A society has recently been organised in London for the purpose of supplying that beer imbibing city with drinking fountains, that its thirsty inhabitants may be able to moisten their windpipes without being compelled to enter a gin shop, or purchase a pot of 'arf-an-arf.' London is but indifferently supplied with the aqueous element, and what they have is not of the purest quality; but it is placed within the reach of all the wayfarers of its interminable streets. In New York, which is the best watered city in the world, where the weather is generally dry, the heat often oppressive, and the dust always choking, there is not a public drinking fountain, supplied with a cup, where the stranger may clear his throat and slake his thirst. There are a few ornamental fountains, but they are carefully railed round so that they cannot be approached, and the jet throws up its sparkling columns of liquid brilliants in the centre of a stone basin, to which access is denied by the public authorities. There should be at least a thousand drinking fountains scattered over the city, supplied with cups, for the use of the wayfaring public; and these fountains, which should be mostly mural, and small, might be rendered, at a very trifling expense, highly ornamental, and in the highest degree beneficial. They would, it is true, be the ruin of hundreds of drinking saloons, where bad liquor is sold, and that may be one reason why the city has not been supplied with them. Paris is full of drinking fountains for the benefit of the people; but then Paris is under the rule of a despot who will see that the comfort of the people is secured; while New York, being governed by the people, is sadly neglected by its governors. The absence of public drinking fountains in our streets is as strange an anomaly as the lack of bathing places on the river fronts of the city. With the salt water flowing all around us, and fresh water running through all our streets, there is not a place where one of our dirty, thirsty, and wearied citizens can either bathe his person or quench his thirst, free of charge. As the hot weather will soon be upon us, and the dusty season has already arrived, it is about time that our city fathers took these things into serious consideration."

An act of justice—tardy, though not on that account the less acceptable both to the recipient and to the class to which he belongs—has just been paid in the promotion of Mr. Robert McCormick to the rank of Deputy-Inspector of Hospitals and Fleets. The claims of this meritorious officer of Her Majesty's Navy are founded principally on his eminent services in connexion with the scientific expeditions to the Polar regions. In 1827, he was appointed assistant-surgeon to the *Hecla*, under the command of Sir Edward Parry, and accompanied that vessel in the attempt to reach the North Pole. On his return, he was promoted to the rank of surgeon by His Royal Highness the Duke of Clarence, then Lord High Admiral. In the years 1839-43, he acted as chief medical officer and naturalist to the Antarctic expedition, in the voyage of the *Erebus* and *Terror;* in 1852, he commanded a boat-expedition up the Wellington Channel, in search of Sir John Franklin, in Her Majesty's boat *Forlorn Hope;* and in 1853 he volunteered to go up Smith's Sound, in command of the *Mary* yacht, to explore the Polar Ocean. In addition to these services in the frigid zones, extending altogether over a period of about seven years, Mr. McCormick has seen much service in tropical regions. His promotion, if his merits had been recognised in common with those of other officers, would have taken place long ago; and his recent advancement is an act which, like the honourable distinction bestowed some months ago on Dr. McWilliam, will be remembered to the credit of the present heads of the Admiralty.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

Philip H. Williams, M.D., *General Secretary.*

Worcester, April 26th, 1859.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-third Annual Meeting of this Branch will be held on Wednesday, June 8th, at the Town Hall, Chester, at Twelve o'clock at noon, under the presidency of E. Waters, M.D.

The members and their friends will dine together after the meeting, at the Albion Hotel.

Gentlemen who intend to bring forward cases or communications are requested to send notice to the Secretary as early as possible.

A. T. H. Waters,
Honorary Secretary.

Liverpool, May 11th, 1859.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South Midland. [Annual Meeting.]	Infirmary, Northampton.	Monday, May 30th, 1 P.M.
Lancashire and Cheshire. [Annual Meeting.]	Town Hall, Chester.	Wednesday, June 8th, 12 noon.
Birmingham and Midland Counties. [Annual Meeting.]	Hen and Chickens Hotel, Birmingham.	Friday, June 10th, 3½ P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS, IN CONNEXION WITH THE SOUTH-EASTERN BRANCH.

The last of the series of meetings for the present session was held at the Bull Inn, Dartford, on Friday, May 20th, at 3.30 P.M.; J. Cordy Burrows, Esq. (Brighton), President of the Branch, in the Chair. There were also present: John Armstrong, M.D. (Gravesend); F. J. Brown, M.D. (Chatham); J. E. Crook, M.D. (Northfleet); Daniel Culhane, Esq. (Dartford); James Dulvey, Esq. (Brompton, Chatham); Frederick Fry, Esq. (Maidstone); J. H. Gramshaw, Esq. (Gravesend); Adam Martin, M.D. (Rochester); C. J. Pinching, Esq. (Gravesend); Thomas Hextall Smith, Esq. (St. Mary Cray); Flaxman Spurrell, Esq. (Bexley Heath); and John W. Woodfall, M.D. (Maidstone); with the following gentlemen as visitors: Wm. Camps, M.D. (Park Street, Grosvenor Square); Joseph C. Martin, Esq. (Dartford); Ebenezer Moore, Esq. (Dartford); and John Grantham, Esq. (Crayford).

The minutes of the last meeting having been read and confirmed, the President delivered an appropriate address.

NEW MEMBERS.

The following gentlemen were then elected members of the Association and of the Branch, each having been duly proposed, seconded, and supported:—Ebenezer Moore, Esq. (Dartford); Joseph C. Martin, Esq. (Dartford); John Grantham, Esq. (Crayford); Jarman Patrick, Esq, (New Brompton).

PAPERS AND COMMUNICATIONS.

The following communications were then read:—

1. On the Nature and Treatment of Diphtheria. By T. Hextall Smith, Esq. (St. Mary Cray).
2. On a Case of Neuralgia. By A. Martin, M.D. (Rochester).
3. On Acute Hydrocephalus. By J. E. Crook, M.D. (Northfleet).
4. Mr. Spurrell, of Bexley Heath, exhibited several interesting preparations, with the aid of a good microscope. There was also a great variety of surgical apparatus on the side-tables.

The thanks of the meeting were unanimously and heartily voted to those gentlemen who had thus contributed so materially to the pleasure of those assembled; and Mr. Smith, Dr. Martin, and Dr. Crook, were requested to allow their communications to be published in the Journal of the Association.

Thanks were with equal unanimity and heartiness accorded to the President of the Branch, for his kindness in having come from so great a distance, and for his ability in the chair; after which, at 6 P.M., the members present adjourned to dinner. Soon after 9 P.M., the meeting broke up, having passed an evening of great enjoyment.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 10th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

PRACTICAL DEDUCTIONS FROM AN EXPERIMENTAL INQUIRY INTO THE INFLUENCE OF FOOD. BY E. SMITH, M.D., LL.B., ETC.

The author, in some preliminary remarks, referred to the large amount of vital action which is necessary to maintain life, and mentioned the various circumstances which he had noted during the continuance of a prolonged fast. He stated that the practice of administering arrow-root, or other fashionable foods, consisting of starch, with water, under the impression that it was more nutritious and easier of assimilation than wheat-flour, was indefensible, since it did not sustain the vital action to a degree capable of maintaining life; and that Nature has not provided starch, as food, altogether apart from nitrogenous substances. He contrasted the action (or rather want of action) of starch with that of the cereals, and showed that the latter is nearly as great as that of any substances with which we are acquainted. He drew the distinction between an action which increases the existing amount of vital force, and that which only tends to prevent loss of vital power—two circumstances which, in practice, are commonly confounded; and showed that beef-tea, wines, and brandy, can act only in the latter mode, whilst the cereals act in the first named manner. Hence, in cases of prolonged exhaustion, where there has long been more waste than supply, the former is not sufficient, and it is essential that the cereals be added or substituted.

The action of milk is exceedingly analogous to that of the cereals, both in extent and duration; and the combination of the two appeared to be the most perfect kind of food. The casein is to the milk what gluten is to bread; and the oil in milk is associated with substances (respiratory excitants) which call it into action in a manner quite analogous to the common combination of bread and butter, or of a mixture of fat and lean flesh. He showed that milk and flesh are the best and most natural modes of exhibiting fat, and altogether preferable to the administration of separated oils. He referred to the frequent use of skimmed milk in Germany as a medicinal agent, and of sour milk in Greece and America as a part of food; and explained the action of the former by its casein and sugar as respiratory excitants, and that of the latter by the advantage of administering lactic and other acids in that combination in the summer season, and at other times when the blood, by tending to undue alkalinity, is less capable of carrying on the oxygenating process. He showed that, in fevers, skimmed milk is preferable to new milk.

As fats lessen the respiratory changes, they ought to be, and are, combined with other articles of food which increase them. He referred to the importance of determining the reasons for the administration of both fat and starch, and showed that there is less difference in the relative amount of these two substances used in different climates, than has been commonly be-

lieved. He attached importance to the physical properties of fat, and explained the beneficial action of that substance when applied to the skin by its power to retard the conversion of the fluid perspiration into vapour, and thereby to lessen the waste of heat by the skin. He thought this latter mode of employment of fat to be especially fitted for cases of debility with lessened appetite and perspiring soft skin, in whom the waste is always greater than the supply.

The beneficial action of sugar was insisted upon; and the love of the French for sugar and water was explained by the refreshing coolness, the innocuousness and the agreeable flavour of the fresh made beverage, and the great freedom and lightness of respiration which attends its action. He thought the ill effects of sugar in the healthy system had been exaggerated.

The action of animal substances in increasing the respiratory process, in addition to the supply of plastic materials, was dwelt upon, and shown to be of great value to the system. These are allied to gluten, and some of them probably act as ferments; and, in illustration, he especially cited cheese, which promotes digestion if taken in small quantity, but is apt to disturb it if much is eaten.

Tea was shown to cause increased waste, and to excite every function of the body; and hence was well fitted to cases where there was a superfluity of material in the system, or where we otherwise desire to induce a temporary increase in the vital action; but is injurious in those who are under-fed, or in any case where there is greater waste than supply: and, in illustration, cited the increase in the loss of weight of the prisoners at Wakefield when tea was added to their food. The action of tea had been hitherto misunderstood; but the sagacious observation of Liebig, as to its analogy with the active principle of the bile, was much commended. He recommended its use, instead of spirituous liquors, by soldiers on march, or otherwise exposed for a lengthened period to great heat; since, by its powerful influence in increasing respiration and the action of the skin, without increasing pulsation, it was particularly fitted to counteract the influence of heat in its tendency to induce "heat-apoplexy", or, as more suitably termed by Mr. Longmore, "heat-asphyxia". Twenty-five grains of tea, in a concentrated cold infusion, taken every hour or half-hour, during exposure, would suffice. For similar reasons, he urgently recommended it as an adjunct in the treatment of suspended animation, as from immersion. It has a rapid and accumulative action, so that small and repeated doses have much greater effect than large and isolated ones. It differs from coffee chiefly by increasing the action of the skin, and thereby tending to cool the body; and therefore the two substances are applicable to different conditions of the system. He thought that both, and particularly tea, ought to be more commonly used as medicinal agents. Coffee-leaves he believed to be a valuable febrifuge medicine, and one particularly fitted for cases of nervous excitability.

The author then contrasted the effects of brandy and gin with tea, and showed that in all respects they were directly opposed; but coffee so far resembled them in action, that it lessened the action of the skin, and thereby lessened refrigeration. Rum and beer he regarded as restoratives, and the combination of rum and milk as the best restorative employed as food; whilst brandy and gin simply lessened waste. He regarded all alcohols as having their chief influence in sustaining the action of the heart; and recommended that they should be given in small quantities, and repeated every quarter or half hour in urgent cases, so as to accumulate their action, rather than allow reaction to follow each dose by permitting a long interval between the doses. He mentioned a case in which he gave six bottles of port wine in forty-eight hours, with the effect of saving the patient's life, and reducing the pulse from 150 to 90 per minute. He believed that alcohol increased the respiratory action indirectly through the nervous system; and that, in fine old wines and spirits, the action is lessened by the volatile elements, which have a conservative tendency. He particularly cited the conservative influence of fine old port wine, and the disturbing influence of new and inferior spirits. The primary and secondary action of all alcohols, when taken in an amount to affect the sensorium, was always felt; and the author described the attendant circumstances.

In conclusion, the author stated that dislikes for food are indicative of lessened action, and that other foods of analogous properties should be provided in such cases; and also that it was probable that at least some kinds of azotised substances are more fitted for the hot season, when the chemical changes are greatly reduced, than has been heretofore believed.

Dr. Stallard said, however valuable the facts stated by the author, they should, nevertheless, be received with a certain amount of caution, and that a wider view of the case should be taken than that presented in the paper. The recommendation of bread, in preference to beef-tea, seemed so opposed to the general experience of the profession, that it ought not to be received without further confirmation. Dr. Smith's experiments, however, were upon a very healthy person, and this possibly might make all the difference. Beef-tea might be absorbed by the simple law of the percolation of fluids through membranes; but bread had to undergo a distinctly assimilative process, which in a weak patient might not be easily carried on. The author scarcely took into consideration the influence exerted by fat in the assimilation of non-nitrogenous as well as nitrogenous foods. It was possible that fat, instead of being assimilated, might pass out in the fæces. With regard to tea, it no doubt produced a greatly increased respiratory action; but the question was whether the increase was temporary, or whether it had a permanent specific effect, due to the composition of the tea itself. It might possibly have an ultimate depressing effect. He inquired whether the author's experiments showed any increase of the vapour expired after the use of alcohol?

Dr. J. A. Wilson said that the paper was of such an unreasonable length, that it precluded anything like an adequate discussion of its statements—an evil which, he said, was unfortunately growing upon the Society. He agreed with the author's remarks as to the importance of fat in supplying loss by perspiration. Liebig's statements had led to the inference that fat was not used in warm countries; but in the course of Captain Sturt's journeys in the interior of Australia, where the heat in the deserts was most intense, he and his followers ate fat with the greatest avidity, their desire for it departing only when the heat subsided. Other instances of a similar kind had been recorded. The utility of casein to aid digestion had been long known, since Shakespeare made *Ajax* address *Thersites*, "Come my cheese, my digestion". [*A laugh.*]

Dr. Smith, in reply, stated that when he recommended the use of starchy food and milk, instead of or in addition to beef-tea and brandy in cases of exhaustion, he was desirous to urge the distinction between food which can alone supply material to meet waste and that which simply tends to lessen the rate of the wasting process. Fat when taken alone lessens the evolution of carbonic acid, and when taken with the cereals it also somewhat lessens (instead of increasing) their action on the same function. The action of tea is temporary; but if food is duly supplied to meet the increased waste, tea does not cause a subsequent decline of action. Inhalation of alcohol increases the amount of vapour exhaled by the lungs, probably from some local action; but when it is taken into the stomach, the doses taken by the author did not produce a very decided effect; but this subject was only incidentally examined in the present series of experiments. Casein, known as a digester, was proved to act in common with other nitrogenous substances to promote the transformation of starch and fat, or at least the evolution of carbonic acid from whatever source.

CASE OF CONTRACTION OF THE HEEL (TALIPES EQUINUS) FROM EXCESS OF ACTION OF THE MUSCLES OF THE CALF.

BY HOLMES COOTE, ESQ.

Mr. Coote communicated the particulars of a case to illustrate a form of talipes equinus not commonly recognised. There was no paralysis of any set of muscles; the flexors and extensors of the leg being firm and well nourished. But there existed a loss of balance of power between the two; and the flexor muscles gradually drew up the heel so as to keep the toes permanently pointed downwards. The first indication of this morbid state was often overlooked by the surgeon. The foot was contracted and held fast when raised to a right angle with the leg; and patients tripped and stumbled in walking from the toes catching in any object on the floor. The disease had often been mistaken for incipient disease of the hip, in consequence of the irregularity in the patient's gait. The remedy consisted in the division of the tendo Achillis, and in the very gradual extension of the twisting medium. The muscles of the calf were very often much more highly developed than usual: this hypertrophied state commonly subsided after treatment. A boot and iron were frequently needed during convalescence.

Mr. Solly said that the statement of the author, that the cases referred to were very little known; was incorrect, as hospital surgeons were familiar with them.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, May 4th, 1859.

Edward Rigby, M.D., President, in the Chair.

Thirty-one candidates were proposed for the fellowship. These gentlemen will be balloted for at the next meeting, on June 1st.

CASES OF EXTRAUTERINE FŒTATION.

Dr. Harley exhibited a specimen of Fallopian tube pregnancy, complicated with fibrous tumours of the uterus. The preparation was taken from the body of a negress, aged 22, who died from rupture of the tube at about the fifth month of gestation. The patient was under the care of Dr. Magrath, of Jamaica.

Dr. Waller also showed a considerable number of perfectly formed fœtal bones, which had passed from the rectum of a female, aged 47. The history was to this effect:—Ten years before the bones were passed, this woman fell in the family-way. At the end of nine months, labour pains set in, a sanguineous discharge followed, and then all symptoms of labour passed away. A month afterwards, menstruation was established, and continued regular for ten years. The catamenia then became irregular, her health failed, and she had difficulty in the passage of the motions. Fœtal bones were then found to come away with the latter; and when all seemed to have been passed, the general health was restored.

A discussion followed, in which Dr. Tyler Smith, Dr. Granville, Dr. Rigby, Dr. Gibb, Dr. Harley, and Dr. Routh, took part.

DESCRIPTION OF AN ANENCEPHALIAN MONSTER. BY R. U. WEST, M.D.

The woman who gave birth to this monster (which was exhibited to the Fellows), had previously had a large family of healthy well developed children. On the present occasion, there was a very large quantity of liquor amnii, after the discharge of which, what was thought to be the head of the fœtus was felt low down in the vagina. A hand and arm also kept coming down, though they were pushed back again and again. Feeling convinced that the infant was dead, Dr. West bored a hole in the presenting part, introduced his forefinger into the opening thus made, and pulled the fœtus away. There was an enormous placenta. The monster proved to be a perfect specimen of Geoffroy St. Hilaire's rare genus "Dérencéphale".

ABORTION, WITH ALBUMINURIA AND CONVULSIONS, IN SIX SUCCESSIVE PREGNANCIES. UNDER THE CARE OF TYLER SMITH, M.D.

[*Reported by* W. H. Broadbent, M.B.]

This case furnished a remarkable instance of the relation of puerperal convulsions with albuminuria in successive pregnancies. The cause of the convulsions was evidently the same in all the pregnancies. It also seemed that it was not organic renal disease which stood in the relation of cause to the convulsions and abortions; since, while she was under observation, albumen only appeared in the urine when pregnancy had reached a certain stage, and disappeared within a fortnight of the expulsion of the ovum. From this case, and from others, Dr. Tyler Smith concluded that the albuminuria was not to be accounted for by any mechanical interference with the renal circulation by the gravid uterus. Albumen appeared in the urine at a period of gestation, when the uterus was too small to exert pressure on the kidneys. The renal congestion, which no doubt was the proximate cause of the albuminuria, depended, in the opinion of Dr. Tyler Smith, on reflex irritation of the kidneys by the gravid uterus, and resembled the congestion of the mammæ, salivary glands, and other organs in reflex sympathy with this organ.

CASES OF POLYPUS OF THE UTERUS: WITH CLINICAL OBSERVATIONS. BY FRANCIS ELKINGTON, M.D.

Dr. Elkington recorded the full histories of six cases of large uterine polypi, chiefly remarkable for the size of the tumours, and the difficulties which were generally experienced in effecting their removal.

Case i occurred in April 1849. A ligature was applied by means of Gooch's cannula, and at the end of five days the neck of the polypus was cut through. The lady afterwards became pregnant, and did well.

Case ii. This example was under treatment at the same time. On making a vaginal examination, a large fleshy tumour was found completely filling the vagina, the os uteri being situated high up, and tightly embracing the mass. An obstetric physician of some repute had diagnosed inversion of the uterus, and recommended that an attempt should be made at reduction. Dr. Elkington, finding the uterus in its normal position by means of the uterine sound, detected the true character of the disease, and in consequence applied a ligature, which cut through the tumour at the end of fourteen days. The patient gradually regained her health, and afterwards became pregnant.

Case iii was that of a woman suffering from chronic inversion of the uterus, which had been mistaken for polypus. She was pale and anæmic, aged 47, and her only labour had occurred twenty-six years previously, and had been severe, with adherent placenta. At various times she had been much weakened by severe attacks of flooding, which at first recurred about every fortnight, but subsequently once a month. She also experienced at times much pain in the abdomen, accompanied with nausea and vomiting, so that she had never known good health since her confinement. On examination, a pear-shaped tumour was found protruding from the os uteri, and occupying the upper part of the vagina; it was tender to the touch, had the appearance of the inner surface of the uterus, and the sound could not be passed between the tumour and the cervix. It seemed evident that the case was one of chronic inversion of the uterus; but as this condition had existed so many years, it was deemed unadvisable to make any attempts at reduction, and consequently only palliative treatment was adopted. By the latter, the general health was improved, the discharges lessened, and the suffering much diminished.

Case iv. This patient was under the author's care in January 1846. She was the mother of twelve children, and she aborted in 1844, when in her forty-ninth year. She had never been well since, and had been weakened by several attacks of flooding. On examination, the uterus was found enlarged and tender, with the os uteri small. Leeches were applied, which relieved the tenderness, but the discharge, sometimes mucopurulent, sometimes sanguineous, continued. She remained very ill and feeble for many months, but no part of the tumour passed through the os uteri until March 11th, 1847. On the following morning, a ligature was applied round the base of the tumour, a large part of the latter coming away in seven days, and in eight days more the ligature, with another portion of the growth. Health and strength were slowly regained; but in July, the patient was well, and was seen in good health two years afterwards.

Case v. This patient consulted Dr. Elkington in September 1839, at which time she was out of health, and was "unwell" too often. No enlargement of the uterus could then be detected; nor was any discovered until Christmas of the same year, when it was thought that a fibrous tumour or polypus existed in the uterine cavity. There was little change for some months, except that the uterus gradually increased in size; but about April 1840, the os opened, and allowed the tumour to pass into the vagina. In July, a ligature was passed around the upper portion of the polypus, which came away on the 11th, with a portion of the growth weighing sixteen ounces. It was clear, however, that a large part of the tumour still remained *in utero*, which in time descended into the vagina, so that a second ligature was used in September 1840. By this means, twenty ounces of the mass were got away, but the removal was followed by very severe phlebitis. Ultimately, she got much better, and continued well for twelve months, at the end of which time the floodings began to return, and in two years she was as large as a woman at the seventh or eighth month of pregnancy. In December 1842, there was some decomposition of the tumour, the discharge from which was most offensive. The mass gradually descended into the vagina, and on February 6th, 1843, a ligature was applied for the third time. Pieces of the decomposed tumour came away with the whipcord on February 19th, but the uterus still continued much enlarged. In December 1843, her health began to break down, but she partially improved, and in February 1844, was stronger, though the uterus was very much enlarged. At various subsequent periods, parts of the mass sloughed, and were expelled; until, in March 1846, another ligature was applied, which in a few days brought away one pound and a quarter of the growth. From this date, she again improved, but remained very large, until May 1847, when another portion was taken away by ligature. In the early part of 1849, she got permanently worse; and in May she died. Unfortunately, no *post mortem* examination could be obtained.

Case vi was seen in April 1856. In this instance, there was a large polypoid growth, which was removed by ligature, but

it grew again; so that in March 1858, a second ligature was required. The lady, however, died from exhaustion before the tumour came away.

Dr. Rigby said that the cases detailed were such as gave rise to great anxiety in their treatment. He had had a patient under his care whose history partly resembled Dr. Elkington's fifth case, and from whom he had removed upwards of forty pounds weight of tissue, at different operations with the ligature.

Dr. Waller had had a similar case under his care at St. Thomas's Hospital. He showed the instrument which he generally used for applying the ligature, and which consisted of Gooch's cannula, slightly modified.

Dr. Routh feared that he might be deemed guilty of some presumption in criticising Dr. Elkington's paper; but still he felt it right to state that, in his opinion, the plan of treatment adopted had not been so good as he had frequently seen practised by continental surgeons. He thought that in most instances of polypus uteri the tumour might be cut off without any fear of hæmorrhage; a proceeding which was far preferable to the ligature, since by it all risk of purulent absorption was avoided. Supposing, however, that the practitioner was in dread of much bleeding, he might safely employ the écraseur; the wire or chain of which could even be passed round the tumour while it was still in the uterus.

Dr. Tyler Smith did not consider that any blame attached to Dr. Elkington for the course he had pursued, especially as the cases had occurred before the écraseur was resorted to as much as it is now. Moreover, he had found it difficult to apply this instrument, except when the polypus was small. He was in the habit, however, of passing a wire round the tumour by means of Gooch's cannula; and then, by tightening the wire at once with the aid of a small winch, he could cut off and remove the polypus in a few minutes. Dr. Smith stated also that he had lately seen a patient, with Sir Charles Locock, in whom the tumour was so large that only half of it could be removed at the first operation; and there was still a large mass to get away.

Dr. Murphy had received a great deal of instruction from the paper, though he rather regarded the treatment adopted as belonging to a past age. He thought that most if not all polypi might be drawn down and cut off at once, without any injurious loss of blood. He was generally in the habit of applying a ligature, which was allowed to remain on for twenty-four hours. By the aid of this the tumour was then drawn down to the orifice of the vulva, and the pedicle snipped through with a pair of scissors. By this plan there was not the slightest risk of hæmorrhage; and as there was no offensive discharges, there could be no fear of purulent infection. At the same time, he was well aware that many difficult cases were met with, in practice, where resort could not be had to this measure; in many of which he would recommend dilatation of the os uteri, and then the drawing down of the tumour by means of forceps.

Dr. Elkington having replied, the Society adjourned.

Editor's Letter Box.

POTASSA FUSA TO THE URETHRA.

Sir,—I read with interest the "New Mode of Relieving Retention of Urine", by Mr. Langston Parker, in your last number.

Though I have never used potassa fusa for the purpose of relieving retention, I can bear testimony to its power of overcoming urethral obstruction; but it is possible to produce an almost alarming amount of hæmorrhage with potassa fusa, even when cautiously applied. I had been treating an obstinate stricture for some time, without making any satisfactory progress, when I determined to apply the caustic potass. A small piece was inserted into the end of a wax bougie, which was well oiled and passed down to the stricture, against which it was held for two or three seconds. On withdrawing the instrument, some blood escaped: the bleeding continued, gradually increasing in quantity, for three or four hours. While waiting in a chemist's shop for some gallic acid which I had prescribed, my patient was advised to apply to another surgeon, who, ignorant of what had been done, immediately proved its efficacy by passing a good sized catheter with the utmost ease. I am, etc., F.R.C.S.

Brighton, May 32rd, 1859.

POST MORTEM EXAMINATIONS.

Letter from William Sankey, Esq., F.R.C.S.

Sir,—I observe with regret, in the returns of cases of diphtheria, that, in the majority of fatal cases, no *post mortem* examination has taken place. Every medical man has now an opportunity of obtaining, if not enforcing, the same, by refusing to give a certificate of the cause of death, which, strictly speaking, he can never give, or at least in very few cases, without such evidence.

I fear the fault does not rest so much with the friends or relatives of the patient, as with the medical man himself. I have now been nearly fifty years engaged in the duties of a general practitioner in the country, and can conscientiously aver that I have never neglected an opportunity of making a *post mortem* examination in cases where the same could elucidate an obscure case, or confirm or refute the previous opinions of the cause of death. The present rising generation are, I am sorry to say, more zealous in filling their coffers than in adding to their own and the public knowledge, and avoid, instead of seeking, *post mortem* examinations, unless remunerated for the same. I am, etc.,

William Sankey.

Dover, May 18th, 1859.

LARA AND WALTERS *v.* WARD.

Letter from Messrs. Lara and Walters.

Sir,—As you have permitted Dr. Ward, to our possible detriment, to give in your columns his own version of the above trial, in opposition to the published report, will you allow us to state,

That our case did not break down, but that judgment was given against us solely on the novel ground that we had rescinded our whole contract with the defendant by permitting him to withdraw his practice from our books, which he did, stating that he was resolved to remain in Kensington, two or three days only before he sold it to Dr. Williams.

That, having furnished full particulars of the practice to Dr. Williams, our "extraordinary demand", £25:5:6, would otherwise most certainly have been awarded us by the judge, in accordance with our express and unequivocal terms, to which the defendant had agreed.

That, though this is immaterial, Dr. Williams did not give us the slightest intimation of having previously heard of the matter.

That the report which appeared in your paper, and comprised these facts, was not a mere statement of counsel, but contained Mr. Lara's sworn testimony; and that if, from want of memory, Dr. Williams had contradicted this, it could have been confirmed in every particular, from the latter's own lips, by a gentleman with whom we were personally acquainted, but perfectly well known both to him and to Dr. Ward.

We are, etc., Lara and Walters.

Temple, May 21st, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Gardiner. On May 20th, at Bristol, the wife of George Gardiner, Esq., Surgeon, of a daughter.

Jeaffreson. On May 20th, at Finsbury Square, the wife of Henry Jeaffreson, M.D., of a daughter.

Jenner. On May 24th, at 8, Harley Street, Cavendish Square, the wife of William Jenner, M.D., of a daughter.

Martyn. On May 17th, at Bristol, the wife of *Samuel Martyn, M.D., of a daughter.

Monro. On May 20th, at Churton House, Belgrave Road, the wife of James Monro, M.D., Surgeon-Major Coldstream Guards, of a son.

Murray. On May 21st, at 17, Green Street, Grosvenor Square, the wife of *Gustavus C. P. Murray, Esq., Surgeon, of a son.

Stevens. On May 23rd, at Hoddesdon, Herts, the wife of Robert Ingram Stevens, Esq., Surgeon, of a daughter.

MARRIAGES.

Crosby—Ryan. Crosby, Thomas B., Esq., Surgeon, of 23, Finsbury Place, to Annie, only child of Joseph Ryan, Esq., of Gordon Place, Tavistock Square, at St. Pancras Church, on May 24th.

Easton—Marshall. Easton, Thomas Ogilvy, Esq., youngest son of the late John Easton, M.D., of Cowrance Hill, Dumfriesshire, to Elizabeth Agnes, eldest daughter of the late Rev. James Marshall, of Clifton, on May 19th.

Inman—Mackay. Inman, Robert Matthews, Esq., Surgeon, to Rose Munro, widow of the late Robert Mackay, Esq., of Williamstown, Australia, at Cyderhall, Sutherlandshire, on May 3rd.

Peren—Sylvester. Peren, Robert B., Esq., solicitor, of South Petherton, Somerset, to Mary, only daughter of Thomas Sylvester, Esq., Surgeon, of Highbridge, Somerset, at Burnham, on May 13th.

Peters—Stilwell. Peters, Joseph, Esq., of Wouldham Hall, Rochester, to Jane Catherine, eldest daughter of George Stilwell, Esq., Surgeon, of Epsom, at St. James's, Paddington, on May 21st.

Shuttleworth—Kean. Shuttleworth, Charles, Esq., Lieutenant 14th Royal Highlanders, to Caroline Janette Sybella, second daughter of the late Archibald Kean, M.D., Civil Surgeon of Moorshedabad, at Berhampore, Lower Bengal, on March 29th.

Somerville—Ward. *Somerville, Charles, M.D., of Bloxwich, to Jane, youngest daughter of the late John Ward, Esq., of Stafford, at Lichfield, on May 17th.

Trotter—Elliot. Trotter, James, Esq., Surgeon of the Durham Artillery Militia, to Mary, youngest daughter of the late John Elliot, Esq., banker, Carlisle, at Staindrop, Durham, on May 21st.

DEATHS.

Baird, John, M.D., at 45, Southampton Row, Russell Square, on May 18th.

Bellingham, Francis James, Esq., Surgeon, of Bourne, Lincolnshire, at Torquay, aged 41, on May 19th.

*Black, James, M.D., Surgeon to the West Norfolk and Lynn Hospital, at King's Lynn, suddenly, aged 31, on May 21st.

Hardey. On May 20th, at 2, Earl Street, Blackfriars, Sarah, wife of Key Hardey, Esq., Surgeon.

Howlett, Henry, Esq., Surgeon, late of Cambridge Terrace, Hyde Park, at Castlemaine, Australia, on March 1st.

Knapp. On April 12th, at Farnham, Mary Olive, wife of James M. Knapp, Esq., Surgeon Bombay Medical Service.

Litchfield. On April 12th, at Dholia, Khandeish, India, after a short illness, from an accident while on field-service, Lieutenant Robert Litchfield, 30th Regiment Bombay Native Infantry, sixth son of Thomas Litchfield, Esq., Surgeon, Twickenham, aged 28.

Mackintosh, John, M.D., late Royal Artillery, near Dundee, on May 14th.

Menzies, Robert, Esq., Surgeon, at 86, Upper Stamford Street, aged 64, on May 17th.

Robertson, Archibald, Esq., Surgeon Royal Navy, at Twickenham, aged 74, on May 20th.

Sillery, Robert, M.D., of Dover, late Surgeon Royal Army, and for many years Senior Physician to the Military Lunatic Asylum, in London, on May 20th.

Thompson. On May 22nd, at 42, Sussex Gardens, Hyde Park, Helena Augusta, youngest daughter of Charles T. Thompson, M.D., aged 3 years and 4 months.

APPOINTMENTS.

Turner, G. B., M.D., elected Assistant-Surgeon to the East Sussex, Hastings, and St. Leonard's Infirmary, in the room of the late Walter Duke, Esq.

PASS LISTS.

Royal College of Physicians. At the Comitia Majora, held on Friday, May 13th, 1859,

Waller, Augustus Volney, M.D., Birmingham, was admitted a Licentiate of the College, under the new bye-laws.

Also, at the Comitia, on May 23rd,

Sutton, John Maule, M.D., Tenby, Pembrokeshire, was admitted a Licentiate under the same bye-laws.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, May 13th, 1859:—

Alcock, Daniel Robert, Eccles Street, Dublin
Barr, Joseph Henry, Stockport
Bowstead, Rowland Mounsey, Caistor, Lincolnshire
Fernie, Henry Mortlock, Yelden, Bedfordshire
Gooding, John Callender, Barbadoes
Hewlett, Richard Whitfield, Harrow
Jay, Frederick Fitzherbert, Acle, Norfolk
Lloyd, Francis, Bedford Row
Mitchinson, Charles Calthrop, Boston, Lincolnshire
Parker, Albany John Etherington, Usk, Monmouthshire
Skardon, Thomas Gray, Dadbrook Maker, Devon
Spencer, Charles, Bury, Lancashire
Spouncer, Frederick Charles, Gainsborough
Stafford, Patrick Walter, Dublin
Tuck, Buckmaster Joseph, Blackheath
Watkin, John, Aberystwyth

Monday, May 16th:—

Armstrong, John Christopher, Gravesend
Ash, William, Lansdown Villas, Chelsea
Brend, William, Bideford, Devon
Bride, John, Liverpool
Brunton, Linton Bennett, Waterloo Place, Limehouse
Cullen, Peter, Calcutta
Emanuel, Leonard, St. John's Wood Place
Hall, Robert Arnold, Grantham, Lincolnshire
Hawkins, Thomas Henry, Reading, Berkshire
Hocken, Thomas Morland, Dublin
Hutchinson, Francis Blake, Bridge Street, Blackfriars
Illingworth, John Alfred, Newport, Monmouthshire
Jameson, George William, Caistor, Lincolnshire
Mackenzie, Walter Fawkes, Wigan, Lancashire
McMorris, Robert James, Tyrone, Ireland
Ormerod, William George, Bristol
Reid, John, Calcutta
Stedman, James Henry, Norwich
Thomas, John Lloyd, Pwllheli, Caernarvonshire
Trevor, James Ebenezer, Plymouth
Turton, Frederic, Wolverhampton
Utterson, Edward Vernon, Winchester
Watson, John, Newcastle-on-Tyne
White, Francis Thomas, Rawreth, Essex
Whitgrave, Vincent, Walsall, Staffordshire
Wickham, William, Tetbury, Gloucestershire

University of St. Andrew's. The following gentlemen, having previously obtained the degree of Doctor of Medicine, have been placed on the list of Honours.

First Class.

(The names are arranged in order of merit.)

Hewitt, Frederick Hughes, Guy's Hospital
Drysdale, Charles R., University College

Second Class.

Bancroft, Joseph, Manchester Medical School

Apothecaries' Hall. Members admitted on Thursday, May 19th, 1859:—

Hutcheson, Robert William, Bahamas
Plowman, Thomas, North Curry, Somersetshire
Taylor, William, Cardiff, Glamorganshire
Thomas, John Lloyd, Pwllheli, Carnarvonshire

HEALTH OF LONDON:—WEEK ENDING MAY 21st, 1859.

[*From the Registrar-General's Report.*]

The total deaths registered in London, which were 1207 in the last week of April, have constantly decreased in the three weeks of the current month, and in the week that ended last Saturday, they were 1057. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1041; but as the deaths returned for last week occurred in a population which has increased, they should be compared with the average raised in proportion to that increase; namely, with 1145. The comparison shows that the deaths that occurred last week were less by 88 than the number that would have occurred if a mortality equal to the average rate for the third week of May had prevailed.

The births of last week exceeded the deaths of the same period by 612.

The present returns, in connexion with those of previous

weeks, show the deaths from small-pox in several sub-districts, and a certain though not strong or uniform tendency of this disease to increase. Last week, it was fatal in 23 cases: 19 of which occurred to children under ten years of age; 9 occurred to infants less than a year old. Four children died from it in the sub-district of Bethnal Green; and the Registrar of St. Mary, Newington, who returns two cases, states that it is very prevalent in his sub-district. The deaths from scarlatina, which were 57, 55, and 47, respectively in three previous weeks, declined last week to 39, of which six occurred in Lambeth, and three in Plumstead. Besides the 39 cases of scarlatina, there were 16 of diphtheria, which has not declined concurrently with the former disease. The deaths from diphtheria occurred as follows:—one in Ladbroke Villas, Kensington; one at 8, Thayer Street, Marylebone; one in Upper Avenue Road, Hampstead; one at 34, London Street, Pancras; one at 9, Cambridge Row, Camden Town; one at 10, Anderson's Road, Homerton; one at 42, King Street (St. Anne, Soho); one at 30, Ann's Place, Hackney Road; two in one family at 35, Coventry Street, Bethnal Green; one at 8, Worship Square, Shoreditch; one at 1, Martha Street, Haggerstone East; one at 18, Price's Street, St. Saviour; one at 67, Nelson Square; one at 36, Felix Street, Lambeth; and one at 13, Vauxhall Place. There were eight deaths in the week from erysipelas, three of which occurred to infants. Three children and two adults died from syphilis. Two persons died of ischuria. Of 47 violent deaths, 39 were by accident or negligence, four by murder (three of these infanticide), and four by suicide. A widow died on the 19th inst., at 15, Wellington Street, Shoreditch, at the age, as stated, of 100 years.

Last week the births of 859 boys and 810 girls, in all 1,669 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1,574.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·668 in. The barometer fell from 29·92 in. on Sunday to 29·55 in. on Thursday, those points being the highest and lowest in the week. The mean temperature of the week was 52·6°, which is 0·4° below the average of the same week in 43 years (as determined by Mr. Glaisher). The thermometer in the shade attained its lowest point, 39·7°, on Sunday, and its highest, 67·9°, on Thursday. The range of the week was therefore 28·2°; the mean daily range was 13·9°. On Sunday the range was 24·3°; on Tuesday it was only 4°. The difference between the mean dew-point temperature and air temperature was 4·4°. The mean degree of humidity of the air was 88; on Wednesday, the humidity was 99, approaching complete saturation. The mean temperature of the water of the Thames was 55·9°. The wind blew invariably from the north-east, which has also been the prevailing direction since the beginning of the month. Rain fell to the amount of 1·60 in., the proportion of which that fell on Friday was 0·77 in. There was a thunder-storm on the evening of Thursday.

Asphyxia. An extraordinary case of asphyxia occurred a few days ago in the Rue de Tracy, when a young man suddenly rushed into a chemist's shop, with evident signs of intense agony, uttering inarticulate sounds and convulsively putting his hand to his throat. He tore off his cravat, and taking a small pair of embroidery scissors from his pocket, thrust them several times into the region of the windpipe. All this took place very rapidly, so that there was hardly time to bring the sufferer to a chair, when he sank into it, and it was found that life had fled. It has since been ascertained that deceased was a sailor, and had suffered, at Marseilles, from an attack of *angina membranacea*, which had rendered the dangerous operation of tracheotomy inevitable. His life had been saved by the aid of a silver tube put into the wound; but some time afterwards a physician whom he consulted advised him to remove it, as his recovery seemed to admit of no doubt. This advice was, however, premature, and the unfortunate young man was suffocated, as above described, by the closing of the wound; the cuts he had inflicted upon himself in his agony, with a view to reopen the windpipe, being pronounced utterly insufficient to cause death.

Lunacy in Workhouses. A blue book of eighty pages contains a supplement to the twelfth report of the Commission of Lunacy to the Lord Chancellor. It refers to the condition, character, and treatment of lunatics in Workhouses. The large increase of lunatics in workhouses is noticed, in the first instance, as a phenomenon requiring explanation; the number having risen from 6,800 to 7,666 between January 1857, and July 1858. The cases met with are those of persons suffering from chronic dementia, melancholia, and epilepsy; they comprise many who are idiotic or imbecile, and include none who are able to take care of their own interests or welfare, or to conduct themselves discreetly if left to themselves. The system of treatment in workhouses is so reprehensible as to surpass belief. The rules in force to check disorderly conduct in common paupers, are, most improperly, extended to the insane, who are, in effect, prisoners for life, incapable of asserting their rights, yet amenable to as much punishment as if they were quite sane. Of the metropolitan workhouses, the majority are of great size, old, badly constructed, and situate in the midst of dense populations; the same statement applies to the houses in large provincial towns. The deficiency of means of accommodation and exercise for lunatics is a source of infinite evil. The commissioners opine that the best mode of providing for the insane poor, who cannot be received into the present asylums, would be the erection of inexpensive buildings, adapted for the residence of idiotic, chronic, and harmless patients, in direct connection with, or at a convenient distance from, the existing institutions. These auxiliary asylums would be intermediate between union workhouses and the principal curative asylums. It is also suggested that the visiting justices of asylums have full power to visit workhouses, to order the removal of insane inmates therefrom to asylums at their discretion, and to order the removal into the asylum of pauper patients boarded with strangers. Various other suggestions are urged upon the attention of the Lord Chancellor to obviate the evils complained of.

The Middlesex Hospital. The Governors of this Hospital have purchased an adjoining house, partly for the purpose of enlarging the out-patient department, but principally to obtain accommodation for the residence of three clinical assistants. These assistants will be selected from amongst the most deserving students of the Hospital; and they will, by the wise liberality of the Governors, be boarded and have their quarters free.

Superstition. For some time past, says the *Worcester Herald*, there has been a fatal malady, which has taken off great numbers of children in Studley, Coughton, and the neighbourhood. At Coughton, the people have been so far gulled by impostors as to believe that all the children who partook of wine out of the chalice from the Roman Catholic chapel would be cured of the disease at once. Such has been the want of common sense among the Protestants as well as Catholics, that great numbers flocked to the priest, and it became so much a nuisance that it had to be removed to a private residence in the village, where they could have their fill.

TO CORRESPONDENTS.

Devonshire. You seem to be labouring under a mistake. Neither the Licentiates and Fellows of the London or of the Edinburgh College of Physicians have any *legal* right to the title of M.D. If they do affix this appendage to their names, it is granted by courtesy and custom only.

Foreign Degrees. A correspondent asks whether a person can style himself Dr. who is M.D. of Erlangen, but was never there, nor passed an examination?—No.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

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Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

TWO CASES OF RETENTION OF URINE.

Under the care of CÆSAR H. HAWKINS, Esq.

CASE I. John L., aged 42, was admitted under Mr. Hawkins's care on May 12th, 1859. It seemed that he was a butler, and used to be very intemperate, but had not been able to indulge during the last year, on account of poverty. He suffered first from stricture nine or ten years ago—the result, as he supposed, of gonorrhœa. He then was treated successfully, and has ever since been able to pass No. 4 catheter without difficulty. At 6 A.M. on May 7th, he found himself unable to pass water, and went to his medical attendant, who, however, could not pass the instrument. A little urine, however, came away after the attempt. No urine passed on the 8th. On the 9th, he again applied for relief. An instrument was again tried, but it could not be got into the bladder; and then a diaphoretic draught was given, after which the urine passed *guttatim*, and continued to do so till the morning before admission, since which none had passed. His medical attendant then again tried to pass the catheter; and, failing in this, ordered some leeches to the perinæum. He was admitted at midnight, on May 12th. It was then thought best not to try to pass any instrument; but he had a hot bath, and two successive doses of forty drops of laudanum. After the second dose of laudanum, he went to sleep; and when next seen, at 10 A.M., the stricture had given way, and the urine had been effused into the cellular tissue of the perinæum, scrotum, and penis, which were very hard, red, and distended. The bladder was distended to above the umbilicus, and was very hard and tender to the touch. The pulse was small, 108; the tongue brown and quite dry. He was still partially narcotised, and the pupils were contracted. Attempts were made, both by the house-surgeon and by Mr. Prescott Hewett, who saw the case in Mr. Hawkins's absence, to pass the catheter. This was impossible, however; and the urethra was found much lacerated somewhere about the end of the spongy portion. It now appeared that the only prospect of saving his life was establishing an opening into the bladder; and, with this view, Mr. Hewett proceeded to operate. A staff was passed down to the seat of stricture; but, as this went into the false passage, it served no purpose in the operation, and was disregarded. Having cut deeply into the middle line of the perinæum, in front of the prostate, Mr. Hewett succeeded in opening the urethra behind the stricture; the cavity, lined by mucous membrane which was formed in that situation, being easily recognised. The forefinger was now pushed along into the bladder, and served as a guide for a gum catheter, which was thus passed from the perinæum into the bladder. The urine came away in large quantities, very alkaline and offensive. Free incisions were then made into the sloughing cellular tissue. He was then put to bed, and attempts were made to keep up his strength by a very large supply of stimulants and such diet as he could take; but he fell into a semi-insensible condition, with hiccough; and sank gradually, dying in the evening of May 18th.

On *post mortem* examination, the kidneys were found healthy, except that there were a few spots of ecchymosis here and there in their tissue. The ureters were not dilated. The bladder was a good deal thickened and fasciculated, and the mucous membrane was ulcerated in patches. The urethra was healthy down to within an inch from the lower end of the spongy portion. From this point to the bladder it was extremely dilated and sloughy, forming a large cavity with ragged walls, leading into the bladder. The incision in the perinæum led into this cavity, just in front of the prostate. There was no obstacle, in the dead subject, to the passage of an instrument into the bladder, as the tissue which had formed the stricture was quite destroyed by the sloughing. The other organs presented nothing remarkable.

REMARKS. The treatment of impermeable stricture—*i. e.*, of stricture which has become, by spasm or otherwise, impassable to instruments—is, it must be confessed, one of the most difficult problems in surgery. Our own experience inclines us to agree with the opinion which is supported by the great authority of Mr. Cock of Guy's Hospital, that the best way is to operate early by the rectum in most cases. Without pronouncing an opinion upon treatment which we had not an opportunity of seeing, it would be impossible to say whether such an operation would have saved the life of the patient; but his case, at any rate, resembles, in many respects, those which are adapted for this treatment, and in which it succeeds best. The patient had no visceral disease; his stricture had been passable till within a short time before the occurrence of the fatal retention; and yet, from some cause, whether that the patient had himself made a false passage in attempting to pass the catheter, as was his custom, or that some change in the composition of the urine had set up invincible spasm, it was clear that an instrument could not be passed *per urethram*. In this position of things, one of three courses was indicated; viz., either to trust to the operation of warm baths and opium, or to puncture the bladder from the perinæum or rectum. The first plan is certainly one which rarely fails to relieve the retention; yet it may do so (and, in fact, did fail later on in this very case; for, though the patient was fully narcotised after his admission into the Hospital, his retention was not relieved); and, when it succeeds, it is sometimes only after protracted suffering and a continuous exhibition of opium not devoid of danger. On the other hand, the puncture from the perinæum is a difficult operation, and a severe one; while that from the rectum is momentary and safe. The former would, it is true, be preferred in a case where the stricture was really and permanently impermeable; inasmuch as then a staff could at the same time be forced through the stricture into the perinæal wound in the urethra, and a radical cure attempted; but, in the present case, the short time during which it had been found impossible to pass the instrument showed that the stricture was obstructed only by spasm; and that, when the irritation of the urine had been withdrawn from it for a few days, there would be every prospect of passing a catheter. The case was much changed, however, when Mr. Hewett saw it. Then, as extravasation had taken place, incisions in the perinæum were indispensable; and then the operation from the perinæum was clearly indicated, to prevent, if possible, further extravasation and sloughing. The operation of cutting into the bladder without a staff is one always of considerable difficulty, yet which may be confidently undertaken by a surgeon practically acquainted with the anatomy of the parts, and which a good anatomist can demonstrate with certainty on the dead body. The great obstacle to it in the living subject is the sloughing and extravasation which has always occurred in the patients in whom it is required. Still, by accurately remembering the relations of the urethra and prostate to the pubic arch, by cutting strictly in the middle line when deep in the perinæum, and by avoiding making too free incisions at a great depth, we believe that the bladder may always be reached without wounding any important parts.

The other case, which occurred in the same Hospital, at about the same time, is peculiar, from the seat of the stricture, and from the difficulties found in discovering the orifice of the urethra, as well as in passing an instrument along it. In this case, also, there is good reason for supposing that a puncture from the rectum before extravasation came on might have saved the patient's life; but, unfortunately, he had neglected

his case, or rather, treated himself by medical means only; he having been an assistant to a medical man, and thus having acquired an unfortunate idea that he was competent to manage his own ailments. When he was admitted, the mischief had progressed to such an extent, and the condition of the urethra was such a complication of recent and old mischief, that little hope could be entertained of successful treatment.

Case II. T. B., aged 39, was admitted under Mr. Hawkins's care on May 18th. He had had a stricture for about six years near the orifice, the result of an attack of syphilis, in which much of the glans penis had sloughed away, and a new orifice had been formed on its lower aspect. He had never been under treatment for stricture, except once, when a No. 4 silver catheter had been passed into the bladder six times. Four years ago he was at this hospital for retention of urine, when he was relieved after the use of the hot bath, but did not remain in the house. Latterly he had been subject to retention, for a few hours, occasionally; but he had neglected it. On the morning before admission, retention came on, and had persisted up to that time. Just previous to his coming here, he found the penis and scrotum becoming red and enlarged. On admission it was seen that the cellular tissue of the whole penis and scrotum was much infiltrated, and the redness was beginning to show itself it the groins and lower part of the abdomen. There was no pain or hardness in the perinæum, and he gave a distinct history of the effusion having commenced in the penis. The prepuce was so swollen that it was impossible to find the orifice of the urethra, until it had been slit up; and even then it was very difficult to get any instrument into the urethra. At length a small silver catheter was passed. The stricture near the orifice did not offer much obstacle; but one was met with lower down, in front of which a false passage seemed to exist, as the catheter went in for some distance without arriving at the bladder. Free incisions were made into all the spots where extravasation existed, and he was ordered to have hot baths to faintness, and large doses of laudanum. After baths in the morning and evening he passed water in drops, but no substantial relief was afforded, although the laudanum was pushed almost to narcotism.

Next day, the gangrene of the scrotum continuing to spread, and the patient's condition becoming constantly worse, a long incision was made in the median line of the scrotum, along its whole length, and carried down into the urethra. No catheter was put in, but the urine came away from this incision; not much passed, however, and he still suffered from strangury and pain in passing water. The gangrene continued to extend till it implicated the whole of the scrotum and skin of the penis; and he sank gradually, retaining his senses till the morning of the 23rd, when he became quite comatose, and died in the evening.

On *post mortem* examination no visceral disease of any importance was discovered. The kidneys were healthy, but somewhat congested; the ureters not distended. The whole of the scrotum and penis was one mass of slough, and the urethra terminated anteriorly in a large, sloughing cavity, opening freely into the prepuce. The whole urethra, down to within three inches of the bladder, was much dilated, ragged, and sloughy. About five inches from the glans penis, a stricture existed, in front of which was a false passage leading, for about two inches, into the cellular tissue of the penis. The bladder was much distended with foul urine, its walls thickened and fasciculated, and its mucous membrane ulcerated in spots, and in some parts of a perfectly black colour from congestion.

University College Hospital. At a meeting at the hospital on Wednesday week, Mr. Thomas Field Gibson announced that his relative, Mr. George Filliter, of Trigonhill, Wareham, Dorset, had sent him £1,000 as a donation for the hospital, and had expressed a wish that the amount should be invested, and the income applied in some manner to connect with the hospital the name of his son, Dr. William Filliter, lately deceased at an early age. Dr. Filliter was formerly a distinguished student of the faculty of medicine, and had received his preliminary education in the Junior School and Faculty of Arts of the College. At the same meeting, the committee, having resolved on a former occasion not to have recourse this year to a public dinner, determined to set on foot a more private appeal for aid towards the year's expenses. Subscriptions towards that object of £200 from Mr. J. R. Jaffray and Mr. A. W. Jaffray, father and son, contributors of several like gifts on former occasions, and one of £25 from Mrs. Flanagan (an addition to several former similar gifts for investment), were ordered to be inserted in the list of donations.

Original Communications.

FIVE CASES OF OVARIOTOMY—THREE SUCCESSFUL; WITH PRACTICAL REMARKS.

By I. Baker Brown, Esq., F.R.C.S., Surgeon to the London Home for Surgical Diseases of Women.

[*Read before the Harveian Society of London.*]

[*Concluded from page 424.*]

Case IV. *Ovarian Dropsy, Multilocular; Extirpation; Death.* Madame D., aged 35, was admitted into The London Home. on February 19th, 1859. Dr. Grasemann, of Great Russell Street, at whose recommendation she applied to me, has kindly furnished the following history:—

"Madame D. had typhus fever about a year before her marriage, which took place fourteen years since. She has had four children; the last in 1853. During her last pregnancy, she suffered from prolapse of the womb; and after her confinement, was ill for long time with pain in the lower part of her abdomen. About four years ago, a tumour was diagnosed in the hypogastric region by M. Nélaton, of Paris, who is said to have mentioned the right side as its seat. Blisters were applied, and medicines given; and it is said to have disappeared under this treatment. Two years ago she came to England, and did not perceive any enlargement at that time. After six months, the abdomen began to enlarge again, and was again reduced by treatment. In another six months the enlargement began again, and she went over to Brussels, and was under the care of M. Raspail for four months, and afterwards under Messrs. Jolly and Charron. In August 1858, she was tapped for the first time (on this occasion, Mr. Jolly is said to have pronounced her liver to be diseased). The paracentesis was repeated in six weeks; and again on November 4th, December 10th, 1858, and January 18th, 1859. Menstruation was regular up to the last."

I saw her in the early part of February; and from the history of the case and a careful examination, I had no difficulty in pronouncing it to be multilocular ovarian tumour; and further, it was certainly a case in which no resource was left except extirpation. I stated very fully the great dangers of the operation; and, after consideration, she elected to undergo it. I ordered her a tonic, as her general health was a good deal reduced. When admitted into The Home, she was very rapidly filling again; and from the great sense of fluctuation, I had no doubt there was a good deal of peritoneal fluid in addition to the ovarian.

After due preparation by warm baths and gentle aperients and tonics, I proceeded to operate, on February 24th, at 2 P.M., assisted by my colleagues Messrs. Nunn and Philip Harper, as well as by the several visiting surgeons. Mr. Edwards administered chloroform. I made an incision about seven inches long between the umbilicus and pubes, and carefully cut down to the peritoneum, which I then punctured, and let out forty-five pints of fluid. The ovarian cyst now appeared: I then passed my hand around it, and found that there were only a few adhesions, but that these were very strong and thick—one especially, which passed up to the edge of the liver. I now punctured the cyst, and let out several pints of thick fluid. It was then easily drawn out of the abdomen. I tore through the smaller adhesions; but the one which passed to the liver and one of the others were so thick, and contained such large vessels, that I passed a twine ligature round them before dividing, and allowed them to return into the abdomen. The pedicle was then drawn out; and, Mr. Philip Harper's clamp being put on, it was fixed in an instant, without the possibility of slipping. I then sponged out the fluid which remained in the abdomen, and closed the opening with iron wire sutures, the pedicle being retained at the lower end of the incision. Wet lint and strips of plaister were put on, a broad flannel bandage was passed around the abdomen, and the patient was replaced in her bed.

3.30 P.M. The pulse was 100. Two grains of opium were given. Wine and ice were ordered.

10 P.M. The pulse was 120. She had a little sickness. One grain of opium was given.

February 26th. She slept a little in the night. She had a little brandy once. Sickness was troublesome.

3.30 P.M. Pulse 110. The tongue was slightly coated, but

moist. The skin was moist. She looked unfavourably, and had much sickness. She was ordered to take two grains and a half of calomel, and five grains of Dover's powder every four hours. Egg and brandy, beef-tea, and wine, were given.

February 27th, 3 A.M. She appeared rapidly sinking, and was pulseless. Vomiting was incessant. Brandy and beef-tea enemata were given, and opium suppositories were applied.

8 A.M. She had somewhat rallied. There was no pain, but a good deal of swelling of the abdomen. Egg and brandy were ordered to be given, as much as possible.

9 P.M. She was very low. There was no pain.

February 28th. She was lower; pulse 130. She was ordered to have ten minims of tincture of sesquichloride of iron every four hours, and in the evening three grains of quinine.

March 1st. She slept a little during the night, but slightly wandered, and was restless. She was very sick; the vomited matter was nearly pure bile. In the latter part of the day, she became very restless, and almost maniacal at night. Dr. Hall Davies saw her, and advised half a drachm of tincture of henbane and a drachm at midnight.

She gradually sank; and died at 4.45 A.M. on March 2nd, six days after operation.

Post Mortem Examination twelve hours after death. Pretty firm adhesions of the wound had taken place. The peritoneum was much inflamed; a good deal of lymph had been effused, and glued the intestines together. The ligatures which had been returned into the cavity were surrounded by solid effusion. The liver was very pale, and so soft in texture as to break down on the slightest pressure. The kidneys were enlarged, and congested. The heart and lungs were healthy. The uterus was very large and congested. Menstruation was taking place. The vessels in the pedicle were perfectly obliterated by the clamp, and an injection of water could not be forced through them.

Remarks. It is evident that this case was a most unfavourable one for operation; still there was nothing else left to be done; and, in my opinion, the cause of death was the diseased liver: and without any operation she would have probably died after an ordinary tapping.

Case v. *Ovarian Dropsy in both Ovaries: Multilocular: Extirpation: Cure.* I was called to Mrs. W., aged 45, mother of two children, by Mr. Philips, of Pentonville Road, who gave me the following history:—

"About five years ago, Mrs. W. got into ill health; she had a large annular induration over the ala nasi, of a deep brown colour, looking like the beginning of some form of lupus. After some gentle medicine and the occasional application of tincture of iodine, the patch disappeared; but before it had entirely gone a deep seated glandular swelling began to rise from the chest, behind the left clavicle. This swelling increased slowly upwards, and produced some dyspnœa by pressure upon the bronchus. It was osteo-sarcomatous in feel, triangular in shape, with its base in the chest, and apparently firmly attached to the adjacent structures. It disappeared rapidly after two or three weeks attention to the general health, and the frequent application of iodine. Soon after its disappearance, she became constantly sick and a good deal emaciated, and complained of excessive pain and pressure in the rectum on going to stool. On examining the rectum, the end of the finger just reached a hard nodulated substance, which seemed to be pressed backwards from the upper part of the vagina. The vaginal passage, however, was found to be perfectly free; but at its upper and posterior part, behind the uterus, the same hard nodulated mass could be distinctly felt, and it was exceedingly tender to the touch, both here and in the rectum. A variety of remedies were tried for the purpose of relieving the distressing sickness. The liver seemed to be most inactive; and the greatest amount of relief was, I think, obtained from the measures applied directly to the functions of this organ. After a short interval, I was again summoned to her, and found her much improved in general health, but the abdomen so swollen, as to press on the diaphragm and impede respiration. It was, I believe, thought that pregnancy had taken place; but the abdomen fluctuated distinctly and the catamenia were regular. I had no difficulty in arriving at a different conclusion. The fluid was evidently encysted, as the patient could lie down quite flat without any increase of dyspnœa. About four years ago I first tapped her, and withdrew a full house-pail full of straw-coloured fluid, loaded with albumen; apparently nothing but serum. After an interval of fourteen weeks, during which she greatly improved in health, I repeated the operation; and about the same quantity and quality of fluid came away. At intervals of three or four months she was tapped until about a year ago, since which not more than seven or eight weeks have elapsed between the operations. The character of the fluid changed into a brown coffee colour at the third or fourth operation, then again became pale; and the last seven or eight times has been pale and straw-coloured, as at first, and quite sticky with albumen. She has recovered quickly after each tapping, being generally out in a week or ten days each time. Latterly, since the abdomen has become more rapidly distended, there have been marked emaciation and loss of power; and she feels that she cannot go on much longer without some more permanent form of relief. The urine has never been albuminous; but has varied in quantity according to the state of distension of the abdomen."

I saw her on February 19th, 1859, and found the countenance pale and unhealthy, but cheerful and hopeful, and the abdomen rapidly refilling. From the above very succinct history, by Mr. Philips, and her present state, I had no difficulty in arriving at the conclusion that she was suffering from multilocular ovarian dropsy, and that no resource was left except extirpation. This proposition met with the hearty concurrence of the patient, who had already made up her mind to any operation, however full of danger, which might be proposed. I ordered gentle aperients and ten grains of citrate of quinine and iron three times a day, and a warm bath at night.

February 25th, 2 P.M. I proceeded to operate, assisted by Messrs. Nunn and Philip Harper; Messrs. Philips, Ramsbottom, Worthington, and others, being present. Mr. Edwards administered chloroform. I made an incision, about six inches in length, between the umbilicus and pubes, and carefully divided the structures down to the peritoneum, which was then opened and several pints of fluid were let out. A substance closely resembling a large cauliflower then presented itself, which further examination showed to be a growth attached to a large mass of cells of the right ovary. There were only a few moderate adhesions, which I tore through, and pulled the mass out through the wound. The pedicle was short; the clamp of a pair of calipers was passed around and tightly closed, and the mass of cyst was cut off. This being done, another tumour of the size of a child's head was visible in the left side of the abdomen. I found it to be a mass of cyst attached to the left ovary. One unexpected difficulty now presented itself. On endeavouring to pass my hand round the mass, to withdraw it, I found it so firmly adherent that I could not move it. Careful examination showed that this did not arise from ordinary adhesions; but it appeared as though the mass were entirely surrounded by a layer of pelvic fascia. With a good deal of trouble, I managed to insinuate my hand between the cyst-wall and thus succeeded in enucleating the mass, repeatedly upturning cysts, each containing fluid of different colours and density. In three places the union was so complete and intimate that I was obliged to use the écraseur to divide portions of the adhesions. I was thus enabled to withdraw the mass; and, having no second clamp, I passed a strong whipcord ligature around the pedicle, and bringing it close to the clamp already fastened on the right pedicle, I tied it to one of its blades. I now carefully sponged all the fluid out of the abdomen, and finding no hæmorrhage, I proceeded to close the wound with iron wire sutures, at intervals of half an inch, and retained the clamp, with both pedicles, at the lower extremity of the incision. Wet lint, with broad strips of adhesive plaster, were put on the incision; a broad flannel bandage was passed around the abdomen, and the patient was put into bed.

From this time she steadily progressed. The clamp was removed on the seventh day, and each day, one or more sutures. On the eleventh day the bowels were relieved by enemata, and on the fourteenth day she was removed to the sofa, and is now (March 16th) gradually gaining strength; the whole line of incision is healed, except at the point where the pedicles came out. She eats, drinks, and sleeps well; and her bowels act easily of their own accord.

Remarks. This is the first case I have met with where both ovaries were so diseased as to require extirpation; and when the patient's bad general health is considered, with the length of the disease, the character of the cysts, the double extirpation, extensive adhesions, etc., I think we may fairly say that this case is unique in ovariotomy. It will be seen that the écraseur was used to separate the adhesion. I believe it was the best mode of effecting the object. I need not say that no other mode of treatment was open to us. The repeated tappings only relieved temporarily, and death was hastening on very rapidly.

I shall not attempt to draw any comparisons with this and other great operations. We have no proper data to go upon at

present; but taking these five cases, we see three lives saved that would otherwise have been lost. The results of all the operations performed during the past fifteen months in London, shew rather more than one out of two successful; and I have no doubt that when the diagnosis of this disease is more perfect; when the operation is performed earlier; when all the steps of the operation are carefully done; when health is improved by diet and medicine before operation; and when the after treatment is thoroughly understood—then, and not till then, must we expect to be able to lay down any table of comparison. Let us, however, be encouraged by the experience of herniotomy, lithotomy, and lithotrity, and the more recent amputations of the thigh; and, observing how improved treatment has told upon their statistics, let us confidently anticipate that surgery will yet triumph in ovariotomy, and thus benefit humanity.

17, Connaught Square, Hyde Park, May 1859.

REMARKS ON DR. INMAN'S PAPER "ON THE INFLUENCE OE VITALITY UPON SECRETION".

By John Kent Spender, Esq., Surgeon to the Eastern Dispensary, Bath.

I have read with considerable interest Dr. Inman's paper in the Journal of April 30th, "On the Influence of Vitality upon Secretion". His observations embody much that has probably occurred to the thoughtful physiologist, though perhaps never before put into so intelligible and practical a form. But the question is at once suggested: Is not Dr. Inman confounding two essentially different processes—*active* and *passive* secretion? *Active* secretion is a sign and product of life, and is coincident with the activity of all the other organic processes. *Passive* secretion is almost entirely a physical act, and is independent of nerve-power: nay, it even goes on better when nerve-power is diminished or suspended. It scarcely deserves the name of a vital function at all; but I apprehend that it pretty accurately defines that phenomenon of which Dr. Inman has given so many appropriate illustrations.

In true secretion, we have three elements to bear in mind—the blood from which the secretion originally comes; the blood-vessel through which the secretion transudes; and the gland-structure which is the anatomical instrument for separating and eliminating it. Now, the most ultimate gland-structure always possesses the several constituents of mucous membrane; namely, areolar tissue, basement-membrane, and epithelial cells; and the special characters of the different secretions are usually said to depend upon the elective faculty with which these epithelial cells are endowed.

Active secretion being an index of present life and force, the epithelial cells are busy in the work; but the term passive secretion literally expresses the fact that the aqueous portion of the blood, and very little else, simply filters through the blood-vessels and gland-walls; and that vital agency has very little to do with it. For example, increased cutaneous perspiration is of two kinds—active, when it accompanies bodily exercise; passive, when it is the effect of exhausting diseases, and the prelude of death itself. In the former case, it is the symbol of augmented function; in the latter, it is merely that the diminished tone of the capillary walls allows the water of the blood to permeate them. Paralysis of the vasi-motor nerves, or any particular dyscrasia, produces the same result. I lately attended a case which illustrates this point. A child of seven years old had threatening mesenteric disease: her skin was cold and dry by day, and covered with profuse passive sweat at night. By alterative and tonic medicines, and a regulated diet, a constitutional improvement quickly ensued, and the passive sweat was stopped; and, in the course of a few weeks, the skin was constantly moistened with the warm dew of active perspiration.

A so-called diuretic drug may appear to exercise a marked effect in increasing the amount of urine; and, if the organic and inorganic principles of this secretion are increased in proportion to the aqueous constituent, it is a true instance of accelerated functional activity. But, in hysterical and nervous persons, who pass a large quantity of nearly colourless urine at a time, the haste with which the water filters through the Malpighian tufts leaves scarcely any time for it to be impregnated with the contents of the epithelial cells that line the uriniferous tubes, and which are the agents for imparting to the urine its special characters. The act is less a vital than a physical one, and cannot with precision be termed a secretory process at all.

Pathology supplies us with numerous facts illustrative of the same distinction. The primary stages of bronchorrhœa, gonorrhœa, and diarrhœa, have particular features in common; and the exudative products of these forms of local inflammation have analogous appearances and qualities; but, if these inflammations become chronic in duration or asthenic in degree, the hyperæmia in which they severally originated is unnaturally prolonged, and this local blood-stasis causes a corresponding change in the nature of the exudations.

It is an old doctrine, that secretion is only a form of molecular nutrition; the tissue nourished being the epithelial cells, and the nutriment supplied to them that which is ultimately destined to be the secretion itself. This being granted, we have a right to assume that the influence of innervation is as much required for the formation and growth of gland-cells as for the ultimate elements of every other animal tissue. Consequently, when nerve-force is lessened, gland-cells cannot form and grow so rapidly, and the secretional product must be diminished in an equal ratio. Hence, whenever we have an apparently augmented secretion as the accompaniment or result of weakened power, we ought to regard it, not as an exaltation of a physiological act, but rather as a retrogression into the domain of purely physical processes.

ON UNUNITED FRACTURE.

By W. J. Moore, Esq., H.M. Indian Medical Service, Bombay Establishment; formerly Senior Resident Surgeon at the Queen's Hospital, Birmingham.

Unless there be some constitutional cause, either already persistent, or the result of circumstances, as locality, situation, diet, etc., immediately after the accident, it will seldom happen that Nature's reparative process is insufficient to consolidate a fractured limb, treated with ordinary care both by attendant and patient. When such non-consolidation does happen, it must always be regarded as a grave and serious occurrence, and the more so the nearer the trunk it may be situated. Thus, both as regards the inconvenience to the patient, and the difficulty and dangers attending attempts at cure or relief, the bones of the forearm or leg will give more anxiety to the surgeon than those of the foot or hand; and, again, in their turn, the tibia, ulna, and radius, are less a cause for uneasiness than when the femur or humerus is the bone affected. This remark is not only true regarding operative attempts at cure, but applies with double force to those unfortunate cases where the state of the limb requires amputation as a *dernier ressort*.

The bones in which false joints most frequently occur are, according to the statistics collected by Mr. Norris, those of the thigh and arm (*American Journal of the Medical Sciences*, vol. xxix, 1842); but my own experience would lead me to infer that the occurrence took place at least as frequently in the bones of the forearm as in those of any other part of the frame. South (*Chelius*, p. 888) states that unnatural joints are most frequent in the upper arm; next, the femur would appear to be the one generally affected; and the tibia seems least liable to such result. This is, indeed, what one would, *à priori*, suppose to be the case, as it is evident that a broken leg can be kept in perfect apposition with greater ease and security than a broken thigh; and thus one source of unnatural joint does not act with the same frequency on the former part.

The causes of non-union of broken bones, and of unnatural and false joints, are numerous; but foremost may be mentioned a debilitated or cachectic condition of system. Sir Astley Cooper, in his work *On Fractures and Dislocations*, p. 568, observes: "In numerous instances, the failure of union may be traced to a defective state of the constitutional powers." This debility may arise from divers causes, such as bad food; habitual loss of blood, as from hæmorrhoids; residence in the impure localities or underground tenements of crowded cities. Malarious atmosphere will also produce a condition in which union is with difficulty obtained. This was exemplified in the case of a sailor under my care, when in medical charge of the naval station of Bassadore,* in the Persian Gulf, where the disposition to non-union was happily combated by a lengthened course of quinine and wine.

* For an account of Bassadore, see a paper by the author "On the Climate of the Persian Gulf", *Association Medical Journal*, November 1856.

The cachectic condition constituting scurvy, and the *allied* disease called beri-beri, has a manifest and powerful effect in retarding the consolidation of fracture. It may even cause absorption of a callus several months or years after its formation. This is mentioned by Erichsen (*Science and Art of Surgery*, p. 568), Dr. Guy (Hooper's *Practice of Physic*, p. 277), S. Cooper (*Surgical Dictionary*, p. 943), and other authors; while Armstrong, in his lately published work on *Naval Hygiene*, speaks of old wounds opening in such conditions. In Lord Anson's voyage round the world, when scurvy raged to such an extent that in one ship alone (the *Centurion*), in the latitude of the island of Juan Fernandez, forty-three men died during one month, and double that number during the next, it is stated that loosening of old fractured bones occurred in many instances (*Narrative of Lord Anson's Voyage Round the World*, pp. 33-142). One of these cases was that of a sailor, whose leg had been broken fifty years before, at the battle of the Boyne. An instance of the kind was witnessed on board the *Dreadnought*. The patient, while in China, broke one of his ribs, which united in the usual time. In the voyage home, he became scorbutic; the rib which had been broken became disunited; but, on the man's recovery from scurvy, it speedily united again (*Library of Medicine*, vol. v, p. 84).

In an American ship, to whose captain I paid a professional visit when on the Gulf station, in 1855, most of the crew were more or less affected with scurvy. Among them were two cases of non-union of fractured forearm, one of three months, the other of longer persistence. I was assured by one of the mates, who professed to be doctor also, that these fractures had been only placed in splints; that, in the one case, the arm grew firm; but, on the man becoming affected with scurvy, it ultimately became as I found it.

These debilitating causes may come into operation during the progress of cure, and will produce their result in the injured part; and, according to the anæmic state established, either a false joint properly so called, or a fibrous tissue possessing a low degree of vitality, will take the place of a healthy deposition of osseous material. It seems probable that, in very debilitated individuals, more or less of this fibrous tissue would always be the deposit; organisation not proceeding to the more complex condition of simulated synovial membrane, cartilage, and capsule. The simple condition of the bones being united by fibrous tissue also appears more susceptible of cure than when a false joint has been formed. This may easily be imagined, when it is considered that, in the one case, absorption to a considerable extent must occur; while, in the other, deposition is more required.

Undue movement during the stage of consolidation is supposed to be a frequent cause of non-union. Unless, however, there be a very considerable amount of interference with the quietude of the part, it seems improbable that this result would occur very frequently in a perfectly healthy constitution. The fractured clavicle, which can seldom be kept entirely motionless, unites; ossific deposit sometimes restores the broken acromion; and the rib, which is unavoidably in constant motion, unites, as Paget (*Surgical Pathology*, vol. i, p. 248) has shown, by the ensheathing or provisional callus—a mode of repair now known not to be so frequent in the bones of man as was formerly supposed. We may, therefore, conclude that, in the majority of instances (unless the limb has been moved about much more than is generally the case, at least in civil practice), non-union depends on some constitutional defect.

Pregnancy has been said to be a cause. I think, however, when non-union happens during this condition, it will be due to some of the causes inducing debility, or otherwise may be traced to want of care on the part of the patient or attendants. This was the opinion of Amesbury (*Practical Remarks on the Nature of Fracture*) and of S. Cooper (*Surgical Dictionary*, p. 943); but cases have been recorded of the occurrence. For instance, Alanson (*Med. Obser. and Inquiries*, vol. iv, No. 37) reports a case in which union was delayed during pregnancy, and took place after delivery; and Wardrop (*Med.-Chir. Trans.*, vol. v, p. 359) records another. Boyer (*Traité des Malad. Chirur.*, p. 32) and Malgaigne (*Treatise on Fractures*, p. 95) doubt if pregnancy be unfavourable to union. On the whole, the weight of evidence is against pregnancy being a cause *per se*; and the same may be said of suckling.

Advanced age does not appear to favour disunion, although it certainly is a cause of slow consolidation in occasional instances; but that it proves sufficient of itself to cause non-deposit of ossific matter, may well be doubted. Should, however, aged persons be placed in the same position, with regard to external circumstances, as the young and robust frequently are, it appears not unreasonable to suppose that we should have a larger amount of ununited fractures occurring in elderly persons than is at present the case; for to the feebleness of old age would more readily be added the debility consequent on vitiated and tainted atmospheres. On this head, South observes: "In almost every ununited or imperfectly united fracture I have seen, the patient has scarcely, if at all, exceeded middle age."

Muscular action is given by systematic writers as a cause of non-union; as, for instance, in fractured femur, when the psoas and iliacus muscle acts upon the upper fragment; or, according to Mr. Butcher (*Dublin Quarterly Journal of Medical Science*, Feb. 1853), the lower fragment is drawn upwards and outwards; or when the muscles of the leg separate the fractured ends of the tibia widely apart; or, as Mr. Crompton (*Medical Gazette*, Nov. 15th, 1850) observes, in any case where the seat of fracture is near the insertion of a powerful muscle. This, however, can rarely be allowed to become a cause of non-union in the hands of an educated surgeon, although some degree of deformity, in spite of the best endeavours, particularly in the femur, will sometimes result; but I can easily imagine the graver accident of false joint occurring from the treatment of bone-setters and other pretenders, who flourish on their misdeeds and the credulity of the public.

In intracapsular fracture of the neck of the femur, the globular head, being detached from its vascular supply, may necrose. Therefore, want of supply of arterial blood may undoubtedly be a cause of want of union. If one fragment is so situated that a sufficient supply of blood is not afforded to it, not only will it refuse to throw out bony granulations, but it may likewise necrose. Erichsen (*Science and Art of Surgery*, p. 194) mentions, out of thirteen cases of ununited fracture of the humerus, nine were found to be situated above the canal in which the nutritious artery is lodged; the course of the vessel being from above downwards.

Diseases affecting the system, as gout, syphilis, and cancer, may have an influence in retarding union; but perhaps, except in their extreme stages, cannot be looked upon as definite causes, otherwise than as producing cachectic conditions. Every surgeon must have seen persons affected with secondary syphilis get well from fractured limbs; and a fracture I once saw, in a confirmed cancerous subject, consolidated in little more than the usual time.

Acute diseases, as fever and erysipelas, will delay consolidation; and perhaps, from the frequent movement which such cases are of necessity subjected to from delirium, restlessness, etc., false joints may result.

Loss of nervous influence may be a cause of non-union. Thus, a case occurred of injury of the back, palsy of the lower extremities, and fracture of the leg and arm. The latter united, but the former did not.

Malgaigne mentions disease of the bone near the seat of fracture as an occasional cause. Another class of cases in which non-union occurs are those where a portion of the bone becomes detached, dies, and remains as a foreign body between the ends of the fracture. In compound fracture, this is not an uncommon occurrence; and, of course, union will not take place until the removal of the dead bone has been effected.

Muscle may also get between the ends of the bones; but this would most likely be thinned and removed by absorption, unless sufficiently injured and detached to lose its vitality.

Bullets, pieces of cloth, and other extraneous matter, sometimes effect a lodgment. These latter, however, would generally be detected at the time of injury, and, if possible, removed.

Sir A. Cooper believed that non-union might sometimes result from the too long application of cold, in the shape of lotions or otherwise. He thought that the inflammatory action necessary for the reparative process might be thus checked. Malgaigne, amongst what he calls "local causes", also mentions moist applications, togther with too early, too tight, too long bandaging, and premature use of the limb. Practically, however, under the judicious treatment employed by surgeons of the present day, these will seldom become causes: for instance, no person would think it necessary to continue the application of cold after the subsidence of pain and heat.

There is yet another peculiar state of system, which, although rarely occurring, will, I believe, in some instances, prevent true union taking place. I allude to mollities ossium, or malacosteon—a state which has been well described by Mr. Stanley as "an affection accompanied with softness of the bones and thinning of their walls, and with the accumulation

of adipose matter in their tubes and cells, with a preternatural excretion of phosphate of lime with the urine." (*Diseases of the Bones*, p. 237.)

A woman was under my care in 1851 for fracture of the tibia and fibula. The parts would not unite with any degree of firmness, and she afterwards became the subject of distorted pelvis and mollities ossium. Cases of this kind may be found in the *Institutes of Surgery* (vol. i, p. 370), and in Mr. Stanley's work on the bones.

It should, however, not be lost sight of, that the reverse has been known to occur. Mr. Toynbee, in *St. Thomas's Hospital Reports*, No. 1, states that, notwithstanding the unsoundness of the bones in this disease, union sometimes takes place not only at, but within, the customary period; and he gives the case of a man who had twenty-two fractures of long bones, all uniting without difficulty. Arnott (*Medical Gazette*, June 1833) and Bell (*Diseases of the Bones*, p. 71) also mention cases where union occurred in less than the usual time.

There are some localities in which fractured bones do not so readily unite; and, in illustration, may be mentioned the Persian Gulf, particularly the station of Bassadore, on the northern extremity of the poetically famed island of Kishna; some cantonments in northern India; and, as I have been informed, places on the African coast, and the southern States of America; the reason being probably the miasmatous state of the atmosphere.

Lastly, there are certain cases where non-union occurs, and for which we cannot assign any cause. The patient appears in good general health, neither affected with gout, scurvy, syphilis, or cancer; has not been exposed to malarious influences, or in any manner become debilitated, either previously to the accident or subsequently to that event. The fracture has been treated *secundum artem;* and yet a long period will pass before consolidation occurs, or the case will end in non-ossific union. Here we are obliged, as Fergusson justly observes, to refer it to "the usual resource of ignorance—a peculiarity of constitution". (*Practical Surgery*, Part i, p. 19.) Happily, such cases are small in number; but the amount occurring from several of the causes named is considerably larger, averaging, as I have reason to believe, one in about every three hundred and fifty fractures.

Although not of practical importance, still, as a matter of curiosity, it is worth noticing that by far the greater number of false joints occur in the male sex. Thus, out of one hundred and forty-seven cases mentioned by Mr. Norris, there were but four women; and the whole of the instances referred to by Malgaigne were men.

[*To be continued.*]

CASE OF EXTENSIVE MALIGNANT DISEASE OF THE ABDOMINAL VISCERA: OBSCURITY OF SYMPTOMS.

By William Davies, Esq., York Town, Bagshot.

Mr. J. R., hotel-keeper, aged 55, of fair sandy complexion, and somewhat inclined to corpulency, had always enjoyed pretty good health till the last year or two, with the exception of having now and then attacks of gout in the foot and biliary derangement, but for which affections he seldom put himself under medical treatment. He sent for me on the 27th of September last, in consequence of his having been suffering from pain in the lower and fore part and sides of the abdomen, recurring at indefinite intervals. He stated that he had not been well for some time; that he often felt sick and weary, nervous, and indifferent as to going about his business. His appetite was various and capricious. After eating, he felt distended, with occasional pains in the region of the stomach, flatulency, and heartburn; his bowels had not acted kindly, sometimes being constipated, at others relaxed. He complained a good deal in passing urine, which was usually loaded with an acid furfuraceous sediment. He was prescribed antacids and alteratives, which relieved him.

He shortly afterwards left home for a change, and I did not see him again till the beginning of December. At this time, he had evidently lost flesh, and his countenance was dull and sallow-looking, yet placid; but it gradually assumed that pinched and anxious expression, and that peculiar yellow hue, which are so characteristic of organic visceral disease. He now wasted fast. His chief complaint was of pain in the abdomen, below the navel, on each side, always present, but augmented in frequency to an extreme degree of severity. At length the epigastrium became tender, as well as painful, with a burning sensation in the stomach extending upwards towards the throat, followed by nausea and heartburn. These symptoms slowly increased and advanced, till everything taken into the stomach was rejected some little time afterwards. Vomiting took place at intervals (particularly in the evening), of matters having different appearances: sometimes a green watery fluid and mucus; at others, that peculiar acid brown fluid like coffee-grounds, often mixed with undigested food; and, two or three weeks before his death, almost entirely fæculent. He had frequent attacks of hiccough, which annoyed him considerably towards the last. The skin was sometimes hot, and usually dry, and imparted a roughish sensation to the touch; the tongue was always dry and clammy, and had a reddish fur in the centre; the bowels (as they almost always had been all along) were obstinately costive, and, towards the close of the disease, nothing could be elicited by evacuation or other means. The pulse varied from 70 to 100; it was small, thready, and feeble.

On April 16th, his memory began to fail; his reasoning powers sank rapidly; and, in the evening of Sunday, the 17th, he expired.

Many remedies were tried, which I do not particularise, as none of them gave him any sensible or continued relief.

Post Mortem Examination. The whole body was emaciated and attenuated to the utmost degree. The abdominal parietes being reflected, a considerable quantity of a thick glairy fluid escaped from the cavity. Scarcely any omentum was observed on the bowels; the convolutions of the bowels presented a dark gangrenous appearance, and were agglutinated together by firm adhesive peritoneal inflammation. The liver was pale, atrophied, and of a friable granular texture; its peritoneal surface was almost universally adherent to the surrounding viscera; and a small granular tumour was found on the external surface of the large lobe. The gall-bladder was small and empty. The stomach was somewhat oblique in position, and unusually small, capable of holding only about a pint or so of fluid. On laying it open, about half or three-quarters of a pint of a thin yellow feculent fluid escaped. The cardiac end presented a normal appearance; the mucous membrane was soft and vascular, more especially towards its pyloric end, where the organ was increased in thickness, and the mucous membrane corrugated, and of a darkish hue. On cutting open the pylorus, a roughish grating feeling was communicated to the scalpel. The peritoneal coat around it was entire, but involved in the general thickening. A section of the pylorus, contracted in size, exhibited the characters of true scirrhus, which encircled it, and extended somewhat down the duodenum, which was congested and dark coloured. The pancreas and mesentery were much increased in size; they were very hard, and had lobulated masses of a carcinomatous growth, and were inseparably united to the surrounding viscera. On tracing the intestines, much difficulty was experienced by their softened condition and the firm adhesions between their convolutions and the mesentery. Several strictures, of various size and extent, were found in the course of the small intestines, which were much distended above and below, and contained dry hardened masses of fæculent matter. The cæcum was smaller in calibre than usual. The caput coli was very considerably enlarged. Three strictures were observed; one in the ascending, and two in the descending portions of the colon. A stricture was also found, of a scirrhous character, encircling the rectum, about six inches from the anus. The spleen was healthy; as was also the right kidney. The left kidney was enlarged and soft, exhibiting fatty degeneration. The bladder was healthy, and contained about a pint of urine.

Remarks. This case is a very interesting one, from the general abdominal viscera being involved in disease, while the premonitory symptoms were extremely obscure, appearing at first to be simply those of ordinary dyspepsia, no attention having been paid to them by the patient, who, although impaired in health and strength, was able to get out and about tolerably well. When the symptoms became aggravated, he was anxious for further advice, and took the opinion of other medical men, two of whom are of some eminence in the profession, but each gave a different diagnosis. However, as the disease advanced and emaciation increased, accompanied by that peculiar sallow hue of complexion, a general restlessness, and anxious expression, with sickness recurring some time after taking food, as well as the nature of the egesta, no doubt could remain as to the existence of extensive malignant organic disease in the stomach and intestines. Very little could be done in a case of the kind, beyond administering palliatives and sedatives.

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By William Addison, M.D., F.R.S., Fellow of the College.

Lecture III.

XIV.—Continued Fever.

In the sixth volume of the *Transactions of the Medical and Physical Society of Calcutta*, there is a paper by Mr. Leslie, On the Diseases of Gowhattee, the capital of Lower Assam.

"The poorer inhabitants of the town," says Mr. Leslie, "are badly lodged, clothed, and fed. They sleep on a thin mat, spread upon the ground; their food is chiefly rice, and fever is often introduced by an intractable form of bowel complaint. The disease consists in inflammation and ulceration of the large intestines; and so insidious is it that in many cases emaciation has advanced to a great degree, and ulceration of the colic mucous membrane has taken place, before the patient applies for assistance. In such circumstances, he has no pain, or prominent or urgent complaint to make; scarcely allows he is ill, or has loose stools; he merely feels weak and wastes slowly. But, when fever comes on, the patient wastes rapidly, with thirst, loss of appetite, smooth red tongue, hot skin and frequent pulse. Œdema of the extremities appears, and the disease generally proceeds to a fatal termination amidst the most extreme degree of debility."

Mr. Leslie gives a tabular view of forty-seven fatal cases of the disease, with the appearances on dissection, from which it results that every variety of lesion of the mucous membrane of the colon was observed; from inflammation and purulent secretion, lining the membrane, to abrasion and ulceration, various in extent and depth, or even to mortification.

We contrast this form of fever observed by Mr. Leslie, with fever reported on by Dr. Craigie, which appeared in Edinburgh, in 1834 and 1835. One hundred and seventy-four cases were treated; and of these, in one hundred and twenty-six, or seventy-three per cent., the head was the principal part affected. Of twenty-four examinations, after death, brain affections were found in twenty-two. Speaking of these results, Dr. Craigie says, emphatically:—

"We have had several examples of fatal fever, with lesions of the mucous membrane of the stomach, and sometimes enlargement of the intestinal follicles; but we have almost none of *dothinenteritis*, which have been so commonly observed elsewhere. In the whole of the cases treated by myself, there was only one in which the follicles were so much diseased as to justify particular importance being attached to it, and in this case the ulcerations observed must have existed prior to the fever."

Dr. Robert Perry, from the year 1831 to 1835, made careful observations in upwards of four thousand cases of fever, in Glasgow. Three hundred necroscopic examinations were made; and he dwells particularly on the necessity of distinguishing true typhus from *dothinenteritis*, or typhoid fever.

"Contagious typhus," he says, "is an exanthematous fever, solely produced by the introduction into the system of a specific poison, generated in the human body. It runs a certain course, which may be modified, but cannot be stopped. It is most contagious when the patient is convalescent, the poison being spread abroad by the desquamation of the cuticle. *Dothinenteritis*, or enlargement of the mucous follicles of the smaller intestine, and enlargement and ulceration of the aggregated glands of the lower third of the ileum, is a disease *per se*; and, though it occurs in combination with contagious typhus, it is a different disease, of different origin. It begins with bowel complaint—sometimes so slight at first as scarcely to attract the patient's attention. Afterwards, fever arises. This disease," Dr. Perry goes on to say, "may exist in every degree of mildness or severity; it has no regular period of termination. The fever may run on for two, three, or four weeks, and terminate in gradual restoration to health without any sensible crisis; or the patient may sink under it from exhaustion, or by hæmorrhage from the bowels; or it may end by some of the ulcers of the aggregated glands of the lower third of the ileum penetrating the coats of the intestine."

It is well known, from various afflicting causes—unwholesomeness and insufficiency of food, cold, wet, fatigue, and exposure—that the British and French armies on the heights before Sebastopol suffered an extraordinary amount of sickness: the British army chiefly in the winter of 1854 and 1855; the French army principally in the winter of 1855 and 1856. The former, numbering twenty-three thousand soldiers on its muster roll, had upwards of twelve thousand at one time in hospital; the latter, in January, 1856, had thirteen thousand; in February, twenty-one thousand; and in March, eighteen thousand sick and wounded men, distributed in various hospitals, and in other places that could be hastily obtained for their accommodation and treatment. The chief diseases from which these men suffered were, frost-bites, scurvy, chronic dysentery, diarrhœa, and fevers.

"Contagious typhus, scurvy, dysentery, frost-bites, and hospital gangrene," says Dr. Bryce, speaking of the French hospitals on the Bosphorus, in the winter of 1855 and 1856, "abound; but the first-mentioned disease, by its virulence, extent, and type, is more deadly than all the others taken together." The very large development of scurvy, and the outbreak of contagious typhus, exhausted the sanitary means of the French at Constantinople; and Dr. Bryce noted with astonishment the crowding and filthiness of the patients, the foulness of the bed and body clothes, the unwholesome and ill-ventilated state of the wards, and the stenches arising from various sources. The picture drawn by this gentleman, from personal observation whilst rendering his valuable services to the sick, is one of the most painful and heartrending to be found in the medical records of camps and hospitals.

"I could have no difficulty," says the Doctor, "in pointing out the fallacy of confounding, under one denomination, *two fevers* essentially distinct in respect of symptoms, course, morbid lesions, and etiology. . . . In the contagious typhus, studied in the French hospitals, as elsewhere, there are present the characteristic maculæ and petechiæ, very distinguishable from the rose-coloured papulæ of typhoid fever. In the former there are absent the abdominal symptoms so prominent and almost pathognomonic of the latter. Equally absent are the anatomic lesions, which constitute the morbid state of typhoid fever, namely, morbid state of the intestinal follicles, mesenteric ganglions, and spleen. . . . The number of surgeons who have fallen as sacrifices to their duty is almost without parallel. Forty-six died from typhus alone; scarcely one escaped an attack. There was fear lest the sick should be left utterly without skilled help. Sisters of charity, clergymen, orderlies, and all whose duties compel them to pass several hours daily in the service of the wards, have been, with few exceptions, attacked. But worse even than this is the deplorable fact that patients, labouring under scurvy and bowel diseases, when their progress to recovery is established, are seized with contagious typhus.

The vast proportion of the patients, the soldiery, showed, by their attenuated limbs and sunken countenance, a by-gone period of privation of proper nutriment; and the resemblance, in external aspect, of these patients to those suffering from fever during the famine years in Ireland, was very striking. On the other hand, "I have seen," says Dr. Bryce, "in the orderlies, and in others attending upon the sick in previous good health, the sudden invasion of typhus, marked by rigors, intense heat, headache, and delirium; and oftentimes the termination was as rapid and unexpected as the onset. These circumstances are very different from the slowness and incertitude of the same nominal state in typhoid fever."

If we note the series or order of events as related by these several observers, it is, in Mr. Leslie's report, poor diet, hardships, bowel complaint, dysentery, emaciation, and lastly, fever. In Dr. Craigie's cases, it was first fever, headache, and then cerebral and pulmonary affection.

Dr. Perry expressly says that he had to treat two fevers; one beginning with bowel complaint, sometimes so slight at first as scarcely to attract the patient's attention; the other was the contagious typhus. In the hospitals at Constantinople, we have the testimony of Dr. Bryce to the same effect. He had no difficulty in pointing out the fallacy of treating, under one denomination, two fevers, distinct in their etiology; the one supervening on previous forms of ill health, on bygone periods of hardship and suffering; the other attacking the orderlies and attendants on the sick—persons in good health and comfortable circumstances until prostrated by fever. The facts place before us two fevers, the one, contagious typhus, striking

down the healthy; the other, typhoid fever; and the question, as regards the latter form of fever, is: Whether or not anatomical lesions, from which morbid matter may be absorbed into the blood, exist before the fever, as they do in hectic fever?

Now in the case of the sailors we have before mentioned, the men transacted the duties of the ship with ulcers on their legs. In many other instances, persons walk about with extensive ulcerations on the legs and elsewhere. Persons in consumption pursue their daily avocations with suppuration and ulceration in the lungs. In the cases of fever observed by Mr. Leslie, emaciation was apparent, and ulceration of the colic mucous membrane had taken place before the patient applied for assistance—before symptoms of fever appeared. The history of perforating ulcers of the stomach proves that, in many cases, persons do not complain of illness with ulceration of the mucous membrane of that organ. The anatomical lesion is not known to exist, little or no complaint being made until perforation of the coats of the stomach has occurred. In the case of fever, expressly noted by Dr. Craigie as associated with disease of the mucous membrane of the bowel, he says that the local disease existed before the fever.

In the armies before Sebastopol, thousands of men with scurvy, diarrhœa, and dysentery, faced and did their duty. In the overcrowded and poorest parts of cities and towns, where hardships must be endured, sickness abounds: scrofula, scurvy, diarrhœa, dysentery, typhoid fever, and typhus. Under such circumstances, numerous poor persons certainly continue their avocations, with bowel-complaint, diarrhœa, and chronic dysentery. The person may have no pain, or prominent, or urgent complaint to make, may scarcely allow that he is ill, or has loose stools; he merely feels weak and wastes slowly. Chronic ulcerations are preliminary conditions of hectic fever.

The inference is, that the anatomical lesions of diarrhœa and dysentery exist before; but are sometimes latent, until symptoms of fever appear. The fact cannot be demonstrated, neither can it be denied; and, in the absence of direct proof to the contrary, collateral circumstances are in favour of the inference. Could it be demonstrated, hectic and typhoid would be essentially the same kind of fever; both occasioned by debasement of the plasma, from absorption of morbid matter through places of chronic ulceration or anatomical lesion. The differences between them would arise from differences in the situation of the anatomical lesions, and from difference in the qualities of the matter absorbed.

If it should be inquired why ulceration of the mucous membrane of the bowel (the ileum, or colon)—anatomical lesions of diarrhœa and dysentery—occasion typhoid, when chronic ulcerations elsewhere in the body occasion hectic fever, we should reply: Because the special function of the part affected gives spectalty to the fever. The mucous membrane of the bowel is eminently an absorbing surface. Myriads of groups of cellular bodies naturally exist here, the contents of which are all normally tending inwards, towards the fluid of the blood, which is, indeed, their destination. And Peyer's patches in the small intestine are especially rich in absorbent vessels. Therefore morbid elements, from ulceration of these parts, are the more readily indraughted into the blood. Moreover, excretions of the alimentary canal are naturally offensive; these must mingle with the matter of the ulcerations; and, on that account, spoiled and offensive material, abnormally ebbing back into the circulation from places of ulceration or disease in the mucous membrane of the bowel, will more speedily and thoroughly debase the plasma than from ulcerations elsewhere in the body.

"Typhus fever," says Dr. William Fergusson, "may be called the endemic of the British Isles, and of the same parallels of latitude on the continent of Europe. But, besides the endemic, or aërial, origin of this fever, there appears to be another source of the typhoid poison; I mean that which arises in crowded hospitals, prisons, barracks, and other habitations. I acknowledge it to be unphilosophical and incongruous to imagine that two fevers, springing out of sources so distinct, should yet so entirely resemble each other that they have been treated, classed, and acknowledged for the same; nor can I afford any satisfactory explanation of this phenomenon. But the fact is certain that they do so arise; for in the contagious ulcer, or hospital gangrene, we possess a demonstrable, tangible, and visible proof of its existence. This ulcer is a local form—a visible personification, if I may use the term—of the typhoid poison. It never occurs but under the most distressful crowding of the sick and wounded, and it is then so highly contagious that all other ulcers, or even abrasions of the skin, are speedily involved in its destructive course. The contagion is capable of inducing typhous fever upon the sound, healthy, inmates; but in the wounded, where the poison finds a *nidus* and a vent, instead of affecting the constitution generally, it commits its ravages upon the wounded limb. So strong is the predisposition to that form of pyrexia, called typhoid, that it is prone to become an aggravation and superaddition to other forms of fever. All the remittent types and degrees, as well as the catarrhal and peripneumonic fevers are apt, when long continued or improperly treated, to glide into it."

Now not only is the typhoid pyrexia thus apt to become, as Dr. Fergusson says, an aggravation to other forms of fever; but also it is apt to appear in cases of large, surgical wounds, in other wounds, and in puerperal women, where there is lesion of the mucous membrane of the womb, and an offensive discharge. And, generally, of anatomical lesions with offensive discharges, the typhoid pyrexia is apt to become an aggravation.

From all the foregoing considerations, we set down the anatomical and casual distinctions between typhoid fever and typhus, as follows:—

TYPHOID FEVER.	TYPHUS.
Previous, and perhaps present, hardships and privations.	No previous hardships.
Chronic lesions of the mucous membrane of the bowel:	No chronic lesion of the mucous membrane of the bowel, or elsewhere.
Absorption of morbid matter from the anatomical lesions; and lastly—	No absorption of morbid matter to change the qualities of the fluid of the blood; but, first—
Fever, or disorder of the corpuscles of the blood, from debasement of the fluid in which they swim.	Fever, or disorder of the blood-corpuscles from an aërial poison introduced through the lungs; the corpuscles of the blood being the first elements of the body disordered.

The points of distinction, as they relate to our argument, being that:—In typhoid fever the blood-corpuscles are disordered in consequence of previous debasement of the fluid in which they swim;—whereas in typhus they are disordered by a poison acting directly on them in their passage through the lungs.

From the contrast above shewn, it is evident that the condition of the patient is more complicated in typhoid fever than in typhus; for in a given case of each fever, the consequences of the fever may be the same, or equal; but the previous anatomical lesions, which occasion typhoid fever, introduce a most material element as respects the history, treatment, and termination of that form of continued fever.

But it has been concluded that disease of the blood-corpuscles may generate a contagious virus. In the inoculated small-pox, in the case of the physician before related, and in other contagious fevers, the quantity of morbid matter introduced into the blood is exceedingly small; but the magnitude of the effect is very great. The reason we have assigned is because the morbid matter disorders by contagion, or by a contact-action, the whole of the corpuscles of the blood. There are no reasons for excluding, in any arbitrary manner, a similar contact-action amongst the blood-corpuscles from morbid matter introduced into the blood through anatomical lesions in the bowel; especially in cases where the matter absorbed may happen to be particularly offensive; therefore, a severe form of typhoid fever may introduce the virus or poison of typhus.

We say it may do so; because, although the history of hectic fever shows that it is not every form of reactionary fever that gives origin to a contagious virus, still, inasmuch as the generation of a contagious virus in the blood and symptoms of fever go together, so, on the other hand, we apprehend we are justified in saying that the graver forms of typhoid fever do, or may, issue in the production of a contagious matter; thereby, persons in health—attendants on the sick—are struck down with fever; a fever, be it observed—in the persons who may have been attacked by fever in this way—of very different beginnings from the fever of the person communicating it; occasioned, not through debasement of the fluid of the blood from preexisting anatomical lesions, but through a virus generated in the blood of the first patient, and attacking the second and healthy person through the lungs.

The history or seqnence of the sickness which abounds in times of hardship or famine, substantiates the argument; for the order usually is:—first, forms of inflammation without

fever, ulcerations, boils, and eruptions; then follow bowel-complaints, chronic dysentery, and diarrhœa; and, lastly, fevers—the typhoid and typhus. This sequence obtains, because hardships in diet disorder the bowels; and this disorder is comprised in the terms diarrhœa and dysentery. The anatomical lesions of chronic diarrhœa and dysentery occasion typhoid fever; and typhoid fever may beget the poison of typhus. Our own experience accords with the conclusion that the typhoid poison will sometimes beget fever in the healthy attendants on the sick.

Let us examine how far the facts observed in puerperal fever bear out the validity of our argument in this respect.

XV.—Puerperal Fever.

Gestation and parturition are physiological acts; but the condition of the puerperal woman, immediately after her delivery, is one of a *quasi* pathological character in the following respects:—

The blood abounds in plasma elements, and forms, on withdrawal by venesection, a buffed coat. The uterus, just relieved of its contents, may be likened to an injured organ proceeding to recovery. The condition of its blood-vessels is one favourable to the ebbing back of morbid matter into the circulation, and there are offensive discharges from the uterus. Cruveilhier has seized this analogy in its minutest details. Dr. Ferguson too, dwells upon it. "The puerperal woman," he says, "is in a condition analogous to that of a person who has undergone a serious surgical operation. All the uterine vessels from which the placenta has been detached, form part of a large wound, and are bathed in the secretions which take place while this wound is healing." Such being the conditions of the puerperal woman, her medical treatment has become a matter of routine for the first three days, lest a chill, an emotion, or an error in diet, should change reparative reactions into forms of inflammation. And the words of Mr. Hunter, which we quoted in our first lecture, are applicable here. "Granulations may all at once fade away and lose their life; and pus of a very different quality is discharged when granulations are fading away, than when a sore is granulating freely."

The analogy, or rather perfect similarity, between the condition of the womb in the puerperal woman, when, from a chill, an emotion, an error in diet, or any other accident, granulations have all at once lost their life, and the condition of the mucous membrane of the bowel in cases of chronic dysentery, as respects their both being sources of specially offensive matter, can scarcely be denied; and if it be not denied, then the same course of reasoning which has been employed in tracing the relation between ulceration of the mucous membrane of the bowel and typhoid fever, and between typhoid fever and typhus, is equally available in explanation of the relation of inflammation of the womb in the puerperal woman, to two forms of puerperal fever. That is to say:—In the puerperal woman the conditions upon which inflammation of the womb supervenes are favourable to a debasement of the plasma, because there are anatomical lesions, and because, from the state of the uterine vessels, morbid matter is specially liable to ebb back into the circulation; and should this absorption take place to a degree sufficient to disorder the corpuscles of the blood, symptoms of fever, from deuteropathy of the plasma, would arise; that is, fever, from the same kind of antecedents as hectic and typhoid fever. But it has been concluded that disorder of the blood-corpuscles may issue in the generation of a contagious poison; consequently, in a lying-in hospital, a puerperal woman, in an adjoining bed, or in an adjacent ward, may become affected with fever from the illness of the first patient;—a fever, be it observed, in this second case, of very different beginnings from the first; occasioned, not through anatomical lesions and debasement of the plasma; but by a poison generated in the body of the first patient; affecting the second woman from the air and through the lungs.

On referring to the literature of puerperal fever, it is seen that physicians have been divided in their views concerning the pathology of that disease; some holding the opinion that puerperal fever is an idiopathic fever; others regarding it as a local inflammation, taking the form of peritonitis, metritis, or uterine phlebitis. These two views, there seems to us no necessity for placing in antagonism. In all cases of puerperal fever there are forms of inflammation and fever; but, if there be truth in our doctrine of fever, it is of the utmost importance in any given case of puerperal fever, to determine whether inflammation has, or has not, preceded, and been a cause of fever. If it has, the fever is a reactionary, or plasma fever, *i.e.*, fever from debasement of the plasma, and anatomical lesions precede the fever; if it has not, the fever is a primary or aërial fever, and independent of any inflammation or anatomical lesion, except what may follow from it.

Upon the subject discussed in this section, it has been suggested that we have offered no proof of the existence of *granulations* in the interior of the puerperal womb. But, as we have said in the first lecture, granulations are simple cellular growths; their shape and colour are not essential to their definition; and certainly "the large wound from which the placenta has been detached" can heal only through the intervention of new cellular growths, which may, from unsuitable conditions, "all at once lose their life and fade away;" and should they do so, then reparative reactions are changed to forms of inflammation—a granulating wound is "all at once" changed into an ulcerative one.

[*To be continued.*]

Transactions of Branches.

BATH AND BRISTOL BRANCH.

NYCTALOPIA.

By Augustin Prichard, Esq., Surgeon, Bristol.

[*Read April 21st*, 1859.]

There are two sets of symptoms, representing two very different conditions of the powers of vision, which are expressed in English by the terms *night-blindness* and *day-blindness;* and two technical words derived from the Greek, viz., nyctalopia and hemeralopia, have been used to designate them.

There is the very great advantage in the use of Latin and Greek technical words, that they are the same in all languages, and, whether we refer to a French or German, or any other work, we find them there; but, in this particular instance, and in the use of these two, great confusion has occurred.

It is, of course, important that all such doubt should be removed; and it is inconvenient not to know the meaning assigned by the author you are reading to the particular word he uses; and I bring the subject before the Society more with the hope that, by a definite and reasonable expression of opinion, something may be done towards setting this question at rest, than with any expectation of saying much that is new on the subject of the diseases themselves; neither do I claim originality in what I have to say respecting the derivation of the words; but it is probable that they have been used hitherto thus promiscuously, and, as I think, incorrectly, because many writers have not considered it necessary to enter into the subject of the origin of terms.

By almost all ophthalmic writers, *night-blindness* has been called *hemeralopia.* Mr. Mackenzie and one or two others have renognised the difficulty, and the former avoids it by using only the English words; and Dr. Little calls night blindness nyctalopia. With these few exceptions, also, day-blindness is called by most writers nyctalopia; and the terms thus used are supposed to be derived in the following way; viz., *hemeralopia*, from ἡμέρα, *a day*, and ὤψ, *an eye*, or a sight by day; and *nyctalopia*, from νὺξ, *night*, and ὤψ, or a sight by night. But this explanation is anything but satisfactory, even without considering the syllable *al*, which occurs in both words, and which, by this method of interpretation, is unaccounted for; for we can hardly imagine diseases of the eye named from such symptoms as that the patient could see by daylight, or that he could see by night; for these are no causes of complaint: it is rather that the patient is blind by day, or blind by night; and the real derivation bears out this statement.

There is a Greek word, ἀλάομαι, *I wander or grope about;* and another derived from it, and compounded with ὤψ, namely, ἀλάωψ, or ἀλαῶπις, which means *blind.* Nyctalopia is, therefore, night-blindness, derived from νὺξ and ἀλαῶπις, being the disease in which patients can see by day, but are blind by night; and hemeralopia is day-blindness, from ἡμέρα and ἀλαῶπις, being the disease in which patients can see by night, but are blind by day.

Of these two diseases, nyctalopia, or night-blindness, is most marked in its symptoms; and, although better known in brighter climates than our own, we not unfrequently meet with cases of it, occurring here and there, without any connexion with one another.

Nyctalopia does not mean that the patient is absolutely blind at night, but that, although he sees as well as usual by day, and there is no peculiarity in the appearance of the eyes, he cannot see to find his way about at night, and artificial light is of little or no aid to him.

That the disease is not one of the rare cases of periodic amaurosis, is proved by the fact that, whenever the patient is taken into a dark room or corner, he cannot see: in other words, to enable him to see correctly, he requires the objects to be illuminated by a large amount of daylight.

The pathology of the disorder is very obscure. I have had three cases lately under treatment, and have two or three every year; but I have not yet examined them with the ophthalmoscope, nor have I been able to make any satisfactory experiments. Two were children, who, besides the regular symptoms of the disease, were presbyopic for a time, requiring in the day, for reading, a lens like that worn by old people; and, as far as the sight alone is concerned, to require more light upon an object is nearly as much a sign of increasing years as to require artificial aid in adjusting the focus of the eye.

Again, in the disease called "asthenopia", or "weak sight" (where patients see to read well for a minute or two, but the sight becomes *presently* confused), young persons are frequently presbyopic, and require glasses for perfect sight; but their eyes are only temporarily old, and, by suitable treatment, they are made young again; that is, they regain the power of keeping the eyes adjusted to objects at different distances.

The day before yesterday, I saw a strumous boy, who was brought to me on account of defective sight; and it proved to be asthenopia, of a fortnight's standing, with no apparent cause besides weakness of his general health. He could see well with a thirty-six-inch convex pair of spectacles; but he could not see to make out letters or marks in a darkened room, when I could read them readily.

In two of the cases which I have lately seen, the symptoms followed sore-throat; one being a case of diphtheritis, and another ordinary tonsillitis; and I think that many of these cases, and indeed other general diseases, have lately been followed by unusually obstinate debility.

The most interesting accounts of nyctalopia have been given by surgeons who have had opportunities of noticing it in hot climates. In the West Indies, it has been known to attack simultaneously nearly half a ship's crew, so that, after dusk, they had to be led about. In Strasburg, there was an outbreak of it a year or two ago among the soldiers; and, in these instances, it was traced to prolonged exposure of the eyes to too bright a light. The retina being thus rendered for a time less sensitive, the patients are nyctalopic. An attempt has been made to connect the condition with the colour of the eyes, or the amount of pigment in them; but this has not been successful.

The physician who reports the case of the Strasburg soldiers, says that, by sending the patients into a dark room for two or three hours in the middle of the day, and making them try to see in the dark, they can readily be cured. The cases reported from the West Indies also got well after two or three months.

I have prescribed the dark room on one or two occasions, but have not had any report as to its efficacy, or otherwise. Counterirritants, tonics, and stimulants, appear to me to be the best plan of treatment; and it is an encouragement to know that the cases generally do well.

I feel that I ought to apologise to the meeting for bringing forward so imperfect a paper about a disease upon whose puzzling nature I can throw so little light. Its name has been doubtful, and its nature doubtful. Fortunately for our patients, its diagnosis is easy, and its treatment satisfactory; and I do not despair at all of our finding out its pathological history. It does not appear likely that the ophthalmoscope will lend us much aid; but so many wonderful facts connected with light and optics have lately been found out, among others, by that very numerous body, the photographers—as, for example, the power of isolating the chemical and luminous rays of light, and of shutting up the former ray for months in a dark chamber, and employing its photographic powers afterwards, and the course of rays through lenses of various simple and complex structures—that we shall most likely find an explanation of these three curious abnormal conditions, which arise so often from the same causes, and occur so frequently together, that they are undoubtedly connected with one another, and which, when they exist separately, affect respectively the optical, the mechanical, and the sensitive parts of the eye; I mean presbyopia, asthenopia, and nyctalopia.

Discussion. Mr. Stockwell gave the history of a case of asthenopia arising from extensive eczematous eruption of the head and neck. The child could read for one or two minutes, and would then say that she could see nothing. This loss of vision continued for a time, and then it was slowly regained. By treatment adapted to the constitutional state of the patient, the eruption was cured, and the eyesight quite restored.

Mr. Norman had for years known an individual who had habitually very large pupils, so that the whole eye seemed occupied by it. The pupil, however, contracted by light. At night, or towards the dark, this lady could not see at all, but was obliged to be led about. The explanation probably was, that the pupil, being ordinarily dilated to a great exent, when the light decreased the pupil could not enlarge; and therefore, from some peculiar state of the retina, sufficient impression was not made on it.

Mr. George had a patient, one of whose pupils was enormously dilated, the other natural. In the dilated eye, the sight was weak; in the other, it was perfect.

Mr. Boult remarked that, in hot countries, the opinion was very common that night-blindness arose from sleeping in the moonlight. Though the explanation might be difficult, there could be no doubt that sleeping, in hot climates, in the open moonlight, was decidedly injurious; as well as exposure to the direct rays of the sun.

Dr. Tunstall gave the particulars of a gentleman who, having had an attack of apoplexy, continued to suffer from double vision, though there was no visible difference in the axis of the eyes, and the vision of each eye was perfect. The patient, in every other respect, is quite well.

Mr. Bartrum narrated a case where the eye had been protruded, and the most marked squinting caused, by effusion of blood among the muscles of the eyeball, inducing double vision. As the blood was absorbed, the squinting disappeared, and double images were no longer formed.

Dr. Davey illustrated this abnormal vision, dependent on some irregular muscular action, by pressure on the eyeball.

Mr. Prichard remarked, that the axis of vision in both eyes was, or ought to be, quite alike. If either diverged from this, it is strabismus, which might arise from deficient muscular action or pressure on the nerves either in the brain or at the exit of the nerves from the orbit. By careful observation, one might trace almost certainly which muscle is the one affected. By fixing the head, and causing the patient to look at an object, it would be noticed that, in one direction, the two images converged; on the other side, they diverged. At the present day, we were daily acquiring fresh information upon subjects of this kind, and the stereoscopic images, and the new discoveries of photography, enable us to test the patients amount of binocular vision as well as the degree of sight possessed by each eye.

ON THE TREATMENT OF STRICTURE OF THE URETHRA.

By George Norman, Esq., F.R.C.S., Consulting Surgeon to the Bath United Hospital.

[*Read April 21st*, 1859.]

The frequency and the importance, in surgical practice, of the diseases of the male urethra and bladder induce me to believe that a few observations on long continued and severe stricture of the urethra may not be unacceptable to the Association, or unprofitable in the discussion.

The perinæal section, as it has been of late called, and not unfrequently employed for the relief of the worst forms of stricture, gives rise to the consideration what are the circumstances under which it should be resorted to.

Mr. Syme, the present most prominent advocate of the measure, has laid down a rule, that the section of the perinæum should not be made unless an instrument having a groove in its convex surface can be introduced into the bladder, which, no doubt, greatly facilitates the operation, by having the groove to cut into. With deference to the great abilities and the position of Mr. Syme, my own experience would bring me to the conclusion that, when an instrument, be it ever so small, can be passed into the bladder, it is perfectly possible to cure very severe stricture by careful perseverance in the use, and by the gradual increase of the size, of the instrument; and by thus rendering the passage of the urine through the urethra more and more easy, the tendency to inflammation is subdued, and the indurated parts in and about the urethra become gradually absorbed; and I have found that, even where fistulous openings have existed in the perinæum, they have closed, and become

entirely obliterated, without any other treatment than the restoration of the urethra to its normal size.

I know that there are very good surgeons who are of opinion that very bad stricture is never entirely cured, but that, after a time, the parts relapse into their former morbid state; but I must think that the cause is either the omission of the surgeon strongly to enforce the necessity of occasionally, and indeed tolerably frequently, passing an instrument to preserve the advantage gained, or, as Mr. Cline used to call it, to keep up the right of way; or the neglect of the patient in not observing the directions so essential to his future comfort. It appears to me, then, that the cases in which the perinæal section is required are those in which no instrument can be passed into the bladder, and in which, under retention of urine, puncturing the bladder would be required.

It occurred to me, certainly more than thirty years ago (for it was at the Casualty Hospital, before the United Hospital was built) to have a case of retention of urine in a man who had for years suffered from severe stricture, and had often been in peril from retention. I could not then pass a catheter through any portion of the stricture; and, instead of puncturing the bladder, I cut on the point of the catheter in the perinæum anterior to the stricture, and continued the incision through the whole indurated mass; and, taking the centre of the arch of the pubes, under which the membranous part of the urethra passes, for my guide, I passed the catheter (which was still in the urethra) into the bladder, and retained it there; so that all the urine passed through it. I kept a catheter constantly in the bladder till the wound in the perinæum was entirely healed; I then passed a catheter once a day, afterwards every second day, and occasionally after the man left the hospital. The result was, that he passed his urine perfectly well, and lived some years without any further difficulty.

Not long afterwards, I had a similar case, which I treated in the same way, and with the same success. I have since had recourse to the same plan in cases of retention, but not always with the same success; for it frequently happens that cases of retention, requiring the puncture of the bladder, do not come into a hospital until there is little hope of relief, the urethra having given way, forming a tumour in the perinæum, or the urine become extravasated into the surrounding cellular membrane. In such cases, the perinæum has been freely divided; and, if they have lived, a catheter has been afterwards passed and retained in the bladder until the wound has healed. I believe retaining the catheter in the bladder during the whole time of the cure to be a most material point in all cases where the perinæal section has been made; for it facilitates the formation of a new urethra, which, if it do not become lined by a perfect mucous membrane, becomes a secreting surface, which prevents the irritating effects of the urine from keeping up inflammation, and thereby reproducing induration and stricture. I have known one case in which Mr. Syme performed the perinæal section, and kept the catheter in for one or two days only, and afterwards passed it from time to time; and in that case there was recurrence of the disease. I do not know if that be his present plan; but I feel convinced that keeping the catheter in the bladder until the wound in the perinæum is healed is essential to the obtaining perfect success.

I consider that cases requiring puncture of the bladder for retention would be better treated by the perinæal section where the retention is occasioned by long continued, indurated, and impassable stricture, than by puncturing the bladder; and, indeed, that many cases occur where it is advisable to perform the perinæal section, though there may not be entire retention of urine—where the strictured and indurated state of the urethra does not admit of the ordinary remedy. Gentlemen will, I am sure, understand that I do not include in the cases of retention, as requiring the section of the perinæum, those cases arising from less permanent obstruction, in which, if the bladder be emptied and the inflammatory symptoms allowed to subside, the obstruction may be removed by the use of bougies; there puncturing the bladder through the rectum gives the required relief speedily and safely, and affords time for employing the means for a permanent cure.

Another and very frequent cause of retention of urine is enlarged prostate. It does not, however, often happen that the puncture of the bladder is required, as in most cases the gum elastic catheter, without a stillette, and of an extra length, will, with care and perseverance, find its way through the enlarged and misshapened prostate; and, if not, the skill of the surgeon will enable him to pass a silver catheter. If neither can be attained, puncturing the bladder through the rectum is the best way to give immediate relief; and, after the inflammation of the prostate has subsided, the gum elastic catheter can readily be passed, and, after a time, the patient himself is enabled to pass it. I have known several persons who have for years used a gum elastic catheter, as the only mode of emptying the bladder.

I will conclude this paper by relating a case of prostatic disease in which I have had recourse to a different plan.

An elderly man, who had for a considerable time experienced difficulty in emptying his bladder, from disease of the prostate, was twice admitted into the United Hospital for retention of urine; and, as on neither occasion could an instrument be passed, the bladder was punctured through the rectum. The third time, he was admitted under my care. I could not pass a catheter; and as the bladder, then fully distended, occupied a space considerably above the pubes, I punctured it above the symphysis; and, after the escape of the urine, I passed a gum elastic catheter through the canula, and, withdrawing the latter, I secured the catheter in the bladder; and all the urine passed through it. After some time, the wound healed around the catheter, and the adjacent parts became consolidated; so that it was certain that the bladder had become permanently fixed above the pubes. I then withdrew the catheter; and, keeping a small piece of bougie as a plug in the opening, the man drew off his water with a female catheter as often as required. It soon became evident that there was no occasion to keep in the plug, as the opening was permanent, and no urine escaped excepting when the catheter was passed; nor did a drop of urine ever pass through the urethra. I had an opportunity of knowing that he lived two or three years after, without suffering any inconvenience.

The result of this case may suggest the question whether, in cases of diseased prostate, where the difficulty in passing a catheter is such that the patient is unable to accomplish it himself, and is unable to procure the constant attendance of a surgeon,—it may not be advisable to allow the bladder to be distended so as to project above the pubes, or to procure the same by injecting the bladder; and then to puncture above the pubis, with the intent of preserving a permanent opening, as in this case.

I ought, gentlemen, to apologise for occupying so much of your time in relating bygone events; but, as so much of the time and of the skill of surgeons is necessarily occupied with diseases of the bladder and the male urethra, I have not hesitated to bring the subject before you.

Discussion. Mr. Stockwell detailed a case of obstruction at the neck of the bladder. A patient, aged about 60, came under treatment in October last, for stricture. Ten years before, he had suffered in the same way, but was after a short time relieved. Since that period, he continued free from complaint until June last, when symptoms of stricture reappeared, and advanced until the time of his application for relief. He then was unable to pass more than a few drops of urine at a time, after great straining. The bladder was distended quite as high as the umbilicus, and no catheter had been able to be passed. On making pressure on the stricture, a few drops of urine escaped; but it was not until the next day that Mr. Stockwell was able to introduce a small gum elastic catheter through the stricture, and draw off a large quantity of healthy urine. The next day, there had been no desire to pass urine; so the catheter was again introduced; and this was obliged to be continued daily until No. 10 catheter could be easily passed. During this time, there was a good deal of inflammation of the mucous lining of the bladder, which by the early part of November had subsided; and the patient was instructed to pass a catheter twice in the twenty-four hours. Up to the present time, the patient had been obliged to continue this: the bladder had contracted so much that any attempt to retain urine more than twelve hours caused great suffering; but he was totally unable to void a single drop by ordinary efforts, or assisting them by pressure on the hypogastric region. On examination, there did not appear to be any lateral enlargement of the prostate; and a short catheter (No. 9) could be most readily passed; so that it was unlikely that an enlargement of the third lobe was the cause of the retention. It seemed to Mr. Stockwell that this was one of those cases which were described by the late Mr. Guthrie as bar at the neck of the bladder; the cause of retention being a fold of mucous membrane forming a valvular covering to the opening of the meatus, and in this case completely occluding the orifice, but offering no resistance to a catheter passed down the urethra. The cause of this might probably be found in the attack of inflammation which occurred during the treatment of the case;

or perhaps from the mucous membrane, by the long continued over-distension of the bladder, being thrown into membranous folds by its subsequent contraction.

Mr. George gave some particulars of two cases of neglected stricture, followed by habitual distension of the bladder and nocturnal incontinence of urine. The first of these occurred in a man of sixty, who, after a prolonged drinking bout, was seized with retention of urine, which continued for thirty hours. The retention never returned; but from that time the patient was troubled, while awake, with a frequent need to make water; and, during sleep, the urine escaped involuntarily. This state of things had lasted seven months before the case came under the observation of Mr. George, who desired the patient to pass urine in his presence, which he did to the extent of half a pint; but, on the subsequent introduction of a catheter, three pints more of alkaline urine were drawn off. No urine was voided for fourteen hours after the emptying of the bladder; and when the catheter was used, at the expiration of twenty-eight hours from its first introduction, only two pints were drawn off. On the third day, the quantity was reduced to a pint; and, by the end of a fortnight, the bladder had regained its full power of expulsion, though the urethra was not freed from contraction until many weeks had elapsed. The involuntary escape of urine during sleep never recurred after the first time that the contents of the bladder were completely evacuated. The second case occurred in a man of eighty-one, of vigorous constitution, who had long suffered from neglected stricture. In this instance, there had been no attack of retention; but the patient, whose habits of life were very temperate, was tormented by incessant desires to void his urine, and its involuntary escape during sleep. On introducing a catheter immediately after micturition, two pints of most offensive ammoniacal urine were drawn off, containing a large proportion of ropy muco-purulent deposit, owing to the length of time that the strictures had been unattended to, and the advanced age of the indivldual, the bladder had never regained its contractile power; but, the urethra having been for the last six years restored to a nearly healthy condition, the patient was now able to introduce a catheter every night before going to bed, and so free himself not only from incontinence during sleep, but also from any inclination to pass urine for the next sixteen hours. In both these instances, there existed great mental disturbance, which disappeared as soon as the urine had acquired a more healthy character.

Mr. Godfrey felt that the Society was much indebted to Mr. Norman for thus giving the results of his experience. He thought the golden rule, that "whenever any instrument, however small, could be passed through the urethra, others of sufficient size, by care and perseverance, could be used with success," was a maxim that held good as well now as in former days. The real difficulty was the maintaining a canal of sufficient diameter; and, drawing a wide distinction between the ordinary operation of opening the perinæum with the membranous portion of the urethra, for the immediate relief of retention of urine, and the well conceived operation of the perinæal section, by Mr. Syme, for the renewal of the canal, he considered that the result of either operation, *after a time*, equally required the care of the surgeon and the attention of the patient to maintain a fair diameter in the urethra. One point in the treatment of stricture, that he considered valuable, was the use of catheters, instead of sounds or bougies, where practicable, as thereby the bladder was well emptied, and a frequent source of irritation lessened. This applied to all cases, but more especially to those in which enlargement of the prostate coexisted, and the bladder, for this reason, was never well emptied.

Mr. Prichard remarked, that Mr. Syme's operation was the division of a stricture from without by a clean cut upon a grooved instrument already passed through the canal; and that Mr. Syme objected to any confusion between his operation and the operation of cutting into the urethra *beyond* the stricture to relieve retention. The latter proceeding Mr. Prichard had been called upon several times to adopt; and he considered it one of the most difficult operations in surgery.

Mr. Norman, in reply, stated his opinion that, where the stricture was of long standing, and characterised by extensive hardness and firmness, and no instrument could be passed into the bladder, passing a trocar into the bladder through the rectum was the appropriate treatment for such cases. The stricture and parts were hereby relieved; and it often happened that, in a few days or hours, a catheter could be coaxed through the stricture.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, JUNE 4th, 1859.

THE NEW WARRANT FOR REGULATING THE RANK AND PAY OF THE MEDICAL OFFICERS OF THE NAVY.

In recording events relating to the welfare of the medical profession, or of any of its individual members, the degree of satisfaction which accompanies the performance of the task must necessarily vary—even when that task is unexceptionably one of pleasure. And we do not remember to have ever had a more gratifying duty to perform, than that which devolves on us this day, of announcing the issue of a Royal Warrant for regulating the rank and pay of the naval medical officers. A new and bright era, in fact, has opened in the history of the medical department of Her Majesty's Navy; and years of patient endurance and earnest remonstrance have been rewarded by the concession of privileges and emoluments, which will render the junior members of the profession as eager, as they have hitherto been reluctant, to enter and remain in the service.

In order that an idea may be formed of the extent of the improvements effected, we will compare some of the principal regulations of the new warrant with those which were previously in force.

First, with regard to relative rank, there has been a general advance. The assistant-surgeon, for instance, ranks on entering, as hitherto, with a lieutenant in the army. He may, at the end of five years service on full pay, be promoted to the rank of surgeon, when he would at once stand at the level of a major; but, should he (which is very likely) not be so fortunate, he is in a measure consoled after six years service by being ranked with a captain in the army, and with a lieutenant in the navy. The surgeon of twenty years standing, with the designation of staff-surgeon, receives promotion from the relative army rank of captain to that of junior lieutenant-colonel; and an inspector-general of hospitals and fleets, on receiving his promotion to that grade, will henceforth find himself placed on the level which has hitherto been occupied by the Director-General of the Medical Department of the Navy. In order that the changes in relative rank may be at once understood, we have tabulated them from the warrant, and from the *Navy List* for April 1859.

Relative Rank of Medical Officers of the Navy.

	Relative Rank in Army.	
	Former.	*Present.*
Assistant-Surgeon . . .	Lieutenant . .	Lieutenant
Do. after 6 years service .	Lieutenant . .	Captain
Surgeon	Captain . . .	Major
Staff-Surgeon	Captain . . .	Lieut.-Col., jun.
Deputy-Inspector . . .	Major	Lieut.-Colonel
Do. after 5 years service .	Major	Colonel
Inspector	Lieut.-Colonel .	Brigadier-Gen.
Do. after 3 years service	Lieut.-Colonel .	Major-General

	Relative Rank in Navy.	
	Former.	*Present.*
Assistant-Surgeon . . .	Mate	Mate
Do. after 6 years service .	Mate	Lieutenant
Surgeon	Lieutenant . .	Commander
Staff Surgeon	Lieutenant . .	Capt., und. 3 yrs.
Deputy-Inspector . . .	Commander . .	Capt., und. 3 yrs.
Do. after 5 years service .	Commander . .	Captain
Inspector	Capt., und. 3 yrs. .	Commodore
Do. after 3 years service .	Capt., und. 3 yrs. .	Rear-Admiral

With the advancement in rank, there is an increase of pay. For the encouragement of any of our younger professional brethren who may be inclined to enter the navy, we have to inform them that their full pay, on entering as assistant-surgeon, will be only one penny a day less than has been hitherto allotted to officers of the same rank after ten years service,* and under the responsible condition of performing duty at the time in a ship unprovided with a full surgeon. The pay of an assistant-surgeon, under the regulations hitherto in force, varied, according to length of service, from 8s. 1d. to 10s. 1d. *per diem;* the extremes are now 10s. and 13s. A full surgeon (including staff-surgeon) has been entitled to a daily pay varying from 11s to 19s.: he will now commence on promotion with 15s., and after twenty-five years service on full pay, will be entitled, as staff-surgeon, to £1 : 5 *per diem.* A deputy-inspector has, previously to the warrant, received £1 a day; he will now have from £1 : 8 to £1 : 14: and the daily pay of an inspector is raised from the *minimum* of £1 : 11 : 6 and the *maximum* of £2 : 2, to the corresponding extremes of £2 and £2 : 5.

The half-pay has undergone a corresponding augmentation. For the sake of contrast, we will merely give the half-pay of an assistant-surgeon under the past and the present systems.

	Former.		*Present.*	
	s.	*d.*	*s.*	*d.*
Under three years service - -	2	0	6	0
Above three do. do. - -	3	0	6	0
Under five do. do. - -	3	0	6	0
Above five do. do. - -	3	0	8	0
Above ten do. do. - -	4	6	10	0
Above twenty do. do. - -	5	0	10	0

In the foregoing respects and in all others, with the addition of a clause regarding prize-money, the provisions of the naval medical warrant are closely identical with those which were issued last year for regulating the rank and emoluments of the medical officers of the army. There are, indeed, merely such differences as unavoidably arise out of the constitution of the two services; but Sir John Pakington and his colleagues have certainly succeeded beyond our expectation in reducing these to a *minimum*, so as to place the medical service of the navy as nearly as possible on an equal footing with that of the army.

The only parts of the warrant which may seem to some at variance with its liberal spirit, are the clauses which restrict the honour and authority of the medical officer. Such restriction is, however, merely necessary for the preservation of discipline. Due care is taken that proper respect shall be paid to the medical officer; but special marks of honour are reserved for those who are the representatives of a royal service. Thus, for instance, the commander of a ship is rightly and of necessity held to be "superior in rank and precedence to every officer under his command."

* Where terms of service are mentioned, allusion is made to the entire service on full pay from the time of entering the navy as assistant-surgeon.

The new warrant, we have said, constitutes an era in the history of the naval medical department. Little more than half a century ago, the medical service of the British navy, if it may be said to have existed at all, was in a miserable state. During the fifty-four years which have elapsed since Lord Melville rescued the department from impending destruction, and gave it a standing ground, a few improvements have been made at long intervals: but while the other ranks of the naval service, as well as the medical staff of the army, have in general received that treatment which is alone calculated to ensure efficiency, the medical officers of Her Majesty's navy—especially the junior—have been systematically snubbed. And this has been, not from any want of remonstrance on their part, or of earnest pleading on their behalf on the part of the profession and of some honest and honourable members of the legislature; but from a dogged obstinacy on the part of Admiralty Lords, and a most insensate idea, that the discipline of the service would be endangered by extending the privileges of those on whose skill and care its efficiency in a high degree depends.

Now, however, the aspect is happily changed. The student who is reflecting how he shall employ himself after undergoing the ordeal of examination, will no longer look on the naval medical service as a last and desperate resource, honourable only in its abstract associations, and to be "cut" at the earliest opportunity. On the contrary, whether he enter the army or the navy, he will have the position and treatment of a gentleman and a member of a learned profession. There can be no doubt that the beneficial effect of the new warrant will be soon felt; and that we shall ere long cease to hear that Her Majesty's ships are occasionally unprovided with their proper complement of efficient medical officers. It has already been told us, indeed, that several recent recipients of diplomas have declared their intention of abandoning their previously formed schemes of civil practice for commissions in one of the public services. We can now honestly approve their intention, and advise industrious students in general to follow their example.

It would be wrong to conclude these remarks without a word of congratulation and of acknowledgment. Our hearty congratulations are offered to the medical officers of the navy; and not less to those, whether professional or lay, who have so long and earnestly striven to bring about the changes which the last year has witnessed. To the latter, also, sincere thanks are due; and especially to Drs. McWilliam and F. J. Brown in the profession, and to Colonel Boldero in past Parliaments, for the persistent zeal with which, under the greatest difficulties, they have advocated a righteous cause. And by no means must the part taken by Sir John Pakington, as First Lord of the Admiralty, and Sir John Liddell, as Director-General of the Medical Department of the Navy, be forgotten. To their honesty and independent sense of justice is due that happy consummation of years of patient waiting and toil which we have the happiness of recording to-day. For many years to come, the Naval Medical Warrant of 1859 will recal their names to the grateful remembrance of a profession, the value of which they have recognised, and the just claims of which they have honourably respected.

THE WEEK.

On Monday, the ever charitable Miss Burdett Coutts laid the foundation stone of the new Cancer Hospital at Brompton, adding another to the number of special hospitals already existing in London, and which, in due time, will hold out its hand in the *Times* advertisement sheet for the subscriptions of the benevolent. When one sees the long list of urgent appeals made through the columns of the press for aid in filling the beds of long established hospitals, we are at a loss to understand the policy which brings fresh almsmen into the field; and we think this remark applies with especial force to the Cancer Hospital just rising on the Brompton Road. If we are asked whether there is any necessity for such a hospital, we must reply in the negative. There is nothing in cancer which renders it necessary that a special hospital should be devoted to it. It cannot be pretended that the promoters of the institution have any special ability in the treatment of this disease. Can any one say that the existing Cancer Hospital, which is the parent of the one rising from the ground, has added one fact to our knowledge of this terrible scourge? We think not. Besides, where, we ask, is the necessity for a new hospital, when so many wards of the old hospitals are now empty? There are special wards in the Middlesex for this very class of cases, which are never full. We confess we look with the greatest distrust upon the multiplication of special hospitals, inasmuch as their tendency, as we think, is to destroy our appreciation of the unity of disease, and to throw great obstacles in the way of the medical student's acquiring a thorough knowledge of his profession. If, following in the wake of the old Egyptians, we make specialities of all the great leading diseases, and locate them in widely scattered buildings, how are our students ever to become conversant with their profession? Are they to spend all their time and money in riding in Hansom cabs from cancer hospitals to orthopædic, fistulic, ophthalmic, fever, or skin-disease institutions? In the large foreign hospitals, they never dream of thus dislocating the different forms of disease. Instead of special hospitals, they have special wards. Thus under one roof the student sees, without loss of time, every form of disease to which humanity is subject. We cannot, therefore, help repeating, that an immense injury is done to the profession by the needless multiplication of small special hospitals; and we cannot but hold those benevolent persons who aid in establishing them as responsible for bringing about a state of things which, we feel convinced, must be detrimental to our science, and to humanity itself.

The frightful tragedy which has just occurred at Ballinamore, Ireland, forms a singular commentary on the loudly reiterated assertion that the liberty of the subject is too easily violated in cases of alleged insanity. We are told that the asylums of England are full of persons who never ought to have been confined, and that the law must be so amended as to give greater freedom to such persons. From time to time we have brought under the notice of our readers the frightful crimes which have been perpetrated by maniacs allowed to be at large in obedience to the public voice, and now we have to record a fresh case—that of Mr. Ffrench, who has just taken the life of his agent, Mr. Burke, and further heightened the catastrophe by committing suicide. We are told that he has been insane for two years; and that, about a year and a half ago, he attempted the life of a policeman. The disease, it would appear, is hereditary, inasmuch as his grandfather, the late Lord Ffrench, committed suicide. The blood of the unhappy Mr. Burke is clearly upon the heads of those persons who, having lawful authority over Mr. Ffrench, allowed him to bide his time, and to embrue his hands a second time in human blood.

The following advertisement appeared last week in a cotemporary.

"WANTED immediately, by a Chemist at the East End, a Visiting and Dispensing ASSISTANT, possessing the M.R.C.S. Age from twenty to thirty. Salary, £50 per annum, including board and lodging. Address, A. Z., care of Messrs. Edwards, 67, St. Paul's Churchyard."

It is an old joke against Warren, the blacking-maker, that he kept a poet. A. Z., it is clear, is about to keep a member of the College. It may be asked what use A. Z. can have for such an expensive luxury? We have no doubt this aspiring druggist has a good counter-practice, which he intends to turn into back parlour consultations, his tame M.R.C.S. officiating. We recommend this ingenious method of evading the law to the attention of the London Medical Registration Association.

Association Intelligence.

EAST YORK AND NORTH LINCOLN BRANCH: ANNUAL MEETING.

The third Annual Meeting of this Branch was held at the Hull Infirmary, on Thursday, May 26th, at 2 P.M.; Thomas Sandwith, M.D., of Beverley, President, in the Chair. There were also present: J. P. Bell, M.D. (Hull); C. L. Brereton, Esq. (Beverley); Sir H. Cooper, M.D. (Hull); R. M. Craven, Esq. (Hull); O. Daly, M.D. (Hull); John Dix, Esq. (Hull); H. George, Esq. (North Thoresby); John Hill, Esq. (South Cave); J. F. Holden, Esq. (Hull); T. Jackson, Esq. (Welton); K. King, M.D. (Hull); J. A. Locking, Esq. (Hull); W. J. Lunn, M.D. (Hull); and John Morley, Esq. (Barton); and, as visitors, R. Atkinson, Esq. (Hull); and C. Kevern, Esq. (H.M.S. *Cornwallis*).

NEW MEMBERS OF THE BRANCH.

Messrs. C. L. Brereton (Beverley), F. Calvert (Beverley), and H. Gibson (Hull), were admitted members of the Branch.

MEETING IN 1860: ELECTION OF OFFICERS.

It was decided that the next annual meeting be held at Beverley. The election of officers terminated as follows:—*President:* W. H. Eddie, Esq. (Barton). *Representative in the General Council:* Sir H. Cooper, M.D. (Hull). *Secretary:* J. A. Locking, Esq. (Hull). *Committee:* J. P. Bell, M.D.; R. M. Craven, Esq.; O. Daly, M.D.; J. Dix, Esq.; R. Hardy, Esq.; and K. King, M.D.—all of Hull.

PRESIDENT'S ADDRESS.

The President read an address on Medical Antiquarianism, which will be published in the Journal.

PAPERS AND COMMUNICATIONS.

The following communications were made:—

1. Excision of the Knee-Joint as a Substitute for Amputation. By K. King, M.D.

2. Case of Harelip, in which a New Mode of Operation was employed. By John Dix, Esq.

The members and friends afterwards dined together at the Kingston Hotel.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

Philip H. Williams, M.D., *General Secretary.*

Worcester, April 26th, 1859.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-third Annual Meeting of this Branch will be held on Wednesday, June 8th, at the Town Hall, Chester, at Twelve o'clock at noon, under the presidency of E. Waters, M.D.

The members and their friends will dine together after the meeting, at the Albion Hotel.

Gentlemen who intend to bring forward cases or communications are requested to send notice to the Secretary as early as possible.

A. T. H. Waters,
Honorary Secretary.

Liverpool, May 11th, 1859.

MIDLAND BRANCH.

The Annual Meeting of this Branch will be held at Derby, at the Board Room of the Infirmary, on Thursday, June 23rd, at Two o'clock. The annual dinner will take place at the Royal Hotel at Five o'clock.

Henry Goode, M.B., *Honorary Secretary.*

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Lancashire and Cheshire. [Annual Meeting.]	Town Hall, Chester.	Wednesday, June 8th, 12 noon.
Birmingham and Midland Counties. [Annual Meeting.]	Hen and Chickens Hotel, Birmingham.	Friday, June 10th, 3½ P.M.
Midland. [Annual Meeting.]	Board Room, Infirmary, Derby.	Thurs., June 23rd, 2 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

Monday, May 2nd, 1859.

B. G. Babington, M.D., F.R.S., President, in the Chair.

ON THE SUCCESSIVE EPIDEMICS OF YELLOW FEVER AMONG THE GARRISONS, ETC., IN BERMUDA DURING THE LAST FORTY YEARS.

BY GAVIN MILROY, M.D., F.R.C.P.

The Bermuda islands are in lat. 32° N., and therefore nearly on the same parallel as Madeira to the east, and Charlestown, in South Carolina, to the west. They are about six hundred miles distant from the American coast. Four or five only of the group are inhabited; the rest, upwards of two hundred in number, are bare rocks. Besides the garrison, which of late years has usually been from 1,200 to 1,400, there is a large convict establishment, numbering about 1,800 persons. There is also an extensive dockyard and naval hospital on one of the islands. The general population, half of whom is black or coloured, amounts to between 10,000 or 11,000.

The prevailing diseases among the troops are bowel complaints; and then fevers and diseases of the respiratory organs, which are nearly equal as to frequency. The average sickness-rate has been such that every soldier may be said to be in hospital once in eight or nine months. The usual death-rate in the course of the year has been between three and four per cent. of the strength of the garrison. Most of the deaths are from fevers and diseases of the chest; and then bowel complaints are next in fatality.

The type of the ordinary fevers is very generally synochal or synochoid. Periodical fevers are rare. But besides the usual endemic fevers met with in all years, the Bermudas are subject to occasional visitations of yellow fever, which have been often most destructive. As the medical returns of the army do not go further back than 1817, the first epidemic of which there is any notice is that of 1819. It appeared among the troops at the beginning of August; and in six weeks from the beginning of that month to the end of September, a fourth of the entire garrison perished! As one in every second or third case proved fatal, nearly two-thirds of the troops were attacked. Unfortunately, no particulars are given of the circumstances which preceded or accompanied the outbreak; nor are we told anything respecting the results of the pestilence among either the naval establishment, the convicts, or the general population. On that occasion, as on all other like occasions, some persons supposed that the disease had been imported by a vessel from the West Indies (and 1819 was a notoriously sickly year there), but without adducing any evidence whatever.

The next epidemic visitation mentioned in the Army Medical Returns is that of 1843. It appears, however, that "early in October 1837, when H.M.S. *Pearl*, direct from England, arrived in Bermuda, the island (Ireland island, where the dockyard is situated) was in a very unhealthy state; and, as the ship's company were allowed to go on shore, a considerable number of cases of (what was believed to be) yellow fever occurred among them." The disease was regarded as of indigenous development; and no mention is made of suspected importation by vessels, although it is certain that Jamaica, Cuba, and other West India islands, had suffered from it in the course of the year.

Respecting the epidemic of 1843, the information in the Army and Navy Medical Returns is very meagre and unsatisfactory. Dr. Milroy had been told by Dr. King, who was then the principal medical officer of the navy on the station, that the outbreak of the fever had been preceded by the prevalence of unusually severe bowel complaints, many of the diarrhœa cases being of a well-marked choleraic character, and by a few cases of malignant and rapidly fatal cholera. The earliest cases of yellow fever occurred, about the end of July, in St. George's island, where the first cases had also appeared in 1819. It was again in August and September that the pestilence committed its great ravages,—the two months, it is worthy of remark, that the ordinary endemic fevers are usually most severe and fatal. A *seventh* part of the whole garrison was swept away in the course of a few weeks. The type of this endemic appears to have been less malignant than that of 1819, as the deaths were in the proportion of only one in every five or six cases. The medical chiefs of both services were decidedly of opinion that the pestilence sprang up spontaneously in the islands; and Sir William Reid, so well known to science by his works on *Storms*, who was then Governor, has recorded his opinion, that it could not be traced to importation.

Respecting the two last epidemics, those of 1853 and of 1856, we are fortunately possessed of much more exact and ample information, in consequence of the Colonial Ministers having, on both occasions, ordered a special investigation by commissioners on the spot, and of their reports having been printed by order of Parliament. Both documents contain much valuable instruction, and especially upon those very points which stood most in need of elucidation, viz., the origin or development of the disease, its progress, with the causes which favoured its spreading, and the best means of investigating its invasions in the future.

In 1853, the appearance of the epidemic was preceded by an unusual prevalence of aggravated bowel diseases, and by some fatal cases of cholera, as in 1843. The fever appeared first among the convicts, and proved very destructive; out of 1778, 161 perished. But the ravages among the garrison were much greater; for out of 1517, no fewer than 365 died, and this in the course of six or seven weeks! The chief cause of this excessive mortality was *proved* to be the unwholesome state of the barracks. The details will be found in the official report. In the epidemic of 1856, the garrison suffered very little, although the convicts again experienced a heavy loss, and the

disease proved fatal to the inhabitants in some of the islands. The preservation of the troops was greatly owing to removing them from the barracks at, or rather before, the commencement of the epidemic, and camping them on healthy ground, and frequently changing the site of the camps.

The history of the successive outbreaks in Bermuda accords, in many respects, with that of the repeated invasions of the disease in the early part of the present century among the garrison of Gibraltar. In both places it always begins about autumn, between July and October; and its manifestation was on no occasion traced to importation by sick or infected persons, although the arrival of foul and diseased vessels was very often believed to be connected with it; and the great importance of anticipative hygienic precautions in a threatened locality, and of early camping out troops in the sickly months, was strikingly shown.

Dr. McWilliam observed, that although in neither of the epidemics of 1853 and 1856 was the importation of the disease clearly traced to any of the inculpated vessels, and that the case against those vessels must stand therefore as "not proven;" yet the history of both of those outbreaks furnishes facts which ought not to be hastily dismissed. For instance, of the witnesses examined in the epidemy of 1853, by the Commissioners of Inquiry, thirty-eight were in favour of, and four against the doctrine of communication. The cause of the disease at Bermuda appeared to furnish several instances of contagious propagation; and the number of persons attacked by fever at the Naval Hospital (which in point of situation and sanitary condition is unexceptionable) was remarkable. His friend Dr. Hilditch, Inspector-General of the Naval Hospital, who is a non-contagionist, in his evidence before the Commissioners, had stated, that "eight out of ten persons employed in the wards of the hospital were attacked, and two died. All the naval officers were attacked; the steward of the hospital contracted the disease and died; his mother-in-law and brother-in-law, living in the same house with him, were attacked and both also died." The Commissioners, "without undertaking to affirm that yellow fever could not be imported, were not satisfied that on the occasion in question it was so introduced," and considered that "the point was still involved in much obscurity." Towards the conclusion of their Report they observe: —"Considering the great preponderance of the opinion as to the communicability of yellow fever, of the type which prevailed here last year, and the certainty that small-pox and other eruptive fevers are contagious, and can be imported into this colony, the Commissioners are convinced that more stringent and effective quarantine regulations than those which now exist would be conducive to the public welfare." The Commission appointed to inquire into the epidemy of 1856 reported that the disease originated at Bermuda. The Attorney-General, one of the Commissioners, judging from his previous experience of yellow fever at Bermuda during several visitations, and considering it an established fact that the outbreaks of epidemic yellow fever there had been usually, if not invariably, preceded by the arrival at Bermuda of some ship with yellow fever on board, qualified in some degree, on his own part, the opinion expressed in the Report. The Governor and Commander-in-chief also recorded the fact "that on no occasion has yellow fever appeared in Bermuda without having been immediately preceded by the arrival of ships infected with that disease". There was a variety of opinion among the medical men examined; and Dr. Rees, deputy-inspector of the naval hospital, who is strongly opposed to the view of contagion, gave evidence to the following effect: "That, out of sixty-two general patients (*i. e.*, other patients than yellow fever patients) admitted between August 1st and December 13th, fifteen sickened of yellow fever, and four died; and, this proportion being too large to be ascribed to the epidemic constitution, and seeing that the sanitary condition of the hospital was unexceptionable, I can only infer that the emanations from the sick must have served either to contaminate the atmosphere within the hospital, or to give to the disease itself superadded infectious properties to a limited extent." Latterly, Dr. Rees removed all the general patients out of the hospital into an empty house in the neighbourhood; and it is worthy of observation, at least, that none of these were attacked. Dr. McWilliam considered that Dr. Rees' facts looked more like evidence, both positive and negative, in favour of contagious propagation, than anything else.

After some remarks from Dr. Greenhow, Dr. Logan, Dr. Babington, Mr. Radcliffe, and Dr. J. Bird, the meeting adjourned at ten o'clock.

Editor's Letter Box.

MEDICAL SOCIETIES AND OUR BRANCHES.

Letter from W. A. Greenhill, M.D.

Sir,—I am very glad to see that, in your leading article today, you have given your readers some observations on the connexion that might spring up between the British Medical Association and the numerous medical societies that are in existence throughout the kingdom. The subject is one of great importance; and it will be indeed a most happy circumstance for the Association if any means can be devised for bringing about the union which you so earnestly recommend. In order to illustrate more fully the practical working of your proposition, I will mention the case of three societies which have been flourishing for some years within the district allotted to the South-Eastern Branch, and each of which seems to possess one very important element of perpetuity in the shape of a good permanent library. Let us see how these three societies stand with respect to the British Medical Association.

In July 1858, the Association had sixty-nine members in the county of Sussex. At the same time (or rather, during the preceding year), the number of the members of the Brighton and Sussex Medico-Chirurgical Society was, exclusive of honorary members, sixty-five, of whom only twenty-two, or about 34 per cent., appeared to have belonged to the Association. In the case of the East Sussex Medico-Chirurgical Society, the Association had only six members out of thirty-seven, or about 16 per cent. In Kent, the number of the members of the Association was eighty-five; and the members of the East Kent and Canterbury Medical Society were twenty-four, of which number only five, or about 21 per cent., were members of the Association also.

Probably this is nearly the same state of things that exists elsewhere; and it is manifest how much the influence and importance of the Association would be increased if a large proportion of the members of these societies could be persuaded to join it. But how to induce them to do so will, I fear, be found a difficulty. It is hardly likely that many persons in the provinces will pay a *second* guinea every year for the sake of belonging to the Association; neither is it probable that many of the town members of these societies will transfer their subscription to the Association in preference to them.

I wish that you had suggested a remedy for this difficulty, or that you would do so; for it seems to me that, at present, the medical societies stand so much in the way of the Association, that it will be worth while to get them to join it almost on their own terms. Till any better mode is devised of doing this, I would suggest that those members of these societies who do not want to receive the British Medical Journal should be allowed to join the Association at a considerably reduced rate of subscription. To gentlemen in the country, or where no circulation of the medical periodicals takes place, the Journal is of course a valuable boon; but in Hastings, for instance, where each member has the advantage of seeing all the chief medical periodicals, which are afterwards carefully preserved, it would be unnecessary to send eighteen or twenty copies of the Journal, when a single copy of the other periodicals is found sufficient for the requirements of our Society.

I need not enter into any further details at present, and I am quite aware of various objections that can be brought against the plan which I have ventured to propose. As, however, I am convinced that the prosperity of the Association would be greatly promoted by effecting some such union as you have pointed out, I have taken the liberty of offering these remarks, in the hope that a thorough ventilation of the subject may tend to bring about so desirable an object.

I am, etc., W. A. Greenhill.

Hastings, May 28th, 1859.

TREATMENT OF CEREBRAL DISEASE IN A CHILD.

Letter from W. F. Cleveland, Esq.

Sir,—In the last number of the Journal, under the "Illustrations of Hospital Practice", there is an interesting case of cerebral disease by Dr. Jenner, in which no mention is made of the treatment that was adopted. As the child was much benefited by her stay in the hospital, it is desirable to know if any, and what remedies, were used. I am, etc.,

W. F. Cleveland.

23, Beaufoy Terrace, Maida Vale, May 30th, 1859.

IS THE LONDON COLLEGE OF PHYSICIANS APPLYING FOR A NEW CHARTER?

Sir,—Is the London College of Physicians applying, or about to apply, for a new charter? By the 47th section of the Medical Act, fellows or licentiates of the Edinburgh or Dublin Colleges may, on payment of a fee of £2, obtain the diploma of the London College under any new charter which it may receive. As I find that four fellows of the Edinburgh College —Drs. Chadwick, Cormack, Priestley, and Winslow—were last week elected by ballot licentiates of the London College, the inference is that no new charter is in contemplation. These gentlemen have voluntarily submitted to the ordeal of a ballot, and the payment of a considerable fee, to obtain a title which by the Medical Act they could claim as a right for the small sum of two pounds, whenever the London College gets its new charter. I am, etc., Argus.

London, June 1st, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Blagdon. On May 25th, at Stroud, Gloucestershire, the wife of Richard Blagdon, Esq., Surgeon, of a daughter.

Flemming. On May 22nd, at Freshford, near Bath, the wife of *T. H. Flemming, M.D., of a daughter.

Marshall. On May 29th, at 10, Savile Row, the wife of John Marshall, Esq., Surgeon, of a son.

MARRIAGES.

Croft—Croft. Croft, Thomas, M.D., of Bracknell, Berks, to Eliza, second daughter of George Thirmbeck Croft, Esq., of Slough, on May 24th.

Kennedy—Hayes. Kennedy, William, Esq., Surgeon, of Dublin, to Grace Marian, eldest daughter of the Hon. Mr. Justice Hayes, of Dublin, on May 24th.

Sympson—Peacock. *Sympson, Thomas, Esq., Surgeon to the General Hospital, Lincoln, to Caroline, third daughter of the late Rev. Edward Peacock, vicar of Fifehead Magdalene, Wilts, at Road Hill, Wilts, on May 24th.

Wilkinson—Dickson. Wilkinson, the Rev. Joseph, rector of Christchurch, to Wilhelmina Catharine Tracey, youngest daughter of the late Sir David J. H. Dickson, M.D., at Hougham, near Dover, on May 31st.

Wilson—Partridge. Wilson, Frederick W., M.B., of East Grinstead, Sussex, to Ellen, youngest daughter of the late James Partridge, Esq., of Northmolton, Devon, at Exeter, on May 26th.

DEATHS.

Mutter, Thomas D., M.D., Emeritus Professor of Surgery in the Jefferson Medical College of Philadelphia, aged 59, on March 16th.

Tierney, John Francis, Esq., Bengal Medical Service, at Berhampoor, on April 9th.

APPOINTMENTS.

*Clapton, Edward, M.D., elected Physician to the Surrey Dispensary.

Whitley, George, M.D., elected Physician to the Surrey Dispensary.

PASS LISTS.

Royal College of Physicians. The following gentlemen were elected Licentiates of the College, on May 18th:—

Hake, Thomas Gordon, M.D., Spring Gardens
Hooper, John, M.D., Hoddesdon, Herts
Mitchelson, George Frederick, M.D., Bayswater
Parsons, Samuel, M.D., Clarges Street
Porter, John Henry, M.D., Cheltenham
Powell, Robert H., M.D., Wyndham Place, Bryanstone Square
Sherlock, James, M.D., Worcestershire County and City Asylum, Powick
Stillwell, James G., M.D., Moorcroft, Hillingdon, Middlesex
Stookes, Alexander Richard, M.D., Liverpool
Sutton, John Maule, M.D., Tenby, Pembrokeshire
Waters, John, M.D., Bedford Square
Whitehead, James, M.D., Manchester

Also, on May 23rd:—

Banks, John Tatum, M.D., Crawley, Sussex
Chadwick, Charles, M.D., F.R.C.P.E., Leeds
Cooper, Thomas Henry, M.D., Slough, Bucks
Cormack, John Rose, M.D., F.R.C.P.E., Ampthill Square
Down, John Langdon Haydon, M.D., Earlswood, Redhill
Drake, Augustus, M.B. and L.M., Exeter
Evanson, Richard Tonson, M.D., Torquay
Foreman, Robert Clifton, M.D., Brighton
Gee, Robert, M.D., Liverpool
Gooch, William Henry, M.D., Dawlish, South Devon
Greenwood, Henry, M.D., Blackheath
Guy, Thomas, M.D., Rochester
Harley, George, M.D., Harley Street
Inman, Thomas, M.D., Liverpool
Kennion, George, M.D., Harrogate
King, Henry Stavely, M.D., Lower Grosvenor Street
Kingsley, George Henry, M.D., Bridgewater House
Loney, William, M.D., H.M.S. *Arrogant*
Lucas, T. Prestwood, M.D., Brecon, South Wales
Nootт, William Francis, M.D., Alverstoke
Norton, Robert, M.D., Bayswater
Ogden, James, M.D., Manchester
Peirson, Thomas Tranmar, M.D., Bridlington Quay, Yorkshire
Pickering, John, M.D., Royal Military College, Sandhurst
Plomley, Francis, Ext. L.R.C.P., Maidstone
Priestley, William O., M.D., F.R.C.P.E., Somerset Street, Portman Square
Purdie, Robert, M.D., Blackheath
Ramsay, W. Fred. Hutcheson, M.D., Somerset Street, Portman Square
Sheppard, Edgar, M.D., Hanover Terrace, Regent's Park
Sykes, John, M.D., Doncaster
Winslow, Forbes B., M.D., F.R.C.P.E., Cavendish Square

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, May 27th, 1859:—

Blackstone, Joseph, Gloucester Road, Regent's Park
Bright, John Meaburn, West Dulwich
Bronner, Edward, Bradford, Yorkshire
Groves, William, Knaresborough
McKee, Richard Gooddy, Royal Navy

At the same meeting of the Court—

Granville, Augustus Bozzi, M.D., of Curzon Street, May Fair, who was admitted a member in 1813, and subsequently disfranchised on becoming a Licentiate of the Royal College of Physicians in 1817, was readmitted a member of this College.

Licentiates in Midwifery admitted at a meeting of the Board, on June 1st:—

Barter, Clement Smith, Bath: diploma of membership dated April 18th, 1859
Brigstocke, Richard Whish, Milford, Pembrokeshire: March 14th, 1859
Brooks, Bransby, Guy's Hospital: April 11th, 1859
Candy, John, Camden Road, Holloway: April 18th, 1859
Chappell, John James, Axmouth, Devon: April 10th, 1857
Clapp, William John, Newport, Monmouthshire: December 18th, 1854
Dale, Thomas, Liverpool: February 28th, 1859
Dodsworth, Frederick Charles, Turnham Green: December 20th, 1858
Godfray, Charles Le Vicomte, Jersey: April 18th, 1859
Godrich, Henry, West Brompton: March 14th, 1856
Hudson, George, Newport, Yorkshire: April 15th, 1859
Larkin, Henry William, Bilston, Staffordshire: February 25th, 1859
Marshall, Edmund Henry, Kelvedon, Essex: August 6th, 1858
Sarvis, Thomas, Waterloo Town: May 17th, 1850

Apothecaries' Hall. Members admitted on Thursday, May 26th, 1859:—

Adams, Matthew Algernon, Margate
Bringloe, John, Camberwell
Carter, Alfred Pleydell, Gloucester
Charlton, Egbert, Tunbridge
Goodall, Ralph, Newcastle, Staffordshire
Griffith, Hugh, Edeyrns, near Pwllheli, Carnarvonshire
Holman, Thomas, Easthothly, Sussex
Lovegrove, Charles, Maidenhead, Berks
Parker, Roger, Liverpool
Read, S. Cartwright, Hemel Hempstead, Herts
Sterling, Hautville Howe John, Deal

At the same Court, the following gentlemen passed their first examination:—

Harris, Francis Douglas, Gower Street, Bedford Square
Murray, William, Chester-le-Street

HEALTH OF LONDON:—WEEK ENDING MAY 28TH, 1859.

[*From the Registrar-General's Report.*]

The mortality of the London districts has constantly decreased in the successive weeks of May. In the first week of the month, the deaths registered were 1108; in the fourth week, that ended last Saturday, they were 1028. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1017; but as the deaths returned for last week occurred in a population which has increased, they can only be compared with the average raised in proportion to that increase; namely, with 1118. The public health is therefore so far in a favourable state, that the deaths that occurred last week were less by 90 than the number that would have occurred if the average rate of mortality as estimated for the end of May had prevailed.

The deaths that were recorded last week as caused by zymotic diseases, amounted to 238; the corrected average for corresponding weeks is 257. Those referred to diseases that affect the respiratory organs, were 130; the corrected average is 172. This latter comparison excludes phthisis, the deaths from which were 130, the average being 153. Scarlatina was fatal in 50 cases, nearly half of which occurred on the south side of the river. Four of these occurred in Wandsworth, and four deaths from measles in Putney. Thirteen cases in which diphtheria is returned as the fatal disease, occurred as follows:—one at 8, High Street, Notting Hill; one at 20, Hanover Street, Belgravia; one, on 24th April, at St. George's Hospital; one at 10, John Street, Tottenham Court Road; one at Acorn Cottage, Shacklewell Green; one at 13, Barking Churchyard; one at 1, Short Street, Shoreditch; one at 78, Long Alley, Shoreditch; one at 55, Forston Street, Hoxton New Town; one at 5, Falcon Terrace, Newington; one at 28, Surrey Grove, St. Peter, Walworth; one at 11, Brad Street, Lambeth; and one at 9, Wellington Street, Greenwich.

Three deaths from intemperance were registered in the week, besides five in which the cause of death is entered as "delirium tremens"; five infants and two adults died from syphilitic disease; three infants were murdered. Of four nonogenarians who died, the oldest were a woman, 94 years, and a man, 95 years of age.

Last week the births of 966 boys and 916 girls, in all 1,882 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1,549.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·791 in. The barometer fell from 29·95 in. on Sunday to 29·59 in. on Saturday, these being the highest and lowest points in the week. The mean temperature of the week was 56·1°, which is 1·5° above the average of the same week in 43 years (as determined by Mr. Glaisher). The thermometer in the shade fell to its lowest point 40·5° on Monday, and rose to its highest 73·8° on Friday. The range of the week was therefore 33·3°. The mean daily range was 26·5°; the range on Tuesday was 31·5°. The mean dew-point temperature was 48·5°, and the difference between this and the mean air temperature was 7·6°. The mean degree of humidity of the air was 75. On the last two days, the humidity varied from 59 to 93. The wind was generally in the north-east. No rain was measured till Saturday, when the amount was 0·13 in.

THE MEDICAL SERVICE OF THE NAVY.

The *London Gazette* of May 27th, contains the following warrant:—

At the Court at Buckingham Palace, the 13th day of May 1859; present the Queen's Most Excellent Majesty in Council;

Whereas there was this day read at the Board a Memorial from the Right Honourable the Lords Commissioners of the Admiralty, dated the 12th of May 1859, in the words following, viz.:—

"Whereas we have had under our consideration the necessity of assimilating, as far as possible, the relative ranks and rates of pay and half-pay of the Medical Officers of your Majesty's Navy and Army.

"And whereas we are of opinion that it would be for the advantage of your Majesty's service that the following regulations should be adopted for the Medical Officers of the Royal Navy, viz.:—

"1. That there shall be four grades of Medical Officers, viz.:—

1. Inspector-General of Hospitals and Fleets.
2. Deputy Inspector-General of Hospitals and Fleets.
3. Surgeon, who, after twenty years service on full-pay, ten of which in the rank of Surgeon, shall be styled Staff-Surgeon.
4. Assistant-Surgeon.

"2. That no candidate shall be admitted to the examination for a commission in the Medical Department of the Royal Navy who does not possess such a diploma as would qualify a civilian to practise medicine and surgery; and no such candidate shall receive a commission as assistant-surgeon until he shall have satisfactorily passed an examination in naval surgery and hygiene before a board of examiners appointed by the Lords Commissioners of the Admiralty.

"3. That no assistant-surgeon shall be eligible for promotion to the rank of surgeon until he shall have passed such examination as the Lords Commissioners of the Admiralty may require, and shall have served on full pay with the commission of assistant-surgeon for five years, of which two, at least, shall have been passed on board one of your Majesty's sea-going ships.

"4. That no surgeon shall be eligible for promotion to the rank of Deputy-Inspector General of Hospitals and Fleets until he shall have served ten years in your Majesty's navy on full-pay, of which three at least must have been passed in one of your Majesty's ships, on some one or more foreign stations, with the rank of surgeon.

"5. That no Deputy Inspector-General of Hospitals and Fleets shall be eligible for promotion to the rank of Inspector-General until he shall have served five years at home, or three years abroad, in the rank of Deputy Inspector-General.

"That in cases of emergency, however, or when the good of your Majesty's service may render such alteration desirable, it shall be competent for the Lords Commissioners of the Admiralty to shorten the several periods of service above-mentioned in such manner as they shall deem fit and expedient.

6. That the rates of full-pay of the Medical Officers of your Majesty's navy shall, in future, be in accordance with the following schedule:—

"FULL-PAY.

"Inspector-General of Hospitals and Fleets.—After thirty years service on full-pay, £2:5; after twenty-five years service on full-pay, £2:5; after twenty years service on full-pay, £2; or on promotion, should these periods of service not have been already completed.

"Deputy Inspector-General of Hospitals and Fleets.—After thirty years service on full-pay, £1:14; after twenty-five years service on full-pay, £1:10; after twenty years service on full-pay, £1:8; or on promotion, should these periods of service not have been already completed.

"Staff-Surgeon.—After twenty-five years service on full-pay, £1:5; after twenty years service on full-pay, £1:2.

"Surgeon.—After fifteen years service on full-pay, 18*s.*; after ten years service on full-pay, 15*s.*; or on promotion, should these periods of service not have been already completed.

"Assistant-Surgeon.—After ten years service on full-pay, 13*s.*; after five years service on full-pay, 11*s.* 6*d.*; under five years service on full-pay, 10*s.*

"7. That every medical officer on the active list, now on

half-pay, and those who may be placed on it subsequently to the date of your Majesty's Order in Council authorising this proposal, shall be allowed the half-pay to which his period of service on full-pay shall entitle him, according to the following schedule.

"HALF-PAY.

"Inspector-General of Hospitals and Fleets.—After thirty years service on full-pay, £1:17:6; after twenty-five years service on full-pay, £1:13:6; after twenty years service on full-pay, £1:10; or on promotion, should these periods of service not have been already completed.

"Deputy Inspector-General of Hospitals and Fleets.—After thirty years service on full-pay, £1:5:6; after twenty-five years service on full-pay, £1:2:6; after twenty years service on full-pay, £1:1; or on promotion, should these periods of service not have been already completed.

"Staff-Surgeon.—After twenty-five years service on full-pay, 18*s.* 6*d.*; after twenty years service on full-pay, 16*s.* 6*d.*

"Surgeon.—After fifteen years service on full-pay, 13*s.* 6*d.*; after ten years service on full-pay, 11*s.*; or on promotion, should these periods of service not have been already completed.

"Assistant-Surgeon.—After ten years service on full pay, 10*s.*; after five years service on full pay, 8*s.*; under five years service on full-pay, 6*s.*

"8. That with a view to maintain the efficiency of the service, all medical officers of the ranks of staff-surgeon, surgeon, and assistant-surgeon, shall be placed on the retired list when they shall have attained the age of sixty years; deputy inspectors-general shall be placed on such retired list when they shall have attained the age of sixty-five years; and inspectors-general when they shall have attained the age of seventy years. Officers thus superannuated shall receive the rates of half-pay mentioned in the preceding schedule.

"9. That the relative rank of the medical officers of your Majesty's navy shall be similar to that conferred upon the medical officers of the army, and shall be as follows:—

"An assistant-surgeon shall rank as a lieutenant in the army, according to the date of his commission, and after six years service on full-pay, as a captain in the army, according to the date of the completion of such service.

"A surgeon shall rank as major in the army, according to the date of his commission; and a staff-surgeon, as lieutenant-colonel, but junior of that rank.

"A deputy inspector-general of hospitals and fleets shall rank as lieutenant-colonel, according to the date of his commission; and after five years service on full-pay as deputy inspector-general, shall rank as colonel, according to the date of completion of such service.

"An inspector-general of hospitals and fleets shall rank as brigadier-general, according to the date of his commission; and after three years service on full-pay as inspector-general, shall rank as major-general, according to the date of completion of such service.

"Provided always that no naval medical officer, while borne on the books of one of Her Majesty's ships, or employed on establishments on shore, shall be deemed superior in rank to the officer appointed to command such ship or establishment; but such commanding officer shall, under all circumstances, be held to be superior in rank and precedence to every officer under his command.

"10. That such relative rank shall carry with it all precedence and advantages attaching to the rank with which it corresponds, and shall regulate the choice of quarters, rates of lodging-money, servants, forage, fuel, and light, or allowances in their stead, when medical officers of the navy may be employed on shore on joint service with your Majesty's land forces; but that medical officers serving in the fleet shall, notwithstanding the relative rank thus conferred upon them, in all such details, and also in all matters relating to the duties of the fleet and the discipline and interior economy of your Majesty's ships, be subject, as heretofore, to the authority of any executive officer of the military branch while on duty, under the general regulations which may from time to time be prescribed by the Lord High Admiral, or the commissioners for executing the office of Lord High Admiral; and that medical officers shall share prize-money according to the proclamation or proclamations which may be in force for the time being, for regulating the distribution of the proceeds of prizes in the Royal navy.

"11. That medical officers shall be entitled to the same allowances, on account of wounds and injuries received in action, as combatant officers holding the same relative ranks.

"12. That the families of medical officers shall in like manner be entitled to the same allowances as granted to the families of combatant officers holding the same relative ranks.

"13. That medical officers shall be held entitled to the same honours as other officers of the Royal navy of equal relative rank.*

"14. That a medical officer retiring after a full-pay service of twenty-five years, may, in cases of distinguished service, receive a step of honorary rank, but without increase of half-pay.

"15. That good-service pensions shall be awarded to the most meritorious medical officers of the Royal navy, under such regulations as shall, from time to time, be determined upon, on the recommendation of the Lord High Admiral, or the commissioners for executing that office.

"16. That four of the most meritorious medical officers of the Royal navy shall be named honorary physicians, and four honorary surgeons, to your Majesty.

"We do therefore most humbly submit that your Majesty will be graciously pleased, by your Order in Council, to grant us the necessary authority for carrying the foregoing regulations into effect; the Lords Commissioners of your Majesty's Treasury having signified their concurrence."

Her Majesty having taken the said Memorial into consideration, was pleased, by and with the advice of Her Privy Council, to approve of what is therein proposed; and the Right Honourable the Lords Commissioners of the Admiralty are to give the necessary directions herein accordingly.

WM. L. BATHURST.

UNIVERSITY OF ST. ANDREWS:—MEDICAL EXAMINATION PAPERS. MAY, 1859.

THE following were the questions proposed to the candidates for the degree of M.D. at the recent examinations:—

First Examination. First Part. A passage from Celsus, *De Medicinâ* (lib. ii, cap. x—"Incidenda ad medium" to end of chapter), to be translated into English. Give the derivations and primary meanings of the following words: Azote, Cyanogen, Diabetes, Ethmoid, Hypogastric, Menorrhagia, Parotid, Peritoneum, and Parthenogenesis.

Second Part. *Chemistry.* 1. What compounds does nitrogen form with oxygen, with hydrogen, with carbon, and with chlorine? State the composition of each. 2. Enumerate the alkalies and alkaline earths; and state what you understand by an alkali, a base, and a radical. 3. How is hydrocyanic acid prepared? Give a process for ascertaining the exact strength of a sample. 4. Give the tests for salts of copper. *Materia Medica and Therapeutics.* 1. What medicines have been employed either to counteract the predisposition to the formation of calculi; or to effect the solution or disintegration of urinary concretions within the body? Explain the *modus operandi* of such medicines. 2. What are the therapeutic uses of (1) hydrochlorate of ammonia, (2) iodide of iron, (3) the preparations of arsenic, (4) prussic acid, (5) aconite, and (6) strychnine? 3. Write Latin prescriptions, without using symbols or abbreviations, for a mixture containing strychnine, and for a dozen pills containing extract of nux vomica.

Second Examination. Anatomy and Physiology. 1. Describe the anatomical relations and the functions of the principal branches of the fifth pair of nerves. 2. Describe the muscles of the leg which by their rigidity or contraction may give rise to the different varieties of club-foot. 3. Describe the iris and retina, and state what you know regarding their minute structure. 4. Describe the structure and uses of the glands of the skin. 5. What are the objects of the process of absorption, and in what different ways is this process effected?

Third Examination. (N.B. In answering the practical questions, the examiners require every candidate to specify the mode of treatment, which he is in the habit of adopting, and the doses of the medicines which he prescribes.) *Pathology, and Practice of Medicine.* 1. Mention the principal signs and symptoms known to you of aneurism within the thorax, and indicate their bearing upon the diagnosis with regard to the position and relations of the aneurism. 2. Describe the course of the symptoms, and indicate the treatment, of delirium tremens. 3. What are the principal causes of perforation of the

* This clause does not extend to the compliments to be paid by garrison or regimental guards, as laid down in pages 29 and 30 of your Majesty's regulations for the army, nor to corresponding honours paid on board your Majesty's ships.

alimentary canal? Given the symptoms of perforation, how would you proceed to discover its actual mode of origin in a particular case? 4. Describe and contrast eczema, impetigo, scabies. Indicate shortly the treatment of each.

Fourth Examination. Surgery. 1. Describe the early symptoms, progress, and results of scrofulous disease of the vertebræ. 2. Enumerate and describe the different kinds of cancer which affect the external parts of the body: mention the regions in which each is chiefly found; and the circumstances in which you would consider it judicious to employ the knife or escharotics in the treatment. *Midwifery.* 3. In what circumstances is it advisable to induce premature labour, and by what different methods may it be accomplished? 4. What changes take place on the mamma and nipples during pregnancy and after delivery; and what are the differences between the milk secreted immediately after parturition and that subsequently yielded?

Fifth Examination. Cases. 1. A child, aged 5, has been delicate from the period of teething; apt to suffer from diarrhœa, disposed to feverishness from slight exciting causes. Once or twice it has been threatened with convulsions; and hooping-cough was followed by protracted chronic bronchitis, with shortness of breath and increased feverishness and emaciation. Present symptoms are restlessness, somnolency, alternating with fits of screaming and tossing; the child is irritable, and complains of the head; appetite is lost, and bowels are constipated; the face is flushed, pulse 120, but very variable both in strength and frequency; expression vacant, pupils sluggish and slightly dilated; eyes generally closed, and face averted from the light; there is great thirst, and vomiting (which in the course of the illness has frequently occurred) is now less frequent; skin hot and dry; abdomen shrunk; no convulsion; no paralysis. Remark on the diagnosis of this case, in such a manner as to give your ideas of the significance of each fact recorded above. State also the prognosis, and the probable condition of the organs in head, chest, and abdomen. Sketch out the general course of treatment applicable to such a case. 2. A young woman has had a chronic cough, chiefly during winter and spring, for three years; the chest has been repeatedly examined without any disease of the lung, beyond slight catarrh, being discovered; but there is suspicion of tubercular disease. Of late there has been an aggravation, marked by suddenly developed pain in the right side, with severe dyspnœa; percussion of right side of thorax not dull as compared with left; in front and at some points of lateral region faintly tympanitic; respiratory murmur almost universally absent on right side; on left rather exaggerated. What is the most probable view of the cause of the aggravation in this case; what further examination would you make, and what signs would you expect in the event of the probability you contemplate being converted into a certainty? 3. A sempstress complained of increasing difficulty in seeing to work: on examination, there were found (1) injection of palpebral conjunctiva, with heat and watering of the eyes; (2) inability to read for more than a minute or two at a time, though the type appeared quite distinct at first, and distant objects were always seen clearly and distinctly; (3) vision as of motes and twisted strings, these objects appearing to fall down across the field of view when the eyes were suddenly raised to the window; (4) the appearance of sparks and flashes of light before the eyes after much use of them. Explain the pathology of these four sets of symptoms, and the treatment proper to cure or alleviate the morbid states which caused them.

Assumption of Medical Titles. The following resolutions were agreed to at a meeting of the Salopian Medico-Ethical Society, on Tuesday, May 10th. The blanks denote certain individuals, whose names appear in the resolutions as passed.

"That the solicitor to the Society be instructed to write a cautionary letter to Messrs. ——, ——, and ——, of Shrewsbury, and request that they will cease to style themselves surgeon-dentists—a title to which they have no legal claim whatever; and, in the event of their refusal, that the solicitor be authorised to take legal proceedings against them, under the fortieth clause of the Medical Act.

"That the Honorary Secretary be requested to write to Mr. ——, of Cardington, and apprise him of the Society's determination to prosecute for illegal practice, unless he immediately desists from practising the profession of medicine and surgery.

"That the solicitor (provided the evidence is, in his opinion, sufficiently conclusive to ensure conviction) be, and is hereby, fully authorised to institute, on behalf of the Society, legal proceedings against —— and ——, for an illegal assumption of titles; and also against ——, of this town, for illegal practice; and to sue in each case for the full penalty attached to illegal practice."

St. Bartholomew's Hospital. Mr. Paget has resigned the lectureship on physiology at St. Bartholomew's Hospital, and, it is stated, will be succeeded by Mr. Savory; while the lectureship on anatomy, it is expected, will be divided between Mr. Skey and Mr. Luther Holden.

Epidemiological Society. On Monday, June 6th, a paper will be read entitled "Practical Remarks on Cholera Morbus"; by H. Cameron, Esq., Indian Artillery.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Communications have been received from:—Mr. I. B. Brown; Mr. George Norman; Mr. T. Holmes; Argus; Mr. Henry Goode; Dr. Greenhill; Dr. R. U. West; Dr. S. M. Bemiss; Quercus; Mr. L. Parker; Mr. T. M. Stone; Devonshire; Mr. Nunn; Mr. J. K. Spender; Dr. J. E. Crcok; Dr. Styrap; Mr. W. F. Cleveland; Dr. McWilliam; Dr. Jas. Russell; Dr. W. Addison; Dr. P. H. Williams; Dr. T. H. Flemming; Mr. Pound; Mr. Logsden; and Mr. William Davies.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. On Dislocations and Fractures. By Joseph Maclise. Fasciculus IX; completing the work. London: John Churchill. 1859.
2. Hastings and St. Leonards-on-Sea; their Meteorology and Climate. By J. C. Savery, Esq. London: Churchill. 1859.
3. Prostitution considered in Relation to its Cause and Cure. By *James Miller, F.R.S.E. Edinburgh: 1859.
4. An Essay on the History, Pathology, and Treatment of Diphtheria. By *E. Copeman, M.D. Norwich: H. Stacy. London: Churchill. 1859.

ADVERTISEMENTS.

Just published, Fifth Edition, price 1s. 6d., or by post, 1s. 8d.

Lateral Curvature of the Spine, with a New and Successful Method of Treatment for Securing its Removal, without Confinement. By CHARLES VERRAL, Surgeon to the Spinal Hospital, Portland Road, London, Author of "The Spine, its Curvatures and other Diseases", etc. etc.

London: John Churchill, New Burlington Street, and all Booksellers.

Just published, price Eightpence; to be had by forwarding eight postage stamps to Messrs. Gray & Warren, High Street, Croydon.

The History of Sanitary Progress in CROYDON: a LECTURE delivered at the Literary and Scientific Institution, on Wednesday, April 6, 1859, by ALFRED CARPENTER, M.B. Published by desire.

Printed and Sold by Gray & Warren, High Street, Croydon.

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Archives of Medicine, No. IV, which will complete Vol. I. Subscribers are requested to send their remittance to Mr. John Jones, 10, Grange Court, Carey Street, W. C.

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TO ADVERTISERS.

British Medical Journal.— Office, 37, GREAT QUEEN STREET, LINCOLN'S INN FIELDS, LONDON, W.C.

Advertisements ought to be delivered and paid for at the Office on the Thursday preceding publication; or if not paid for at the time, should be accompanied by a respectable reference.

Post-Office Orders are to be made payable at the "Bloomsbury Branch" Office, to Thomas John Honeyman (the Publisher), 37, Great Queen Street, Lincoln's Inn Fields, London, W. C.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXVIII.] LONDON: SATURDAY, JUNE 11, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

ACUTE TUBERCULOSIS IN AN INSIDIOUS FORM: DEATH FROM CONTINUED FEVER.

Under the care of JAMES RUSSELL, M.D.

[*Clinical Clerk*—CHARLES WALLS, Esq.]

E. P., aged 14, living at home, a well made girl, was admitted on May 15th. The following history was given by her mother. She was much alarmed last Christmas by witnessing a serious accident. In the course of the following night, she was seized with profuse menstrual discharge, although at that time she was not fourteen, and had not had the least indication of the approach of menstruation. The attacks of menorrhagia recurred four times, each time with less severity than the last. Five weeks ago, she was startled by a very trifling occurrence; and immediate return of the menorrhagia was the consequence. Ever since the period of her first alarm, a marked change has taken place in her general condition; from being lively and spirited, she became dull: she complained of constant weariness, and lost flesh.

She has now been laid by for seven weeks "with a cold"; has had shivering, perspiration, thirst, and loss of appetite. This day week, she was delirious, and was often so during the ensuing week. She vomited frequently, especially after taking food. She had not had jaundice. She was purged very profusely two days before admission, the stools being very black. She has kept her bed for a fortnight, though, up to the last two days, she has got up for an hour or two. She lives in a solitary house, with no other dwelling nearer than a mile and half. No case of fever is known in her neighbourhood. Excepting two visits to the Queen's Hospital as an out-patient, and two to a surgeon, she has been closely at home.

Present State. Pulse 128. The respiration was 60, frequently interrupted by crying and moaning. She lies on her side. The tongue is rather red, coated in the middle with a thick yellow hairy fur. She has been somewhat delirious, and has tried to get out of bed; but is obedient to directions, and makes signs for drink. There is slight occasional cough. The abdomen is flat and soft. There is no eruption. She was ordered ammoniæ sesquicarbonatis gr. v, ætheris chlorici ♏viij, every three hours. Half an ounce of wine was to be given every second hour, and beef-tea.

May 16th. Pulse 136, very feeble; respirations 50. The tongue is moist. She has very little cough. She was delirious all night. She has had no stool; the urine is copious. She was ordered an ounce of wine every two hours, and two glasses of brandy in the day.

May 17th. Pulse and respiration as before. She passed a nearly sleepless night, with delirium. She has had four stools, brown, and containing much solid matter. The urine is abundant, light coloured, acid. She has no cough. The chest is perfectly resonant. The face is dusky. The teeth have sordes; the tongue is not brown, but dry; but she lies with her mouth open. The bowels are flat. She still lies on her side. There is no eruption. She takes what is ordered. She was ordered to have an ounce of brandy every three hours, and an ounce of wine hourly.

May 18th. Pulse 136, very feeble; respiration 36. The heart's sounds are very feeble.

May 19th. She has been greatly disturbed through the night, shrieking vehemently and incessantly until quieted by an opiate of nine minims of liquor opii, of which three doses were required. The face is rather livid, bathed in perspiration. She has just awoke, and is shrieking and calling for her sister; but is quite obedient to directions. In the evening, the pulse could not be counted.

May 20th. Violent shrieking continues; but she is quite sensible to external events, and replies to questions. Pulse 150; respirations 54. The tongue is moist, and cleaner. The pupils are natural; the eyes are not injected. The bowels have not been opened for two or three days. There is no eruption.

She died on the 24th, with no important change in her symptoms. She was constantly shrieking and crying out, unless quieted by an opiate, yet remained obedient to any directions; and the expression of her face was natural. Her pulse varied from 152 to 136; the respirations about 56. Her urine was passed involuntarily the last two days only. The treatment consisted in the free administration of stimulants and of milk, of which she drank freely.

SECTIO CADAVERIS, twenty-four hours after death. The lips were livid. The body was not much wasted. *Head.* The tissue of the brain was perfectly healthy. The large vessels of the pia mater were full of dark blood, and there were numerous bloody points throughout the substance of the brain. *Chest.* The heart was firm; both ventricles were about half-full of dark semi-coagulated blood. Both lungs were entirely filled with miliary tubercles, which were scattered thickly and equally throughout their entire substance; the pulmonary tissue was not more loaded with blood than would be explained by the process of dying, which was very protracted; several of the pulmonary lobules were imperfectly distended with air. The bronchial tubes were very slightly congested, and were nearly free from mucus. *Abdomen.* The intestines and stomach were perfectly healthy, excepting that the walls of the former were thin. The mesenteric glands were healthy. The surface of the liver was thickly dotted over with minute adherent flakes of lymph, between which the serous covering was perfectly natural; the substance of the liver was quite free from tubercle. The spleen contained one or two miliary tubercles. Miliary tubercles were thinly scattered through the substance of the kidneys. The epithelial cells of the kidneys were filled with granular matter—in many of the tubes, to such an extent as to conceal the ordinary cell-structure. The tubes broke up so readily, and the cells issued from them in such abundance, as to render it necessary to wash the specimens thoroughly, to remove the fragments of tubes and the cells, which perfectly obscured the field.

REMARKS. This case affords an illustration of the insidious manner in which even an acute deposit of tubercles may take place in the lungs, in consequence of the entire absence of reaction in the organs thus affected. Constitutional symptoms were present, in the form of persistent feverish irritation, and enabled the commencement of the morbid process to be indicated seven weeks before the patient's entrance into the hospital; but neither in the history of the case, nor during the period she was under observation, were there any local symptoms to direct attention to the chest; and, after death, the bronchial tubes were found nearly free from congestion, and from mucous secretion. It is not improbable that the tubercular cachexia was brought into activity by the fright which produced such remarkable effects at the time, and left so evident and permanent a change in the patient's health subsequently.

The symptoms observed whilst the patient was in the hospital indicate that her death was occasioned by a specific fever. The high delirium, rapid pulse, and marked tendency to sinking, pointed to this conclusion; and, a fortnight before her admission, her symptoms underwent a change; and delirium made its appearance in the second week.

Two cases have occurred to Dr. Russell, of equally insidious

deposit of tubercle. In both, the lungs were in the same condition as in the case under consideration. In one, the chest was repeatedly examined by a very able and experienced surgeon, as well as by himself, without the discovery of a single sign to indicate disease in the lungs. The only symptom was a state of low fever, protracted through seven or eight weeks. The second case occurred under similar circumstances, and was of five weeks duration. Both occurred in young children.

ST. GEORGE'S HOSPITAL.

ANEURISM OF THE AORTA.

Under the care of H. Bence Jones, M.D.

Eliza S., aged 37, a married woman, was admitted under the care of Dr. Bence Jones on May 18th, on account of a very large pulsating tumour of the chest, which had made its appearance about last Christmas. It seemed that it had commenced above the left breast; but, on her admission, it had extended across the median line, and presented a very singular appearance. There was an enormous aneurismal tumour, almost as large as her head, reaching from the level of the larynx to the upper part of the chest, more to the left side than the right, covering both clavicles, and pulsating violently, so as to shake the entire trunk. The pulse could not be felt in the right radial artery, although in the right carotid and facial artery it could be felt. The sterno-mastoid on each side was tightly stretched over the tumour—more so on the left side than the right. She suffered from dyspnœa to such an extent that she could not swallow solids; and there were also some dyspnœa and cough, with expectoration of a tenacious mucus. The enormous pulsating tumour, however, on the chest, prevented any satisfactory stethoscopical examination; the *bruit* being excessively loud. The pulse in the left wrist was felt; it was weak, and 132 in the minute. The *bruit* was not heard behind.

It is unnecessary to go further into the history of the case than to say that the dyspnœa rapidly increased, and that she died of it five days after her admission into the hospital. The nurse observed that the pulsation in the tumour continued for some time (she said five minutes), after the breathing had ceased, and the patient appeared to be dead.

The *post mortem* examination was made thirteen hours after death. The body was found to be much emaciated. The tumour had fallen in very much since her death, and was quite flaccid; it covered the inner part of both clavicles, had eroded the sternum to a great extent, and lifted up the two upper ribs on both sides. On the right side, the second rib had been broken across about two inches from its cartilage; and the inner fragment, displaced by the muscles, was found sticking vertically upwards. This bony prominence had been noticed during life. The pectoral and sterno-mastoid muscles, which were stretched across the tumour, were greatly wasted. The tumour was formed by a large aneurism, which communicated with the ascending aorta by an opening of about the size of a half-crown, an inch above the valves on the anterior part of the vessel, perfectly smooth, with rounded edges. This led into a very large sac, of the size of a child's head, which was filled principally with fluid blood and coagulum formed after death. The outer part was lined with a thin layer of laminated coagulum. In front of the sternum the proper sac seemed to cease; and here the sac was formed only by the muscles and condensed cellular tissue. The aneurism had not given way in any part. The trachea and œsophagus lay behind it, and from the upper part of the arch four vessels were given off. The first was the right carotid, which passed off undivided, but otherwise presented no peculiarity. The second was the left carotid, which seemed to come off lower down than usual, and lay at its commencement more behind the trachea than natural. The third branch was the right subclavian, which passed quite behind the œsophagus, between it and the spine, close to a point where the fourth and fifth dorsal vertebræ had suffered from pressure, and were deeply eroded. Hence it was concluded that the artery had also been compressed by the tumour. The last vessel given off from the arch was the left subclavian. The left lung was consolidated throughout, every part sinking in water. The bronchial tubes were much enlarged, and the parenchyma loaded with numerous very small white granules, rather resembling miliary tubercles. The heart was healthy. The root of the aorta, up to the opening of the aneurism, was very atheromatous; but the continuation of that vessel and the iliac arteries were healthy.

Remarks. The peculiarity in this case, in the symptoms observed during life, was, that a tumour originating in the left side of the body, and situated principally on that side, should have compressed the subclavian artery to such an extent as to stop the pulse entirely, without similarly affecting the carotid—a circumstance hardly possible in the ordinary arrangement of the vessels, when any pressure exercised upon either of these arteries must have acted on them entirely or principally through the innominate. The anatomical peculiarity, however, discovered after death, fully accounted for this symptom, inasmuch as it showed that the right subclavian, in its unusual course, was exactly in the situation where the pressure was greatest. The peculiarity is a rare one, but is noticed in all our text-books of anatomy (*vide* Quain's *Anatomy*, vol. i, p. 500, edit. 1848). It is also noticed by anatomical writers on this head, that in such cases of anomalous origin of the branches of the aorta, they are frequently placed lower down on the artery than usual; and that the right subclavian may even arise as low down as the fourth dorsal vertebra.

In other respects, the case is interesting as an example of the enormous size to which such a tumour may grow in a very short space of time, and of a termination to the case which our experience would lead us to regard as not a very uncommon one; viz., by pulmonary inflammation, occasioned by the irritation of the tumour.

Original Communications.

IDIOSYNCRASIES.

By T. W. Nunn, Esq., Assistant-Surgeon to the Middlesex Hospital.

Instances of the poisonous effects, on certain constitutions, of drugs ordinarily of moderate action, are not unfamiliar in medical practice. Ipecacuanha is perhaps one of the best examples of a drug that, even in a state of the minutest subdivision, is capable of producing, idiosyncratically, extreme results. But some articles of diet also are, to individuals, poisonous: a numerous class of persons might be easily found, the members of which could not take, without inconvenience, one or other of the various alimentary substances. There are, doubtless, scattered over the field of unrecorded medical experience, very many interesting and curious examples of this idiosyncratic incompatibility or susceptibility. The production of spasmodic asthma seems to be the most frequent symptom of idiosyncratic poisoning. Irritation of the mucous and cutaneous surfaces is also a common one; direct influence of a severe character on the nervous system, a rare one.

The object of this communication is, however, not to discuss the physiological questions which naturally arise in the consideration of such a subject: it is rather to offer an instalment of facts. I am the less willing to submit any theory on such a purely medical subject, since I have perceived that Dr. Hyde Salter (from whose able pen much information may be expected), in his paper on the Varieties of Asthma (*Edinburgh Medical Journal*, May 1859), promises to enter fully into the subjects of hay asthma and asthma from animal emanations.

Case i. *Poisoning by Rice.* J. M., an occasional patient, cannot eat rice in any shape without extreme distress. From the description given of his symptoms, I believe spasmodic asthma to be the cause of his discomfort. On one occasion, when at a dinner party, he felt the symptoms of rice-poisoning come on, and was, as usual, obliged to retire from the table, although he had not partaken of any dish ostensibly containing rice. It appeared, on investigation, that some white soup, with which he had commenced his dinner, had been thickened with ground rice.

Case ii. *Rice-Poisoning.* A gentleman who, as in the preceding case, could not eat rice "without being suffocated", took luncheon with a friend in chambers. The fare was simple—bread, cheese, and *bottled* beer. On the usual symptoms of rice-poisoning seizing him, he informed his friend of his peculiarity of constitution. The symptoms were explained by the circumstance of a few grains of rice having been put into each bottle of beer, for the purpose of exciting a secondary fermentation.

Case III. A gentleman, some time since under my treatment for stricture, informed me that he could not eat figs without experiencing a most unpleasant formication of the palate and fauces; and that the fine dust from split peas produced the same sensation, accompanied by a running at the nose. The father of this gentleman suffers from hay-fever at certain seasons.

Case IV. Mr. P., himself a gentleman of a peculiarly nervous temperament, states that his father cannot endure the sensation produced by handling a russet apple. He also communicated to me

Case V—that of Mr. T., who cannot remain in a room in which there is a cooked hare, on account of the peculiar effect produced on his system.

Case VI. Miss ——, after eating egg, suffers from swelling of the tongue and throat, accompanied by "alarming illness".

Case VII. Miss ——. In this case, somewhat similar effects follow the taking of honey of any kind, and especially honey-comb, into the stomach; viz., swelling of the tongue, frothing of the mouth, and blueness of the fingers.

Case VIII. The following is an extract from a note received by me from a lady, who says:—"I had on three mustard plaisters—one on the throat, one on the back of the neck, and another under the left shoulder. They remained on half an hour. Cotton wool was applied on their removal. About thirty hours afterwards, a painful stinging sensation commenced in the back of the neck, followed by violent twitching of the muscles of the face, arms, and legs, which continued in regular succession through the whole night. It yielded, after about twelve hours, to hot fomentations of poppy-heads applied to the back of the neck." It cannot be ascertained that any medicine containing strychnia was taken.

Case IX. A gentleman, a member of the medical profession, with whom I am well acquainted, suffers from nettle-rash after eating veal. Veal has the reputation of being particularly indigestible. The above instance of the production of urticaria from its use is, doubtless, not an uncommon one.

Case X. I have been informed of a lady who cannot remain in a room in which there is a cat. Although the cat may be concealed, the lady's peculiar sensations immediately declare to her the presence of the animal.

Case XI. A patient under my care, since dead of cancer, was invariably thrown into a state of nervous excitement by the exhibition of the compound infusion of orange-peel.

Case XII. A personal friend of my own suffered from erythema nodosum after eating shrimps, although these were perfectly fresh. I believe shell-fish generally is particularly liable to excite unpleasant consequences.

It would be useful, I venture to suggest, if other members of the Association would contribute any instances of idiosyncratic poisoning they may know; since, from a multiplicity of exceptions, some general rule may be educed.

8, Stratford Place, W., June 1859.

ON THE INFLUENCE OF VITALITY UPON THE EXCRETIONS.

By T. Inman, M.D., Liverpool.

In a recent number, I ventured to call the attention of the profession to the influence which a debilitated condition of the system had upon secretion generally: I wish now to call attention to the influence the same cause has upon the secreted matters themselves; or, as they are sometimes designated, the excretions.

All of us are more or less familiar with the fact that the excretions do not decompose, as a general rule, while they are in the body. The fæces, retained though they be sometimes for days, and in some rare cases for weeks and months, in the colon or the rectum, do not decompose there, as they do when they are expelled from the body; and this observation holds good, even though the bowels are distended with flatus, and the fæcal matter is in contact with a gas differing in no degree from common atmospheric air. The urine, when retained in the bladder, becomes denser, and undergoes some change; but it does not decompose in the same manner in the interior of the body as it does when expelled therefrom, and kept in a close well stoppered bottle. We account for this by saying that the excreta have a certain vital power as long as they remain in the body, which enables them to resist the ordinary laws governing the inorganic world.

But we know from experience that the vital power does not immediately leave a limb after it has been amputated; and it becomes, therefore, a question whether vitality may not also remain in excretions for some time after their expulsion from the body. In other words, do the excretions lose their vitality as soon as they are expelled? or is there a period during which they successfully resist chemical laws? And, if such period exist, is it definite for all? Do the excretions of some decompose, *cæteris paribus*, sooner than those of others? and, if so, can we associate that phenomenon in any way with the condition of the individual at the time?

My attention was first called to this subject in the following manner. When M. Ledoyen came to Liverpool, about twelve years ago, to demonstrate the deodorising power of his "disinfectant" fluid, with other experiments, the following was made. The alvine dejections of a certain number of patients, ill with fever and various other diseases, were all placed side by side, to the number of thirty or more, in a small room attached to the pauper hospital. They remained all night in the chamber, and the next day M. Ledoyen commenced operations. After demonstrating the general advantages of his compound, he proceeded to sprinkle a few drops of his diluted mixture into each utensil. The amount used was the same in each case; but the appearance produced varied immensely; and, according as the chemical change was excessive or otherwise, he judged of the condition of the individuals who had passed the "motions". "This patient", he would say, "is not very bad; that one is seriously ill; this one is dying; this one is nearly dead;" etc. As his observations were correct, he was asked how he judged of the danger the patient was in? His reply was, "that he had found, in the course of his experiments, that fæces decomposed rapidly or otherwise, according to the debility of the individual passing them."

For a long period, the principle here enunciated seemed to belong to the class of interesting but useless facts. More recent observations have, however, shown that it may be turned to good practical account.

If any one will diligently consult the napkins used by infants, he will find that, during the time the motions are of a good healthy yellow colour, they have a peculiar odour, which they retain for twelve hours at least; but if, from any cause—*e. g.*, debility in the nurse, or inappropriateness of the food—the child loses its healthy condition, the motions not only change in colour and consistence, but in smell, and decompose in a very short time after being passed. Where there is diarrhœa and excessive depression of the vital powers, the motions are often found to be decomposed in a few minutes. We may notice, too, that a similar result is met with at the same time in the other secretions of the child; and that the urine decomposes quickly, and the breath is foul or sickly.

But it is not in children alone that this change may be detected: it is equally evident in adults. If, for example, the doctor is called to attend a case of diarrhœa, where there is always more or less debility present, he may consider it necessary to inspect all the alvine discharges that take place. His visits are at intervals of twelve hours only; and he has on each occasion placed before him perhaps as many as six motions in different utensils. He is probably struck with the different odour exhaled from the various specimens, and notices a difference in the colour; but a few words from the nurse soon explain the mystery. The dark brown stinking ones are those passed the longest period ago; the healthy looking and smelling ones are those passed only a short time before the doctor's visit.

Simple though this fact seems to be, it is one which is not universally acknowledged and acted on; I have known "motions" which have simply become decomposed taken for "foul secretions", and the patient dosed with mercurials, under the impression that they would improve the condition of the bowels. The result has been what might have been anticipated; the patient has got weaker, and the bowels no better. The following case came under my notice some time ago. It is valuable as illustrating the danger resulting from inattention to these points.

An elderly gentleman was under treatment for indigestion. He was improving upon a tonic plan of treatment, when he was induced by his friends to have "a second opinion". When the physician called, he was shown a motion which had been passed twelve hours before. It had undergone decomposition, and was pronounced to be extremely "vitiated"; and, with the intention of improving the secretion, a mercurial alterative was prescribed. This acted freely; and when the visit was made the next day, the motions were all inspected, and as that

passed the last seemed to be the most healthy, the natural conclusion was that the medicine had done good. It was therefore persevered with; on the next occasion, and for some time subsequently, only the last motion passed was inspected, and, as it had not had time to be decomposed, it was thought to be healthy, and the patient was supposed to be "better", as his secretions were no longer "vitiated". But, notwithstanding this opinion, it was clear to the first attendant that the man was getting more feeble and debilitated day by day. If the medicine did improve the secretions, it certainly impaired the strength. It was then doubted whether the first inference was correct; and, to decide this, the nurse was directed to save all the "motions", and arrange them in the order in which they were passed. When they were inspected, the same order of things was noted as at the first examination; but the older ones appeared more vitiated than ever, and the most recent ones had begun to change in colour. It was interesting to know how the same fact struck the two doctors. One remarked, "that with such excretions, there was greater necessity for an alterative than ever"; the other said, "that seeing such had been the effect of the alteratives which the patient had already taken, the sooner they were suspended the better." This led to a warm debate, which was ultimately decided by an appeal to the nurse. Thus: "Nurse, which is the last motion passed?" "This" (the healthy looking one). "How long has it been passed?" "An hour." "What was the appearance of the other motions when they were passed?" "They looked precisely the same as the one first referred to." "Then they have all changed in appearance since they were placed here?" "Yes." "Do the motions change in appearance now more rapidly than they used to do?" "Yes." This confirmed the idea that the "vitiated character of the excretions" was, so to speak, a *post mortem* appearance, and simply indicated a smaller amount of vital force (as opposed to chemical) than is usually possessed by vital products when separated from the body. The termination of the case showed the justice of this view, for the patient's strength continued to diminish, and he died shortly afterwards of pure debility and exhaustion. It is useless to speculate upon what might have been the result had the phenomena been read correctly from the first.

As decomposition takes place in the alvine secretions very rapidly in fevers and all diseases marked by great debility, the practitioner must ever have his attention alive to the fact, that what he calls "vitiation" may be more apparent than real, and a sign which calls for stimulants and strengthening remedies rather than mercurial alterative medicines, whose invariable effect is to make a weak patient weaker.

The excretions of the body being comparatively few, and for other reasons, we cannot prosecute our inquiries into the influence of vitality upon them in the same way as we did concerning the function of secretion. We are not in the habit of requesting our patients to retain their saliva, their tears, their leucorrhœal or catamenial secretions, etc., for our inspection; consequently we know little about the phenomena of decomposition in these fluids and the changes effected thereby.

There are, however, two other excretions with which we are tolerably familiar; namely, the breath and the urine, respecting which we may say a few words. As a general rule, we know that the breath of healthy children is free from any odour perceptible to our senses; and we may say the same of that of healthy adults. But as soon as a child begins to suffer from debility, we know that we can recognise in its breath a variety of unpleasant smells, which we designate as sour, sickly, or putrescent. These odours are increased in intensity and duration by every cause which tends to augment the existing debility; and they go away as soon as the health is restored. In adults, the influence of debility in producing "foul breath" is very remarkable. I know individuals in whom it is invariably produced by a day's fatigue, by the occurrence of the catamenia, or by the too prodigal use of aperient medicines. In these instances, it is cured by wine, tonics, and rest, as certainly as diarrhœa is checked by opium, etc. In other, it comes on in consequence of indulgence in such passions as anger, or from excessive fear, anxiety, and disappointment. In others, it precedes and accompanies asthenic indigestion, and in them a debauch is as surely followed by foul breath, as it is followed in others by nausea and headache. Of course, it may be argued that this foul breath is not due to decomposition of the expired air after it leaves the lungs, but simply to the exhalation of "crudities" already existing in the blood. I acknowledge the force of the argument; but it matters little which solution we accept, so long as we recognise in such phenomena the presence of impaired vital force, and the necessity that exists for adjusting the work to be done to the constitutional power to do it.

There can be no such difficulty respecting the urine. Under ordinary circumstances, this excretion continues for about four and twenty hours, without undergoing any perceptible decomposition; but when the individual passing it is weak, decomposition takes place with a rapidity varying according to the amount of debility present; nay, we may go further, and say that in some instances—as in paraplegia, where the vitality of the kidneys and bladder is very low—the urine is actually decomposed ere it leaves the body. The decomposition is recognised in a variety of ways: by the smell, by the occurrence of vegetable growths, vibriones, torulæ, etc.; by the abundant formation of ammoniacal salts; by turbidity, etc.

It is scarcely necessary to remark that we are fully alive to the fact that atmospheric conditions have a great influence in promoting the rapid decomposition both of urine and fæcal matter. What we want to call attention to is, that if on a cool day and in a cool room the urine of a patient shows evidence of decomposition in twelve hours, it is evidence of a debilitated condition of the bladder, the kidney, or the system generally. As such conclusion seems very dull and meagre however, when thus announced, we will endeavour to point it by recording the case which determined the writing of this communication.

A medical friend sent me a bottle of urine, with the laconic request that I would give my opinion upon it, and my views of the treatment to be recommended. The sole information he imparted to me was, that it was passed that morning by a boy about ten years old. After allowing the fluid to stand for some hours, it was examined microscopically and by simple chemical tests, etc., but nothing wrong could be found with it, except that it had begun to decompose. The first impulse was simply to communicate that fact to my friend, and leave him to draw his own inference; but as it would be an useful mental exercitation to put down the conclusions which might be drawn from that fact alone, I resolved to give an account of the symptoms that I thought the case would present.

The following was the train of argument. As there is an absence of much vesical mucus, triple phosphates, etc., there is presumptive evidence against the idea of vesical or renal disease. There is then general debility; and the presumption is that there will be debility in all the organs of the body, and consequent disorder of function. The signs by which deficient vital power in the brain and nervous system, in the respiratory, digestive, cardiac, and other sets of organs, might generally manifest itself, were then mentioned; and the note ended by recommending a strengthening plan of treatment. In reply to this communication, my friend reported that not only were the symptoms correctly described, but that some had been mentioned in the note which had not been recognised before its receipt. The plan suggested tallied entirely with his own views, and he felt his hands proportionally strengthened thereby.

The practical conclusion to be drawn from the foregoing observations is obvious. If the physician finds that the excretions of any of his patients decompose more rapidly than they would do during health (under the same external circumstances of light, air, and heat), he may feel certain that the vital powers are seriously impaired; and if under the treatment he adopts the decomposition occurs at an earlier period than it did before, there is reason to inquire whether such phenomenon is due to the augmentation of the disease itself or to the medicines administered for its cure. It will then be a subject for consideration, whether the plan of treatment is to be further developed in the same direction as before, or to be fundamentally changed.

Nor is this a matter of so slight importance as it might at first sight appear. Many seem to think that it is the simplest matter in the world to enable a patient to regain strength; and, consequently, they care little about employing medicines which, while they reduce the powers generally, seem to have some special influence over particular organs. But it is by no means an easy matter to enable a patient to regain health; and any one who systematically endeavours to do so, will have to acknowledge that it is one of the most difficult problems in medicine. It is easy to reduce the strength, for that we have a host of drugs; but directly to increase it, we have literally none.

"Facilis descensus.....
Sed revocare gradum.....
Hic labor hoc opus est."

Gulstonian Lectures
ON
FEVER AND INFLAMMATION.

DELIVERED BEFORE THE
ROYAL COLLEGE OF PHYSICIANS, LONDON,
1859.

By William Addison, M.D., F.R.S., Fellow of the College.

Lecture III (*concluded*).

XVII.—Crisis, Protraction, and Relapse: Fever.

There are no diseases in which the transition from unfavourable to favourable symptoms is more marked than in primary contagious fevers. Thus, in typhus, in the great majority of those who recover, the turn in favour of the patient is determined within a period of twenty-four hours. In our exposition of fever, we have treated the corpuscles of the blood as living bodies. And in all phenomena depending on the actions of living bodies there are epochs or periods; there is a time of germination, maturity, and decline. And symptoms of fever, because they are based upon an independent action or metamorphosis of the blood-corpuscles, have also their analogous epochs.

When the fluid of the blood is disordered short of affecting the corpuscles, and some form of inflammation arises for its depuration, there is but one preternatural depurative reaction: namely, that of the fluid upon the common tissue, denoted by the inflammation. But in fever there are two preternatural reactions: one, and the first, that of the corpuscles, whereby they extricate themselves from a virus; or, in other words, excrete a poison, and transfer it to the fluid in which they swim: the other, and subsequent one, that of the fluid whereby the virus is handed over to the common tissue for expulsion by some form of inflammation. In both kinds of inflammation, namely, those without fever, and those consequent on fever, the inflammation has reference, not to the state of the corpuscles, but to the state of the fluid of the blood.

The crisis, or maturity and termination of fever, then, depends on two events, both of them vital actions: *first*, the discharge of the virus from the corpuscles; and *secondly*, its discharge from the plasma. If there be obstacles to the discharge of the virus from the corpuscles, symptoms of fever will be protracted; should there be hindrances to its discharge from the plasma, forms of inflammation will be protracted.

If the corpuscles have freed themselves from the virus, but there are hindrances to its discharge from the plasma, then the imperfectly depurated fluid may react upon the convalescing corpuscles, and symptoms of fever be renewed. And the more probable will be this renewal, or relapse, where inflammation is acting the part of a depurative organ. But let it be observed in the circumstances presumed, the fever into which the patient relapses has a different *condition précédente* from the fever with which he was first attacked. The first fever has an aërial origin, the second, or prolonged fever, is due to imperfect depuration of the plasma. Let us examine this point in more detail.

When causes of hardship and sickness abound in the mixed population of a crowded city, complex forms of illness must often occur. These it is very difficult to unravel, because the persons are not, or have not been, continuously under medical observation. We therefore again refer to the crew of a ship, where, from the inmates being seen daily, and from other circumstances, the sequence of events can be better followed.

Formerly, in long voyages, it has not unfrequently happened that a salt diet, bad water, and confinement on board the ship, have produced in the men that state of blood which founds, upon the slightest local provocation, chronic ulcerations on the exterior of the body. Also, in addition to the exterior ulcerations, various forms of bowel complaint, diarrhœa, and chronic dysentery, have been present. With the crew in these conditions, the ship has sailed into an unhealthy port, and some of the men have taken fever from the poisonous atmosphere of the shore. Here fever has arisen from the aërial source; but the symptoms, history, and termination of the fever will vary greatly in the different men; because the anatomical conditions in which they severally are when they enter upon fever are different. And when the aërial fever has run its course, or when its proper epoch of termination has arrived, we have seen men linger in fever, or seem to fall back—relapse—into fever. The reason is because the latent anatomical lesions, present before the aërial fever set in, have now, from the commotion of that fever, themselves become influential by giving indraught to morbid matter into the blood; in creating, not a continuation of the aërial fever, but another—the typhoid pyrexia, or fever. In such cases the patient no doubt relapses into fever; but he does not relapse into the same fever; it is into another and a different one.

"During seven months in 1831, eleven hundred and forty-five cases of fever were treated by me," says Dr. Perry, "to a termination. Of this number there were nineteen relapses, averaging one in sixty; and I was particularly struck with the fact that these relapses, almost altogether occurred in patients who had been admitted in hospital on account of some local inflammatory affection; and who had caught fever in the house, or who were seized with it shortly after leaving the house. The incorrectness of calling *these* cases of relapse, is quite manifest, as it was an entirely new disease. It is as absurd to talk of a relapse of typhus fever as to talk of a relapse of small-pox, scarlet fever, or measles. When an increase of fever takes place after the crisis of typhus, it is owing to some other disease."

Renewed accessions of fever after the crisis of typhus are regarded by Dr. Perry, and we think correctly, as analogous to renewed accessions of fever, after the crisis of scarlet fever, from disease of the kidneys, or from anatomical lesion in any other important organ. And generally, respecting the contagious fevers—scarlet fever, measles, small-pox, and typhus—it may be concluded of persons lingering in fever much beyond the natural periods of these fevers, that the fever of the latter part of the period is not the fever of the first part of it. It is thus, we apprehend, that persons are not unfrequently said to have scarlet fever and typhus. That is to say, more correctly, the typhoid pyrexia, from some anatomical lesion giving inlet to morbid matter to the blood, may follow close upon the primary fever. And it is not difficult to understand that an aërial fever may, through anatomical lesions occasioned by that fever, *glide* into typhoid fever without any interval by which the term relapse is made appropriate.

Thus fevers may interchange, or the one may be supplanted by the other. For persons may be approaching, or have just entered the state of typhoid fever, when an aërial poison introduces and substitutes the dominating typhus. On the other hand, persons recovering from the aërial fever, typhus or scarlet fever, may, through anatomical lesions, lapse into typhoid fever; but for fevers thus to glide, or relapse, into one another, the *conditions précédentes* of both fevers must have been present.

"Great numbers of the sick," says Dr. Bryce, "admitted into hospital with scurvy, dysentery, and diarrhœa, were approaching, or had already symptoms of typhoid fever; when, upon being crowded together with others suffering from the true contagious typhus, that disease dominated all the rest." Our interpretation of the fact noticed by Dr. Bryce, is that irritation, or disorder of the corpuscles of the blood—denoted by symptoms of fever—arises from debasement of the plasma; but that, when an aëriform poison of specific qualities reaches them, in their passage through the lungs, a contagious abnormal metamorphosis of the corpuscles is substituted in place of simple irritation. Also, in contagious fever, when the abnormal metamorphosis of the corpuscles has run its course, irritation of the corpuscles may continue, if anatomical lesions, giving inlet to morbid matter, remain.

Hectic and typhoid fevers are, then, both of the reactionary class; for both arise from debasement of the plasma through absorption of morbid matter from anatomical lesions. But the site of the lesion and the quality of the matter absorbed, occasion important differences in the history and symptoms of the two fevers. Then, again, of the two fevers in puerperal women, the one is a reactionary or plasma fever; the other is a primary or specific fever.

It results then, that anatomical lesions, giving inlet to morbid matter to the blood exist prior to the appearance of the typhoid pyrexia, or typhoid fever; the quality of the matter absorbed distinguishing this pyrexia from hectic fever. Contagious typhus belongs to a different class of fevers. Nevertheless, the typhoid pyrexia may introduce the poison of typhus. The order of events then may be as follows:—Hardships in diet diarrhœa, the anatomical lesions of diarrhœa giving inlet t, morbid matter to the blood, typhoid pyrexia, typhoid pyrexio generating the virus of a primary fever. On the other handa

the order may be:—Aërial miasms, primary contagious fever, an anatomical lesion occasioned by that fever giving inlet to morbid matter to the blood, typhoid pyrexia.

We here give a tabulated view of these results, with the following explanation:—

Primary and generally aërial.	Specific and infectious.	Small-pox, scarlet fever, measles, typhus, etc.	Corpuscles of the blood diseased *before* distemperature of the plasma.
Reactionary or plasma fevers.	Hectic and non-infectious.	From diseased joints or bones, pulmonary consumption, and other chronic anatomical lesions, with bland discharges.	Corpuscles of the blood disordered or diseased in *consequence* of debasement of the plasma.
	Typhoid and mixed.	From anatomical lesions of the mucous membrane of the bowel; of the puerperal womb; from surgical wounds and other anatomical lesions, with fœtid and ichorous discharges.	

In this table, the first column exhibits two classes of fever: and the last column shews how we consider them dependent upon the physical constitution of the blood, and upon properties usually assigned by physiologists to the corpuscles.

Injurious substances dissolved in the air and inhaled by the lungs, and specific poisons introduced in very small quantity into the blood, produce infectious or *contagious fevers*. A contagious virus is generated in the blood; and forms of inflammation follow upon the fever. The examples in this country are small-pox, scarlet fever, measles, and typhus. In these fevers, it is the *quality* and not the *quantity* of the poison which is operative. For the quantity, as in the inoculated poisons, may be *exceedingly small;* but its effects are great, by reason of some independent action excited by it in the blood itself. This independent action, which extends through the whole mass of the blood, is, we say, the result of a contagion, contact-action, or fermentation amongst the blood-corpuscles; an *abnormal metamorphosis* which issues in the generation of a contagious virus. And the phenomena, because dependent on the vital action of cellular bodies—the blood-corpuscles—have therefore *a crisis*, a more or less decided or marked epoch of rise, maturity, and decline. The rise, crisis, and decline of contagious fevers corroborates the conclusion which bases phenomena of fever upon the vital actions of cellular bodies.

Spoiled materials constantly ebbing back into the plasma from chronic anatomical lesions with *bland discharges*—such as diseased joints, protracted suppurations, pulmonary consumption, etc.—distemper the fluid of the blood; and reiterated or deuteropathic distemperature of the fluid disorders the corpuscles and produces *hectic fevers*. In these fevers, there is no evidence of that kind of independent action in the blood which issues in the generation of a contagious virus. They are non-infectious; therefore there is an absence of proof of any specific quality in the matter introduced into the blood. Hectic fevers, moreover, have no marked epochs of maturity and decline; and that the symptoms of fever depend upon the constancy and reiteration of the spoiled material seems proved; because they continue whilst the source of absorption continues, but disappear when it is removed, as it often can be, by amputation or by some other surgical operation. Hectic fever, then, depends on the permanence of the source of spoiled material; on a continuousness of absorption which debases the fluid, and, through the fluid, the corpuscles of the blood. Symptoms of fever follow from their disorder; but this disorder—if we may so speak—is one of constant fretting and irritation, from the constancy of the ebbing back of spoiled matter into the plasma. There is no independent action in the blood, such as issues in the generation of a contagious virus. Pathogenetical substances, then, introduced into the blood, occasion fever; by their quality, when a very small amount excites an independent action in the blood-corpuscles, which has its rise, maturity, and decline, and issues in the generation of an infectious virus; by quantity and reiteration, when continuousness of introduction occasions constancy of irritation amongst the corpuscles, denoted by hectic and non-infectious forms of fever, which decline and disappear when the source of morbid absorption is removed.

Interposed, as it were, between these two fevers—contagious and hectic—are *typhoid fevers*, or *typhoid pyrexiæ*. These sometimes have the characters of the contagious, sometimes of hectic fever; because the forms and symptoms which these typhoid fevers may assume are determined sometimes by the quality, and sometimes by the constancy or reiteration of the morbid matter. In proportion as the quality is more offensive or specific—as when the source of absorption is hospital gangrene, ulceration of the mucous coat of the bowel, a surgical wound with an ichorous discharge, or the puerperal womb—the fever approaches in all its phenomena to the contagious forms of fever. On the other hand, the more the symptoms of fever depend upon reiteration of the morbid matter, as when the source of absorption is an anatomical lesion with a more bland discharge, then the more the phenomena observed in the patient approach to those of hectic fever.

There is no arbitrary assumption here, in arguing differences in the symptoms and phenomena of reactionary fevers from differences in the quality of the matter absorbed into the plasma of the blood from different conditions of anatomical lesions, or different states of ulceration. The fact of difference of quality in the matters discharged is demonstrated in surgical ulcers, some of which discharge a bland and laudable pus, others a thin, irritative, and fœtid ichor. Nay, the same anatomical lesion or ulceration will differ in the quality of the matter discharged—and therefore in the quality of the matter which may be absorbed—on two consecutive days. It results, then, that if the corpuscles of the blood take on a general and independent action from a poison which may come into contact with only a few of them, an infectious or contagious virus is generated in the blood, and infectious or *contagious forms of fever* appear: whereas, if the corpuscles of blood suffer only constant irritation or fretting from the continuousness of the presence of an irritating matter in the plasma, a contagious virus is not generated, but *non-infectious* or *hectic* forms of fever arise. The contagious or primary, and the reactionary or hectic, are the two classes of fever which we conclude to be dependent upon the physical constitution of the blood. In the one class, the corpuscles are disordered, irrespectively of the fluid in which they swim. In the other class, debasement of the fluid is antecedent to disorder in the corpuscles. But the two parts of the blood are much too closely associated with each other, for impairment of the quality of one part to continue without impairment of the qualities of the other part. Therefore fever of the one class may glide or relapse into fever of the other class. And it would seem, from the physiology of the corpuscles, that contagious fevers from aërial poisons must relapse into fever from debasement of the plasma, were it not so ordered that forms of inflammation perform the office of a depurating organ. The corpuscles of the blood generate the contagious virus, and they transfer it to the plasma; and should the specific form of inflammation characterising the fever fail of fixing it in the common tissue, symptoms of fever are renewed.

The same poisonous atmosphere may be breathed for the same time by a number of persons, and it will produce fever only in a few of them; because the corpuscles of the blood have different degrees of resistance in different persons. A poison in the atmosphere is a *condition précédente*; it is not the logical *antecedent* of contagious fever. Some physiological element of the body must be disturbed, or must be interposed between the aërial poison and symptoms of fever. This physiological element we have concluded to be the corpuscles of the blood.

In like manner, it is not every distemperature of the fluid of the blood that occasions hectic fever. On the contrary, the first effect of simple distemperature of the fluid of the blood is to occasion new, or to aggravate existing forms of inflammation. It is only when the cause of the dyscrasy of the fluid is permanent and has overcome the resistance of the corpuscles, that symptoms of hectic fever appear. Anatomical lesions (ulceration and suppuration) have therefore only the same relation to hectic fever, that poisons in the air have to contagious fever. They are *conditions précédentes*, and not the antecedents of the fever. Extensive ulcerations and suppurations exist without hectic fever, because the anatomical lesions must have become continuous inlets of spoiled material to the blood, and

the fluid of the blood must be thereby continuously debased before symptoms of hectic fever appear.

It has not unfrequently happened that persons in dissecting the dead body or in necroscopic inspections have pricked their finger; of such many escape without inconvenience, whilst another, more unfortunate, may be attacked with fever; and recover only after extensive inflammations and more than one large critical abscess. The reason is because the puncture, or anatomical lesion, is only a *condition précédente*. A contagious disorder amongst the blood-corpuscles is the proper antecedent of fever; and distemperature of the fluid of the blood is the proper antecedent of inflammation and critical discharge. Fever from the puncture, therefore, does not arise unless the blood-corpuscles be affected.

So, again, anatomical lesion, or follicular disease of the mucous membrane of the bowel, is a *condition précédente*, and not the *antecedent* of typhoid fever. A great number of persons may be suffering hardships, and may be afflicted with chronic dysentery and diarrhœa, or with follicular disease of the mucous membrane of the bowel; but only a very few of them may fall into typhoid fever; and these may not be those with the worst, or most extensive anatomical lesions. The reason is because the state of fever does not depend upon the anatomical lesions in the manner of an antecedent. Symptoms of fever make their appearance only when the lesions are giving inlet to morbid matter into the blood, which, either by quality, or frequency of iteration, disorders or irritates the blood-corpuscles.

It will be observed of this exposition that the *condition précédente* of fever, occasioned through miasms in the atmosphere, is external to, and apart from the body. A poison from the air affects the blood (the corpuscles) and fever is actually the first phenomenon of departure from health; whereas in reactionary fevers the *condition précédente* is within, or is a part of the body. Some anatomical lesion, and an irritative matter in the plasma, exist before, or are preliminary to symptoms of fever. A departure from the standard of health has therefore already occurred before; but, perhaps, without symptoms until the typhoid pyrexia appears.

In bringing our discourse upon a very difficult and interesting subject to an end, we have only in conclusion to observe that the doctrine of fever we have propounded is based on the physiological and physical constitution of the blood; on the known properties of cellular bodies; and on microscopical examinations of the state of the plasma and blood-vessels in the process of repair and inflammation. The chief points of the doctrine are:—

The fluid of the blood has a pathology distinct from that of the corpuscles.

Forms of inflammation, or of local poisoning without fever, make their appearance when there is dyscrasy of the fluid only: forms of fever when the corpuscles are disordered.

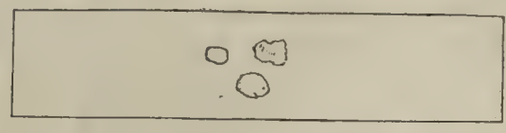
These points are submitted to your learned judgment and impartial criticism, as propositions; though, to our mind, they assume the aspect of truths, derived, as they are, from years of experiment and research upon the qualities of blood, and of the elements of repair and inflammation.

Upon the whole subject, the ideas we have endeavoured to express are, that numerous and various substances may circulate through the body dissolved in the fluid of the blood; and that the cellular elements of the body (including the corpuscles of the blood) have various affinities, and oppose various degrees of resistance to injurious matter. Therefore, if from distemperature of the fluid the common tissue be first disturbed, forms of inflammation first arise; if some local parenchyma be disturbed, the phenomena are those of local poisoning, delirium, coma, diuresis, purging, sweating, salivation, etc.; if the corpuscles of the blood be first disordered, fever is the result.

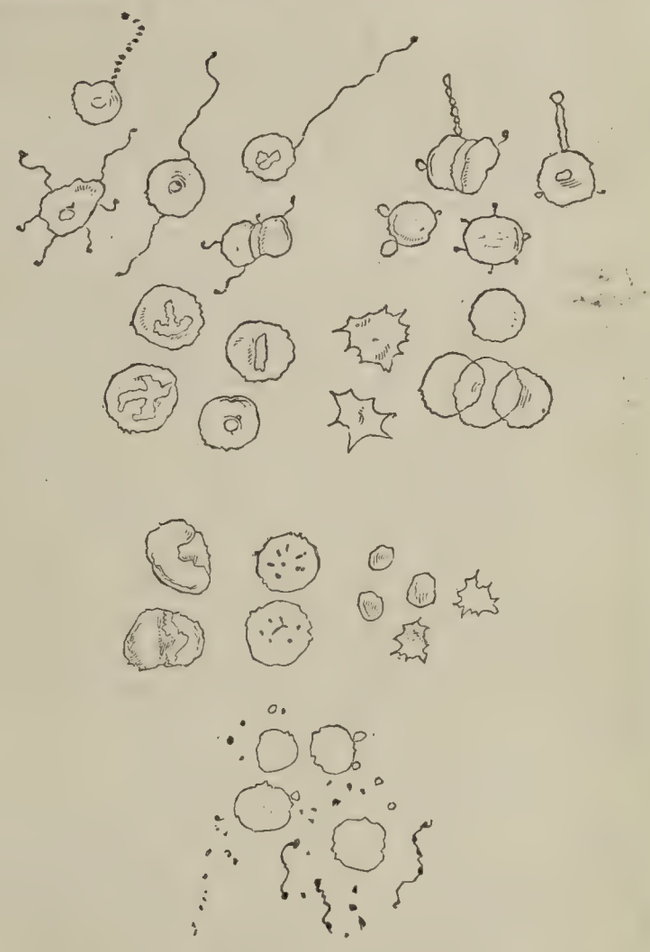
Appendix.

Experiment II, mentioned in our second lecture, refers to appearances of such a novel and remarkable kind, that we think the details, upon which success in repeating it depends, should be given:—

A glass tube, one-tenth of an inch in bore, drawn out to a point, is used for a pipette. Dissolve two grains of common salt and one grain of carbonate of soda in half an ounce of water. This forms a solution which may or not be used with sherry wine. Take a slip of glass, and receive on it a drop of fresh blood. Place, by means of the pipette, beside the blood, but not touching it, a drop of the saline solution and a drop of sherry wine, thus:—



. Let fall a thin piece of glass upon the fluid and they will mingle in various proportions. A good eighth object glass is required; we use a middle eye-piece; and it is essential, to see the tails, etc., that the edge or circumference of the mixed fluids should be looked at, and not the middle of the mass. We have made the experiment, with and without the saline solution, numberless times; and though never failing to produce tailed forms in some part or other of the mixed fluids, still we find it impossible to foretell what set of appearances will prevail *within* the corpuscles. Some one or other of the following forms will, however, be seen. Half an hour or more should be given for the best effects.



The way in which the wine and the saline solution take off all disposition of the corpuscles to adhere in rolls; the various prickly appearances which some of them assume; and the innumerable very different markings seen in the interior of others, are scarcely of less interest than the tails. Opinions may vary as to the nature of the motions seen in the tails. If there be motion in the fluid, the tails are of course influenced by it; nevertheless, there is a constant wavy movement, which seems independent of all motion in the fluid.

Where the undiluted wine has acted upon the corpuscles, they are entirely deprived of their colouring matter, and a minute molecular matter floats in the surrounding fluid without molecular motion; but, where the wine is acting and producing tails, numerous and variously sized molecules are thrown off from the corpuscles; and these all have an intense molecular movement. The change which the fluid undergoes in consequence is well worthy of especial notice.

Royal College of Surgeons of Ireland. At a meeting held on June 6th, the following officers were elected for the ensuing year: *President*, Christopher Fleming, M.D.; *Vice-President*, Robt. Adams, M.D.; *Secretary*, Edw. Hutton, M.D.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY
LIONEL BEALE, M.B., F.R.S.,
PHYSICIAN TO KING'S COLLEGE HOSPITAL; PROFESSOR OF PHYSIOLOGY AND GENERAL AND MORBID ANATOMY IN KING'S COLLEGE, LONDON; ETC.

Lecture III.

Healthy Urine. III. Inorganic Constituents. *On the Salts generally; Changes effected in the Composition of the Salts by Incineration: Proportion of the Saline Matter in Urine: Phosphates; Common Phosphate of Soda; Alkaline Phosphate of Soda; Acid Phosphate of Soda; Phosphate of Soda and Ammonia; Phosphate of Magnesia; Phosphate of Ammonia and Magnesia; Phosphate of Lime; Estimation of the Alkaline and Earthy Phosphates; Quantity: Sulphates; Quantity; Estimation: Carbonates: Chloride of Sodium; Quantity; Detection; Circumstances affecting the Excretion of Chloride of Sodium: Bases in Urine: Soda and Potash: Lime: Magnesia: Iron: Silica: Alumina: Systematic Quantitative and Qualitative Examination of the Saline Matter of Healthy Urine.*

III.—Inorganic Constituents of Healthy Urine.

The saline or inorganic constituents of healthy urine are composed of those substances which remain after the solid matter has been exposed to a red heat, and the carbon burnt off so as to leave a pure white ash. If a little of the solid matter be placed in a platinum capsule, or upon a piece of platinum foil, which should be very large in proportion to the quantity of solid matter operated on, and exposed to the red heat of a spirit or gas lamp, it will melt and boil, giving rise to the evolution of offensive gases, which result from the decomposition of the organic constituents of the urine. When this has ceased, a charred mass, consisting of carbon and the indestructible saline matters of the urine, remains. After this black spongy mass has been kept in the open capsule, at a dull red heat, for a few hours, the carbon will gradually disappear, in consequence of the action of the oxygen of the air, which at this temperature combines with it, and forms carbonic acid. A pure white ash, which has an alkaline reaction, alone remains; and this consists entirely of saline or inorganic material, which is indestructible at a red heat.

Changes effected in the Composition of the Salts by Incineration. Now, it must not be concluded that the salts which we find in the ash existed in precisely the same state in the urine previous to incineration; for we know that many of these salts, when heated together, undergo mutual decomposition. Some of them may even be volatilised, if kept for a considerable time at a red heat. A mixture of carbonate of soda and chloride of ammonium becomes decomposed at a red heat. Chloride of sodium remains behind, while carbonate of ammonia is evolved. Any lactates, oxalates, and salts, of other organic acids present in the urine, will be found in the ash, in the form of carbonate, although no carbonate existed in the urine originally. The ammoniaco-magnesian or triple phosphate will be found in the ash as phosphate of magnesia; the phosphate of soda and ammonia, as phosphate of soda. Other phosphates also become completely changed by the process of incineration, and by the action of other salts present in the ash upon them. During the incineration, a considerable loss of chlorine also takes place.

Again, unoxidised substances, such as sulphur and phosphorus, and partially oxidised compounds, in combination with organic materials, will become oxidised in the process of decarbonisation; and will, therefore, be found in the ash in the form of sulphuric and phosphoric acid. These will react upon some of the bases present, and sulphates and phosphates will be formed.

Professor Rose of Berlin, in a beautiful series of experiments, has proved that the mineral constituents exist in very different states in various organic substances. From the *carbonaceous* ash of some organic matters, the greater proportion of the salts can be extracted with water or acids; while, in other cases, but little saline matter can be separated, unless the mass be exposed to the oxidising action of the air for some time. This shows that the substances must have originally existed in an unoxidised or in a partially oxidised state, probably in combination with some organic material. In certain substances, then, the greater quantity of the mineral material is perfectly oxidised (*teleoxidic*); in others, it exists partly in an oxidised and partly in an unoxidised state (*meroxidic*). Professor Rose was not able to discover any substance in which it occurred completely unoxidised (*anoxidic*). In blood, milk, yolk of egg, and flesh, a considerable portion of the mineral constituents are *meroxidic;* while, in urine and bile, they are almost entirely *teleoxidic;* which is exactly what we should expect, when we consider the different nature and offices of these fluids.

Proportion of Saline Matter in Urine. About one-fourth of the solid matter of healthy urine consists of saline constituents which are not destroyed by a red heat.

One thousand grains of healthy urine, containing from forty to sixty grains of solid matter, will give from ten to fifteen grains of fixed salts. Of the salts, more than nine-tenths are soluble in water (alkaline salts); while the remainder can only be obtained in solution by adding an acid (earthy salts). A mere trace remains behind, which is insoluble in water, acids, and alkalies. This consists of silica, with perhaps a little carbon which has resisted oxidation. These numbers are, of course, only approximative, as the amount of salts is liable to great variation.

The saline constituents soluble in water are composed of the following acids and bases.

Sulphuric acid	Potash
Phosphoric acid	Soda (and sodium).
Hydrochloric acid (chlorine)	

The salts may be readily obtained in a crystalline state by dissolving the residue in hot water, and evaporating a few drops of the solution on a glass slide. The crystals are represented in the *Illustrations of Urine*, Pl. 1, Fig. 2.

The mineral constituents insoluble in water are composed of the following acids and bases.

Phosphoric acid	Lime
Carbonic acid (occasionally)	Magnesia
Silicic acid or silica	Alumina (sometimes).

In disease, the mineral constituents have been found to vary in quantity quite as much as the organic substances; and other salts are not unfrequently found, which will come under our notice at a future time: while occasionally one or more of the saline compounds mentioned in the above list are altogether absent.

The organic constituents of the urine have hitherto received a greater share of attention than has been given to the inorganic salts; but, from recent investigations, it seems probable that, before long, the physician will regard a departure from the healthy standard in the saline constituents with as much attention as he has been accustomed to observe an increase or diminution in the quantity of the urea, uric acid, or other organic ingredients.

Phosphates. The phosphates are a very important class of salts, which exist in greater or less quantity in all the tissues of the body, in the secretions, and in considerable proportion in the blood. The salts of phosphoric acid which are carried off from the organism in the urine, may be divided into two classes.

1. The *alkaline phosphates* are *soluble* in water, and are not precipitated from their solutions by ammonia or other alkalies. When ammonia is added to healthy urine, the *alkaline* phosphates are not thrown down. Some of the most important alkaline phosphates are, *phosphate of soda*, *acid phosphate of soda*, and *phosphate of soda and ammonia.*

2. The earthy phosphates are *insoluble* in water, but are dissolved by the mineral acids. Most are soluble in organic acids, although they dissolve very slowly if the acids are dilute. They are held in solution even by carbonic acid. Most albuminous substances have the power of dissolving earthy phosphates; and casein holds in solution a considerable quantity of phosphate of lime. The earthy phosphates, as phosphate of lime and phosphate of magnesia, are always precipitated when ammonia is added to healthy urine.

Of the phosphoric acid eliminated in the urine in the form of phosphates, the greater proportion is doubtless taken in the food; but a certain amount is formed in the organism by the oxidation of the phosphorus of albuminous tissues, which takes place during their disintegration. Much of the phos-

phoric acid formed in the organism is doubtless produced in the nervous tissue.

In these lectures, I have purposely avoided the use of chemical formulæ, partly because, in many instances, I should have had to enter too far into the province of chemistry to explain them, and partly because I felt that all that was necessary for the clinical examination of the urine might be explained without their use. It is, however, impossible to allude to the composition of the phosphates without giving their chemical formulæ; and I therefore propose to make an exception in the case of this class of salts.

Phosphoric acid is one of those acids which exist in three forms—the monobasic, bibasic, and tribasic acids, which combine respectively with one, two, or three equivalents of base, to form three different classes of salts.

Tribasic phosphates . . .	3 Na O, PO^5+24 Aq. 2 Na O, HO, PO^5+24 Aq. Na O, 2 HO, PO^5,+2 Aq. Na O, HO, NH^4 O, PO^5+8 Aq.
Bibasic or pyrophosphates	2 Na O, PO^5+10 Aq.
Monobasic or metaphosphates	Na O, PO^5.

Now, the phosphates found in the organism are all *tribasic phosphates*, and consist of three equivalents of base, combined with one equivalent of phosphoric acid, with different proportions of water of crystallisation. The elements of the base of a tribasic phosphate may be various. Thus, they may consist of three equivalents of soda or other base, or two equivalents of soda and one of water acting the part of a base, or one equivalent of soda and one of ammonia and one of water acting the part of a base, combined with one equivalent of phosphoric acid.

The chemical composition of the phosphates occurring in urine is represented in the following table.

Common or rhombic phosphate of soda, having an alkaline reaction	2 Na O, HO, PO^5+24 Aq.
Acid phosphate of soda, having an acid reaction . . .	2 HO, Na O, PO^5+2 Aq.
Alkaline phosphate of soda, having a highly alkaline reaction	3 Na O, PO^5,+24 Aq.
Phosphate of potash* . .	3 KO, PO^5.
Phosphate of ammonia and magnesia, ammoniaco-magnesian or triple phosphate .	2 Mg O, NH^4O, PO^5+12 Aq.
Acid phosphate of lime . .	2 Ca O, HO, PO^5+3 Aq.
Phosphate of lime (bone-phosphate)	3 Ca O, PO^5

Alkaline Phosphates.

Common Phosphate of Soda—2 Na O, HO, PO^5 + 24 Aq. This salt exists in healthy urine in the proportion of about two grains in one thousand. The fixed salts contain perhaps from 20 to 30 per cent. of ordinary phosphate of soda. Its presence in healthy urine may be proved by adding absolute alcohol to the syrupy fluid obtained by evaporating the urine over a water bath. This concentrated fluid is poured off from the salts which have crystallised, and placed in a small glass vessel. The alcohol is added; and, after the mixture has stood for some time, the crystals are deposited upon the sides of the glass. This method is given by Robin and Verdeil (*Traité de Chimie Anat. et Physiol.*, par Ch. Robin et F. Verdeil.)

Acid Phosphate of Soda—Na O, 2 HO, PO^5+12 Aq. This salt has only been found in the urine; and to it, at least in many cases, the acid reaction of the urine is due. This acid phosphate of soda may be formed from the common phosphate (which has an alkaline reaction), by the addition of uric acid, which removes from the common phosphate one equivalent of soda, forming *urate of soda;* and the reaction of the mixture becomes acid, in consequence of the formation of the *acid phosphate.*

The acid phosphate of soda may be obtained from the concentrated urine treated with absolute alcohol, after the separation of the common phosphate. The acid salt, which is much more soluble, becomes deposited in the course of a few days; but its separation may be expedited by the addition of ether. This phosphate has been separated from the urine by MM. Robin and Verdeil, who attribute the acid reaction of urine to its presence (*Comptes Rendus. Mém. de la Soc. de Biologie*, Paris, 1850, p. 25; also *Traité de Chimie Anat. et Physiol.*, 1853). The crystals of this salt are figured in Robin and Verdeil's *Atlas*, Pl. IX, Fig. 2.

Alkaline or Basic Phosphate of Soda—3 Na O, PO^5+24 Aq. This phosphate is considered by some to be present in urine; but it is so readily altered by other salts present, that it is impossible to obtain it from the animal fluids in a state of purity. In the presence of carbonic acid, it is decomposed: one equivalent of soda unites with the carbonic acid to form carbonate of soda, and common phosphate of soda is formed, both which salts have an alkaline reaction—3 Na O, PO^5+ CO^2+HO=2 Na O, HO, PO^5+Na O, CO^2.

Liebig has shown that it is not present in healthy urine, as was stated by Heller; and Messrs. Robin and Verdeil do not enumerate this phosphate as one of the constituents of urine: indeed, if this phosphate were formed, it would, in all probability, be at once resolved into salts of a more stable nature.

Phosphate of Soda and Ammonia—Na O, NH^4O, HO, PO^5, +8 Aq. This salt, although probably not present in perfectly fresh urine, is usually enumerated as one of the phosphates found in the secretion. The crystals of phosphate of soda and ammonia, or microcosmic salt, are beautiful transparent four-sided prisms.

Phosphate of Potash—3 KO, PO^5—is probably not present in healthy human urine; but it has been detected by Boussingault in the urine of the pig, in the proportion of 1·02 per 1000.

Many vegetable tissues contain a large quantity of phosphate of potash; and it is met with in the juice of muscle in considerable quantity.

The proportion of alkaline phosphates in the organism varies according to the nature of the food. Generally, the proportion is smaller in herbivorous than in carnivorous animals. Muscular fibre contains a large amount of phosphates. Wheat, and the seeds of the cerealia generally, contain a considerable quantity of alkaline phosphates. Robin and Verdeil found in the ash of the blood of a dog fed upon flesh as much as 12 per cent. of phosphoric acid, combined with soda and potash; while the ash of the blood of the ox did not contain more than 3 per cent. When the dog was fed upon potatoes, the proportion fell to 9 per cent. The ash of the blood of man contained about 10 per cent. of phosphoric acid. In urine, Berzelius found 2·94 per 1000; and Simon, from 1·25 in slightly acid urine, to 2·75 in very acid urine.

Breed and Winter estimate the quantity of phosphoric acid removed from the organism in the urine, in the course of twenty-four hours, at from 59·48 to 79·97 grains. The proportion increased considerably after taking food. This quantity corresponds to from 120 to 160 grains of phosphatic salts.

The quantity of phosphoric acid increases for some hours after a meal. Vogel, Winter, and others, have made numerous experiments on this point; and their researches show that the hourly variation in the excretion of phosphate is regular. The morning urine contains the smallest quantity. In some of Dr. Bence Jones's analyses, however, the quantity of alkaline phosphates is even greater in the urine passed before than in that excreted after a meal (*Animal Chemistry*, p. 81).

The proportion of phosphates in the urine depends much upon the nature of the food. The quantity is increased if phosphorus is taken, proving that this substance does become oxidised in the organism. That the greater proportion of the alkaline phosphates present in the urine are derived from the food is rendered evident by referring to the amount introduced into the organism in this manner. A man taking about fourteen ounces of bread and twelve ounces of meat, with half a pound of potatoes and half a pint of milk, would take about 130 grains of alkaline phosphates.* As we have seen, he would eliminate, in his urine, about the same quantity. It is true that these numbers are only to be regarded as rough approximations to the truth; but I think, at present, it must be admitted that the quantity of phosphate excreted in the urine, but found in the organism, is so small in comparison to that which is derived from the food, the amount of which is liable to great variation, that, in the present state of animal chemistry, it is quite impossible to form an estimate of the amount

* It is doubtful if phosphate of potash usually exists in urine, as chloride of sodium and phosphate of potash decompose each other, forming chloride of potassium and phosphate of soda. It is not improbable that it may exist in urine in which the chloride of sodium is present in very small quantity, or altogether absent, as in pneumonia and some other acute diseases.

* 14 oz. of bread contain 53·2 grs. of phosphates.

12 oz. of beef	„	40·7	„ „
½ lb. of potatoes	„	11·0	„ „
½ pint of milk	„	32·0	„ „
		136·9 grs. of mixed phosphates.	

arising from the former source, or to separate this from the phosphates taken in the ingesta.

Still it is certain that some of the phosphoric acid is formed within the organism, by the oxidation of the phosphorus of the albuminous tissues; but this must bear but a small proportion to the whole amount of phosphate removed in the urine, as the above data conclusively show.

The fluid which surrounds the elementary fibres of muscle has an acid reaction, depending probably upon the presence of acid phosphate of soda, produced by the action of lactic or some other organic acid upon phosphate of soda. Du Bois Raymond has, however, shown that this acid reaction is not met with when the muscles are at rest. The ashes of most tissues contain phosphates in large proportion; and Schmidt has shown that a considerable quantity of phosphate is always present in young tissues. The quantity of alkaline phosphate required by the organism is considerable; for, besides the large proportion which is excreted in the urine, the ash of the solid excrements contains as much as 20 per cent. alone. The phosphoric acid required is, no doubt, supplied principally by the food, partly in the form of phosphatic salts, partly as phosphorus which is oxidised in the organism. We shall recur to this subject when we have to consider the elimination of the phosphates in disease.

[*To be continued.*]

Reviews and Notices.

A Manual of Obstetrics, Theoretical and Practical. By W. Tyler Smith, M.D., Member of the Royal College of Physicians; Physician-Accoucheur to, and Lecturer on Midwifery at, St. Mary's Hospital. Pp. 628. London: John Churchill. 1858.

The present unpretending-looking volume is one of Mr. Churchill's very valuable series of Manuals, and assuredly not the least important and valuable of them. As the author says in his preface, it consists of the substance of a course of lectures which appeared in the *Lancet* in the year 1856. Now, a *manual* is generally understood to be merely a compilation or epitome of certain doctrines and opinions held by the profession as established. Dr. Tyler Smith's book goes much further than this; for while he freely lays before the reader such doctrines and theories as have been accepted as fixed, and gives with strict impartiality the views and opinions of others on points which are *adhuc sub judice*, he, with bold originality, gives his own doctrines and opinions; in the former case, often turning quite aside from the beaten track; in the latter, endeavouring to throw the light of his own independent views and experience on the subjects discussed; in both cases—

"Nullius addictus jurare in verba magistri."

We have not space to comment on all the subjects discussed in this manual. In the first chapter—that on Generation—we find the philosophy of the subject clearly laid down, including many curious points, which, though not bearing exactly on obstetrics practically considered, are yet of considerable scientific interest: such, for example, as the strange phenomenon in reproduction to which the term "parthenogenesis" has been given. The anatomical and physiological descriptions are given with the brevity demanded by the occasion, but nevertheless with sufficient clearness. In the chapter on the Signs of Pregnancy, we find the opinion once prevalent on the subject of the uterine *souffle*—that that sound was caused by the placental function, being thence denominated *bruit placentaire*—effectually disposed of. "It has been heard in cases where putrid fœtuses have been born", and where there was other proof that there could be no circulation going on in the placenta: therefore, "the uterine *souffle* is no proof of the life of the fœtus".

Speaking of the *decidua vera*, we find our author adhering to the opinion that it is identical with the uterine mucous membrane, and that it is entirely thrown off after parturition, in the form of the lochial discharge, in the same way as, he says, the mucous membrane is removed with every menstruation. That this is "a startling doctrine", our author admits; but, nevertheless, certain facts adduced by himself, and by others before him, would seem to confirm it. We think, however, that Dr. Matthews Duncan, and some others, have published somewhere other facts, which equally strongly contradict it. The subject is one of but little practical value; and, therefore, we leave it.

The subject of the Duration of Pregnancy is highly important, and we have a very elaborate chapter upon it. Dr. Smith considers that the duration of pregnancy is a multiple of the catamenial period; "labour coming on at what would have been a catamenial period, had the woman remained unimpregnated". On this principle, he says, he constructed his well known Periodoscope, "upon the data that conception generally occurs a few days after the completion of a catamenial period, and that labour may be expected on some day of what would have been the tenth period, had pregnancy not intervened." Dr. Smith, however, with perfect impartiality, favours his readers with the views of those who differ from him on this point—of those, namely, who maintain that the time of labour is determined somewhat arbitrarily by the maturity of the fœtus. As "the last hypothesis respecting the variable duration of pregnancy", he mentions "that advanced by Dr. Clay of Manchester, who argues that the younger the parent, the shorter is the term of gestation". We must say on this point that, having carefully read Dr. Clay's paper on the subject, we think that the facts adduced by him confirm his theory very strongly; while, if the theory be true, it must upset the catamenial or ovarian doctrine.

On the question of the mechanism of parturition—a somewhat vexed one—we find our author follows Nägele, with too implicit acquiescence, we are inclined to think; but we are bound to say that, in so doing, he has the majority with him.

We recollect that, on the occasion of "a consultation at Norwich", in the year 1851, Dr. Murphy was much reflected upon for maintaining that it was possible for a portion of retained placenta to undergo hydatid degeneration. Our own opinion certainly was, that such a doctrine was preposterous. Dr. Smith, in the work before us, seems to hold with Dr. Murphy. He says that "Drs. Montgomery and Ramsbotham believe that small portions of placenta retained *in utero*, after parturition at the full term, may become the nucleus of hydatigenous formations; but Dr. Barnes combats this view, from the general history of hydatigenous formations, and the destruction of the fœtal vessels of the placenta which occurs at the time of birth." He adds, that the question—a very interesting one—must be considered, to some extent, as still unsolved. Dr. Smith, while on this subject, does not allude to the famous Murphy controversy of 1851. We could have wished that he had done so, as the opinion of a physician of such eminence as Dr. Murphy, put forward so prominently as it was, is of great importance; and the question itself is clearly one which ought to be settled, if possible; for, on the occasion referred to, the reputation of a most respectable man was seriously assailed.

The danger to the life of the fœtus in the administration of ergot of rye to the mother during parturition, is a vexed question which it is desirable should be settled. Dr. Hannotte Vernon, of the Great Northern Hospital, in a paper published a few years ago, argues for a poisonous influence of the drug, producing, as a perceptible effect, a gradual slowing of the fœtal pulse. He maintains that the child is sure to be still-born, if the fœtal pulsations become reduced below a specified rate. Dr. Smith, in the work before us, on the contrary, attributes the danger, if any, to "the spastic contraction of the uterus, caused by this medicine, which interferes with the utero-placental circulation;" adding, that "the state of the child should be watched

while the mother is under the influence of ergot, and delivery completed with the forceps, if the action of the fœtal heart is *quickened* to any great extent." For our own part, we do not believe that the ergot of rye is obnoxious to the grave accusation of killing the child in either of the ways suggested above. If the child be destroyed during the labour, when ergot has been given, we hold that it must be by some latent compression of the funis, the first perceptible effect of which would probably be a slowing of the fœtal pulse, as shewn by Brown-Séquard, in a paper "*Sur l'association des Efforts Inspiratoires avec une diminution ou l'arrêt des Mouvemens du Cœur.*" (*Journal de la Physiologie de l'Homme et des Animaux.* No. III. Juillet, 1858.) This eminent physiologist says that violent efforts at breathing produce a slowing of the pulse. And Casper, of Berlin, in his elaborate work, *Gerichtliche Medicin*,* shows that during intrauterine compression of the funis, the fœtus makes powerful instinctive efforts at pulmonary respiration, although still deprived of access to air. On this view, a slowing of the fœtal pulse may be a sign of compression of the funis, and, *in that way*, of danger to the life of the child. And on the same view, while Dr. Vernon's theory of a poisonous influence is not necessary to explain the slow pulse for which he contends, that slow pulse would justify Dr. Smith's theory —of interference with the utero-placental circulation, rather than would the acceleration, which the latter writer alleges is the effect of that interference, and which may or may not be the fact. In short, Dr. Vernon's fact, if fact it be, of the slow pulse, is confirmatory rather of Dr. Smith's explanation than of his own—the poison theory.

While on this subject, we must not omit to mention (and we do so, less for the purpose of producing evidence in favour of any opinions of our own, than for that of presenting one of the many proofs we find in the book of our author's spirit of investigation), that Dr. Smith himself, in his chapter on the *Fœtus in Utero*, referring to some experiments made in the year 1850, "with a view to determine the particular reflex movements manifested by the fœtus *in utero* under irritation," says that he observed *respiratory* movements. There was, he says, "constantly a movement of the head as if in respiration; the respiratory movements affected the whole of the upper part of the body..... It appeared to me....that movements of respiration do not occur, as is supposed, for the first time after birth, but that the muscles have been exercised previously." We have thus, observed by Dr. Smith, the fact of respiratory movements on the part of the fœtus while still wholly within the uterus, although he does not attribute those movements to the same exciting cause as Casper does. Their occurrence under compression of the funis when the fœtus is partly born may be noticed in almost every case of pelvic birth, and are, indeed, well understood as a sign of danger to the life of the child; in fact, as our author himself says, in his chapter on Pelvic Presentations, "no other sign of danger to the fœtus is so trustworthy as the occurrence of these jerking spasmodic attempts at respiration."

These independent and impartial observations of different authors serve to show, at least, that we are by no means reduced to the necessity of accusing the ergot of rye, simply because the fœtal pulse may have been affected prior to the expulsion of a dead child; there being several other dangerous causes capable of producing the effect in question—that is, on the supposition of the correctness of Brown-Séquard's views of the association of forcible respiratory efforts with affections of the circulation. For our own part, we must decline to listen to these theories claiming to be explanatory of the assumed fact of the destructive effects of the ergot of rye—theories confused, contradictory of one another, and susceptible of other explanations, as we have shewn them to be, preferring to adhere to an opinion long since arrived at from the independent and careful observation of a great number of cases, in which we have administered the ergot of rye without hurting the child: that that drug cannot *per se* kill the fœtus *in utero*. That the fœtus may be destroyed by it, when given for the express purpose of inducing premature delivery, is, we think, satisfactorily shewn by Dr. Ramsbotham. And, in corroboration of our further conviction that this assumed fact, so attempted to be explained, has never yet been *proved*, we are, even while writing this, enabled to refer to the important evidence of a recent decision of the French Academy of Medicine, in a report to which, presented on May 24th, 1859, the eminent names of MM. Paul Dubois, Danyau, and Depaul, are attached.

We find that Dr. Smith reproduces, in the present work, a theory originally propounded by him in 1848, in which, endeavouring "to draw a distinction between the movements of the fœtus and those of the uterus," he maintained "that many of the movements commonly attributed to the fœtus really belong to the uterus." On the present occasion, Dr. Smith refers to this theory chiefly for the purpose of acknowledging that he "now believes he underrated the extent and influence of the fœtal movements." This is a commendable kind of honesty, which, we regret to say, is rarely to be met with on the part of authors. We think, however, that we have seen cases which are explicable only on some such hypothesis as that originally propounded by Dr. Smith.

But let us leave speculations and theories, and come to something more usefully practical. We have said that our author has not been afraid to depart from the beaten track, even when that track is almost universally adhered to as were the laws of the Medes and Persians. "Meddlesome midwifery is bad," is a well known axiom, and a very useful one—to a certain extent. It cannot be too forcibly impressed upon the ignorant, the uneducated, the careless, the hard-hearted; but with Dr. Tyler Smith we cordially and heartily concur, in thinking that the rule may be pushed too far, and that it may lead to evils worse than those it is meant to hold in check. There is all the difference in the world between the rashness and impatience of clumsiness and ignorance, and the boldness of scientific knowledge and of the *tactus eruditus*. Dr. Tyler Smith is now well known, and worthily known, as the advocate of the *abolition of craniotomy*—a benevolent idea, which he proposes to carry out by putting in practice all the resources of intelligent and educated obstetric art. Of these resources, with parturition at the full time, turning and the forceps are important ones—"meddlesome midwifery", both of them. The latter he advocates in a much earlier stage of the labour than books have hitherto sanctioned. Quoting Dr. Simpson, he says that "no other circumstance exerts so prejudicial an effect as the prolonged duration of labour". We quite agree with Dr. Smith in not insisting, as many do, on the necessity of waiting for full dilatation of the os uteri before applying the forceps: indeed, we have found in practice that, in some of the cases where the os uteri, although very dilatable, seems to be unusually slow in completing its dilatation, the process requires to be assisted mechanically by the passage of the head, which is delayed by a narrowness at the brim of the pelvis. It is, therefore, we think, especially in such cases that the forceps is required. The os does not complete its dilatation so as to slip over the head, simply because the head cannot get low enough to pass through it. We have frequently used instruments to aid the delivery, under this condition, with immediate advantage, and with perfect safety to both mother and child. Why so much dread of introducing the blades of the forceps within the uterus? The whole hand is often introduced there without any harm being done. Why fear to pull the head through a partially dilated os uteri? Do we not often

* Practisches Handbuch der gerichtlichen Medicin, von Johann Ludwig Casper. Thanatologischer Theil. Berlin, 1857. SS. 466, 706, 707, 708, 803, u. s. w. Casper dwells much upon the fact, speaking of these efforts as "lebhafte Athmungsbewegungen" and "wirkliche Athemzüge," etc.

pull the fœtus through an os uteri tightly grasping it, in cases of feet-presentation?

The meddlesome midwifery that is really bad is the brutal interference of men who thrust perforators and other horrible instruments hap-hazard up the vagina, careless whether they thrust them through the cervix (the os being entirely undilated), or right through the fundus uteri—it may happen among the bowels of their unfortunate and too trusting patient. Such things have been, and may be found recorded in the annals of some of our criminal courts. Shall we, to escape the accusation of "meddlesome midwifery", or pleading the axiom to avoid the acknowledgment of some less worthy motives, leave a woman to her fate, who is flooding to death with placenta prævia? We have known such things done, to the eternal disgrace of the profession, which, by endorsing the axiom, could, however indirectly, sanction such a proceeding. Let but the student or the practitioner study carefully the anatomy and physiology of the subject, as laid down in such excellent works as the one before us; and, depend upon it, we shall find what is too often branded as "meddlesome midwifery" lead to such very desirable results as are contemplated in the concluding paragraph of our author's manual.

"In concluding the present work, I cannot but look forward to the time when the present mortality from child-bearing will be very materially lessened. This is a subject in which we of the present day must bear our part; and it is consolatory to know that every succeeding generation of students and practitioners will come to the work with added means of science and experience, until at length we may hope that no unnecessary mortality shall take place in parturition."

In this benevolent wish of our author we cordially concur. We are quite sure *he* is doing *his* part. May the rest of us, following his teaching, try to do ours!

Periscope.

DENTAL SURGERY.

APPLICATION OF ELECTRICITY AS AN ANÆSTHETIC.

On Tuesday, June 7th, 1859, at a meeting of the College of Dentists, the report of a Committee, composed of members of the medical and dental profession, appointed to examine into the value of electricity in producing anæsthesia in dental operations, was read by Dr. Richardson. The following is an abstract:—

Sixty-eight cases of extraction were recorded, in sixty-five of which the anæsthetic value of electricity was tested; in fifty-five of those the intermittent current was used, and in ten the continuous. In these experiments every possible modification was introduced. The poles of the batteries were reversed in different cases; the force of the current, as indicated by the sensations of the patients, was varied; and every necessary precaution was made to secure insulation of the operator. In a large proportion of these cases the results were negative, In some the application of the current produced additional pain; in others less pain was produced: and in five cases there was direct evidence of relief.

In cases where relief was most apparent, the committee believed that the insensibility was general, the patient being, at the time of operation, in a state of syncope. In cases when it was expressed that the pain was less than had been experienced on previous occasions, when no electricity was used, the committee considered that the apparent benefit was tracable to four causes:—diversion of sensation, less difficulty in extraction, syncope more or less marked, and differences in method of operating.

Cases in which pain was increased by the current were those of recent inflammation of the periosteum, or where abscess was present. In regard to the direction of the current of electricity, its force, as computed by the sensations of the patient, the position of the poles, and the different forms of electrical apparatus and currents, the committee could arrive at no affirmative results; differences in these respects indicating in the main no specific differences in effect.

In a final point the committee were unanimous, that in not one instance did any member observe the nearest approach to local anæsthesia. At the same time, the members were of opinion that the intermittent current was allowable in certain cases as a means of producing a diversion of sensation. But as, in a scientific point of view, the electrical current could not be accepted as an anæsthetic, the committee had no data on which to recommend any special electrical apparatus; nor any particular method of applying electricity in dental operations.

British Medical Journal.

SATURDAY, JUNE 11th, 1859.

OLD FATHER THAMES AGAIN.

When Bramah invented the water-closet, about the beginning of the present century, salmon were not unfrequent visitors of our metropolitan river, and trout were caught as low as Chelsea. It may puzzle some of our readers to know what possible connexion we can find between water-closets and fresh-water fish; but a little reflection will show that the very existence of the one is destructive of the other—at least, with our present imperfect arrangements. Before the introduction of water-closets, a common cesspool under each house received its sewage; and, consequently, not one particle of the excrementitious deposits of this great city ever fouled the purity of its beautiful river.

When London was plague-stricken, in the reign of Charles II, in consequence of the filth that soddened its foundations, the river flowed pure and bright; and Izaak Walton angled at Chelsea, with a certainty of being rewarded for his labours, The moment, however, we began to purify the land, so certainly we commenced to pollute the water. It was found that cesspools could no longer accommodate the amount of sewage, when water was called in to flush our closets: consequently, the drains, which had been used simply for carrying off the surface-water of the streets, were called upon to drain our houses also; and thus the contamination of the Thames began. It has required at least half a century, however, for this contamination to begin to tell upon the inhabitants. The first sense to be assaulted was that of taste. It was suddenly discovered, after the passing away of the cholera, that those companies supplying water from notoriously filthy parts of the river were answerable for supplying cholera also. Thames water at Chelsea Bridge had begun to revenge itself for all the accumulated injury it had suffered from the inhabitants. At a vast expense (which comes out of the public pocket, of course), the water companies endeavoured to baffle the just retribution we were suffering from the river, by obtaining their supplies from higher and purer sources. Old Father Thames is not, however, to be baffled. If we will not taste, we shall smell; and thus he

makes a second onslaught on us through the medium of our noses.

Last year, during the middle of June, the stench was so terrible that for some time there existed a fear of some great epidemic from the foulness of the river. Dr. Letheby, in his weekly report on the health of the City, gives a very clear and satisfactory account of the manner in which these dreadful exhalations so suddenly arose. He says:—

"I made a full inquiry into the matter. The water was examined chemically and microscopically. It was tested at high and low tides, at midstream and near to the shores. It was collected at many places between Isleworth and Greenwich, and the inquiry was conducted with regularity every day during the whole time that the river was foul. The general results of the investigations were, that the river was highly charged with sewage and sea-water; and that the circumstances which attended or preceded the fœtid decomposition were a remarkably hot season, a continued absence of rain, a diminution in the public water supply, a flowing up of the oceanic, or tidal sea-wave, to an unusual height, and the sudden discharge of a large quantity of very offensive sewage from the somewhat stagnant sewers by a heavy fall of rain; the discharge occurring about low tide, when, instead of its passing away to sea, it flowed upwards to the higher districts of the river, and then oscillated between the extreme ranges of the tide. This last fact was particularly observed by Captain Burstall, and this year he has noticed it again.

"Taking the result of one hundred and seventy-two analyses of the water which were then made, it was evident that the putrid decomposition was kept up by the sewage acting on the sulphates, etc., of the sea-water; and that the locality or confines of the decomposition was a wave undulating between Chelsea and Greenwich. At high tide it was at the former place, at low tide at the latter. The unfortunate situation of the Houses of Parliament, nearly midway in the range of undulation, was the cause of their being exposed at all times to the fœtid exhalations from the putrid wave, which never passed away beyond them."

Now it would almost seem as though Old Father Thames was determined to play a practical joke upon the representatives of the nation. As they have trifled with the question of Metropolitan Drainage for so many years, and have at length decided that it was a local rather than an imperial affair, it does seem as though the old river god in revenge had determined to fix the undulations of his most unsavoury tide just before their very doors. He did so last year; and the joke, if it does not turn out something more, is just commencing again, for the flower of the English nation, like the Three Kings of Brentford, are smelling at the one nosegay he offers in the pestiferous halls of St. Stephen's. Sydney Smith used to say that we should never have safe railway travelling until a bishop was sacrificed on some ill-conducted line. Possibly, now that the growing evils of the Thames undulate so provokingly before the very doors of the senate, government will begin to think that the danger is at least imperial, and that something must be done. If the river is so foul now, what will it be in the dog-days? At the present moment, we are told by Dr. Letheby that it contains about 97 grains of solid matter per gallon, of which 61 are common salt, and rather more than 7 are organic impurities in a high state of decomposition, and giving off ammonia with a peculiarly offensive vapour. He further says that "the water near the shore is poisonous to every living thing but vibriones and the simplest of vegetable fungi."

To such complexion have we brought our noble river at last! It is evident that there is no time to meet this alarming difficulty by any other than temporary measures. It will be years before the intercepting sewers will be finished; meanwhile, however, something must be done, and that in the direction of our old motto, "The rainfall to the river, and the sewage to the land." As we cannot get the monster sewers, we must manage by means of barges to intercept and carry away our British guano to the fields, rather than allow it to convert our metropolitan river into a common sewer, and, it may be the population on its banks into a plague-stricken people.

THE WEEK.

The movement throughout the country in favour of forming rifle-corps must, we think, be looked upon in an especially favourable light by all those interested in the public health. We cannot help thinking that the increase which has taken place within the last hundred years in the long and melancholy list of nervous diseases, is in a great measure to be attributed to the increased sedentary habits of the population. Villages have increased to towns, commons have been enclosed, and the difficulty of obtaining fresh air and exercise has for a considerable time gone on increasing. The old games of our ancestors have died out; the shooting at the butt, which once took place on every village green, has long since vanished; football, which the 'prentices of London and other large towns played at even in the great thoroughfares, is now confined to the great public schools; the innumerable games which came round on certain festivals, and which make Hone's *Every Day Book* still so cheering to the reader, have given place—to what?—mechanics' institutes! The clerk, tired with sitting on a high stool all day, and the shopman, unnerved with fiddling over haberdashery, and poisoned with the gas, is invited to invigorate his wearied body and mind by attending classes in Athenæums, or by listening to third-rate lectures on pneumatics, illustrated by the murder of helpless mice. Now all this sort of thing is excellent in its way, but we contend that it is not the way to have strong and healthy Englishmen. After the stifling duties of the office or shop are done, their inmates want good air and out-of-door exercise, which will at the same time amuse the mind, arouse the attention, and brace the body. We have cricket, it is true; but this is too active a game for persons above a certain age, and, moreover, there is not sufficient motive in it to enlist large classes of the population. Rifle-shooting, however, supplies all the interest and the exercise that is required. The formation of corps for this purpose will, we trust, lead large portions of the population into the open air, and thereby add vigour to their limbs and sparkle to their eyes. It is a notorious fact that the race of clerks and shopmen are amongst the most unhealthy classes of the population. If our rifle-corps are to be anything better than narrow cliques, they will be largely permeated by these classes, which constitute so considerable a proportion of the able-bodied young men of the middle class. We hail, therefore, with great pleasure the re-erection of shooting butts throughout broad England; and we feel convinced that they will be instrumental in banishing many nervous diseases which

baffle the skill of the physician and render the patient miserable and helpless.

Among a number of recipients of the Victoria Cross from the hands of the Queen, on Wednesday morning last, were the following two members of the medical profession:—Staff-Surgeon Anthony Dickson Home, late of 90th Regiment (now of a Depôt Battalion), for persevering bravery and admirable conduct in charge of the wounded men left behind the columns when the troops, under the late Major-General Havelock, forced their way into the Residency of Lucknow, on the 26th September, 1857.—Assistant-Surgeon William Bradshaw, late of the 90th Regiment (now of 32nd Foot), for intrepidity and good conduct in removing the wounded men left behind the column that forced its way into the Residency of Lucknow, on the 26th September, 1857.

On Wednesday last, John Nichol Watters, *alias* Dr. Watters, and Claude Edwards, were examined at the Lambeth Police Court, on a charge of conspiring, with another person, to defraud Mr. Thomas Jones of one guinea. The prosecutor deposed that he was a retired tradesmen, and resided at 75, Mount Street, Grosvenor Square, that he was much afflicted with deafness and noises in his head, and that, in consequence of the printed circular produced being given to him by an acquaintance, he, on the 11th or 12th of last month, went to No. 28, Mount Gardens, Westminster Road, whence the circular was addressed. He there saw a young man who subsequently said his name was Allen: and on his describing the nature of his complaint, he said he was assistant to Dr. Watters, that he had attended a thousand such cases for the doctor, and cured all; and that in his (witness's) case he should effect a perfect cure in a week. He then gave him three bottles of "stuff," and the slovenly manner in which they were made up, as well as the careless manner in which the directions for use were written, first led him to suspect all was not right. He was to syringe the back of his head, neck, and ears with it; but it was "nasty stuff." Allen wanted him to pay a guinea for it; but he refused to give more than five shillings. Witness called again on May the 25th, when he saw the younger prisoner, Edwards, who represented himself to be Dr. Watters. He gave Mr. Jones three more bottles of stuff, for which he charged sixteen shillings. The witness paid a third visit to the house on Wednesday, when he saw Dr. Watters for the first time. After asking the nature of his complaint he examined his ears. The defendants gave witness a large bottle, which they wanted him to pay for; but he refused to do so, observing that the undertaking in the first instance was to cure him in a week for a guinea, and that sum he had already paid. He then gave both prisoners into charge to an officer who came in. As it was necessary to make an examination of the "stuff", Mr. Norton, the magistrate, remanded the prisoners. He had no objection to accept good bail for their appearance on a future day; and if Dr. Watters, as he called himself, was the respectable person he represented himself to be, he could have no difficulty in finding the necessary sureties. The name of Watters will be recalled to mind in connexion with the "Bennett Gang", who, it will also be remembered, employed urine as their panacea.

In reporting, on May 31st, with regard to the examination by the University of Cambridge of students who were not members of the University, the Syndics made the following remarks:—

"The Syndics have much pleasure in drawing attention to two instances which have already appeared of these examinations being recognised by important public bodies as substitutes for their own. The Royal College of Surgeons, as appears by a notice, dated February 10th, 1859, admit without examination a candidate for the Diploma of Member of the College to commence his professional education, if he can produce a certificate of having passed either the junior or senior examination instituted by the Universities of Oxford or Cambridge for those who are not Members of the University: and a similar exemption from their own preliminary examination is conceded by the Society of Apothecaries."

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Wednesday, May 11th, 1859.

Present:—Dr. Leet, in the Chair; Dr. Williams, Dr. Smith, Dr. Apjohn, Dr. Corrigan, and Dr. Stokes; Dr. Maunsell, *Registrar.*

Read—Letter from the Director-General of the Army Medical Department, stating that he had made a communication to the principal medical officer in Ireland, who will take the necessary steps for making the arrangements for Registration under the Medical Act known to medical officers of the army serving in Ireland.

Returns from the Universities of Erlangen and Giessen were laid before the Council; and the cases of six gentlemen who have obtained degrees in those Universities, without regular examination, having been considered, the Council declined to make special orders for their Registration.

Read—Letter from the Registrar of the Branch Council for England, suggesting that the Educational Returns presented by the Irish Medical Colleges and Bodies should be printed in Ireland.

Ordered—That the suggestion be adopted, and that the Registrar do forthwith proceed in accordance with it; also, that any supplemental matter which the respective bodies may desire to add to their original returns, be printed therewith.

D. J. Corrigan.

Wednesday, May 25th, 1859.

Present:— Dr. Corrigan, in the Chair; Dr. Smith, Dr. Williams, Dr. Leet, Dr. Apjohn, and Dr. Stokes; Dr. Maunsell, *Registrar.*

The minutes of last meeting were approved and signed.

Returns were read from the Universities of Giessen, Berlin, and Paris; and the following gentlemen, who appeared from the returns to have obtained their degrees after regular examination, were ordered to be registered:—viz., Thomas Aickin, as M.D., Berlin; James Jasper McCaldin, M.D., Berlin; Robert McKinstry, M.D., Giessen, Thomas Neilson, M.D., Paris; John Ryan, M.D., Paris.

The Registrar having asked for instructions respecting the registration of the qualification of Diploma or Licence in Surgery of the University of Dublin, it was

Resolved—That in accordance with the provisions of Clause 27 of the Medical Act, the Registrar be directed to insert in the Register, the Diploma or Qualification in Surgery conferred by the University of Dublin, appended to the names of such gentlemen as possess it.

James Apjohn.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

It is particularly requested that all members who propose to read papers will communicate with the General Secretary without delay.

Philip H. Williams, M.D., *General Secretary.*
Worcester, April 26th, 1859.

MIDLAND BRANCH.

The Annual Meeting of this Branch will be held at Derby, at the Board Room of the Infirmary, on Thursday, June 23rd, at Two o'clock. The annual dinner will take place at the Royal Hotel at Five o'clock.

Henry Goode, M.B., *Honorary Secretary.*

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Midland. [Annual Meeting.]	Board Room, Infirmary, Derby.	Thurs., June 23rd, 2 P.M.
Metrop. Counties. [Annual Meeting.]		Tuesday, July 5th, 8 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

SOUTH MIDLAND BRANCH: ANNUAL MEETING.

The third Annual Meeting of the above Branch was held at the General Infirmary, Northampton, on Monday, May 30th, 1859; J. H. Webster, M.D., President, in the Chair. There were also present: G. Ashdown, Esq. (Northampton); T. Herbert Barker, M.D. (Bedford); W. A. Barr, M.D. (Northampton); W. Birdsall, Esq. (Northampton); Thos. Clark, Esq. (Wellingborough); E. Daniell, Esq. (Newport Pagnell); F. Dufty, Esq. (Stony Stratford); B. Dulley, Esq. (Wellingborough); D. J. T. Francis, M.D. (Northampton); G. Hammond, Esq. (Irthlingborough); James P. Knott, Esq. (Blisworth); J. G. Leete, Esq. (Thrapstone); J. Logan, M.D. (Kettering); B. Marsack, Esq. (Olney); F. H. Marshall, Esq. (Moulton); James Mash, Esq. (Northampton); P. McLoskey, M.D. (Rothwell); W. Moxon, Esq. (Northampton); P. R. Nesbitt, M.D. (Northampton); John Ody, M.B. (Market Harborough); W. Paley, M.D. (Peterborough); William Percival, Esq. (Northampton); T. Philbrick, Esq. (Stamford); T. Prichard, M.D. (Abington Abbey); A. Robertson, M.D., F.R.S. (Northampton); W. A. Skinner, Esq. (Kingscliffe); F. Southam, Esq. (Wansford); R. S. Stedman, Esq. (Sharnbrook); H. Terry, sen., Esq. (Northampton); H. Terry, jun., Esq. (Northampton); W. Thurnall, Esq. (Bedford); R. W. Watkins, Esq. (Towcester); W. S. Wyman, Esq. Kettering); and the following visitors: J. M. Bryan, Esq.; Captain Glen; J. F. Gray, Esq.; W. P. Knott, Esq.; J. Lyman, Esq.; C. H. Marriott, Esq.; J. L. Morley, Esq.; S. Terry, Esq.; and A. E. Woolrych, Esq.

The minutes of the last meeting having been read and confirmed, the retiring President, E. Daniell, Esq., resigned his seat to the new President, J. H. Webster, M.D.

PRESIDENT'S ADDRESS.

The President, upon taking the chair, after congratulating the meeting upon the success that had attended the South Midland Branch, enrolling now, amongst its members, more than one half of the profession in the two counties of Northampton and Bedford, directed attention to the specialities of practise to be adopted by individuals upon their names appearing in the forthcoming register as legalised practitioners. Though the title column in schedule D had, by the recent Act of April, been abandoned, each practitioner must keep within the bounds of his qualifications; and the new Act did not rescind the powers of the previously existing corporations. When it was publicly known "*who were, and who were not,*" qualified to practise the various branches of medicine and surgery, the restrictive and penal clauses of the Act might in some cases be called into operation, which would probably generate a spirit of retaliation; and it would be most unwise to give any handle to the enemies of the faculty. The new Medical Act tacitly acknowledged the existence of a large body of men practising illegally; moreover, from the facilities foolishly afforded for registration, it had raised up certain claimants for the honour of registration, on the plea of having been in practice prior to 1815, who from that to the present year of 1859, never assumed any such pretensions. The enforcement of the restrictive clauses of that act had been much inquired after and discussed, and to questions sent up to the Registrar on the subject, evasive answers had only been returned; the Registrar giving, on one occasion, his individual opinion, namely, that the "*Medical Council could not be a prosecuting body.*" To the Medical Council had been confided by Parliament the administration of that Act, and it remained to be seen whether they would discharge the duties they have undertaken, or perform those only which are agreeable to their feelings, and leave the disagreeables unperformed. They will doubtlessly attempt to follow the example of the College of Surgeons and Apothecaries' Company in these respects; but it will be highly impolitic for the profession to assume their neglect of palpable duties by undertaking such deficiencies. It was most undesirable that any individual, or local committee of individuals, should institute proceedings against illegal practitioners. The latter would enlist the sympathies of an undiscerning public in their behalf as martyrs to peculiar professional opinions, and so augment their notoriety and reputation, the very cards they so skilfully and profitably play. If the General Council should repudiate the penal clauses of the Act, the conduct of proceedings against unqualified practitioners should then be confided to some large central body, free from local feelings, interests, and prejudices; who, by means of an organised staff of secretaries, agents, and lawyers, could minutely and impartially examine into alleged cases of malpractice, etc., and originate the necessary prosecutions. Such a central body is in existence as the London Medical Registration Association, which is inviting and receiving into alliance with itself, the Branch Associations throughout the kingdom; union with that body is highly desirable for increasing its moral influence with the General Council; as also assisting in supplying pecuniary means for the general interests of the profession. There are good reasons justifying the inference that the new Medical Act will lead to many changes in the present condition of professional practice. Admission to the Colleges of Physicians is being facilitated; the dispensing of medicines by the general practitioner is no longer necessary to the recovery in a court of law of professional remuneration. The public will learn to pay for time, skill, and experience, and not for the mere tools employed; so that pharmacy will, by many practitioners in towns, be quickly and joyfully abandoned. Members of the College of Surgeons will be diplomatised by a College of Physicians; and, except there be some coalescing of the London College of Physicians with the Apothecaries' Company, in establishing a new mode of medicalising the member of the College of Surgeons to qualify the general practitioners of the day, the Society of Apothecaries will gradually decline, and revert to its sole original functions. But there will be ulterior changes; the history of medical legislation during the past century is suggestive of others, and which it is of the utmost importance should be steadily regarded by the profession, and by an alteration of the

existing system in the prescribing of medicines, should be entirely obviated.

VOTE OF THANKS TO THE PRESIDENT.

Mr. Daniell proposed, and Mr. Dulley seconded, a vote of thanks to Dr. Webster for his able address, with the request that he would allow it to appear in the Journal. The motion was carried unanimously.

ELECTION OF OFFICERS.

It was proposed and seconded, and carried unanimously—

"That T. H. Barker, M.D., of Bedford, be the President-elect for the ensuing year."

Mr. Terry, sen., proposed, Dr. Nesbitt seconded, and it was carried—

"That the following gentlemen be requested to act on the Committee for the ensuing year: W. Blower, Esq. (Bedford); T. Clark, Esq. (Wellingborough); E. Daniell, Esq. (Newport Pagnell); D. J. T. Francis, M.D. (Northampton); J. G. Leete, Esq. (Thrapstone); F. H. Marshall, Esq. (Moulton); T. Prichard, M.D. (Abington Abbey); and W. S. Slinn, Esq. (Ampthill); with the President, President-elect, and Secretaries."

The Secretaries, R. S. Stedman, Esq., and H. Terry, jun., Esq., were reelected.

REPRESENTATIVES IN THE GENERAL COUNCIL.

Dr. Nesbitt proposed, and Dr. Robertson seconded, the following gentlemen as representatives in the General Council for the ensuing year:—T. H. Barker, M.D. (Bedford); H. Veasey, Esq. (Woburn); and J. H. Webster, M.D. (Northampton).

NEW MEMBERS.

The following gentlemen, having been previously elected members of the Association by the Council of the Branch, were duly balloted for as members of the Branch, and elected unanimously:—George Cotton, Esq. (Northampton); Arthur Cox, Esq. (Long Buckby); Frederick Cox, Esq. (Welford); Charles Dodd, Esq. (Northampton); William Moxon, Esq. (Northampton); W. A. Skinner, Esq. (Kingcliffe).

PLACE OF NEXT MEETING.

On the motion of Mr. Daniell, seconded by Mr. Leete, it was resolved to hold the next meeting at Leighton Buzzard, in September next.

PAPERS AND COMMUNICATIONS.

The following papers were read: most of them will be published in the Journal.

1. Forced Alimentation. By P. R. Nesbitt, M.D.
2. Case of Abdominal Hysterotomy. By G. Ashdown, Esq.
3. Notes on the Cholera Epidemic at Towcester in 1854. By R. W. Watkins, Esq.
4. Case of Strangulated Inguinal Hernia. By B. Marsack, Esq.
5. Some Cases of Ascites, apparently arising from Chronic Peritonitis. By W. Paley, M.D.

MEDICAL REGISTRATION.

The President then alluded to the subject of Medical Registration, and called upon Mr. Gray to read a letter which he had received on the subject from Dr. Ladd, Honorary Secretary to the London Medical Registration Association. The President suggested the propriety of the *local* Registration Society amalgamating with the London Society.

Dr. Francis doubted the propriety of such a step being taken at that time, due notice of the discussion not having been given; and advised a special meeting of the Registration Association, to consider and decide upon the point.

VOTES OF THANKS.

Mr. Dulley proposed, and Dr. Francis seconded, a vote of thanks to the authors of the several papers and cases, with a request that they would allow them to appear in the Journal.

Mr. Marsack proposed, and Mr. Terry, jun., seconded, a vote of thanks to the President, Dr. Webster, for his kindness in presiding.

Mr. Philbrick proposed, and Mr. Watkins seconded, a vote of thanks to the Governors of the Infirmary, for the use of the board-room.

THE DINNER.

The members of the Branch subsequently dined together at the George Hotel, where the usual loyal and professional toasts were given and responded to.

Editor's Letter Box.

LICENTIATESHIP OF THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

Sir,—The numerous attacks which have been made upon the recent regulations of the Royal College of Physicians of Edinburgh, the evident misconception which prevails regarding their real nature and intention, the strong and somewhat unusual step which has been taken by the London College in remonstrating against them, have seemed to me to demand, on the part of some one connected with the Edinburgh College, a fuller and more complete vindication of them than any one of those which have from time to time appeared in your columns. Admirable as these have been, they have been confined to isolated portions of the scheme; and, with the exception of the letter addressed by the Edinburgh to the London College, in reply to the remonstrance of the latter, and which is also, of necessity, somewhat limited, there has been no attempt, on the part of any Fellow of the Edinburgh College, to vindicate the entire policy of that body. For this reason, I am induced to request your insertion of the following correspondence; for, long as it is, I think the subject justly claims the space in your columns which it will occupy, as it is of importance to all classes of medical men, each one of which is more or less affected by it.

The first letter is part of a communication addressed by a Fellow of the London College to an office-bearer in the Edinburgh College, and the second is his reply. I am, etc.,

An Office-Bearer in the Edinburgh College of Physicians.

I. *Extract from a Letter addressed by a Fellow of the Royal College of Physicians of London to an Office-Bearer in the Royal College of Physicians of Edinburgh.*

London, May 30th, 1859.

My dear Dr. . . . . ,—I admit that I most heartily disapprove of the late movement of your College in respect of the manufacture of Licentiates from any, the merest tyros in the profession. I say frankly, that to me it appears nothing else than an acknowledgment of poverty, and a flimsy attempt to enrich your exchequer by a questionable mode.

I really wish to know the parties who are aspiring to the honour. I am plagued with applications for testimonials as to character, and have in every instance refused, and given my reasons without reserve.

I am sorry that you have sanctioned this movement; for, however much the university party are to be blamed for the active steps they have taken against the corporations, there were certainly other modes of doing battle than ruining the reputation of your College.

You have lost immeasurably in the opinion of the London College by this false step; and I really think, the sooner you blot out this stain, the better for all.

Believe me, yours very truly, ———.

P.S. You have not even the safeguard of the ballot.

II. *Letter, in reply, from an Office-Bearer of the Edinburgh College of Physicians.*

Edinburgh, June 1st, 1859.

My dear Dr. . . . . ,—Do not be alarmed at the size of this sheet. When I first read the memorable, and, allow me to say, unfortunate letter, addressed by your College to that of Edinburgh, I felt certain that our recent regulations had been misunderstood; and now, when I see, by yours of the 30th ult., how completely you, a leading Fellow of the London College, misconceive them, I gladly embrace the opportunity afforded by your letter to enter on a full discussion of them, being satisfied that, if I succeed in removing your prejudices, you will do your best to set us right with your colleagues, and endeavour to get them to reply in a suitable manner to the letter of our College.

I need not tell you that the remonstrance of your College, instigated as it was by members of the university minority in ours, has proved a heavy blow and great discouragement to all *your* friends, and a source of unfeigned joy and triumph to the supporters of the university monopoly among us.

Our regulations necessarily divide themselves into two parts—1. Those which are to be permanent; 2. Those which are only to continue in force for one year—the year of grace, as it has been termed. I shall consider these separately.

Every candidate for the license of our College must prove by examination his competent acquaintance with Latin, English, and mathematics; Greek, or one of the modern languages; natural philosophy, or logic and mental philosophy: and he is, besides, recommended to study comparative anatomy, natural history, and geology. I think, then, that you will admit that, as regards *preliminary education*, our requirements are sufficiently high. In regard to our scheme for *professional education*, it is as high as that demanded by any other examining board in the three kingdoms. In addition to undergoing these examinations, the candidate must produce certificates of character; and, all these having been laid before the Fellows of the College, he must then be balloted for by them, which is clearly shown in the regulations, though, judging from the postscript of your letter, it would appear to have been overlooked by you. Should a candidate, either by original talent, or by more assiduous application than his fellows, be fit to undergo these examinations at the age of twenty-one, he may then apply: and this *question of age* seems to be a very sore point with you and your brethren in the London College. You must remember, however, that the license of the College is not henceforth to be conferred as an honour, but is intended to become one of the portals for entering the profession—a portal which, it is believed, will be chosen by all those who prefer to commence practice under the auspices of a medical rather than a surgical body, or who, requiring a double qualification, prefer that their medical one shall be derived from a medical corporation rather than from an apothecaries' company. If, then, the license of the College is to be held as a warrant for entering the profession, it must be conferred at the age which other learned professions adopt as the suitable one for commencing the business of life; and as, in Scotland, twenty-one is the age fixed by the Bar and the Church for admission, and is the age at which universities confer the degree of Doctor of Medicine, it seems the suitable age for admitting to the license of the College those who are then able to obtain it. I know it is the fondly cherished wish of those who have been most active in promoting the passing of these regulations, that they may be the means of introducing, as family practitioners throughout the country, a class of men who, keeping free from the trade of druggists, will, by their superior character and attainments, be the means of elevating the profession.

But, in the second place, let me call your attention to the exceptional admissions now taking place during "this year of grace." You will observe that by regulation 8, any candidate for admission during that year must (1) have passed one or more of the existing licensing boards; (2) must give up the sale of drugs, if he has previously dealt in them; (3) must produce certificates of his fitness to be a licentiate of a college of physicians from hospital physicians or others of eminence; (4) must have his claims and character carefully scrutinised by the council of the college; (5) must be subjected to a ballot by the fellows, "a majority of two-thirds of those who vote" being necessary for his admission.

Now, fully to understand these regulations, you must have regard to the different state of the profession in Scotland and England. North of the Tweed, we do not believe that even the magical age of twenty-six can *make* a man a physician, nor can any amount of general or professional education manufacture the article. For several years back, our most eminent consulting physicians in Scotland have, with few exceptions, been trained in the school of family practice; and have only *become* consultants when they have proved their knowledge and skill. I might instance Abercrombie, Thomson, and the two last Presidents of the College of Physicians, Begbie and Maclagan, who all began life as family practitioners, became Fellows of the College of Surgeons, but eventually rising in repute, and finding their advice sought for by their less experienced brethren, relinquished family practice, joined the College of Physicians, and restricted their attendance to visits in consultation with the family practitioner. At this very time, with two or three exceptions, the whole Fellows of the College of Physicians are family practitioners, all doctors of medicine, practising physic but not pharmacy. The Medical Act, however, has made men consider more carefully their *status* in the profession; and there exists throughout the empire a large body of men of mature age, who, having begun life as surgeon apothecaries or general practitioners, but having established their fame as sound practitioners, are naturally anxious to connect themselves with a body of a higher position than that of a trading company, and are therefore willing to have nothing to do with the sale of drugs, and to confine their practice very much to the higher branches of medicine. All these are aspirations in the right direction for the elevation of the profession, and these it is the object of our College to foster and encourage. Men of this age cannot be expected to submit to examination like tyros just off the irons; and therefore the College agreed to rest satisfied with proof of their having been already examined by a competent medical board, and with requiring from them testimonials of undoubted character and qualification. There is no doubt that many *young* men have applied for admission, but, with few exceptions, these have all been told that they must be examined, as the clause was intended for the admission of practitioners of more mature age. The question has often been put why such a large proportion of those who apply are English, not Scottish practitioners? The answer is easy. North of the Tweed, we have no Apothecaries' Company; and almost every practitioner with us is already either a graduate in medicine of a university or connected with the College of Physicians or Surgeons.

It may surprise you, who have doubtless heard of the keen discussions to which these regulations gave rise in the College, to be told that the only difference was whether the license should be free to all who were duly qualified, or whether it should be restricted to University graduates.

The adherents of the University were naturally anxious for the latter, which would have left the licensing power in medicine almost exclusively in their hands. If the London College remains true to its traditional policy, this is an arrangement I would scarcely expect it to consider desirable; and yet I have every reason to believe that the movement which ended in the remonstrance which it addressed to us, originated with a Fellow who was in close correspondence with one of the least scrupulous of the University party in our College, smarting under recent defeat; and that your College thus unwittingly lent itself to the support of the University party, who, as you justly say, "are to be blamed for the active steps they have taken against the corporations." I think, then, that I am entitled to assume that, with the restrictions which I have explained, and with a thorough and conscientious application of all the rules, no one is likely to be admitted as a licentiate of the College of Physicians of Edinburgh who is unworthy of the honour. I cannot but look upon your systematic refusal to give certificates to aspirants for this honour as unjust to them and injurious to us.

I think you are certainly deficient in charity when you accuse our College in taking this step of "nothing else than an acknowledgment of poverty, and a flimsy attempt to enrich our exchequer by a questionable mode." Our finances fortunately are, and have been for years, in so flourishing a condition, as to place us quite beyond the reach of such a temptation. The plan is one which successive generations of our Fellows have had in contemplation for the last hundred years, and which has only now been accomplished by the energy and determination of those in office, and by the changes effected by the Medical Act. What do you say to your own College, with an exchequer admitted not to be overburdened, who have in the last few weeks admitted nearly three hundred applicants with qualifications not at all superior to those of ours? unless you hold that examinations of Universities are necessarily of a higher class than those of corporations?

And now I am entitled to ask an explanation from you in my turn. On the table of your College the following proposal is lying; not yet adopted, it is true, but still open for discussion, and recommended by a committee of great weight and influence. "VIII. That any person who shall not be engaged in the practice of pharmacy, and who by examination, *or otherwise*, shall have satisfied the said corporation touching his knowledge of medical and general science and literature, and complied with such other regulations as are or shall be required by the bye-laws of the said corporation, shall be entitled to receive a license to practise as a physician, and to become a member of the said corporation." Have we gone a step farther than this? And until such a proposal had been rejected by your body, was it wise in it to remonstrate with us for passing a similar regulation, thereby strengthening the hands of those who wish us no good, and enabling them to speak of the "battle of the Colleges," as if we were ranged against one another in an attitude of determined hostility. "*Divide et Impera*" has long been the motto of our opponents; let us not forget the fable of the bundle of sticks.

I shall conclude this too long letter by a few remarks on that singularly ill-constructed and unworkable clause in the Medical Act (XLVII), commonly called the Hadfield clause, which enables any fellow, member, or licentiate of our, or of the Irish College, who may be practising as a physician in

England, to demand admission as a "member" of your College on the payment of the registration fee of two pounds. The introduction of such a clause was not sought for by the Edinburgh College; and they have stated that its modification or abolition would not be opposed by them. It is manifestly imperfect, as the three grades in the Scottish and Irish Colleges can demand admission only into one grade in the English, and by it the lowest grade in the Scottish might enter the middle grade of the English. This clause *must* be altered, and the sooner the better; and I have no doubt that when that alteration is effected, the "battle of the Colleges" will be ended, and we shall again stand shoulder to shoulder, prepared to oppose an united resistance to those at whose hands we have already suffered such grievous wrong.

It is much to be regretted that mutual consultations had not preceded the alterations of the laws of any of the Colleges. Our President has stated that he made a written proposal to your College and the Irish one for such a consultation; but that, although accepted by the Irish College, your President declined it.

I regret if it be, as you say, that we "have lost immeasurably in the opinion of the London College" by our recent regulations; it only convinces me how great the power of misrepresentation may be; but much as I value the good opinion of the London College, I trust we shall never seek to purchase it by abandoning a course of action which I firmly believe will do more to elevate the profession of medicine than any medical act which we have obtained, or are likely to obtain, for a hundred years to come.

Believe me, yours very truly, ——.

ARE THE FELLOWS AND LICENTIATES OF COLLEGES OF PHYSICIANS ENTITLED TO ASSUME THE TITLE OF M.D.?

Sir,—You say I am labouring under a mistake; and that neither the Fellows nor Licentiates of the Royal College of Physicians of London or Edinburgh are legally entitled to add the title of M.D. to their names; and that, if they do affix the M.D. to their names, it is granted by *courtesy* and *custom* only. If you are correct, this courtesy and custom have prevailed from time immemorial. How do you explain the sentence in the diploma of the London College, "Eidemque summis honoribus, *et titulis*, et privilegiis, quæcunque hic vel alibi *medicis concedi solent*"? Now, the power of the London College is derived, says the same diploma, "auctoritate nobis a Domino Rege et Parliamento commissâ". Now, it did appear to me that, a Royal Charter and an Act of Parliament having given the London College of Physicians power, on certain conditions, to grant *honours*, *titles*, *and privileges*, which, either here or elsewhere, are accustomed to be given to physicians, would have been a sufficient warrant to any Fellow or Licentiate for adding M.D. to his name; for M.D. has been not only the popular, but also the academic distinction or affix to the name of a physician. If I labour under a mistake, some of our most eminent men, past as well as present, have laboured under the same error. Jonathan Pereira did: he had no university diploma. I could name many more. The question simply is, Is the M.D. *ex necessitate* a degree granted by some University? and does the diploma of the London College not confer a right legally to the holder of the diploma of adding M.D. to his name? Until the passing of the Medical Registration Bill, the only *legal* physicians in England were the Fellows and Licentiates of London, and the Licentiates of Oxford and Cambridge; but Oxford and Cambridge men could not practise in London, or within seven miles thereof, if they had not submitted themselves to the examination of the London College. The Edinburgh degree, by the new Registration Act, is recognised throughout the empire, and confers the same title as the London degree; the only difference being, that the Edinburgh Fellow or Licentiate would write M.D.Edin., and the London Fellow or Licentiate M.D.Lond. None but the Fellows of either College have a share in the management or direction of the College affairs; but all have the same privileges, as far as *title* and *practice* are concerned. Most men certainly take out the licentiateship both of London and Edinburgh, for the sake of the title thereby conferred; and both Colleges hold out the right to the title. I am, etc., Devonshire.

June 1859.

[We must, until we are proved to be wrong, adhere, with all due respect to our correspondent, to the statement to which he refers as having been made by us; viz., that the Licentiates and Fellows of neither College of Physicians have any legal right to affix M.D. to their names; and that, if they do affix this appendage, it is granted by courtesy and custom only. Our correspondent cannot have read with sufficient care the diploma of the London College, or he would have found, after the words "concedi solent", the important phrase "*intra auctoritatis nostræ limites*". And to grant the title of M.D. is, we fancy, *beyond*, and not *within*, the limits of the authority of the College. The late Dr. Jonathan Pereira was M.D. of Erlangen: he is so described in the *Medical Directories* of several years back. Editor.]

TREATMENT OF CEREBRAL DISEASE WITH AMAUROSIS IN A CHILD.

Letter from F. B. Jessett, Esq.

Sir,—Having seen in your paper of last week a letter from a gentleman, wishing to know the treatment employed in the case of Ellen Coe (cerebral disease with amaurosis), reported by me in your Journal two weeks ago, I take this opportunity of stating the principal points of the treatment.

When the child was first admitted into the hospital, on November 27th, she was ordered to have a grain of iodide of potassium three times a day in three drachms of carraway water. On November 29th, the dose was increased to two grains; and on the 30th, as the child complained of pain in the head, and there was great heat of the head, accompanied by a pulse of 150, the iodide of potassium was omitted, and she was ordered to have her head shaved and ice applied. This treatment was persevered with until December 18th, when the iodide of potassium was again ordered, and she continued taking it until she left the hospital.

I am, etc., Fred. B. Jessett.

Hospital for Sick Children, June 7th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Mathews. On June 7th, at 1, Winterslow Place, Brixton, the wife of Robert Mathews, Esq., Surgeon, of a daughter.

Wilkins. On May 30th, at Norwood, the wife of Jacob Wilkins, M.D., Assistant-Surgeon Madras Army, of a daughter.

MARRIAGES.

Brook—Darvill. Brook, William Frederick, Esq., of Newington, to Jane Augusta, only daughter of the late John Thomas Darvill, Esq., Surgeon, of Great Berkhampstead, Herts, at St. Giles's, Camberwell, on June 7th.

Compton—Smith. Compton, William, Esq., of Newport, Monmouthshire, to Hannah, second daughter of the late J. Smith, Esq., Surgeon, of Welford, Northamptonshire, at Surwarton, Salop, on June 7th.

Haines—Tweed. Haines, Frederick, Esq., of Maida Hill, to Laura Ann Maria, fourth daughter of J. J. Tweed, Esq., Surgeon, of Alfred Place, Bedford Square, at Boreham, Essex, on June 1st.

Hart—Levy. *Hart, Ernest, Esq., Surgeon, of 69, Wimpole Street, to Rosetta, youngest daughter of Nathaniel Levy, Esq., of Upper Montague Street, Russell Square, on June 6th.

Higgs—Walker. Higgs, T. F., Esq., Surgeon, of New Radnor, to Helena Griffin, second daughter of J. G. Walker, Esq., of Netherton, near Dudley, on June 2nd.

Huntington—Protheroe. Huntington, the Rev. William, M.A., rector of St. John's, Manchester, to Maria, eldest daughter of Griffith Protheroe, Esq., of Narberth, Surgeon, on June 2nd.

Roe—Winn. Roe, Robert, Esq., of Lynmouth, Devon, to Mary Teresa, eldest daughter of James M. Winn, M.D., of London, at Christ Church, St. Kilda, Melbourne, on April 2nd.

Wilson—Bowman. Wilson, James A. K., Esq., to Mary Agnes, eldest daughter of the late Jonathan Bowman, M.D., of Liverpool, on June 2nd.

DEATHS.

Davidson, Thomas, Esq., Surgeon H.E.I.C.S., at Kirkcaldy, on June 1st.

*Hunt, Frederick B., M.D., at Farningham, Kent, lately.

Jones. On June 5th, at Sydenham, aged 3 years and 10 months, Emily Frances, fourth daughter, of Edward Jones, M.D.

Pring, Daniel, M.D., formerly of Bath, at Taunton, aged 69, on June 3rd.

Shelley, Hubert, M.B.Lond., at the Cape of Good Hope, aged 34, on March 31st.

Waddington, Joshua, Esq., Surgeon, at Margate, aged 65, on June 7th.

PASS LISTS.

Royal College of Physicians. At the Comitia Majora, held on Saturday, June 4th, the following gentlemen were admitted Licentiates of the College, under the recently enacted temporary by-laws:—

Whitehead, James, M.D., Manchester
Winslow, Forbes Benignus, Cavendish Square

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, June 3rd, 1859:—

Allinson, Anthony, Lynn, Norfolk
Ayling, William Henry, Great Portland Street, Portland Place
Ayre, John Joseph, Colne, Lancashire
Garman, Henry Vincent, Bow Road
Garman, William Chancellor, Wednesbury, Staffordshire
Harvey, Alfred, Tavistock Street, Covent Garden
Horrocks, William Henry, Liverpool
Howlet, William, Wellington, Shropshire
Jacob, John, Goswell Road
Kelson, Charles John, Bristol
Kennedy, Angus, Stratford Hall, Essex
Kingston, Robert, Woolsthorpe, near Grantham
Leake, Jonas, Old Kent Road
Love, John Henry, Brook Street, Grosvenor Square
Massingham, Joseph Ebenezer, Green Street, Bethnal Green
Moody, John, Strabane, Ireland
Morrison, James Giles, Edgware Road
Paul, James Thomas, Burton Crescent
Rose, Charles, Barnes Place, Mile End
Wade, Henry Thomas, Derby
Walker, George Richard Pratt, Bow Lane, Cheapside

The Fellowship. The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on June 8th:—

Craddock, William, Bengal Army: diploma of membership dated May 4th, 1840
Denne, William, Bedford: August 4th, 1837
Jones, Richard, Brackley: April 9th, 1847
Markwick, Alfred, Trinity Square: July 21st, 1843
Marshall, William Gurslave, Colney Hatch: July 30th, 1841
Shepherd, William George, Claremont Square: March 1st, 1839
Simpson, James Murray, Southampton: June 2nd, 1826
Stone, Thomas, Christ's Hospital: July 21st, 1834
Thorpe, Bower, Staveley: April 22nd, 1839
Warwick, John, Stamford Hill: June 20th, 1843
Waterworth, Henry, Newport, Isle of Wight: February 22nd, 1833
Wells, Warrick Walter, Bengal Army: May 8th, 1835
White, William Todd, Kempsey: March 5th, 1841

University of Cambridge. The following gentlemen have passed the first examination for M.B.:—

Carver, E., B.A. — Liveing, E., B.A.
Dickinson, W. — Partridge, T., B.A.
Griffith, J. C., M.A. — Ward, S., B.A.

The following gentlemen have passed the second examination for M.B., and are admitted to the degree:—

Carver, E., B.A. — Harrison, E., M.A.
Dickinson, W. — Liveing, E., B.A.

Apothecaries' Hall. Members admitted on Thursday, June 2nd, 1859:—

Chappell, John James, Axmouth, Devon
Davies, John Sides, Oswestry, Shropshire
Fennell, Charles, Bromley, Kent
Paley, Edward, Leeds
Palk, Henry, Southampton
Reed, Thomas Sleeman, Helston, Cornwall
Stevenson, James, Totness, Devon

The following gentlemen also, on the same day, passed their first examination:—

Davy, Richard, Chumleigh, North Devon
Hudson, Henry, Newport, Yorkshire
Truman, Edgar Beckit, Poultry, Nottingham

HEALTH OF LONDON:—WEEK ENDING JUNE 4TH, 1859.

[*From the Registrar-General's Report.*]

Under the influence of fine weather, the weekly deaths in London have fallen below a thousand. In the five weeks that have elapsed since the end of April, the mortality has continued to decline; and in the week that ended last Saturday, the total deaths numbered 998. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 979; but as the deaths returned for last week occurred in an increased population, they should be compared with the average raised in proportion to the increase; namely, with 1076. The result of the comparison is that the deaths of last week were less by 78 than the number which would have occurred if the average rate of mortality for the beginning of June had prevailed.

The deaths in the first week of May were higher by 110 than they were last week; and the mean temperature of the air in the former period, 48·5°, was lower by 13·8° than it was last week, when it rose to 62·3°. The medical officers of the *Dreadnought* Hospital ship write that they "have been disgusted, particularly since Monday, with the offensive effluvia from the water."

The deaths from scarlatina, which were 50 in the previous week, declined to 42; and those from diphtheria exhibit a considerable reduction, having been only seven last week. The cases in which this latter disease was fatal, occurred as follows:—One at 5, Alfred Place, Harrow Road, and one at 3, Windsor Place, also in Paddington; one at 18, Chesham Place; one at 8a, Offord Road, Islington; one at 42, Bedford Street, Covent Garden; one at 36, John Street, Newington; and one in Love Lane, Wandsworth. The deaths from bronchitis were 64, the corrected average being also 64; those from pneumonia were 49, the corrected average being 62. Phthisis carried off 145 persons, a number which differs little from that calculated on the experience of corresponding weeks. Three children died from measles in the Workhouse, Gray's Inn Lane. Nine children and four adults died last week from small-pox; six infants from syphilis; three persons from intemperance, besides four others from delirium tremens. Of 33 persons whose deaths were "violent", 26 died from accident or negligence, six by suicide, and one infant by murder. A girl, of 15 years, died on 31st May, in the Ophthalmic Hospital, City, under the influence of chloroform.

Last week the births of 786 boys and 807 girls, in all 1,593 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1,485.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·563 in. The barometer fell from 29·71 in. on Wednesday to 29·43 in. on the following day, being the highest and lowest points in the week. The mean temperature of the week was 62·3°, which is 6° higher than the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week, and on Monday and Saturday this excess was nearly equal to 9°. The thermometer in the shade fell to 49·1°, the lowest point in the week, on Wednesday; and rose to its highest, 79°, on Saturday. The range of temperature in the week was therefore 29·9°; the mean daily range was 20·2°. The thermometer in the sun rose to 104° on Saturday. The difference between the mean dew-point temperature and air temperature was 5·7°. The mean degree of humidity of the air was 83. The mean temperature of the water of the Thames was 61°. The wind blew generally from the north-east. The rain-fall of the week was 0·71 in. There was thunder on the afternoon of Saturday.

Dissecting a Quack. "To puzzle a Philadelphia lawyer," is a common saying with Transatlantic brethren; but the following is related of the manner in which one of those gentlemen puzzled a quack, who was bringing a suit for medical services. *Counsel*—Did you treat the patient according to the most approved rules of surgery? *Witness*—Certainly, by all means, I did. *Counsel*—Did you decapitate him? *Witness*—Undoubtedly, I did that as a matter of course. *Counsel*—Did you perform the Cæsarean operation upon him? *Witness*—Why, of course; his condition required it; and it was attended with great success. *Counsel*—Did you, now, doctor, subject his person to autopsy? *Witness*—Certainly; that was the best remedy I adopted. *Counsel*—Well, then, doctor, as you first cut off the defendant's head, then ripped up his body, and afterwards dissected him, and he still survives it, I have no more to ask. (*Edinburgh Medical Journal.*)

The London Medical Registration Association. A preliminary meeting has taken place, attended by Drs. Hart Vinen (Chairman); Robt. Norton, Handfield Jones, F.R.S.; Burke Ryan (Treasurer and Hon. Sec,); Chowne, Tulloch; and Messrs. Wall, Royston, Clark, and Reece, for the purpose of calling a general meeting of the medical practitioners of Paddington, Bayswater, Notting Hill, and North Kensington, at the Queen's Hotel, Queen's Road, Bayswater, on Wednesday, the 15th instant, at eight o'clock, P.M. The object is to assist the central Association in the repression of illegal practice; and it is hoped that the meeting will be numerously attended.

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Communications have been received from:—Dr. R. U. West; Mr. T. W. Nunn; Dr. Burke Ryan; Dr. T. Inman; Dr. Lionel Beale; Dr. Addison; Mr. T. Holmes; Mr. W. Copney; Dr. James Russell; Dr. Hyde Salter; Mr. Toynbee; Dr. P. H. Williams; An Office-bearer of the Edinburgh College of Physicians; Dr. Toogood; Mr. H. Terry, Jun.; Mr. G. Bottomley; Mr. F. B. Jessett; Mr. A. Hockley; The Secretary of the Obstetrical Society; F.R.C.S.; Mr. T. Paget; Mr. T. M. Stone; Mr. G. M. Humphry; and Dr. J. Watson.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Epiphora, or Watery Eye: Its successful Treatment by the New Method of Dilatation. With Illustrative Cases. By *James Vose Solomon. London: Churchill. Birmingham: Cornish. 1859.
2. On Cancer. By Maurice H. Collis, M.B. (In the *Dublin Quarterly Journal of Medical Science*). Dublin: 1859.
3. Sanitary Progress in Croydon. By *Alfred Carpenter, M.B. Croydon: 1859.
4. On the Prevention of Consumption by the Hypophosphites. By J. Francis Churchill, M.D. London and Paris: 1859.

ADVERTISEMENTS.

TO ADVERTISERS.

British Medical Journal.— Office, 37, GREAT QUEEN STREET, LINCOLN'S INN FIELDS, LONDON, W.C.

The Journal of the British Medical Association is published every Saturday, and is transmitted direct from the Office to BETWEEN TWO AND THREE THOUSAND Members of the Association in all parts of the United Kingdom, among whom are the Medical Officers of most Hospitals and Dispensaries, and the majority of the leading members of the profession. It is also taken in by many Libraries and Medical Societies, and thus comes under the notice of a large number of Medical Men not connected with the Association.

The following were the numbers of Stamps issued to the four London weekly Medical periodicals in 1857.

British Medical Journal	**106,534**
Lancet	60,250
Medical Circular	57,600
Medical Times and Gazette	44,725

SCALE OF CHARGES FOR ADVERTISEMENTS.

Four lines and under	£0	2	6
Each additional line	0	0	6
A whole column	2	15	0
A page	5	0	0

A line contains ten words.

When a series of insertions of the same advertisement is ordered, a reduction is made in the above charges.

Advertisements ought to be delivered and paid for at the Office on the Thursday preceding publication; or if not paid for at the time, should be accompanied by a respectable reference.

Post-Office Orders are to be made payable at the "Bloomsbury Branch" Office, to Thomas John Honeyman (the Publisher), 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

BRITISH MEDICAL ASSOCIATION.

The TWENTY-SEVENTH ANNUAL MEETING of the British Medical Association will be holden in LIVERPOOL, on Wednesday, Thursday, and Friday, the 27th, 28th, and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.

President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

It is particularly requested that all members who propose to read papers will communicate with the General Secretary without delay.

Worcester, April 26th, 1859.

PHILIP H. WILLIAMS, M.D, *General Secretary.*

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXIX.] LONDON: SATURDAY, JUNE 18, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

MIDDLESEX HOSPITAL.

POPLITEAL ANEURISM TREATED BY FLEXURE OF THE LIMB AND COMPRESSION: RUPTURE OF THE SAC INTO THE KNEE-JOINT: LIGATURE OF THE ARTERY: CURE.

Under the care of C. H. MOORE, Esq.

THE following case appears to us of very great interest in many points of view. It illustrates the great difficulty of successfully applying the treatment by compression when the patient is very muscular, and the tumour of large size and growing rapidly, and it is a forcible example of one of the most formidable dangers of certain forms of aneurism in the ham, viz., ulceration of the ligament separating the sac from the cavity of the knee-joint, and the effusion of the contents of the sac into that cavity. This accident is most liable to occur when the opening in the artery is situated on its anterior side, and that this was the case in this instance was rendered probable, in Mr. Moore's opinion, not merely by the subsequent rupture into the joint, but also by the thrilling character of the pulsation previously. We have ourselves observed similar cases, in which the wave of fluid in the vessel appeared to be communicated to the hand distinct and superficial to the more general heaving of the aneurismal tumour, and have noticed in such cases the increased liability of the joint to irritation and to synovial effusion. A slight increase of the same action which leads to this effusion will produce ulceration in the walls of the aneurism, already sufficiently disposed to it, if there is no great amount of clot, and thus the joint is laid open. It will be noticed that the treatment by flexion of the joint, which was recently brought before the Medico-Chirurgical Society by Mr. Ernest Hart, and which succeeded so perfectly in his case, and in one under the care of Mr. Shaw, which was read at the same meeting, was adopted here, but was not persevered in, as it evidently did no good, and may even, perhaps, by producing some direct pressure forward on the tumour, have tended to increase its liability to implicate the joint. We may conjecture, from the relations of the parts and from the shape which the artery would assume when, on the one hand, stretched over an aneurismal tumour seated behind or superficial to it, and on the other, relaxed behind one situated on its opposite side, that this treatment by simple position will be found adapted mainly, if not exclusively, to the former class of aneurisms, and probably will succeed only in those which are of moderate size and not growing very rapidly.

The perfect success of the ligature in this case, both in curing the aneurism and restoring the knee-joint to its functions, ought always to be kept in mind in the treatment of a similar grave complication. Even although so perfect a success might not occur in a second case, it would certainly be the best practice to give the patient the chance of the ligature of the artery before sacrificing the limb, and to watch for any indication of mischief set up by the clot in the knee-joint. The occurrence of abscess in the joint, as a result of such irritation, would probably limit the efforts of conservative surgery, and amputation would then be practised as the last resource. Such was the view taken by Mr. Moore of the present very fortunate case—for the notes of which we are indebted to his case-book.

A fine, manly, highly nourished navigator, aged 46, was admitted on January 18th, 1859, under Mr. Moore's care, with a very large aneurism in the right ham. It reached five inches and a half in vertical extent, and had its greatest lateral breadth at the level of the knee-joint: its highest part lay under the vastus internus, in the course of the artery; while below it extended a little way below the gastrocnemius. The aneurism expanded visibly, and with great force, in every direction; but more so laterally than backwards: and its beat was accompanied by a delicate thrill against the hand laid on the popliteal space, and with a distinct systolic and feeble diastolic *bruit*. There was no swelling of the knee-joint, but the leg and foot were œdematous. The artery in the thigh beat with great force; those in the leg and foot very feebly. The current in the femoral being stopped, the aneurism became soft, and did not appear to contain much clot: it resumed its full size again in about two pulsations.

The history was, that about five or six weeks previously, without any particular injury or strain, his knee and whole leg swelled very greatly, and occasioned him much pain. He was directed to foment the limb; and much of the swelling subsided. Three weeks ago, he felt the pulsation. The limb, at the time of admission, was useless; but he did not think that the knee was enlarging.

The knee was flexed, and fastened in that position with webbing passed in a figure of 8 around the foot and thigh; a pad and tight roller being inserted under the webbing, to moderate the flow of blood through the femoral artery. This left the aneurism beating slightly, but not visibly; and the *bruit* still audible in it, although less loud.

Next day, the bandage, having slipped, and being apparently of little service, was more firmly applied; and a rib-roller was added round the trunk, and passed in a figure of 8 round the foot. The result of all this was, that the aneurism beat comparatively little. The limb did not become materially gorged in the lower part.

January 20th. The aneurism being a very large one, and the webbing having slipped in the night, and rather chafed the foot, Mr. Moore readjusted the sling; but also applied over it a Skey's tourniquet, and instructed the man in the use of it.

On January 21st, it is noted that the aneurism had a decidedly less firm pulsation. He used the tourniquet steadily during the day, and the limb became gorged and œdematous below it. The force of the pulsation appeared, however, in the evening, to be increasing again; and the aneurism to be growing upwards beneath the vastus internus. The webbing was readjusted; Skey's tourniquet was put above it, and the Italian tourniquet below, with orders to tighten them alternately.

Compression was continued during the next ten days; but the flexion of the limb was given up after a short time, and the foot raised upon a double mattrass. Œdema of the limb however, came on; and yet the powers of the pulsation did not diminish. It is stated that, notwithstanding every care on the part both of the patient and his medical attendants, the tourniquets did not act permanently well.

On January 31st, when he was seen, the shape of the knee was at once seen to be altered, the synovial membrane being full, and the patella raised from the condyles. It could be pressed down through some fluid. On loosening the tourniquet, pulsation was found in the joint, but in no other part of the limb except the aneurism; so that it was clear that the aneurism had burst into the joint. When the tourniquet was loosened, the joint became full and tense; and this tension was diminished again when the pulsation was cut off.

A consultation was now held; and it was agreed that the artery should be tied, in the hope that the opening between the sac and the joint might be obliterated, and the blood then absorbed from the joint. It was the more likely that this would occur, since the opening could have been only very recent, as the change in shape had not been noticed by the house-surgeon at his morning visit.

The artery was accordingly tied, at 3 P.M., by Mr. Moore. The wound was made large and very oblique. No difficulty was experienced in finding the artery, which was tied with a strong silk ligature. The knee-joint did not become flaccid after the operation, nor could its contents be squeezed out again.

In the evening, he was found very comfortable. The toes

were cold, but not more so than those of the other limb; the calf and heel slightly warmer. A liberal diet was allowed, and the limb was kept for the next eight days encircled in flannel bandage. No sloughing followed the operation. The wound suppurated a little, and the ligature did not come away till February 21st. On the removal of the bandage, on February 8th, the knee was found of its natural form, and without blood. The aneurism was then decidedly smaller, circumscribed, and firm. The knee measured, round the top of the patella, seventeen inches and one-eighth, being five-eighths of an inch less than on his admission. On February 21st, when the ligature came away, it is noted that the convex rounded part of the tumour was soft, and fluctuated with a readiness almost like that of pus. Under the use, however, of astringent ointments, sal ammoniac, and tannin, the tumour lost this almost fluid softness, and much diminished in size. He was discharged in April.

On May 12th he returned, able to bend his knee to a right angle, and having walked to the hospital from Hampstead. The ham merely seemed full, and it was necessary to flex the knee before any tumour could be felt. All softness was gone, and the mass felt oval, firm, and less than a hen's egg in size. The whole leg and foot were œdematous, but the knee was not so.

DIPHTHERIA.

TABLE OF CASES. (*Concluded from p.* 381.)

1. Age and Sex.	2. Hygienic conditions; occupation, food or clothing, purity, or impurity of air.	3. Meteorological conditions, date, etc.	4. Presence or absence of contagion.	5. Scarlatina.	6. Appearances and symptoms when first seen.	7. Time and situation of the leathery membrane.	8. Fungus.	9. Any affection of viscera (albuminuria, etc.)	10. Treatment and progress.	11. Indication and success of Tracheotomy.	12. Duration and event.	13. Post-mortem appearances.	Remarks.
60 M. E. E. 32 F.	Sanguineous temperament, florid complexion, family scrofulous; two years since had scarlet fever. Residence airy, site healthy.	Sept. 15, 1858	Returned from Dieppe, Sept. 9th, where an infant sister died before she left of some affection of the throat or larynx.	....	Much febrile irritation at the commencement. Submaxillary glands and neck much enlarged on left side, deglutition painful, no dyspnœa, salivation present, pulse very feeble, urine normal, skin perspiring, breath fœtid.	A patch of creamy exudation on left tonsil, extnd. over fauces; mu. membrane of lvd. tinge; denud surf. very vascular & bldg. w'out br'ch. of cntnuity. at first, subsequently a slough fmd. on lft. tnsil., phagedænic ulceration ensued, burrowg. nearly to carotid artery.	....	....	Hot linseed poultices, constantly applied to throat; nitrate of silver in solution applied with camel's hair brush daily; quinine, hydrochloric acid, and muriated tincture of iron; balsam of Peru and glycerine over slough, and solid nitrate of silver and strongest nitric acid to phagedænic ulcer; essence of beef, port wine, brandy, eggs, etc. Progressed favourably until four days before death, when phagedænic ulceration supervened, with severe prostration.	....	Died, Oct. 7. 3 wks.	....	Dr. Ashley, Kensingt. In this, as well as all the other cases of Dr. A. patients had every advantage in the way of well ventilated rooms and most generous diet, and yet they did not rally from the depression under 3 or 4 weeks.
61 W. E. 10 M.	Strong, healthy boy, brother of above.	Sept. 28, 1858	Resided with his sister, & had been also to Dieppe with her.	....	Submaxillary glds. not affected.	Two patches of false membrane on right tonsil. Healed in 5 days.	....	....	Hot linseed poultices; gargle with hydrochloric acid, chlorate of potash, and decoction of bark; nitrate of silver daily to the right tonsil; bark, hydrochloric acid, and chlorate of potash; wine and generous diet.	....	Recovered, Oct. 5.	....	Dr. Ashley.
62 B. T. 11 M.	House in damp situation. Previous health good.	Oct. 2, 1858	Sent home from a school at Hammersmith, where there had been recently a death from diphtheria	....	Mucous membr. much congested, much depression, pulse weak and irritable, syncope, cough, with hurried respiration, voice nasal, submaxillary glands enlarged on both sides, urine normal, skin perspiring.	False membrane on left tonsil and fauces, denuded, bleeding surface; healed in about a fortnight.	....	....	The same treatment as above cited in the case W. E., with the addition of muriated tincture of iron.	....	Recovered slowly Oct. 30	....	Dr. Ashley. The usual appearce. of false memb. first seen on tonsils, with denud. bldg. surface; sudden & grt. depression were as well mark'd here as in the other cases.
63 E. T. 8 M.	A delicate boy, brother of above.	Oct. 5, 1858	Residing with his brother, B. T.	....	Pulse very feeble, submaxillary glands enlarged, urine normal.	False membrane on right tonsil; surface healed in about a week.	....	....	At first poultices and nitrate of silver locally, cinchona, muriatic acid and chlorate of potash internally; then the muriated tincture of iron.	....	Recovered slowly Nov. 6.	....	Dr. Ashley.
64 M. H. 27 F.	Had enjoyed good health. Residence well situated.	Jan. 5, 1859	Had lately returned from a visit in Essex, where there had been many cases of diphtheria	....	Heart's action very feeble, great depression, syncope, & hysterical eclampsia; salivary glands not enlarged, urine normal.	False membrane on right tonsil; healed in about a week.	....	....	Five grains of carbonate of ammonia, with two grains of quinine and fifteen minims of chloric æther in glycerine were given every two hours. Muriated tincture of iron was substituted for the ammonia when the great depression ceased. Brandy, port wine, yolk of egg.	....	Recovered slowly Feb. 8.	....	Dr. Ashley. Although the false membrane was confined to one tonsil, and the surface healed in a few days, the depression was most severe, and her state critical for some days.

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65 F. H. 16 F.	Previous health good; sister of above.	Jan. 11, 1859	Not having accompanied her sister, M. H., into Essex, she appears to have taken the disease from her after her return.	....	Much fever at the onset; submaxillary glands enlarged, urine normal.	Creamy exudation on both tonsils; healed in about a week.	....	....	Poultices and nitrate of silver locally, chlorate of potash, hydrochloric acid, and chloric æther with cinchona internally.	....	Recovered, Jan. 29th.	....	Dr. Ashley.
66 C. G. K. 7 M.	House large, site airy.	Jan. 11, 1859	No apparent cause.	....	Submaxillary glands swollen, urine normal.	Both tonsils & fauces cov. with patches of false membrane; denud. surf. bleeding; healed in ab. 10 days.	....	....	Solution of nitrate of silver 3 j ad ℥ j applied daily; quinine, iron, chloric æther, with glycerine every two hours; port wine, generous diet.	....	Recovered slowly Jan. 26th.	....	Ditto.
67 A.L. A. 5 F.	Healthy girl; residence well situated.	Jan. 11, 1859	Had been in company with the above, C. G. K.	....	Submaxillary glands enlarged, urine normal.	Patches of exudat. first appear'd on one tonsil, then on the fauces and the other tonsil; on removal of the slough, the surface bleeding.	....	....	The same treatment as in the case of C. G. K.	....	Recovered slowly Feb. 3.	....	Dr. Ashley. In this, as well as in the majority of cases I have attended, the bleeding surface was peculiarly characteristic.
68 J. H. S. 22 M.	Had been subject to relaxed sore throat.	Jan. 21, 1859	Had not apparently been exposed to any contagious influence.	....	Mucous membr. of a dark, congested tinge, glands of neck enlarged, urine normal.	Exudation confined to both tonsils; healed in about a week.	....	....	The hydrochloric acid with cinchona and chlorate of potash; after the surface healed, tannin and alum with glycerine to the throat.	....	Recovered, Feb. 5.	....	Dr. Ashley. App'rances local. &cons. sympt'ms in all th. cases, very differt. those of scarl't fever.
69 G. W. 25 M.	Living in one small back room; good drainage.	Jan. 27, 1859	....	....	Dusky purplish tint of fauces, dysphagia.	On the tonsils.	....	....	Sponged with arg. nitr. gr. xx, ℥ j of water, gargle of hydrochloric acid, bark and chloric æther internally, with good diet.	....	Recovered in a week.	....	Dr. Westmacott. Western Dispens. Paddington No. 1.
70 G. W. 6 ms. M.	Same as above.	Feb. 2, 1859	Son of the above.	....	Aspect of fauces livid and swollen, with external œdema of the neck; great dysphagia.	Thick mucous (membranous?) shreds cleared out from the fauces.	....	Hd. bn suffer. 4 days with measl. w. had reced.	Fauces sponged out with arg. nitr. gr. x ℥ j. He could take nothing but the breast, and gradually sank.	....	Died, 7 ds.	No post-mortem examination.	Do. No. 2.
71 M. W. 24 F.	Same as above.	Feb. 5, 1859	Mother of the above.	....	"Usual symptoms and appearances of diphtheria."	Shreds of membrane came away.	....	....	The fauces were sponged with nitrate of silver, 20 grains to the ounce, and she was ordered to live well; no other treatment.	....	Recovered, 5 ds.	....	Do. No. 3
72 A. W. 9 ms. F.	Residing in same yard, but in another house.	Feb. 10, 1859	Niece of above. Had been brought into the house by her mother, who came to nurse the other family.	....	Dysphagia, external and internal œdema.	Ashy membrane over fauces.	....	....	Sponged with nitrate of silver; small doses of tincture of bark and chloric æther internally; could hardly take any nourishment; sank gradually.	....	Died, 6 ds.	No post-mortem examination.	Do. No. 4.
73 F. 8	....	April 8, 1859	....	....	Ill 3 days before admission; some swelling of neck, pulse small and weak.	On fauces; could not be clearly seen from her resistance.	No. (after death)	None. knwn	Emetic; nitrate of silver to throat; sesquichloride of iron and quinine with wine internally; she sank gradually, and died at last in convulsions.	....	Died, 5 ds.	Tonsils and fauces covrd. w. false mem. wh. extended dn. to back of epiglot. Purpuric spots under skin & ben'th peric. caps. liver, &c.	Matilda Woodhatch. Dr. Fuller, St. George's Hospital.
74 E. 17	Residing at Foulness, a low island at the mouth of the Thames.	April 22, 1859	Diphtheria very prevalent in that island.	....	Small weak pulse, much dysphagia, no prostration.	Large extent of false membrane.	No.	Albuminuria.	Inhalation of vapour of vinegar and water; saline and carbonate of ammonia. Dyspnœa came on 2 days after admission, and increased in spite of remedies.	On 2nd day, for alarming dyspnœa, a large coat of windpipe extracted. The relief to breathing was only temporary.	Died, 2 days, of dyspnœa 10 hrs. after tracheotomy.	The false membrane extended from the fauces down to the bifurcation of the trachea, consisting of solid layers Slight incipient disease of the kidneys.	Susan Cripps. Dr. B. Jones, St. George's Hospital. broken edge of lymph where cast had been extract'd durg life could be plainly seen on post mortem examination.

Original Communications.

THE PROGNOSIS OF ASTHMA.

By Hyde Salter, M.D., F.R.S., Fellow of the Royal College of Physicians, etc.

In a disease whose tendency is so little generally understood, and which is so alarming and distressing in its manifestations, the ultimate issue of the case is often a subject of the most painful anxiety to the sufferer and his friends; it is therefore a matter of some importance that the physician should be able to detect the tendency of the disease in any given case, and to form something like a definite prognosis.

Now this prognosis must be based partly on the actual condition of the patient, and partly on the previous history of his case. As far as relates to the actual condition of the patient, the circumstances by which our prognosis will be influenced are his age, and the presence or absence of organic mischief in the heart or lungs. As far as relates to the previous history of his case, the circumstances influencing the prognosis are the duration of the attacks, (rather than their severity) their frequency, the completeness of the recovery between them, their apparent tendency—that is, whether they appear to be getting more frequent and more severe, or less frequent and lighter—and lastly, the length of time the asthma has existed.

I. Circumstances connected with Actual Conditions. The influence of *age* in determining the tendency of asthma constitutes a very constant and characteristic feature in its clinical history. In young asthmatics the tendency is almost invariably *towards recovery;* whereas, in a person who is attacked with it after forty-five the tendency is generally towards a progressive severity of the disease, and the production and aggravation of those complications by which asthma kills. In no disease, in my opinion, does the question of age affect prognosis more, and in none is better shown the power of youthful organisms, to repair, in the intervals of health, the injuries of disease, and to resist the tendency of functional to the production of organic mischief; or, on the other hand, the loss of this power in the advance of life, and the proportionally greater tendency of occasional and recurrent derangements to produce permanent and irreparable injury.

In the young asthmatic under fifteen, one may almost safely predict, barring organic disease, a favourable issue, and tell him he will most likely gradually "grow out of" his complaint. I can call to mind, at the present time, four or five cases of individuals who have thus grown out of their malady, and are now perfectly well; but whose childhood was rendered one of great suffering by asthma. In asthma commencing from twenty to forty, age tells much less in favour of the patient, and the prognosis is doubtful; but if the lungs are entirely free from any organic complication; if there is no emphysema, and no tendency to bronchitis; the patient has, under proper management, a very fair chance of recovery. Above forty-five, the recoveries are, I believe, few indeed; the tendency is, as I said just now, generally towards a progressive severity of the disease, and the prognosis should always be guarded, if not absolutely unfavourable.

Now, why is this? why, *cæteris paribus*, should age have such a determining influence on the tendency of asthma? Partly for the reasons that I have mentioned; that in the young the powers of repair are great, in those advanced in life, feeble; that in the young the pulmonary congestion, that always accompanies asthma, completely vanishes in the intervals of the attacks; the capillaries recover their tone, and the nutritional balance of the lungs is regained; whereas in the old the engorged capillaries are slower in recovering themselves, and the pulmonary congestion hangs about the patient some time after the asthmatic spasm has disappeared, manifesting itself by a profuse mucous exudation, and a certain thickness of breathing and incapacity for exertion; if the attacks are frequent, this pulmonary congestion never entirely vanishes, and thus is produced a kind of spurious chronic bronchitis, with a tendency to aggravation by each attack; which is one of the worst and commonest complications of the asthma of the old. Another complication of asthma—dilated right-heart—is much more apt to occur in the old than in the young, and for the very reason that the dyspnœa in the old is so apt, by the generation of this spurious bronchitis of which I have been speaking, to pass from the occasional and intermittent form characteristic of pure asthma, and become continuous and permanent. As far as I have seen, the right side of the heart never becomes dilated by asthma, however severe the dyspnœa may be during the attacks, if the intervals between them are considerable, and the recovery in those intervals complete. It is a continued and not an occasional and transient arrest of the pulmonary circulation that dilates the right side of the heart. It is from this fact that we see dilatation of the right side of the heart, venous stasis, and general dropsy, so much more common a result of chronic bronchitis than of asthma.

But this greater disposition in asthma to produce organic change in the old than in the young is not the only circumstance which imparts to age its determining influence on the tendency of the disease. In asthma, as in all other constitutional disorders, we have in the young much more room for hope from those changes in the type and build of the constitution which in them are so marked and striking; whereas in the old the constitution is set and fixed, and we have but little to hope on this score. Indeed the existence of a constitutional peculiarity in a child is of itself almost a presumption that he will one day lose it; while in an old person it furnishes a presumption equally strong that it is fixed and indelible.

Again, in an old person the probability is that the asthma has existed longer than in a young one, and, as I shall show presently, the chances of recovery from asthma (as is the case in almost all diseases) are in inverse proportion to the length of time that the disease has existed.

But there is a special reason, depending on the nervous nature of asthma, that makes us sanguine of recovery in the case of the young; and which explains at the same time the greater frequency of pure nervous examples of the disease in the young than in the old. What, for want of a better name, we must call "nervous irritability," is much more marked in the young than in the old. It appears continuously to diminish from birth forwards. Sources of irritation that in the young are adequate to the production of the most violent nervous phenomena, in mature life are powerless to produce such effects. The cutting of a tooth, for example, will send an infant into epileptic convulsions; one never hears of a fit from the second dentition. A young child will grind its teeth, or even be violently convulsed, from the presence of ascarides in its rectum; but one never sees such results from worms in the adult. And thus the diminution of nervous irritability, as childhood passes to youth and manhood, may make an attack of asthma less and less prone to occur on the supervention of its exciting causes, and less intensely spasmodic when it does occur. I believe indeed, that this diminution of nervous irritability is the true explanation of that gradual recovery of young asthmatics which is so common, so almost universal.

Lastly, age influences unfavourably the tendency of asthma, not only because it is more apt in advanced life to engender organic disease, but because it is also more apt to have organic disease as its cause. The causation of asthma in youth and age is indeed very different. In age there is commonly some appreciable organic basis for it; in youth much more rarely.

The other circumstance in the actual condition of an asthmatic determining the tendency of the disease in his case, is *the presence or absence of organic disease in the respiratory and circulatory organs.* This is the most important of all the points affecting the prognosis, and is, of itself, sufficient to turn the scale. Its exact value is this: if the heart and lungs are perfectly free from organic disease, recovery is possible; if they are the seat of such organic disease as tends to engender bronchial spasm, and as is in the given case the actual cause of the asthma, recovery is *impossible.* The cause is incurable, and therefore its consequence.

II. Circumstances in Past History. A very important one of these is the *length of the attacks.* I have just now stated that one of the ways in which repeated attacks of asthma damage the lungs is by the production of permanent pulmonary congestion. At each attack, the shutting off of air by the narrowed bronchules, suspends the normal respiratory changes of the blood in the capillaries; this produces capillary arrest, and this, engorgement of the whole pulmonary circulation, capillary and venous. Now this pulmonary congestion, as is the case in all derangements of vascular balance, congestive or inflammatory, becomes formidable and chronic in proportion to the length of time that it has existed. If the attack is short, and the speedy relaxation of the bronchial tubes quickly readmits a free supply of air, the vessels are at once relieved, the blood-

passes on, and the transient congestion leaves no trace behind it. But it is very different if the attacks last several days, or even weeks, as is sometimes the case. Then the capillaries and venales, long distended, never completely recover themselves, their *tone* is lost, and the pulmonary congestion, manifested by chronic dyspnœa and expectoration, is permanent. This pulmonary congestion, involving as it does the bronchial tubes, and occluding them with mucus, becomes, in its turn, a source of bronchial irritation, and thus tends to excite and keep up the asthma which has caused it. The length of the attacks, therefore, has an important bearing on the prognosis, because it has an important influence in determining the production of that particular damage of the lung which is the commonest way in which asthma becomes hopeless.

The *frequency* of the attacks is another point bearing directly on the prognosis, and for the same reason and in the same manner as their duration. The more frequent they are the worse the omen. If the intervals are so short that the lungs have not time completely to recover from one attack before the occurrence of another, the omen is very bad, because the mischief of each attack being engrafted on some portion of that of its predecessor, the organic derangement is accumulative, and the case one of progressive disorganisation.

Another point that should be carefully ascertained is the *completeness of the recovery* between the attacks. I always ask a patient, "Is your breathing in the intervals of the attacks perfectly free from any shortness or difficulty whatever? If he says "Yes," then I know that his attacks leave no permanent vestige on his pulmonary circulation, that it recovers itself absolutely, and that the disorganising tendency of asthma does not, in this case, furnish any ground for alarm. But if he says "No," I am sure that the mischief which the attacks inflict persists, I confidently expect to find other evidence of organic disease, and I form an unfavourable prognosis.

Especially do I draw an unfavourable inference from the *persistence of expectoration*. Spitting is one of the worst signs in asthma. In fact, what is called "humid asthma," is neither more nor less than asthma complicated with bronchial inflammation or congestion.* Wherever there is chronic expectoration, we may be sure that the lining membrane of the air passages is the seat of organic change. Indeed, the mucous exudation is a positive evidence of, and in its quantity a measure of, that loaded condition of the bronchial vessels which it is its object to relieve. A certain amount of expectoration after each attack, of a thick gelatinous mucus, like pellets of very thick arrowroot, is common, almost universal; especially in the morning succeeding the attack (indeed, the most transient fits of asthma, lasting only a few minutes, are generally followed by the expectoration of a pellet or two of this mucus, with whose discharge the little attack appears to terminate); and from such an expectoration, if it lasts only a few hours, or even days, no harm is to be inferred; it is when it never completely ceases that it becomes ominous. Wherever there is mucous exudation there is cough; *chronic cough*, therefore, is a very bad sign in asthma, and tells just the same tale as the expectoration.

There is one prognostic sign, common to all disease, and which should not be disregarded in asthma; it is, the *direction* that the disease appears to be taking. Is it becoming more or less intense? Are the attacks becoming more severe and more frequent, or milder and more distant? One often derives from this source a most valuable indication of what the upshot of the case will be. The loss and the acquisition of the asthmatic tendency is generally a gradual process, and the future of a case of asthma often but a reflection of its past history. If a patient can tell you that his attacks have mitigated in severity and are getting less frequent, you have, especially if he is young, one of the most hopeful auguries of his ultimate recovery. Such a case would probably get well of itself without any medical interference. If, on the other hand, the disease is *gaining* on him, you have what must be considered a very bad sign, and one which, unless some speedy and great change is induced by some of those means which control asthma, will leave but very little hope.

There is yet one more circumstance, to which I have not yet referred, that will very materially affect our prognosis; it is, our ability or not to *detect the exciting cause* of the attacks, and the controlability of that exciting cause. If the exciting cause is clear, single, and such as may be prevented, nothing is simpler than the treatment of the disease, or more certain than a favourable prognosis. We hold in our hands, as it were, the key of the disease, and by shutting off the exciting cause we may indefinitely postpone a repetition of the attacks. If the attacks never occur but as the consequence of this exciting cause, and its recurrence is permanently prevented, this preventive treatment amounts to an absolute and final cure. If, for instance, what is not uncommon, there is some particular locality where the asthma is sure to come on, and in no other, you have simply to say, "Avoid that place and you are cured." Or if, which is much commoner, there is one place and only one, where the patient never has any attacks, you may say, with almost equal certainty, "Stick to that place and you have seen the last of your asthma." Or if, again, the asthma never comes on but as the result of some error of diet—eating something known to disagree, or eating largely and late in the day—the patient's cure is certain if he will only keep himself within strict dietetic rules, and he may safely and positively be told so. If, on the other hand, the exciting cause is not to be detected, or, being detected, not to be prevented, the omen is bad: for, in the one case we are debarred from adopting any preventive treatment, or in any that we may try we are hitting in the dark; and, in the other, the prevention of the attacks is manifestly impossible.

If, then, an asthmatic were to present himself to me and seek my opinion as to his prospects, I should, having ascertained his age, and carefully scrutinized the condition of his chest, put to him the following questions:—How long do your attacks last? How often do they occur? Do you lose all traces of shortness or difficulty of breathing between the attacks; or is the breathing always a little difficult? Do you habitually cough and spit? Does the disease appear gaining on you, or the reverse? Is the exciting cause of the attacks clear; and can you undertake that it shall not recur?

If the patient is young, the chest sound, the attacks short, the intervals long; if there is no permanent shortness of breath, no cough or expectoration; if the attacks are getting milder or rarer, and if the exciting cause is clear and such as may be obviated, then a favourable prognosis may be given.

If the patient is old, the lungs damaged, the attacks frequent and severe, the breathing never quite free, coughing and spitting constant, the disease apparently gaining ground, and the exciting cause occult or irremediable, then, *quoad* all or any of these circumstances, there is no alternative but to give an unfavourable prognosis.

* By an unfortunate looseness of nomenclature, the term "humid asthma" was formerly, and is even now, applied to cases of simple chronic bronchitis that have nothing specially asthmatic about them.

ON A PECULIAR AUSCULTATORY PHENOMENON.

By J. Thorburn, M.D., Surgeon to the Chorlton-on-Medlock Dispensary, Manchester.

Having several times met with a rather peculiar auscultatory phenomenon which I do not find described or explained in works on the subject, I wish to record it, in the hope that such other members of the profession who may have encountered it in practice may be enabled to compare notes with me, and thus perhaps elicit something which may be of use to other auscultators. The first time I heard the sound in question, I was somewhat puzzled as to its meaning; and even now, though I am quite assured of its existence, I am not positive as to its real pathological bearing.

The best mode of describing the phenomenon will be to detail one of the cases in which I first encountered it.

This patient was a young man suffering from a digestive disorder, and with no symptoms of chest-disease. I examined the thorax merely as a precautionary matter, and found percussion perfectly normal everywhere; no unusual dulness at either apex, nor in the cardiac nor sternal regions. On auscultation, the cardiac sounds were quite healthy, as was also the respiratory murmur over the greater part of the chest. Over the most of the left apex, however, and at the inner third of the right, there was audible what I took to be a loud blowing murmur with the first sound. It was distinctly of a blowing character, without much harshness, perfectly synchronous with the cardiac systole and with the pulse, and very loud. There was no *bruit* in the cervical vessels. To examine the sound more carefully, I made the patient hold his breath; when, to my surprise, I found that the murmur completely ceased. This I repeated several times, that there might be no mistake. It was perfectly plain that, though completely identified with the vascular systole, the sound was present only during the expiratory and the end of the inspiratory process.

There was nothing else abnormal present; and I treated the digestive symptoms, giving no opinion about the thoracic murmur. The patient has since continued for more than two years in apparently perfect health; and I have ascertained that the same sound is still present, but much weaker.

In this case, then, the sound was met with in one who, in the absence of other evidence, has no thoracic disease. I met with a precisely similar sound in a woman, who had distinct evidence of tubercles and of a large vomica on the left side. It was confined to the same regions; and *post mortem* examination, while it confirmed the existence of the phthisis, showed nothing else to account for the peculiar murmur. I have noted five or six other cases where I have met with the same thing, and in no particular were they the least alike with regard to the existence of tubercular, cardiac, or aortic disease.

The question then is—What produces this sound, and what condition may we regard it as evidencing? It must be either a respiratory sound modified by the heart or great vessels, so as to have a cardiac rhythm; or a vascular sound modified by the respiration. From a careful examination, I have come to the conclusion that it is of the former character; and that what is heard is the expiratory murmur and the end of the inspiratory murmur itself, *saccadée* or jerked by some undue impulse. I think it probable that this impulse is communicated by a nervously excited or perhaps *slightly* dilated aorta, just as the action of the heart may sometimes give a cardiac rhythm to a friction-sound, which is really pleural. The greater comparative weakness of expiration will account for its being heard chiefly at that time.

There are certainly some difficulties in the way of this explanation; but I cannot arrive at a better. I cannot conceive that any sound of vascular origin so loud as this could be masked by inspiration, or lost when the breathing ceased. One would, however, suppose that some similar jerking of cardiac rhythm should be heard over the trachea; and in one case, though only in one, I fancied that this was the case. In this instance, the patient declared also that, after much running or the like, he could hear and feel his breath come out "in jumps", as he expressed it. I have myself felt the same thing after great exertion, and have ascertained that it corresponded with the pulse. It has always, however, disappeared before I could have a stethoscopic investigation. I believe that, in the cases I have cited, the condition is owing to slight over action, from some cause, of the aorta; but I should be glad if any one could afford a better explanation. I am convinced that the sound is not very infrequent; that, though loud, it does not indicate serious organic disease; but that, by a not very skilful examiner, or by one unaware of its existence, it might easily be supposed to have such an indication.

Transactions of Branches.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

ON PRIMARY AND SECONDARY SYPHILIS OF THE UTERUS.

By Langston Parker, Esq., Surgeon to the Queen's Hospital, Birmingham.

[*Read April 15th*, 1859.]

The effects of syphilis on the uterus and its appendages have not till lately attracted the attention of practical men. This is hardly to be surprised at, when we find so recently as the time of Hunter, the influence of syphilis on the fœtus *in utero* denied.

There can be little doubt, however, that the uterine organs suffer to an extent much greater than has been generally supposed from the attacks and ravages of syphilis; and not only is this of importance as far as the individual affected is concerned, but such diseases have a distinct bearing, in case of the future pregnancies of such patients, upon the health and even upon the life of the infant, or the fœtus *in utero*.

The literature of this subject is as yet comparatively meagre. Treatises on syphilis are almost silent on the subject; and monographs, with one or two exceptions, are entirely wanting. When I say this, however, I must not include the valuable treatise of Dr. Whitehead of Manchester, "On Hereditary Diseases," nor the paper of Dr. Mackenzie, read before the Royal Medical and Chirurgical Society in 1854, and published in the Association Medical Journal for that year. Both these works contain much valuable and original matter on the subject of uterine syphilis.

I need not remark that syphilis, as we know it in its external or visible manifestations on other parts of the body, is observed under two forms, as a primary or local disease, and as a secondary or constitutional one. The uterus appears to suffer in the same way as other parts, and in addition it is the seat of another class of morbid actions, not due to syphilis, but to gonorrhœa, which are different in their primary and remote effects upon the uterus and upon the infant, from those which I am about now specially to consider.

Primary venereal ulcers, as we observe them on the external parts of the organs of generation, are rarely found on the neck, on the lips, or in the canal of the cervix uteri, yet they have been found in all these situations. I can only find one case on record where an ulcer of the uterus yielded a positive result when tested by inoculation, and this is mentioned by M. Ricord, at page 212 of his *Treatise on Inoculation*. Another case is given, by the same surgeon, at page 11 of his *Iconographie*, and figured in the fifth plate. Here the ulcer was single, and was only discovered by two persons having contracted chancres from the subject of it. No account is given of its having been inoculated artificially, and therefore I conclude that no test of this kind was instituted. It is described as "a round ulcer, with well defined and sharp edges, and an ash-coloured surface, surrounded by a red areola or border."

A man was admitted, under my care, as an out-patient at the Queen's Hospital, some time ago, with several soft chancres round the corona glandis. He said the disease had been given to him by his wife, who was suffering from syphilis when he married her, and soon after this event, the disease under which he laboured broke out. He brought his wife with him for examination.

On the lower lip of the cervix existed a deep ulcer with sharp edges, surrounded by a well defined inflammatory patch; the ulcer appeared to run into the canal of the cervix. I never saw anything more closely resemble a chancre, yet it produced no result when inoculated.

Dr. Whitehead, at page 367 of his treatise on *Abortion and Sterility*, says: "I have seen but one case of this kind. The husband had orificial chancre with gonorrhœa, which were contracted about three months after marriage. His wife had *no external sores;* she had constitutional syphilis. The ulcer occupied the boundaries of the orificium uteri to the extent of a sixpenny piece; it had lost its primary character, as far at least as the infecting power of its secretion was concerned, as no result was obtained by inoculation of the matter on the skin; but it still retained a genuine chancrous appearance, having an excavated centre with raised overhanging margins and a yellow base."

"A girl was admitted into the Queen's Hospital, under my care, in August of last year, with a syphilitic eruption, a well marked 'lichen corymbosus.' On examination by the uterus, a large well defined ulcer was discovered on the lower lip, which ran into the canal of the cervix. It was surrounded by a ring of inflammation. The remaining portion of the mucous membrane was healthy, and contrasted strongly with the diseased one. I was led to regard this ulcer as primary, from the fact of the skin disease constantly relapsing under the same form when apparently cured, a circumstance not common; it did not permanently disappear till after three or four cauterisations of the uterine ulcer."

Nothing appears more likely to happen than inoculation of the uterine surfaces, when the male has chancre of the urethra. The comparative frequency of this may be seen from an examination of the work of M. Fournier, who, out of 824 cases in which the seat of chancre was noted, found thirty-two of the meatus urinarius, and twenty seated within the urethra, which could not be seen till the lips of the urethra were opened.

The latter belong to the class of concealed chancres, or "chancres larvés," as they are termed by the French pathologists. These chancres in the female are commonly seated within the canal of the cervix, and thus bear a strong analogy, as far as their seat is concerned, to those situated within the urethra by the male. The 17th case, narrated by Dr. H. Bennet, in his treatise on *Inflammation of the Uterus*, appears to have been one of this kind. It occurred in a female, who had communicated to her lover a chancre and a bubo; and these circumstances led to an examination of the vagina and uterus. No trace of disease could be discovered, except a profuse puriform discharge from the vagina, and a muco-pus

which issued from the os uteri. On the third examination with the speculum, "a small ulceration was discovered issuing from the os uteri, and turning over the anterior lip. The ulceration presented a greyish surface and an irregular indurated margin; it was deemed to be a true chancre by M. Emery, as well as by Dr. Bennet, and many other persons who saw it." (Bennet, *On the Uterus*, p. 442.) This case is narrated by Dr. Bennet as one of chancre concealed within the cavity of the os uteri for several weeks, the first symptom of which was the discharge of muco-pus from the uterine orifice.

It will be remarked, in the two cases I have mentioned from my own observation, that both the ulcers which I thought might be primary, turned into the canal of the cervix. They might have commenced there, as the cases were not examined till disease had been in existence some time.

It is very probable that the concealed chancre of the canal of the cervix may be a more frequent affection than is generally supposed; for it is not uncommon to see females with secondary syphilis, who have had no external sores, but who complain merely of discharge more or less profuse. On examining these cases with the speculum, a thick muco-pus is found to issue from the os uteri, which may or may not be symptomatic of concealed chancre of the canal of the cervix.

From what has been already said, it will again be observed, that although in one instance only, and that of a sore situated on the external portion of the neck of the uterus, could a successful inoculation be produced; still three of the females mentioned produced chancres in the persons with whom they cohabited, and yet had no external sores; they presented no other marks of primary syphilis than those which were found on the uterus.

It is not surprising that these ulcers should produce no pustule when inoculated with a lancet puncture, when we consider how the morbid secretion furnished by the sore must be diluted and altered by the ordinary or normal secretions from the uterus and vagina.

Apart from these affections of the uterus I have just mentioned, and which may be considered, in the commencement, as primary or local diseases, there is a class of morbid actions to be found in the uterus, which appear to be dependent on the existence of a confirmed constitutional taint, whose presence in the system is marked by other symptoms apart from those which are found in the uterus, which are of an undoubted syphilitic nature, such as ulcerations of the throat, eruptions upon the skin, and others of a like character. It is beyond all question certain that secondary syphilis attacks the uterus, and the symptoms about to be mentioned are found in the uterus in about sixty (Dr. Mackenzie) per cent. of the cases of all those who exhibit unequivocal symptoms of secondary syphilis. These secondary syphilitic affections of the uterus are of especial importance in their relation to conception and pregnancy, and to the health and life of the fœtus *in utero*. Such conditions of the uterus are not a hindrance to conception, but it is extremely improbable that pregnancy should attain its full period, or that a healthy child should be born under such circumstances, even if the father be free from a syphilitic taint. By referring to the tables of Dr. Mackenzie, which will be found at p. 1035 of the Association Journal for 1854, it will be seen that two children only out of twenty-two births could be considered healthy when born of women thus diseased, and seventeen of the children died at very early periods after birth; the greater number of whom exhibited unequivocal symptoms of syphilis. The fourteenth case recorded by Dr. Whitehead at p. 133 of his work, already alluded to, is a well marked illustration of the position just laid down. In this case the patient was diseased by her husband; she was never pregnant, had indurated sores, a puriform discharge from the vagina, enlarged nucleated glands in the groin, scaly eruptions on the face, forehead and arms, and a sore throat. She became pregnant by a second husband fifteen years after having been diseased by the first, and gave birth to a child, which in the fourth week after birth became covered with scaly blotches; the voice was husky, the breathing snuffling, and the mouth and lips sore. The child died. On examination, the cervix uteri was found unusually large and firm; the boundary of the orifice was covered with granulations, which appeared to extend into the interior of the organ; the outer margin of this ulcer was a defined wavy elevation, external to which the surface of the cervix was of a dark red colour. The discharge had never disappeared during the whole interval of time mentioned.

On examining the uteri of those females who exhibit symptoms of constitutional or secondary syphilis, certain alterations will be found, which, as far as my own observations go, I have found pretty constant, and which, when other symptoms are present, must be considered as due to syphilis. But an important question arises, whether such symptoms are ever found in the uterus, if the patient has never had syphilis; or whether, these symptoms being found in the uterus, and no other symptoms of syphilis elsewhere, we are warranted in pronouncing them as syphilitic.

The symptoms found in the uterus of females who have other symptoms of secondary syphilis, are, 1. Purulent discharges; 2. Enlargement and tenderness of the whole vaginal portion of the uterus, or one segment only, generally the lower; 3. Patches of redness, sometimes of a very dark colour; 4. Ulcerations varying in size and appearance. Perhaps one of the most frequent symptoms attendant on secondary syphilis is a purulent or muco-purulent discharge from the uterus itself. This discharge is present in a great majority of females labouring under confirmed lues; sometimes it is present without other symptoms, but much more frequently, under such circumstances, is associated with greater or less enlargement of the neck of the uterus, with more or less eversion of the lips of the uterus, and with certain alterations of the mucous membrane, consisting in red patches, excoriations, or superficial ulceration. I believe this discharge to be, under such circumstances, a symptom of secondary syphilitic disease of the uterus. It is true, such discharge may be a simple leucorrhœa, or it may be due to gonorrhœa, or it may be symptomatic of a concealed chancre of the canal of the cervix; but where it occurs with a constitutional taint, and where it is associated with those other morbid changes I have alluded to; and where, again, the patient was free from such discharges till she became diseased,—there can be little reasonable doubt of its nature. "In every instance where the mothers of syphilitic infants have been under treatment, the existence of syphilitic disease in the uterus, with discharge containing more or less of pus, has always been found." (Whitehead, *Third Report of the Clinical Hospital, Manchester*, p. 106.) Dr. Tyler Smith, at p. 98 of his *Treatise on Leucorrhœa*, says: "It appears to me that, in almost all cases in which leucorrhœa and disease of the os and cervix uteri are present in women suffering from constitutional syphilis, the uterine symptoms are a genuine manifestation of the constitutional or secondary disorder." Neither the microscope nor chemistry, as far as I know, have yet furnished us with any data which would enable us, by the mere examination of the secretions, apart from the history of symptoms, to found a diagnosis. In reference to this point, Dr. Whitehead says that the "stain in venereal affections is different from that communicated by the product of simple ulcerative or inflammatory action, although in what this difference consists, chemically, I do not exactly know."

I could adduce a great number of cases in support of the views I have just set forth, did time and the limits of this paper permit. I may be perhaps permitted to allude to one or two, which present some features of rather peculiar interest. A patient consulted me, some months ago, respecting some superficial ulcerations of the penis, which invariably made their appearance on the day after intercourse with a female with whom he lived *par amours*, but to whom he was not married. He was most anxious that she should be carefully examined, and she was sent to me for that purpose. She had the remains of an old syphilitic eruption upon her. I could detect no further change in the uterine organs than a profuse muco-purulent discharge. She subsequently became pregnant. In the sixth month of her pregnancy, she was delivered of a dead and putrid fœtus. I have watched this case for four years, The patient has miscarried twice, and has been prematurely delivered of two dead children. The uterine discharge has never ceased during the whole period.

A girl, of very healthy constitution, was admitted, under my care, into the Queen's Hospital, in September 1857. She had indurated chancres of the labia, enlarged glands in the groin, a well marked eruption of syphilitic lepra, and a profuse vaginal discharge. On examination, the whole of the vaginal portion of the uterus was found swollen and intensely red: this redness ran into the canal of the cervix, from whence issued a most profuse muco-purulent discharge. The symptoms of syphilis disappeared after a prolonged treatment, which had no effect on the discharge: it subsequently yielded, and almost altogether disappeared, under one or two cauterisations of the orifices of the uterus with the nitrate of silver, and the application of a pledget of lint to the upper portion of the vagina, soaked in a solution of the chlorate of potass, in the proportion of a drachm of the salt to half a pint of water.

These secondary syphilitic uterine discharges are perhaps, of all the symptoms of secondary syphilis, the most troublesome and difficult to cure. In fact, my object in alluding to the last case was chiefly to show that the treatment which generally succeeded in removing the external manifestations of syphilis had frequently little or no effect on those discharges from the uterus which have been deemed of a syphilitic nature; and this is constantly the case. They require a combination of both local and general treatment. Local treatment will not remove them without constitutional treatment; neither will the latter succeed without the former. Sometimes they are rebellious to all treatment; and this may possibly depend upon the location of some mischief in the interior of the uterus, beyond the reach of remedies. In this respect, they may resemble those chancres situated in the interior of the bladder, which have been described by MM. Ricord and Vidal de Cassis.

These difficulties in treatment have been noticed by other observers. Dr. Mackenzie, in reference to this point, says: "Moreover, in determining the relations of these discharges to syphilis, there is this additional difficulty, that the actions of the disease are both local and constitutional; and hence abnormities in regard to these secretions may arise from the local irritation of the disease, rather than from its more specific and constitutional action." These remarks just state the difficulty with regard to treatment; and I venture to assert that the most judiciously framed general plan has little or no effect upon the particular symptoms I have alluded to, without the aid of topical medication.

These discharges may continue through a long series of years; in the case quoted from Dr. Whitehead, for seventeen years—doubtless, of a syphilitic nature; for a diseased child was born at the end of this period, and no other symptoms of taint discoverable either in father or mother, except those seated in the uterus. This is not surprising, when it is considered that, when medical men treat secondary syphilis in the female, the uterine organs are very rarely examined, unless some special circumstance direct their attention that way. And, again, vaginal discharges, from a variety of causes, are so common in females, that they commonly attract but little attention; and, even if their existence be inquired into by the surgeon, it is most frequently denied by the patient.

It will be found, on examination, that a great number of patients suffering from secondary syphilis, I believe the majority, have the neck of the uterus very much enlarged; and this enlargement is, in many cases, so marked as to constitute a distinct and positive abnormity. This enlargement or hypertrophy will be found more frequently to affect the lower segment or tip of the uterus, than the upper; and that frequently in a very marked degree. The mucous membrane covering the uterus so affected may not present many very marked deviations from the healthy condition; but more frequently it does so. The mucous membrane looks red, shining, or excoriated—not a generally diffused redness, but in patches: some of these patches have a deep livid colour, and generally they have a tendency to run towards or into the orifice of the womb itself.

There is little doubt but these symptoms are due to syphilis. If the patient have at the time other marks of constitutional disease, it amounts to little short of absolute certainty; or if, again, the uterus be examined soon after the disappearance of the other symptoms, and such conditions of the uterus are found, they may be pronounced syphilitic; for it must be borne in mind that the symptoms of uterine syphilis will remain for long periods after the apparent cure of other manifestations of the disease. The discharges from the os uteri, to which I have just referred, are also most commonly associated with this enlargement of the neck, and the changes just mentioned in the appearance of its mucous membrane. In the married female, or in those who have borne many children, hypertrophy of the neck of the uterus may probably be attributed to other causes; but, as I have said, the simple hypertrophy seldom exists alone, without the other symptoms I have mentioned: and, again, this enlargement is equally well marked in syphilitic females who have never borne children. Dr. Whitehead says: "When the lower section of the uterus, in a state of hypertrophy, presents a dark red surface, somewhat variegated or mottled, or measley, and especially if it appear tense and glistening, it may pretty confidently be asserted that the patient has a syphilitic taint, and that she will be liable to transmit the evil to her offspring." (P. 291.)

The symptoms of secondary syphilis, as they affect the uterus, consist chiefly in discharges from the os, enlargement of the neck, with redness and superficial ulceration affecting the neck externally, as well as the orifice and canal of the cervix. These symptoms are rarely met with singly; they are frequently all present; but two or more generally coexist. It may be asked, Are these pathognomonic of the existence of syphilis in the system? Would it be safe to assert that such symptoms are syphilitic, apart from the existence of other and the more well known manifestations of the disease? It may be answered, that such conditions of the uterus are infrequent, apart from either the present or antecedent symptoms of syphilis. I have already said that, in secondary syphilis in the female, the uterus suffers in about 60 per cent.: probably the throat suffers in about an equal degree. We know that ulceration of some part of the throat is common in secondary syphilis; but it is not met with in all cases.

If the state of the uterus be examined in patients who have never had syphilis, the symptoms I have mentioned, or others closely resembling them, are not found, or rarely found; whilst in syphilis they are, as we have seen, pretty constant. Mr. Pollock, in a paper read before the Medical and Chirurgical Society in 1852, stated that, on examining the uterus in 583 women who had died of various diseases, in only 23 was the mucous membrane of the cervix or os found diseased or altered. In 708 cases of persons dying of various diseases examined by Dr. Boyd, of the Marylebone Infirmary, 13 only had congestion or inflammation of the uterus. Dr. Allen, of the same institution, and Mr. Prescott Hewett, of St. George's, have also investigated the condition of the uterine organs in a great number of persons dying of various diseases, and they respectively concur in the statement that these lesions of the cervix are rarely met with. (Mackenzie, p. 1055.)

If a female give birth to a syphilitic child, and, on examination, the uterine organs present the symptoms I have described, I think, although no other symptom be present, we may safely declare them syphilitic, and recommend a course of treatment to prevent a similar occurrence on the part of the offspring, in the event of future pregnancies. These symptoms in the uterus, however conclusive they may be as far as the mother is concerned, would not, if cured, necessarily prevent the future birth of diseased children, unless the health of the father be determined. This inquiry, however, is foreign to the object of this paper.

I have already remarked that general treatment, apart from local, rarely succeeds in curing syphilitic diseases of the uterus, whether these be primary or constitutional.

If the disease assume the character of a primary sore, of which I have reported several instances, there is no reason why such sore may not be treated locally in the same way as chancres situated in other parts. For instance, it may be destroyed with caustics, such as the nitrate of silver, or the acid nitrate of mercury: these may be applied with perfect safety through the speculum where the ulcer is situated on the lips or on the external portion of the os uteri. The latter caustics may be easily applied on a camel-hair pencil, or on a small pledget of lint; but, in the event of liquid caustic being used, care should be taken that no more is put on the brush or lint than is required, and that none of the caustic drop on the healthy portion of the vagina.

After the application of the caustic, a soft pledget of lint should be soaked in some weak astringent lotion, such as sulphate of zinc, or acetate of copper with alum, in the proportion of about two grains of the salt to an ounce of water. This should be gently placed over the whole vaginal portion of the uterus, and renewed daily.

The patchy shining condition that I have spoken of may be pencilled over with a solution of nitrate of silver, in the proportion of a drachm to the ounce; and then dusted over with calomel. If there is an extended, spongy, granular, secreting surface, equal parts of calomel and alum may be used; and afterwards some dry soft lint, or charpie, placed over the whole. The lint should be changed, and the dressing of calomel, or calomel and alum, renewed daily. The purulent or muco-purulent discharges from the uterus, which so constantly complicate secondary syphilis, are exceedingly difficult to cure. Simple vaginal injections have little or no effect on them. Such discharges may be symptomatic of disease in the canal of the cervix, or probably still further in the interior of the uterus: I have previously alluded to cases where no reasonable doubt could be entertained that ulceration existed in the canal of the cervix. Vaginal injections fail, because they do not reach the seat of disease; the os itself being commonly occluded by discharges of various kinds. In order to do any good in such cases, these discharges should be carefully washed away by means of a syringe used through the speculum. A

stream of tepid water may be directed against the os till all the discharge is washed away; or a soft piece of sponge or lint may be dipped in warm water, and the secretions cleaned away with it. When this is done, a stick of nitrate of silver may be introduced into the canal of the cervix, and the whole surface well cauterised with it; or a camel-hair brush may be dipped in a dilute acid nitrate of mercury, and the same parts well dressed over with it. These remedies are perfectly safe; I have used them hundreds of times, without the least accident. I mention this simply on account of some unfavourable results which have been said to attend the intra-uterine injections practised by the late M. Vidal, to which I shall presently allude.

In addition to the cases of presumed chancre of the canal of the cervix uteri, which I have already mentioned, M. Robert has cited four cases of discharge from the os, which yielded a characteristic pustule when tested by inoculation; from this fact it was believed that such discharges were symptomatic of chancre situated within the canal of the cervix uteri. There was no external trace of ulceration, and the successful inoculation of the pus discharged was the only symptom which led to the suspicion of the existence of such chancres. (Quoted from a paper by Dr. Achille Dron, in Diday and Rollet's *Annuaire de la Syphilis*, etc., p. 220.)

In those uterine discharges which complicate secondary syphilis, intravaginal injections may be employed through the speculum with great benefit. The ŏs uteri should be well brought into view, and a continuous stream of fluid thrown directly upon it. The fluid used may be a solution of nitrate of silver, very weak (four grains to the pint), a weak solution of sulphate of zinc, of acetate of copper, or of alum, or a strong decoction of the walnut-tree leaf.

These injections should be used about twice a week. These injections have an advantage which no one can dispute; they free the neck of the uterus from their mucosities and secretions, which are more or less acrid, and which may exert a greater influence in perpetuating ulceration than is generally imagined. (Vidal, Blackman's *Translation*, p. 182.)

After the injection, a pledget of lint should be placed over the os, which should be changed daily.

In very obstinate cases, where the disease is located in the canal of the cervix, or even still deeper, injections may be practised through the os tincæ into the canal itself. If the quantity of injection used be small, and the injection carefully made, this may be done with perfect safety. Such injections have occasionally been followed by abdominal and pelvic pains, which have been more or less acute, have continued for longer or shorter periods, and then disappeared. These injections may be made through a small elastic gum catheter, or canula, one end of which is introduced into the uterus, and the other connected with a small syringe. The most convenient injection is a solution of the nitrate of silver, in the proportion of one grain to four ounces of water; of this one drachm is to be used for each injection. The injection must be made slowly and without force. This may be repeated as frequently as may be thought necessary, and the strength increased if required. Much additional and valuable information on "Intra uterine injections in various forms of disease," will be found in the late M. Vidal's work, *Maladies Veneriennes*, chap 3.

The general conclusions that I feel disposed to come to, from the facts contained in the previous paper, are:—

I. The uterus is capable of being primarily inoculated with syphilis, in the same way that we observe similar occurrences take place on the penis and elsewhere. That such primary sores may be situated on the external portions of the neck of the uterus, within the os or canal of the cervix, or probably still more deeply; that these occurrences, as far as they have been at present observed, are rare; but as structure in other parts exerts a very powerful modifying influence on the appearance of a chancre, that these primary sores on the uterus may be more frequent than has hitherto been imagined.

II. Like other parts, as the throat, skin, and elsewhere, the uterus is liable to be attacked with the symptoms of secondary or constitutional syphilis, which are distinct from the primary disease; that these symptoms are found in more than half of the patients who suffer from confirmed lues; and that the symptoms which characterise them are pretty uniform; consisting in discharges from the canal of the cervix, general or partial enlargement of the neck and lips of the uterus, with congestion and inflammation, and superficial ulceration of these parts.

III. These symptoms are most likely syphilitic, since they are found in about sixty per cent. of the cases of those who labour from confirmed syphilis; but are not found in anything like an equal degree in persons labouring under diseases which are not syphilitic.

IV. The symptoms of uterine syphilis will remain for years after the disappearance of the other symptoms; and that this condition of the uterus is the source of infection to the fœtus, even when the female is pregnant by a man who has never had syphilis.

V. The examination of a female labouring under confirmed lues should never be considered as complete till the uterine organs have been thoroughly inspected; and, in reference to treatment, it may be asserted—

VI. No treatment is likely to be successful which does not combine topical medication of the uterus with any constitutional remedies that may be indicated or thought necessary.

LANCASHIRE AND CHESHIRE BRANCH.

PRESIDENT'S ADDRESS.

By Edwin Waters, M.D., Chester.

[*Read at the Annual Meeting, June 8th*, 1859.]

Gentlemen,—The esteem of my professional brethren, as it is one of the most worthy, so has it ever been one of the most cherished objects of my life; it is in all sincerity, therefore, that I give expression to my heartfelt gratitude for the signal mark of regard and confidence you have conferred by electing me your president. I have also to thank you on behalf of the profession in Chester, for so readily responding to their invitation to honour the ancient city with your presence. In their name I give you a most cordial welcome, and I venture to hope that this, your first visit, will prove the precursor of numerous future gatherings, each succeeding one increasing in numbers, in influence, and in the importance of its proceedings. When last we met the long-vexed question of medical reform, after years of agitation, and alternate seasons of hope and fear, was still pending in the legislature; the Medical Act, regulating our qualifications, has since become law. Now, though differences of opinion may exist as to some of its details, the profession as a body, regarding that Act in the light of a step in the right direction, and not as a final measure, have hailed it as a boon; and whatever anxiety may at one period have been entertained respecting the composition of the Medical Council, whether the non-professional element might not be too largely introduced in the shape of Crown nominees, has been completely set at rest. To those ministers who, after grappling in despair with the question of medical reform, abandoned it with the taunt that when the profession—a profession embracing upwards of fifteen thousand members, and comprising numerous conflicting and opposing corporate interests—was unanimous in its views, they would again take it up, I would put the question, Does such unanimity on any subject, however simple, characterise the six hundred and fifty-four members of the House of Commons, or characterise even any of the numerous sections into which the two great parties of the House are divided? and I would reply, that happy would it be for the country if, in the present momentous aspect of our foreign relations, when the death-struggle of nations seems imminent, when patriotic and enlightened statesmen must see the importance of sacrificing to the public weal all private objects and ambition, a government could be formed which would meet with the same hearty approval, respect, and support from Parliament that the Medical Council meets with at the hands of the numerous body over whose various interests it presides.

But not only has an Act to regulate the qualifications of practitioners in medicine and surgery been passed since our last anniversary; distinct warrants for regulating the rank and pay of medical officers of the Army and Navy have been issued, which in point both of status and emoluments leave nothing to desire; the days when members of a liberal profession were subjected to the practical jokes of skylarking midshipmen are now ended, and men of talents and acquirements at an age when study is all important to them, have no longer, on entering the Naval service, to pass through the ordeal of uncongenial and compulsory association with striplings, full of the overflowing buoyancy and frolics of youth natural to their age, though embarked in a noble calling on which the safety, honour, and glory of the country repose. Without derogating from the meritorious zeal of those who have striven for these ameliorations until they were granted; yet, all their efforts having been fruitless until the Medical Act was passed, the presumption

seems justified, that but for the enactment of that law, whereby the profession has acquired a recognised standing in relation to the state, and become possessed of the means of communicating with the heads of departments of the public service, and thereby urging the claims of its members directly on the Government, these warrants would have been sought in vain. The Medical Act has nothing in common with the old charters to our close corporations, but was passed for the profession generally throughout the United Kingdom.

That Act, to which, as I believe, we are in great measure indebted for the subsequent warrants to the Army and Navy, is due to the British Medical Association. All honour to Mr. Cowper, to Mr. Walpole, and Mr. Headlam, for their respective exertions in the cause of medical reform; still, without the steadfast and strenuous fidelity of our Association to the cause, my conviction is that for years to come no measure would have passed into law. No interest more nearly affects the welfare of the community than the really efficient education of the members of the healing art; but so unqualified is the general public for estimating the extent and nature of our educational requirements, that, ignorant of the defects the profession sought to supply, the public remained an indifferent and inactive spectator of our arduous struggles for the elevation of our class. The public, therefore, did not help us; and, as amidst the blessings of our free constitution, the admiration and the envy of the civilised world, we labour under this disadvantage, that scarcely any measure, however just, which involves injury to existing interests, can pass the legislature unless the pressure of public opinion be exerted in its favour; no marvel the struggles of the Medical Reform Committee of the Association were again and again unsuccessful, though always again to be renewed. The various corporate bodies, Universities, Colleges, and licensing boards lent us no helping hand. One and all professed no unwillingness to reform; but then each, with scarcely an exception, required such a measure as would redound to its own special advantage—advantage, I regret to say, rather of a pecuniary than of a scientific character. The inability of Sir James Graham to conciliate their conflicting interests, compelled the withdrawal of the measure he had prepared; and when his bill was followed by those of other ministers, then also did the corporations renew their opposition and their triumph. What power, under such repeated disappointment and defeat, sustained the cause of the reformers? The British Medical Association and its indomitable head. Sir Charles Hastings, and the Medical Reform Committee of our Association, under the most discouraging circumstances, never blenched. When minister after minister failed to carry his measure, and abandoned the subject in despair, private members, amongst whom Mr. Headlam stood conspicuous, received the earnest support of the Association; and when his bill passed the first reading, the battle of reform was virtually gained; the House desired the settlement of the question; a minister and an ex-minister combined to aid its progress; the various Medical Corporations, seeing further opposition must fail, sought only to secure the most favourable terms, and "The Medical Act" became law; which, but for our Association, I maintain, would not have happened for years.

At the risk of being wearisome, I have dwelt thus at length on questions of medical polity, to shadow forth the extent of the influence the Association exerts in regard to them. That influence fully equals what its organisation, its ramifications throughout the length and breadth of the land, and the very large proportion of the profession enrolled as its members, might suggest. That that influence will ever be exerted in the true interests of the profession there cannot be a doubt. Nor are subjects wanting on which to exercise it. I need only mention the position of the poor-law medical officers, which yet remains in an unsatisfactory state, and the important subject of medical education, which must early occupy attention. If, in France, the degrees of Bachelor of Letters and of Science,—if, in despotic Austria, seven years preliminary education in the gymnasia is insisted on before becoming a medical student,—what excuse is there for admitting to the *summos honores medicinæ*, in this country, comparatively uneducated men, and making those admitted swear a long oath in Latin, which many of them do not understand. The general feeling is that this lamentably defective state of learning must be no longer permitted in a so-called liberal profession, and that the wholesale creation of "doctores indocti" must be prohibited. The Journal of the Association is the organ in which these opinions may best be promulgated. This publication has now grown into an excellent weekly periodical; its marked improvement is in the highest degree satisfactory, and I cannot but think it destined, at no remote period, to take the highest standing; particularly when the Branches, by the establishment of ordinary meetings, shall stimulate members to communicate the experience of our excellent provincial hospitals, and the anomalous cases frequently presenting themselves in private practice. In connection with this Branch no such meetings have yet been held. Now, bearing in mind that the district embraced by it contains two enormous towns, such as, in Europe, this kingdom alone can boast—towns equalling, if not exceeding, in population the capital of the still great Austrian empire, the seat of the first medical school in the world; that it also comprises numerous other towns of considerable importance; that all these are provided with excellent hospitals; and that Liverpool and Manchester possess flourishing medical schools; bearing all this in mind, I think the time has arrived when ordinary meetings should be established, with the view of supporting the Journal to a greater extent than has hitherto been done. Although this is the twenty-third anniversary of the Lancashire and Cheshire Branch of the British Medical Association, it is the first occasion on which a meeting has been held within the borders of Cheshire. I shall ever regard my connection with this meeting as one of the proudest days of my life, and I trust that it will be the harbinger of many future gatherings, and that the profession will form a more united class than they have hitherto done.

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

ACUTE HYDROCEPHALUS.

By J. Evelyn Crook, M.D., Northfleet.

[*Read May 20th*, 1859.]

The subject upon which I propose making a few observations is one of great importance, and one, I think, particularly interesting, inasmuch as I consider that the treatment hitherto recommended has not been based on the pathology of the complaint. I am alluding to that disease commonly called acute hydrocephalus, but for which a far better term would be strumous meningitis, or strumous encephalitis; as either would imply, not only that it is inflammatory, but the nature of the inflammation, and the parts affected; moreover, we meet with cases that are not altogether acute; but rather subacute, or even chronic, although the complaint is really a strumous inflammation of the parts within the skull, as is proved by the presence of tubercular matter in the bodies of those that die of this complaint; and during life by the marked difference between the symptoms in these cases, and those of encephalitis occurring in healthy children from injuries, as a fall or blow. Another circumstance which you will be kind enough to bear in mind, in order more fully to understand the object of this paper, is the great extent of serous surface implicated; viz., that of the arachnoid, and that of the lining membrane of the ventricles; and this circumstance, I suppose, has in a great measure directed the treatment. For if we consider it is exactly that of acute inflammation of serous membranes in persons otherwise healthy, it is laid down that upon free bleeding, general, local, or both, and upon the free administration of calomel, that we are to expect most benefit. But let me ask, is there any gentleman present who would treat any other scrofulous disease in that manner? Would any surgeon so treat an eye or joint simularly affected? I think not; and therefore we come to two important questions: Is the result of the treatment usually adopted satisfactory? If not, then, can it be advantageously altered, or in any way modified? for that, after all, is the practical point. I think all here will agree with me that these cases have generally a fatal termination; indeed, it is laid down by the best authors that, when once the disease is fairly present, but very few recover.

You will perceive that in my opinion the inflammatory nature of the complaint, and being chiefly in serous membranes, has led to stronger antiphlogistic treatment than its strumous nature will admit of. I, therefore, propose a modification of that treatment, and I am quite sure you will kindly aid me by your opinions, founded on your experience. I will therefore briefly detail the treatment I have found most successful.

If the child's head is hot, and the superficial vessels unusually congested, one or two leeches behind the ears or on the temples will do good; but I consider general bleeding will always do harm. There can be no doubt as to the propriety of applying cold to the head, and a sharp purge or two, perhaps

with calomel. (Any surgeon would do the same for a scrofulous joint, if the symptoms were at all acute.)

The remedy, however, to which I particularly wish to call attention, is the bichloride of mercury in very small doses; a medicine frequently used in diseases of the class we are considering. Indeed, I find Pereira, in his work on *Materia Medica*, recommends its use in scrofulous affections and disorders of the nervous system. For my own part, I consider it as servicable in these strumous head diseases as cod liver oil is in consumption. In either case, the remedy, to be permanently beneficial, must be administered before disorganisation has taken place. Any gentleman wishing to test the power of the remedy, should choose some subacute case, where the fontanelle is not closed, so that he may feel the fluid through the prominent membrane. It would be all the better if he knew there existed a strong hereditary predisposition to the complaint. Let him give that child, supposing he is from twelve to eighteen months old, from a drachm to a drachm and a half daily of the solution of bichloride of mercury, in divided doses. He will find after a time that the fontanelle is less prominent, and will afterwards become depressed, with great improvement in the general health. But it is not my intention to recommend this remedy exclusively; we ought not while administering it to neglect other means. I think in all strumous affections some local treatment is beneficial; and, after the heat of the head has been somewhat reduced, and vascular fulness relieved, counterirritation, by means of a little blister salve behind one or both ears. I have found it of the greatest service; and, if the case has been subacute from the beginning, I commence with the counterirritation. I may also mention that the bichloride of mercury may be given whether the disease is acute, subacute, or chronic.

You will perceive that by this treatment I combat this strumous disease by antistrumous remedies, while those usually relied upon, viz., free bleeding and free administration of calomel, you know well, are contraindicated altogether in scrofula. I could relate many cases to prove the utility of the remedy; for at one time I hunted up children with this complaint on purpose to give it a fair trial. I have likewise recommended it to other practitioners, who have been well pleased with the result.

British Medical Journal.

SATURDAY, JUNE 18TH, 1859.

QUACK DOCTORS.

We flatter ourselves that in this nineteenth century, which is so much boasted as a grand improvement upon its predecessors, that the age of itinerant quacks, such as once enlivened our fairs and worked so unmercifully the intestinal canals of our ancestors, is gone for ever. Jack-puddings, it is true, no longer plant their booths in the market place, and with a bold defiance to authorised medicine and a challenge to the most famous universities, parade their nostrums before the eyes of poor deluded countrymen, and persuade their wives that they are simply walking envelopes to so many hundred yards of most diabolical tapeworm. The day has gone by for this method of doing business; but quackery remains as rampant as ever, and its manner rather than its matter has changed. The aim of these vagabonds is no longer to set the faculty at defiance, but to assume its titles and honours. The Bennett gang the other day deluded the public by a parade of titles well calculated to take in the unwary; and through the instrumentality of Dr. Barham of Truro, another member of the same craft has been hunted down and secured. This person, who styles himself Dr. Goldsworthy, the travelling physician of the European Institution, City Road, London, has lately been visiting the west, and distributing handbills to the inhabitants of its chief towns, promising to relieve and cure deafness and all diseases of the eye, and appending a numerous list of cases given over by the London faculty, of course, but cured by himself.

There is no attempt as of old to deride the profession; our guide takes quite another line. He is the head of an institution—the senior physician to an establishment. He not only presses an university into his service, but he is knowing enough to parade a Rev. Canon. Our Jack-puddings now-a-days sail with the stream. But let the firm speak for itself.

"Messrs. J. Goldsworthy & Co., Doctors of Medicine, Matriculated Members of the University of Edinburgh, Honorary Members of the London Hospital Medical Society, Licentiates of Apothecaries' Hall, etc., Professors of Anatomy, Physiology, and Pathology, to the University of Cambridge European Institution, City Road, London, and New Square, Cambridge. Established 1842. President, Rev. Canon Armstrong, M.A.; Senior Physician, J. Goldsworthy, M.D. (late of Royal Navy); Surgeons, Messrs. Hopkins and Smith, M.R.C.S.; Treasurer, Alfred Howard, Esq. In consequence of the repeated postal communications received daily at the European Institution, from invalids residing in the provinces desiring to be placed under the treatment of the institution, but cannot undertake the fatigue and expense of making a personal application for advice, the Committee of the European Institution have authorised, that one or more legally qualified members of the institution shall visit the provinces three times annually, and make a personal call at the earliest convenient period after the delivery of this circular, when the afflicted of both sexes will have the opportunity of making their cases known to them personally. The repeated testimonials received daily from distant parts of the world, and the approbation they have everywhere met with, must be convincing proofs of their ability in the charitable work of doing good. Messrs. Goldsworthy have been prevailed upon to specify the subsequent cases."

Notice the cunning with which the adroit "Co." has managed to connect itself with the University of Cambridge—to astonish the natives with the assumption of that magnificently sounding title, "Matriculated Members of the University of Edinburgh"; and to propitiate the humane by the publication of his numerous cures as "convincing proofs of their ability in the charitable work of doing good". Unfortunately, the list of cases contains names which appear to have very moveable addresses. Thus, Mrs. Harriet Wellman, of North Street, Exeter, miraculously cured of "two bad legs, with seven running ulcers, of sixteen years standing", figures, a few months later, as of Chacewater, near Truro. Mrs. Rebecca Reid, again, who has been cured by our Doctor of dropsy, "seven gallons of water having been taken from her", changes her residence at his request. Indeed, the *soi-disant* Dr. Goldsworthy seems to have managed his two thousand testimonials with remarkable facility; his new handbills changing their residences at his own good pleasure, and with perfect safety withal, inasmuch as the names, as well as addresses, are fictitious. Indeed, there is a charming amount of fiction about the whole affair. The "Co." is an entire fiction; the Rev. Canon is an entire fabrication; Messrs. Hopkins and Smith, of the College of Surgeons, an entire myth; and lastly, Dr. Goldsworthy is himself a delusion and a snare, being no more than plain John Gardner, an optician by trade. The University of Cambridge European Institution, City Road, is, of course, *non est inventus*. It was on the discovery of this fact that he was apprehended; and we are glad to say that he is now safely in gaol, and awaits his trial for swindling several poor people out of their money. Truro, Hayle, and St. Ives, it appears, proved capital hunting-ground for this impostor; and our western friends suffered

fearfully; his "takings" having been £40 in Hayle only, in a very short time. There are hundreds of Dr. Goldsworthys infesting both metropolitan and country districts; and we trust that we shall hear of their being as speedily brought to book as we find this redoubtable "Co." has been by our associate the worthy Mayor of Truro.

THE WEEK.

The judgment of the Court of Queen's Bench, relative to the legality of the election of Dr. Storrar as a Member of the General Council of Medical Education, was given by Lord Campbell on Wednesday last. His lordship, in giving judgment, said the defendant, Dr. Storrar, was elected on November 3rd, 1858, by the Senate, consisting of the Chancellor, Vice-Chancellor, and Fellows of the London University, and since that time had acted as a Member of the General Medical Council. On the part of the relator, it was said the appointment should not have been made by the Senate, but by all the persons who had been admitted Members of the University, which by the third section of the last charter comprised all those who had been admitted as graduates. There was strong ground for that argument but for the eighteenth section, which provided, that in all matters unprovided for by the charter, it should be lawful for the Senate (consisting of the Chancellor, Vice-Chancellor, and Fellows) to manage the affairs of the University in such a manner as should be for the welfare of the University. His Lordship said the opinion of the Court was that the Members of the General Council of Medical Education should be appointed by the Senate, under the provisions of the charter; and that the election would thus be more appropriately made than by a body of gentlemen scattered all over England, consisting of Doctors of Laws, and Masters and Bachelors of Arts, etc., a great portion of whom would take no interest in such election. The Court therefore held the election of Dr. Storrar to be valid, and judgment must be given in his favour.—Judgment for the defendant.

We extract from the *Edinburgh Medical Journal* the following decision of a Scottish Sheriff-substitute, in reference to a charge of alleged malpraxis against Mr. Williamson, a surgeon of Annan. The main facts of the case are sufficiently set forth in the document which we quote. A claim for damages rested mainly in the allegation that the death of the patient was caused by defendant's culpable carelessness, neglect, and want of professional skill, in omitting to probe for and extract a piece of wood found in the wound at the *post mortem* examination. We agree with our contemporary, in considering the decision of Mr. Trotter as most just.

"Dumfries, 17th May 1859.

"Having heard parties' procurators on the proofs, and resumed consideration thereof, and whole process, finds—That on the evening of Thursday, the 5th day of June, 1856, the pursuer's (prosecutor's) son Thomas received a lacerated wound in the sole of his left foot; that said wound resulted in a disease known as *traumatic tetanus*, and that the boy died of this disease about half-past six o'clock on the morning of the 12th day of June, aforesaid: finds that the defender was not called in to see said wound until about one o'clock on the afternoon of Saturday, the 7th day of said June, the pursuer's wife having undertaken the sole previous charge and treatment of the same: That when the defender was so called in, the foot was swelled and the wound inflamed; and there was embedded in the wound, beneath the flesh, the piece of splintered wood produced in process: That defender did not, when so called in, probe said wound with an instrument, or in any other way ascertain the existence in the wound of said piece of wood, nor did he at any time remove or extract the same from the wound: That from the time he was called in, until the boy died as aforesaid, the treatment of the wound was altogether under the charge and at the responsibility of the defender: That there is no sufficient evidence to show that defender's said treatment of said wound was negligent, careless, or unskilful; and, in particular, there is no sufficient evidence to show that his treatment in not probing for, or extracting, said piece of wood, as aforesaid, was negligent or unskilful: Finds that the boy died of *traumatic tetanus* as aforesaid; but that there is no sufficient evidence to show that this disease was induced, or its symptoms aggravated, or its fatal end in any way caused by defender's treatment of the wound in question; and, in particular, that there is no sufficient evidence to show that the existence of the piece of wood in the wound was the cause, either of the disease itself, or of its fatal termination. Sustains the defences; assoilzies (releases) the defender from the conclusions of the action; finds the pursuer liable in expenses; appoints an account thereof to be given in; remits to the auditor to tax the same and report, and decerns (orders payment.)

"(Signed) John P. Trotter."

At a recent meeting of the Senate of the University of London, it was resolved:—"That it is expedient to receive certificates of medical study and of attendance on hospital practice and clinical instruction from the Cambridge University Medical School and Addenbrooke's Hospital, for the purposes of graduation in medicine"; of which resolution the Secretary of State has signified his approval.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Address in Medicine will be delivered by Edward Waters, M.D., Chester, President-elect of the Lancashire and Cheshire Branch.

The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool, Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine.

It is particularly requested that all members who propose to read papers will communicate with the General Secretary without delay.

Philip H. Williams, M.D., *General Secretary.*
Worcester, April 26th, 1859.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South Western. [Annual Meeting.]	Bath Saloon, Torquay.	Thurs., June 23, 2½ P.M.
Midland. [Annual Meeting.]	Board Room, Infirmary, Derby.	Thurs., June 23rd, 2 P.M.
South Eastern. [Annual Meeting.]	New Town Hall, Dover.	Wednesday, June 29h, 12 o'clock.
Metrop. Counties. [Annual Meeting.]		Tuesday, July 5th, 8 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

COMMITTEE OF COUNCIL.

The Committee of Council will meet at the Queen's Hotel, Birmingham, on Tuesday, June 21st, at One o'clock.

Business:—To arrange the Report of Council, etc., for the Annual Meeting.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 13th, 1859.

MIDLAND BRANCH.

The Annual Meeting of this Branch will be held at Derby, at the Board Room of the Infirmary, on Thursday, June 23rd, at Two o'clock. The annual dinner will take place at the Royal Hotel at Five o'clock.

Henry Goode, M.B., *Honorary Secretary.*

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

The twenty-third Annual Meeting of this Branch was held at the Board-Room of the Chester Infirmary, on Wednesday, June 8: Edwin Waters, M.D., President, in the Chair. There were also present, as members and visitors, E. Bradford, Esq. (Chester); T. Brittain, Esq. (Chester); T. N. Brushfield, Esq. (Chester); J. Burrows, Esq. (Liverpool); W. T. Callon, Esq. (Liverpool); P. Cartwright, Esq. (Oswestry); J. M. Craig, M.D. (Birkenhead); T. Davis, M.D. (Chester); T. Gaskell, Esq. (St. Helen's); Job Harrison, Esq. (Chester); John Harrison, Esq. (Chester); S. T. Jephcott, Esq. (Chester); Ellis Jones, Esq. (Liverpool); John Jones, Esq. (Frodsham); J. K. Lewis, Esq. (Wrexham); W. M'Ewen, M.D (Chester); W. H. Manifold, M.D. (Liverpool); G. J. Mansfield, Esq. (Fermanagh Militia, Chester); T. Mather, Esq. (Ashton-in-Makerfield); T. Mellor, Esq. (Manchester); T. R. Mitchell, M.D. (Liverpool); J. E. Moreton, Esq. (Tarvin, near Chester); T. Skinner, M.D. (Liverpool); G. Southam, Esq. (Manchester); S. Stolterforth, M.D. (Chester); A. Stookes, M.D. (Liverpool); H. Swift, M.D. (Liverpool); T. R. H. Thompson, M.D. (Liverpool); G. Turner, M.D. (Stockport); J. Vose, M.D. (Liverpool); G. Walker, Esq. (Birkenhead); A. T. H. Waters, Esq. (Liverpool); G. T. Watson, M.D. (Chester); M. A. E. Wilkinson, M.D. (Manchester); E. Williams, M.D. (Wrexham); W. Williams, M.D. (Mold); G. Wolstenholm, Esq. (Bolton).

Mr. Ellis Jones, of Liverpool, the President for the past year, having taken the chair, said—The term of my presidency expires now. Permit me to thank you for the honour conferred upon me last year in being elected to preside over so important a section of the British Medical Association as the Lancashire and Cheshire Branch. I have to acknowledge the kindness and assistance I have received on every occasion from the members generally; and I believe I may say that the proceedings of the Branch have been satisfactory during the last twelve months. We have had a considerable increase in the number of members, and altogether a very healthy feeling has been manifested. Allow me to congratulate ourselves on our meeting to-day in this ancient city, where so many eminent men belonging to our noble profession have from time to time resided and practised, with great credit and honour to themselves and advantage to the surrounding country. I may mention the names, as physicians, of Haygarth, Thackeray, Currie, Cumming, Llewellyn Jones; of surgeons, Orrett, Rowlands, Bennett, and many others; and, at the present time, Chester can boast of men of great professional repute and eminence. This institution has been the nursery of a number of first-rate medical men, many of whom are now practising in various parts of the country, and who are men of influence and standing in their various localities. It is my pleasing privilege, on the present occasion, to introduce into this chair as our President, Dr. Waters, a gentleman in every way worthy of the appointment, and one who possesses all the necessary qualifications to conduct its proceedings, not only with credit to himself, but with usefulness to the Association.

Dr. Waters, having taken the Chair, delivered an Address, which is published at p. 487.

REPORT OF THE COUNCIL.

The following Report was read by Mr. Waters, the Honorary Secretary.

"In presenting their Annual Report, your Council beg to express the satisfaction they experience in welcoming the members of the Branch to the ancient city of Chester.

"Since the last anniversary meeting of the Branch in Liverpool, an important change has taken place with reference to the organisation of the profession, by the passing of the Medical Act, which at that time was before the Houses of Parliament. Your Council rejoice that one of the objects for which the Association has so long contended, has been thus partially achieved; but at the same time, they feel that it is of the utmost importance that the working of the measure, which now forms part of the law of the land, should be carefully watched, both with the view of realising for the profession all the advantages to which they are entitled by its provisions, and for the purpose of ascertaining in what respects the Act is most deficient, and in what points it may hereafter require to be amended.

"In consequence of the general desire which seemed to exist for the formation of Registration Societies in connection with the Medical Act, a meeting of the Council was held at Liverpool in November last, and it was decided to convene special general meetings of the members of the Association in Liverpool, Manchester, and Preston. These meetings were well attended, and resulted in the formation of local Registration Societies in the above-mentioned towns. Your Council believe that the formation of these societies has been generally appreciated by the profession. No returns have been received from Manchester and Preston, but with respect to the Society formed in Liverpool, it has been joined by nearly two hundred members of the profession resident in the district which it includes.

"Your Council refer with much satisfaction to the improved position which has been accorded during the past year to their brethren of the Army Medical Department; and they have read with no less gratification the recent warrant issued by the Admiralty, placing the surgeons of the Royal Navy in an equally satisfactory position.

"Your Council rejoice that the affairs of the Parent Association appear to be in a prosperous condition; and they believe they may state that a large accession of members has taken place since the last annual meeting.

"Your Council have much pleasure in congratulating the members on the continued prosperity which has attended the progress of the Branch during the past year. At the last annual meeting, the number of members was 202. Since that time 38 members have joined the Branch; of these, 7 were previously members of the Association, the remaining 31 being new members of both the Association and Branch. The number of members lost during the year from death, resignation, and removal, is 10, leaving an actual increase in the year of 28 members. The present number of members is 230. The Council have much pleasure in pointing to this accession of members, which makes, during the past two years, a total of 78 who have joined the Branch, and an actual increase of 58. They believe this result has been in great measure brought about by the individual exertions of the members themselves; and they consider it a most convincing proof of the popularity of the Branch, and of the appreciation in which it is held by the profession.

"The Council cannot allow this, the first occasion of the meeting of the Branch being held in Chester, to pass by without expressing their approval of the policy inaugurated two years ago, of holding the anniversaries in other towns of this great district besides the two largest ones, Liverpool and Manchester. The successful meeting at Preston in 1857 has been followed by a very satisfactory accession of members from that part of this district; and the cordiality of the invitation given to the Branch to meet in this city promises most favourably for the present gathering.

"The financial statement for the year will be laid before you. [It shows a balance of £17:12:10 in the hands of the Treasurer.]

"In conclusion, your Council would call upon the members not to relax in their exertions on behalf of the Association. They believe that its power and influence are increasing year by year, and that a vast number of questions affecting the well-being of the profession are only to be solved by that moral force which results from a combination such as the Association presents. The interest shown in the meetings of the Branch affords abundant proof of the appreciation in which they are held; and your Council feel that nothing tends more to promote that proper respect for each other, and that feeling of community of interest which should exist amongst the members of an enlightened profession, than these annual gatherings."

Dr. Davies (Chester) moved—

"That the Report of the Council now read be adopted and printed, together with the proceedings of this meeting."

Dr. Callon (Liverpool) seconded the motion, which was carried.

VOTES OF THANKS.

Dr. Wilkinson (Manchester) moved—

"That the best thanks of this meeting be given to Ellis Jones, Esq., the late President; to J. Vose, M.D., and J. Hatton, Esqrs., the late Vice-Presidents; to the Honorary Secretary, A. T. H. Waters, Esq., and to the other members of the Council, for their services during the past year.

Mr. John Harrison (Chester) seconded the resolution. The gentlemen whose names had been mentioned were so well known, and their services so well appreciated, that there was no need to say a word in support of the motion.

The President put the motion, which was carried.

Mr. Mellor (Manchester) moved—

"That the best thanks of this meeting be given to the Local Secretaries—J. M. Robinson, Esq. (Bolton); John Sharp, Esq. (Warrington); J. B. Gilbertson, Esq. (Preston); and H. M. Williamson, Esq. (Manchester)—for their valuable services during the past year; and that, with the exception of the last gentleman, who has tendered his resignation, they be requested to continue their appointments."

Dr. Turner (Stockport) seconded the resolution, which was carried.

The Honorary Secretary said he could speak individually to the valuable nature of the services rendered by the Local Secretaries in many ways. The labours of the General Secretary were much lightened by their active cooperation; and he could not allow the present opportunity to pass without expressing his individual thanks to those gentlemen for their services. The professional duties of Mr. Williamson compelled him to resign the post of Local Secretary, but he had sent the name of a gentleman willing to relieve him of the duties connected with the office.

PLACE OF MEETING IN 1860: ELECTION OF OFFICERS AND COUNCIL.

Mr. Ellis Jones (Liverpool) moved—

"That the next annual meeting be held in Manchester; that M. A. E. Wilkinson, M.D., of Manchester, be appointed President-elect; and that George Southam, Esq., of Manchester, and E. Batty, Esq., of Liverpool, be appointed Vice-Presidents-elect."

Dr. Stookes (Liverpool) seconded the motion, which was carried.

Mr. Gaskell (St. Helen's) moved, Mr. Burrows (Liverpool) seconded, and it was resolved—

"That, in addition to the President, E. Waters, M.D.; the Vice-Presidents, G. Wolstenholme, Esq., and J. Harrison, Esq.; and the Honorary Secretary, A. T. H. Waters, Esq.,—the following gentlemen constitute the Council for the ensuing year:—E. Batty, Esq. (Liverpool); W. W. Beever, Esq. (Manchester); L. E. Desmond, Esq. (Liverpool); J. Dickinson, M.D. (Liverpool); W. H. Duncan, M.D. (Liverpool); H. Halkyard, Esq. (Oldham); J. Hatton, Esq. (Manchester); Ellis Jones, Esq. (Liverpool); S. D. Lees, M.D. (Ashton-under-Lyne); P. Macintyre, M.D. (Liverpool); G. Mallet, Esq. (Bolton); T. Mellor, Esq. (Manchester); D. Noble, M.D. (Manchester); J. Robinson, Esq. (Bolton); J. Sharp, Esq. (Warrington); J. Southam, Esq. (Manchester); L. Spencer, Esq. (Preston); G. Turner, M.D. (Stockport); T. Vose, M.D. (Liverpool); H. Wilson, Esq. (Runcorn).

REPRESENTATIVES IN THE GENERAL COUNCIL.

After some discussion as to the question of voting by resolution or by ballot,

Mr. Callon (Liverpool) moved, and Mr. Mather (Ashton-in-Makerfield) seconded—

"That the following gentlemen be appointed representatives of the Branch in the General Council:—T. Davies, M.D. (Chester); J. Dickinson, M.D. (Liverpool); J. Hatton, Esq. (Manchester); E. Jones, Esq. (Liverpool); D. Noble, M.D. (Manchester); G. Southam, Esq. (Manchester); L. Spender, Esq. (Preston); A. Stookes, M.D. (Liverpool); E. Waters, M.D. (Chester); H. Wilson, Esq. (Runcorn); G. Wolstenholme, Esq. (Bolton); and A. T. H. Waters, Esq. (Liverpool), Honorary Secretary."

LOCAL SECRETARY FOR MANCHESTER.

Dr. Mitchell (Liverpool) proposed, Mr. Southam (Manchester) seconded, and it was carried—

"That J. Thorburn, M.D., be appointed Local Secretary for Manchester, in the place of H. M. Williamson, Esq., resigned."

NEW MEMBER.

The Honorary Secretary proposed Dr. John Watkins, of Warrington, as a member of the Branch, he being already a member of the Association.

Mr. Southam seconded the motion, which was carried.

MODE OF ELECTION OF MEMBERS OF COUNCIL.

It was moved by Mr. Burrows (Liverpool), and seconded by Dr. Stooks (Liverpool)—

"That, in future, the election of members of the Branch Council, and of the representatives in the General Council, be made by ballot at the annual meeting."

The resolution was put, and lost.

PAPERS.

The following papers were read:—

1. Case of Stone in the Bladder of a Female. By W. McEwen, M.D.

2. Is Division of the Sphincter Ani always necessary for the Cure of Ulceratio Recti, Anal Abscess, and Fistula in Ano? By T. Skinner, M.D.

3. A New Preparation of Iodine for External Application. By T. R. Mitchell, M.D.

Dr. Craig (Birkenhead) moved—

"That the best thanks of this meeting be given to Dr. McEwen, Dr. Skinner, and Dr. Mitchell, for the valuable papers they have read; and that they be requested to forward the same to the Journal for publication.

Mr. Burrows seconded the motion, which was carried.

A paper on "Facts gleaned from Experience in Practice", had been announced to be read by Dr. G. C. Watson; but he had been prevented from preparing it by a domestic affliction, and was at once excused by the meeting from reading it.

VOTE OF THANKS TO THE PRESIDENT.

The President having left the chair, and Mr. John Harrison having been voted into it,

Mr. Southam moved—

"That the best thanks of this meeting be given to the President for his conduct in the chair; and that he be requested to forward his valuable address for publication to the Journal."

Mr. Swift (Liverpool) seconded the motion; which, on being put from the chair, was carried unanimously.

The President thanked the meeting for the vote so heartily passed. With such an orderly assemblage, it was scarcely possible for the President to go wrong. As regarded his address, he should be happy to give it to the Journal, in accordance with the wishes of the meeting. In the meantime, as the present was the first meeting in Chester, it had been arranged that an antiquarian committee should be formed to shew to the strangers the relics of the old city, which bring visitors from all parts of the world.

The meeting then broke up, and many gentlemen, under the guidance of Mr. Brushfield and Mr. J. Peacock, proceeded to visit some of the most striking specimens of city antiquity.

THE DINNER

Took place at four o'clock at the Albion Hotel; Edwin Waters, M.D., President of the Branch, in the chair. About forty gentlemen were present.

The Chairman, after the usual loyal toasts, proposed the "Bishop and Clergy", which was responded to by the Rev. F. Thurland, chaplain to the Chester Infirmary.

The Vice-Chairman (Mr. John Harrison) proposed the "Army and Navy". Mr. Bradford (formerly of the 23rd Regiment) returned thanks for the army; and Dr. Heywood Thomson responded for the navy.

Dr. Vose proposed "Success to the British Medical Association", coupled with the health of Sir Charles Hastings. Were he to attempt to do justice to the theme, he should detain the meeting far beyond the time at which many of them must leave—as with regard to the Association the subject was historical, with regard to Sir Charles Hastings it was biographical; and although both subjects were absolutely identical, yet they would have to be considered separately, were justice done to their merits. The British Medical Association had been in existence twenty-five years. It really began twenty-seven years ago, by the meeting together of fifty gentlemen in a place of no greater importance than the board-

room of the Worcester Infirmary. They all knew what the Association at present was. At that time it trembled in the balance, its existence was equivocal, and it might succeed, or it might fail. For a number of years it was called the "Provincial Association"; but the present appellation of British instead of Provincial was a great improvement. Whatever might be the intellectual capacity of the gentlemen meeting together, there seemed to be a stigma connected with the term "provincial"; and he could not help thinking that there were many men present who had so distinguished themselves in the medical profession that they did not deserve the slightest stigma, either in terms or in their profession, and he must congratulate the meeting again on the change of name. They were often asked why they should take the trouble to keep up the Association; what good did it do, and why should gentlemen leave their practice to attend the meetings. There was no time for details; but a moment's reflection would show good grounds for leaving their practice for a day to attend meetings at which the principles of their profession were clinched. For scientific purposes it had been of considerable advantage, and he need not remind them at the present moment, when they were rejoicing in medical reform, it was not too much to say that had it not been for the continued energy and watchful eye of that Association, the profession would not have been in the position it was as regards the recognition by the State of their claims. With reference to Sir Charles Hastings, it would be mere empty announcement to say that he was the father, the author of the Association. He had supported it from its infancy until it had attained its present vigorous position. Sir Charles Hastings had received, from many directions, very gratifying recognitions of his talents; and he has taken a high position in all matters relating to the medical profession, without reference to his title. The University of Oxford had conferred on him one of its most honourable distinctions, and in all matters connected with science or literature he stood most favourably in the public estimation. He would, therefore, give as the toast, Success to the British Medical Association, coupled with the health of Sir Charles Hastings.

Mr. Cartwright proposed success to the Lancashire and Cheshire Branch of the British Medical Association.

Mr. Hatton responded, and stated that although the Branch had done much good, there was much more to be done, and greater benefits would have accrued had the members collectively been more zealous in their exertions.

Dr. Davies proposed the healths of Mr. Ellis Jones, the president, and of Dr. Vose and Mr. Hatton, the vice-presidents, of the past year.

Mr. Ellis Jones returned thanks, urging the present members to try and increase the list of subscribers, by which means machinery could be set in motion which had not been hitherto tried. If the members were increased to two thousand five hundred, or three thousand, the Journal of the Society would be made superior to any medical publication in existence.

Mr. Southam said he rose to propose the health of a gentleman, which he should have refrained from doing had he not known something of the services rendered by the gentleman he was about to name to the medical profession, and to this Association. He had attended most of the meetings at great inconvenience to himself, both at Manchester and Liverpool, and had been almost the only representative of the Chester physicians and surgeons at those meetings. He was very pleased to see him in the position he occupied as their President. It was gratifying to all friends of the Association to see such an excellent gathering as they had had that day, and when they considered how much the success of a meeting depended upon the President, they would all heartily respond to the toast he would propose, which was the health of Dr. Waters, their worthy President.

The President said, I rise with great diffidence to return thanks for the kind manner in which my health has been proposed and received. I am aware that in years gone by efforts have been made to get the Branch to meet in Chester, and I believe that on two occasions those efforts fell through. It was, therefore, with some uncertainty that I undertook the task of endeavouring to get the Branch invited to meet in Chester. When, however, I had once embarked on the duty, I was agreeably surprised to find my most ardent wishes more than realised. In the few hours that I devoted to getting up the invitation to them, with the exception of two, the whole profession in the city signed it, and the welcome which the stranger friends have received this day, is due to the unanimity of the profession on the subject of bringing the Branch Meeting to Chester. For my own part, during the few years I have been in Chester, coming to the city as a stranger, I naturally looked to an Association of this kind as affording the only means for fellowship with my medical brethren. To give you an idea of my position as a stranger when I came to Chester, I will make the confession now, that when I was nominated to the office of Physician to the Chester Infirmary, so unknown was I to the body of governors that my candidature fell through at the last moment from the inability to obtain a seconder. Since then I have spent many happy hours at your Association meetings, and I have derived instruction from the papers read, and from the discussions bearing upon them; I have had the happiness to form acquaintances and friendships which I trust will last through life; which are bright rays lightening the anxious path of duty which the medical man has to pursue; for be he ever so successful in his career he must meet with trials and discomfiture. For the position I fill on the present occasion I feel that I am more indebted to the favourable consideration of my friends than to my own merits; therefore I shall not dilate upon that subject, but I beg to return my sincere thanks for the cordial manner in which you have drunk my health.

Dr. Mitchell proposed the healths of the Vice-Presidents of the Branch, Mr. G. Wolstenholme and Mr. John Harrison.

Mr. John Harrison, on behalf of his colleague and himself, returned thanks.

M. Callon proposed the health of the Hon. Secretary, Mr. A. T. H. Waters, who was most assiduous in his labours on behalf of the Association, and who, to show the position he had attained in the profession, the other day received the Fothergillian gold medal, laurels which his subsequent career would only enhance.

Mr. A. T. H. Waters returned his sincere thanks for the kind manner in which the toast of his friend, Mr. Callon, had been received; and he begged to assure all present that the labour on behalf of the Association was to him a labour of love, and he felt the greatest satisfaction in being connected with the Members of the Association, carrying on the affairs of so influential a Branch, and one which he believed calculated to effect great good. At the present moment, unlike the two great powers who were fighting in the northern part of Italy, the Association was at peace, presenting an aspect with no internal dissensions. They had passed through great dangers, one of the greatest of which was the change of name, and in every expression of Dr. Vose on that subject he most entirely concurred. Since he last had the pleasure of addressing a similar meeting, on a similar occasion, one object to which the Association had devoted attention had been partially attained, and the year 1858 would long be remembered in the annals of the medical profession as being the year which inaugurated the first great step of medical reform, in the shape of the Medical Act; in addition to which they must not forget the recent warrants placing the Army and Navy Surgeons in a better position. Looking at the Medical Bill, it was a progressive step leading to greater reforms; and he thought he should not be far wrong in saying that the British Medical Association was one of the first to sound the note of medical reform; that its persevering efforts, its long-continued exertions, its widely spread influence, and its greatly increasing power, had proved mainly instrumental in the passing of that Act. No doubt that Act possessed faults and defects, but, all things considered, he thought the profession had received as fair a measure of medical reform as they could reasonably expect. One point in the Act he must allude to with congratulation, and that was the appointment, by her Majesty, as a Member of the Medical Council, of the respected head of the Association, Sir Charles Hastings. It was a great point that an Association, supported by no Royal Charter, backed up by no Act of Parliament, should have achieved a position to be recognised by the State, in the appointment of the head of the Association as a Member of the Medical Council provided by government. With regard to the Association, it was never in a more flourishing condition, and during the year a large accession of members had been received. With regard to the Branch, he hoped the members would exert themselves to increase their numbers, and they would go on in a prosperous condition. Begging again to thank Mr. Callon for his kind allusion to a recent honour conferred upon him, and thanking the company for drinking his health in so cordial a manner, he would conclude by proposing the healths of the new members, coupling therewith the name of Dr. Craig.

Dr. Craig responded.

The following toasts were then proposed:—"The Visitors and Mr. Brittain," "The Press," "The Gentlemen who had read papers," "The Ladies."

NEW MEMBERS OF THE ASSOCIATION.

The following gentlemen have joined the Association from the commencement of the present year.

ENGLAND.

BERKSHIRE.

Lamb, Arthur, Esq., Hampstead Norris
Moore, Adam J., Esq., Reading
Plumbe, Samuel, M.D., Maidenhead

CAMBRIDGESHIRE.

Ollard, William, Esq., Wisbeach

CHESHIRE.

Cumming, R. B., M.D., Malpas
Hamilton, W. T., Esq., Rock Ferry, Birkenhead
Higgins, Charles H., M.D., Surgeon to the Birkenhead Hospital, Claughton, Birkenhead
Hynde, Lawrence R., M.D., Birkenhead
Lyth, T. J., Esq., Birkenhead
McEwen, W., Esq., M.D., Chester
Parr, Alfred, M.D., New Brighton
Scholfield, Henry D., M.D., Birkenhead
Trevor-Roper, G. Esq., Tranmere
Walker, George, M.D., Birkenhead
Willett, James, Esq., Budworth, near Northwich

CORNWALL.

Hutchinson, Thomas, Esq., Camborne

DERBYSHIRE.

Featherstone, J. T., Esq., Butterley
Royston, John, Esq., Whitwell
Shipton, W. P., Esq., Buxton
Watson, Henry W., M.D., Physician to the General Infirmary, Derby

DEVONSHIRE.

Bucknill, J. Charles, M.D., Medical Superintendent of the County Lunatic Asylum, Exminster
Rendle, C. B., Esq., House Surgeon to the Devon and Exeter Hospital, Exeter

DURHAM.

Robson, Robert N., Esq., Durham

ESSEX.

Sanders, Charles, Esq., Chigwell

GLOUCESTERSHIRE.

Arnott, George, M.D., Cheltenham
Granville, Joseph M., Esq., Bristol
McDonald, James P., Esq., Bristol
Powell, T. J. C., Esq, House-Surgeon to the Royal Infirmary, Bristol
Rendell, C., Esq., Westbury
Willett, M., Esq., Easton Road, Bristol

HAMPSHIRE.

Fraser, Thomas, M.D., 10th Hussars, South Camp, Aldershot
Manley, John, M.D., Medical Superintendent of the County Lunatic Asylum, Fareham
Page, Frederick, M.D., Portsmouth

HEREFORDSHIRE.

Howey, E. W., Esq., Bromyard

HERTFORDSHIRE.

Cribb, H., Esq., Bishop's Stortford

KENT.

Barton, Francis E., Esq., Dover
Burton, John M., Esq., Lee Park, Blackheath
Butler, John, M.D., Woolwich
Drew, John H., Esq., Dover
Grantham, John, Esq., Crayford
Grayling, John, M.D., Sittingbourne
Kelsey, W., Esq., Dover
Martin, Joseph, Esq., Dartford
Moore, Ebenezer, Esq., Dartford
Oates, Parkinson, M.D., Erith
Patrick, Jarman, Esq., New Brompton
Slaughter, Thomas G., Esq., Farningham
Smith, Heckstall, jun., Esq., St. Mary's Cray
Swinhoe, George M., Esq., Charlton

LANCASHIRE.

Adams, Joseph, Esq., Waterloo, Liverpool
Allen, Joseph, Esq., Junior House-Surgeon to the Royal Infirmary, Liverpool
Armitage, Samuel H., M.D., Oldham
Barrett, Barnabas, Esq., Toxteth Park, Liverpool
Cayzer, Thomas, Esq., Mayfield, Aigburth, Liverpool
Collingwood, Cuthbert, M.B., Lecturer on Botany in the Royal Infirmary School of Medicine, Liverpool
Cross, John, Esq, Much Woolton, Liverpool
Denton, George B., Esq., Liverpool
Dowse, Joseph G., Esq., Longsight, Manchester
Fearnside, Henry, M.B., Preston
Foster, Joseph, Esq., Chorlton, Manchester
Green, D., Esq., Leigh, Manchester
Leack, Richard, M.D., Blackburn
Marsh, Nicholas, Esq., Liverpool
Moore, Edwin, Esq., Preston
Pennington, Thomas, Esq., Liverpool
Ramsden, W. H., Esq., Royton
Sephton, R., Esq., Culcheth, Warrington
Shain, James M., Esq., Liverpool
Shaw, Thomas, Esq., Kirkham
Stavert, Elliot, M.D., Preston
Taylor, R. Hibbert, M.D., Liverpool
Watkins, J. W., M.D. Newton-le-Willows
Whittle, Alfred, Esq., Liverpool
Wilson, Charles B., Esq., Surgeon to the Lying-in Hospital, Liverpool

LEICESTERSHIRE.

Macaulay, Thos., jun., Esq., Kibworth

LINCOLNSHIRE.

Betts, Nathaniel P., Esq., Sutterton
Cook, Robert, Esq., Gainsborough
Lowe, Septimus, Esq., Surgeon to the General Hospital, Lincoln
Morgan, F. J., Esq. Stamford

MIDDLESEX.

Ashley, Wm. H., M.D., Ladbroke Sq.
Beale, Lionel S., M.B., F.R.S., Professor of Physiology in King's College, Grosvenor Street
Coulson, William, Esq., Surgeon to St. Mary's Hospital, London
Daubeny, Henry, M.D., York Place, Portman Square
McWilliam, James O., M.D., C.B., F.R.S., Surgeon Royal Navy, 14, Trinity Square
Markham, William O., Esq., Physician to St. Mary's Hospital, London
Marshall, William G., Esq., Asylum, Colney Hatch
Stilwell, George J., M.D., Hillingdon
Tyrrell, Walter, Esq., St. Helen's Pl.

NORFOLK.

Dove, Henry, Esq., Norwich
Stephenson, J., M.D., Yarmouth

NORTHAMPTONSHIRE.

Cotton, George, Esq., Northampton
Cox, Arthur, Esq., Long Buckby
Cox, Frederick, Esq., Welford
Dodd, Charles, Esq., Northampton
Logan, James, M.D., Kettering
Moxon, William, Esq., Northampton
Skinner, William A., Esq., Kingscliffe

SHROPSHIRE.

Bratton, James, Esq., Shrewsbury
Davis, W., Esq., Pain's Lane, Wellington
Groom, Thomas, Esq., Whitchurch
Harries, John D., Esq., Shrewsbury
Hayes, Henry, Esq., Wellington
Jones, W. P., M.D., Wellington
Lander, Thomas E., Esq., Shiffnal
McCarthy, G. D. R., Esq., Wrockwardine Wood, Wellington
Meteyard, Charles J., Esq., Clunbury
Mott, Charles, Esq., Church Stretton
Rayner, Alfred P., Esq., Shawbury
Roe, John W., Esq., Ellesmere
Saxton, William W., Esq., Market Drayton

SOMERSET.

Falconer, R. Wilbraham, M.D., Physician to the United Hospital, Bath

STAFFORDSHIRE.

Lines, —, M.D., Wednesbury

SUFFOLK.

Kerr, George, Esq., Wickham Market

SURREY.

Bodkin, T., Esq., Croydon
Bush, John, Esq., The Retreat, Clapham
Butler, William H., Esq., Guildford
Clapton, Edward, M.D., Wellington St.
Johnson, Jeffery S., Esq., Croydon
Lloyd, Henry J., Esq., Harleyford St.
Owen, Francis, Esq., Leatherhead
Ross, Frederick D., Esq., Guildford
Stedman, James R., M.D., Guildford

SUSSEX.

Foreman, Robert C., M.D., Brighton
Jones, Charles S., Esq., Chichester
King, Joseph, Esq., Brighton
Robertson, C. A. Lockhart, M.D., Medical Superintendent of the County Lunatic Asylum, Hayward's Heath
Weekes, Richard, Esq., Hurstpierpoint

WARWICKSHIRE.

Blunt, G. Vernon, M.D., Dean of Queen's College, Birmingham
Bond, Francis, M.B., Physician to Queen's Hospital, Birmingham
Goodall, William P., Esq., House-Surgeon to the General Hospital, Birmingham
Heslop, T. P., M.D., Physician to the Dispensary, Birmingham
Jordan, T. Furneaux, Esq., Demonstrator of Anatomy in Queen's College, Birmingham
Maxwell, —, M.D., Medical Tutor, General Hospital, Birmingham
Neal, James, Esq., Birmingham
Shaw, Henry E. F., Esq., Sutton Coldfield
Spratley, Samuel, Esq., Birmingham
Vinrace, I., M.D., Birmingham

WORCESTERSHIRE.

Andrews, M. F. L., M.D., Malvern
Curtler, H., Esq., Droitwich
Woodward, M., Esq., Pershore

YORKSHIRE.

Bell, Richard, P., Esq., Goole
Brereton, C. Le Gay, Esq., Beverley
Calvert, Francis, Esq., Beverley
Carnley, Henry, M.B., Lecturer on Materia Medica in the School of Medicine, Hull
Carter, Joseph B., Esq., Chapeltown
Clough, Joseph, Esq., Sheepridge, Huddersfield
Easton, A., Esq., Scarborough
Gibson, Henry, Esq., Lecturer on Midwifery in the School of Medicine, Hull
Hare, Henry C., Esq., Cawood
Harland, W., Esq., Scarborough
Kevern, C. T. S., Esq., H.M.S. *Cornwallis*, Hull
Paley, James, Esq., Assistant-Surgeon to the Eye Institution, York
Perkins, Thomas, jun., Esq., Snaith
Pritchard, Edward W., M.D., Filey
Richardson, J., Esq., Middlesborough-on-Tees
Settle, Henry N., Esq., Leeds
Wheelhouse, Claudius G., Esq., Lecturer on Anatomy and Physiology in the School of Medicine, Leeds

WALES.

DENBIGHSHIRE.

Davies, Edward, M.D., Wrexham
Fleischmann, A., Esq., Gresford, Wrexham
Ingman, John, Esq., Ruabon
Lewis, John K., Esq., Surgeon to the Infirmary, Wrexham

MONTGOMERYSHIRE.

Edwards, Thos., Esq., Llansaintffraid
Harrison, E. P. D., Esq., Welshpool
Jones, Ellis, Esq., Llanidloes
Weaver, James, Esq., Llandrinio

SCOTLAND.

EDINBURGHSHIRE.

Thomson, Lawrence R., M.D., Belmont, Dalkeith

HADDINGTONSHIRE.

Lorimer, Robert, M.D., Haddington

KINCARDINESHIRE.

Henderson, Joseph, Esq., Auchenblae

IRELAND.

CORK.

Gordon, Sir John, M.D., Cork

DUBLIN.

Beatty, P., Esq., Dublin
Betty, John, M.D., Dublin
Bolland, E. H., M.D., Dublin
Collins, Thomas, Esq., Dublin
Daly, James, M.B., Dublin
Gorman, William, Esq., Dublin
Harrison, William I., Esq., Dublin
Holmes, Charles, M.D., Dublin
Leet, Charles Henry, M.D., Dublin
Long, P. W., M.D., Dublin
Lyon, R., Esq., Dublin
McMunn, John, M.D., Dublin
Madden, William, M.D., Dublin
Madden, William, jun., M.D., Dublin
Moore, William D., M.B., Dublin
Mulock, Robert, M.D., Dublin
Nalty, John, M.D., Dublin
Nolan, Henry P., M.D., Dublin
O'Flaherty, Jeremiah, Esq., Kingstown
Owens, George B., M.D., Dublin
Pakenham, Daniel, Esq., Dublin
Shaw, C., Esq., Dublin
Shea, John, M.D., Dublin

WATERFORD.

Mackesy, Thomas L., M.D., Waterford

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 24th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

ON SOME OF THE EFFECTS OF PRIMARY CANCEROUS TUMOURS WITHIN THE CHEST. BY GEORGE BUDD, M.D., F.R.S.

The object of this paper was to call attention to the changes produced in the nutrition of the lung by a primary cancerous tumour involving its root. Primary cancer within the chest usually forms a single compact nodular mass, commonly occupying the mediastinum, and invading, to a greater or less extent, one of the lungs—in the great majority of instances, the *right*, the other lung remaining uninfected. Dr. Budd gave the details of three cases of this kind that had fallen under his observation in King's College Hospital, in all of which the tumour involved the root of the right lung. In all these cases, remarkable changes of inflammatory origin were found in the chest. These changes consisted, in the order of their frequency, of—1. Firm adhesion of the lung to the walls of the chest by thickened pleura; 2. Inflammatory condensation of the lung, where it was not invaded by the cancer, proceeding, in all of the cases, to more or less disorganisation of the pulmonary tissue, and the formation of pockets of pus; 3. In one of the cases—the case in which the tumour had attained the greatest size and spread furthest towards the left side—adhesion of the pericardium, and an abundant effusion of lymph on its outer surface.

The extent of change in the lung in the different cases was greater as the tumour was larger, and involved more completely the root of the lung; and in all the cases the left lung was free from adhesions, and presented no other changes than those which resulted from recent congestion. The question was then discussed, how these changes of inflammatory origin were caused; and from a review of the circumstances of the cases, the author considered it most probable that they resulted from the tumour involving and destroying all or great part of

the pulmonary nerves, and that consequently the inflammatory disease of all the tissues of the lung in these cases was analogous to the destructive inflammation of the eyeball, resulting from division of the fifth nerve within the skull. It was remarked that the lung resembles the eyeball in this: that all the nerves which supply it are comprised at its root in a very small space, so that they can there be destroyed or paralysed by disease of no very great extent.

The three cases related above were the only instances of primary cancer involving the root of the lung that have fallen under the author's observation in King's College Hospital since it was first opened for the reception of patients in 1840. The disease was, however, so peculiar in its effects, that—as was shewn by Dr. Stokes, in an admirable paper on this subject published in the *Dublin Journal of Medical Science* for 1842—a diagnosis of it may sometimes be made with much confidence. The elements of diagnosis consist—1. In the signs that give evidence of the existence of a tumour; 2. In the absence of strong pulsation and of the morbid bruits that usually attend aneurismal tumours; 3. In the occurrence of hæmoptysis and other signs, showing that the *lung* is involved in the disease; 4. In a distended and varicose condition of the superficial veins of the chest. A cancerous tumour usually affects the venous circulation and the nutrition of the lung more than an aneurismal tumour of the same size, because it grows into and blocks up the veins, and converts into cancer the other tissues which it embraces in its growth.

Dr. Brinton confirmed Dr. Budd's suggestion, by recalling some analogous cases, observed and published by him (Dr. Brinton) many years ago. In one (*Pathological Transactions*, 1848, vol. i, page 235; also compare *Pathological Transactions*, 1851, vol. iii, page 304), the left pneumogastric nerve, and root of the left lung, had been involved in an aneurism; in the other (the *Lancet*, 1857, vol. i, p. 209), a simple fibrinous deposit had involved the right bronchus near its origin. In each, the corresponding lung had been inflamed; and the inflammation had been explained by him, in the above publications, as a secondary result of the interference of the primary lesion with the pulmonic nerves.

Dr. Budd, in reply to a question from the President, said he was aware of a case in point published in the Society's *Transactions*, by Dr. Burrows. With respect to the cases mentioned by Dr. Brinton, he (Dr. Budd) thought that cancer was more effective in producing ill effects than other kinds of tumours, as it penetrated deeper into the tissues, and led to the complete destruction of the lung. The question of interest was this: Does the tumour lead to destructive inflammation of the lung by the pressure it excited on the blood-vessels or on the nerves? This question was, perhaps, not decided by the cases before the Society; but his own impression was, that it was upon the nerves that the injurious influence was exerted.

Dr. Barker recollected three cases that had occurred in St. Thomas's Hospital, which tended to confirm the opinion of Dr. Budd. In each of these cases, there was extensive cancerous deposit in the anterior mediastinum, involving the root of the lung but not the nerves. In neither of these cases was there inflammation of the lungs or pleura.

Editor's Letter Box.

MEDICAL IMPOSTORS.

Letter from C. Barham, M.D.

Sir,—The worthy who figures in the inclosed circular* as J. Goldsworthy, M.D., etc., is now lodged in our county gaol at Bodmin, awaiting his trial at the quarter sessions on the 25th instant, for obtaining money under false pretences. The preliminary inquiries having been skilfully followed up by Mr. Nash, the superintendent of police for this borough, I issued a warrant for the Doctor's apprehension; and, after a rather prolonged hunt, he was captured at Penzance, where he perambulated the streets as an optician, under the *nomme de guerre* of Gardiner; issuing thence to various towns and villages within a range of eight or ten miles, over which he had spread his net, plucking the feathers of the entangled geese.

For the benefit of the natives of these western places, he slightly modified the circular he had employed here, changing generally the residences of the parties cured, as from Exeter to Truro, in the manner shown in the copy inclosed. He probably calculated on a rapid success in his *razzia* in each locality; otherwise he has shown some want of tact in furnishing such conclusive and accessible proofs of fraud. Wherever he has offered his wares, his success appears to have been great. In Hayle, where Dr. Millett has very ably tracked his steps, he picked up from thirty to forty pounds in a few days; and he must have pocketed at least as much in Truro. He has been accompanied by confederates, both male and female; but not of such importance as to be noticed in the legal proceedings. The man's address has been plausible enough to impose on persons of some standing in society. He is rather tall, and of dark complexion, with abundant whisker.

It has occurred to me that some of our lynx-eyed friends might detect an old acquaintance under the disguise worn by this offender; and for this reason I give you early notice of his incarceration. I am, etc., C. Barham.

Truro, June 11th, 1859.

[*The pith of the circular above referred to will be found in our leader in another column. Editor.]

THE NEXT MEDICAL REFORM.

Sir,—Parliament has done something for us. Can we not do something in a reformatory direction for ourselves? I think we can.

While the Medical Act is likely to furnish the public with a reliable official register of the legal qualifications of practitioners; and while it affords a reasonable hope that a beneficial supervision will henceforth be exercised over all examinations entitling successful candidates to practise, it provides no test of professional respectability. This desideratum cannot be supplied by the legislature; but it can to a considerable extent be afforded by voluntary action on the part of the Colleges. Love of lucre, or national jealousy, may prevent the Scottish and Irish Colleges from adopting the plan which I am now about to suggest, but the English bodies have already shown so unselfish a desire to maintain professional respectability, that I am not without the hope that they may either adopt the following suggestions, or some similar policy, at no very distant date.

The essence of my proposals is to the effect, that facilities be forthwith afforded to every doctor of medicine and every surgeon to enrol himself, on attaining the age of 28 or 30, as a member of one or other of these corporations, and that none should be admitted to governing rank at an earlier age. I would exact the ordeal of a ballot, and a fee of £5 or £10; but I would not, till the lapse of a certain number of years, admit, as of right, these persons to a full share in the management of affairs. At the age of 40, it would be desirable to admit all of them to the higher grade of membership, upon election by ballot and payment of a small registration fee. It would also be desirable that the Colleges should exercise the power of electing to the higher or governing grade, members of the junior grade, as a spontaneous mark of distinction, or upon passing an examination in the more difficult branches of medicine or surgery.

By some such plan, the entire profession would be brought into sympathy with the College, and no respectable practitioner could then feel that he was a cypher in the medical commonweal. At the age of 28 or 30, a practitioner has generally shown himself to be worthy or unworthy of the confidence of his professional brethren, and admission at that age would therefore be a badge of general good conduct. By deferring admission to the governing grade for an additional period of ten years, there would be no risk of the management of affairs falling into the hands of persons full of leisure and deficient in experience. On the other hand, the election, at an earlier age, of a limited number of governors or fellows, would secure emulation in the ranks, and afford wholesome scope for honourable ambition.

The plan now in operation in the College of Surgeons is not very different from that here proposed. The College of Physicians, however, has not given any indication of a similar policy. By no other policy can it so well secure the position which ought to belong to it, of being the head of the medical profession, and the rallying-point of all who practise legitimately the art of healing. The universities would participate in the benefit, and cease from all jealousy of the corporations. The public would be pleased to find that the medical register was, on a large scale, a list of certificates of professional respectability, as well as of legal qualifications to practise.

The little roll of the London College of Physicians may perhaps be regarded in this double light: and to a certain extent the list of "resident" Fellows of the Edinburgh College may also be so accepted. The wholesale manufacture of "non-resident" Fellows and Licentiates has, however, so damaged the *prestige* of the Edinburgh College as to cast a slur upon all its titles. This slur can only be removed by the expurgation of its recent lists, and the limitation for the future of its honours to persons regarding whom the body of its Fellows have means of judging. It is an ugly fact that the Edinburgh College is at present drawing its recruits almost exclusively from persons living in England, and not known in Edinburgh for good or for evil.

I should like to know whether Dr. Godfrey, whose conduct has lately been under scrutiny in our courts of law, was or was not recently elected a Fellow of the Edinburgh College of Physicians; and, if so, why the fact was not used as evidence of character at one or both of the trials?

I trust that the suggestion I have made in this letter may not be lost sight of. It is an ardent wish of many, I believe, to make the register as much as possible a depositary of evidence of general respectability as well as of legal qualifications. I think I have shown how this may be accomplished by a scheme for the enfranchisement of the profession—which I regard as the next medical reform to be contended for.

I am, etc. An Old Fellow.

London, June 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Brown. On June 10th, at Henley-on-Thames, the wife of *George Dransfield Brown, Esq., Surgeon, of a daughter.

Brown. On June 5th, at 103, Blackman Street, Southwark, the wife of R. G. Brown, Esq., Surgeon, of a son.

De Lisle. On June 9th, at Southsea, the wife of Richard V. De Lisle, Esq., Surgeon Royal Artillery, of a son.

Spong. On June 12th, at Faversham, the wife of William Nash Spong, Esq., Surgeon, of a son.

Steel. On June 6th, at Abergavenny, the wife of *Samuel H. Steel, M.B.Lond., of a daughter.

Young. On June 10th, at Kettering, the wife of Lake Young, Esq., Surgeon, of a daughter.

MARRIAGES.

Nunez—Kendale. Nunez, the Rev. Maximilian, B.A., to Catherine, third daughter of the late Henry Kendale, Esq., Surgeon, at Hammersmith, on June 7th.

DEATHS.

Dix. On June 12th, at Long Buckby, Northamptonshire, aged 6 years, William Frederick, eldest child of *Frederick W. Dix, Esq., Surgeon.

Perry, James Chalmers, Esq., Surgeon, at Jerseyville, Illinois, United States, aged 62, on May 18th.

Thompson, Thomas, Esq., Surgeon, at 76, Gloucester Terrace, Hyde Park, aged 35, on June 12th.

APPOINTMENTS.

Macandrew, John, M.D., Inspector-General of Hospitals, has been appointed by the Queen to be an Ordinary Member of the Military Division of the Second Class or Knights Commanders of the most honourable Order of the Bath.

PASS LISTS.

Royal College of Surgeons. At a Special Meeting of the Court of Examiners, on June 15th,

Lima, Teòfilo de, of Caraccas, Venezuela, having undergone the necessary examinations, was admitted a member of the College.

HEALTH OF LONDON:—WEEK ENDING JUNE 11th, 1859.

[From the Registrar-General's Report.]

The mortality of London has continued to fall during the last six weeks, and in the week that ended last Saturday the total number of deaths was 938. In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 984; but as the deaths included in the present return occurred in a population that has increased, they should be compared with the average raised in proportion to the increase; namely, with 1082. The comparison presents a highly favourable result, for it appears that the deaths that occurred last week were less by 144 than the number that would have occurred if the average rate of mortality as ascertained for the early part of June had prevailed.

The births registered last week exceeded the deaths in the same period by 730.

Scarlatina, which was fatal in 50 and 42 cases respectively in the two previous weeks, was fatal last week in 43. Eleven deaths were caused by diphtheria, and occurred as follows:—One at 3, Windsor Place, Paddington; two in a family at 46, William Street, Kensington, where a third child died from scarlatina; one at 4, Cumberland Court (St. Pancras); one at 14, Harrington Square; one at 2, Wellington Road, Hackney; one at 35, Great Tower Street; two in the same family at 10, Hungerford Street (St. George-in-the-East); one at 46, Tiverton Street, Newington; and one at 4, York Place, Greenwich.

Fifteen children and two adults died last week from small-pox; two infants from erysipelas; two persons from carbuncle; seven from syphilis; and two by murder or manslaughter. A man died at the age of 92 years, and a woman at 95. Two infants and two adults died from cholera; they are registered as follows:—"At 2, Bloomsbury Place, a girl, aged 7 months, on June 9th, infantile cholera (twenty hours), exhaustion". "On 11th June, at 2, Brothers Row, Lambeth, a boy, aged 5 months, cholera infantum (three days)." "On 5th June, at 24, North Street, Marylebone, a woman, aged 73 years, diarrhœa (three days), cholera (two days)"; and "On 9th June, at 45, Little George Street, Bermondsey, a man, aged 55 years, choleraic diarrhœa (three days)."

A boy, aged 6 months, died at 5, Emma Place, Kensington, from "spasmodic croup (seven days)." Mr. Cooper Willis adds on his certificate, that the child was poisoned by the exhalations from the road in front of the house, which he states to be "in an infamous condition". Two children died at 6, Austin Street, Hackney Road, from scarlatina followed by dropsy. The air of the house is impure in consequence of the bad state of the drainage. A silk-winder, aged 74 years, died at 11, Winchester Street, Bethnal Green, from eating fish that was unfit for food.

Last week the births of 834 boys and the same number of girls, in all 1,668 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1,533.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·676 in. The barometer decreased from 29·92 in. on Monday to 29·45 in. on Saturday, being the highest and lowest readings in the week. The mean temperature of the week was 61·7°, which is 4·3° above the average of the same week in 43 years (as determined by Mr. Glaisher.) The highest and lowest readings of the thermometer in the shade were 79·8° and 50·9°, and occurred on the same day, Wednesday. The extreme range of that day, and also of the week, was therefore 28·9°. The mean daily range was 20·7°. The difference between the mean dew-point temperature and air temperature was 5·1°. The mean degree of humidity of the air was 86. The mean temperature of the water of the Thames was 65·4°. The wind blew generally from a northerly point. The rain measured was 0·31 in., nearly all of which fell on Sunday.

The Dublin Hospitals. From the annual report, just published, of the above institutions, it appears that the total income thereof for the past year was £26,780, and the expenditure £25,151. The number of patients admitted was 12,549, the discharges amounted to 12,041, and the number of deaths to 560.

The Hunter Statue. It may be interesting to the profession to know that the subscriptions for a statue to John Hunter already exceeds one thousand pounds.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXX.] LONDON: SATURDAY, JUNE 25, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

SUMMARY OF THE TABLES OF CASES OF DIPHTHERIA.

THE cases which are reported in detail, and tabulated, are 74 in number; and to these must be added 55, reported more succinctly, from Canterbury, by Mr. Rigden; and a summary of 133 reported by Mr. Ellis of Woodhouse Eaves, near Loughborough (p. 420). We propose to lay before our readers the conclusions which may be deduced from the answers in the various columns of our table to the questions at the heads of the columns, with some approach to the accuracy of statistics; and shall add to this the more summary conclusions which the great experience of Mr. Ellis and Mr. Rigden has impressed upon them.

I. *Sex and Age.* Of the 74 cases in the table, the sex is not stated in 5 of them. The remaining show 40 females and 29 males. Of Mr. Rigden's cases, 31 were females and 24 males. So that we have, out of 124 cases, 71 females to 53 males. This shows a slight, but, considering the comparatively small numbers, not a very marked excess, in the female sex. Mr. Ellis says, on the contrary, that in his cases "the preponderance was slightly among the males". So that it would appear as if sex had little to do with the matter.

As to age, the conclusions are more distinct; all the various sources of information showing indisputably the much greater liability of childhood and early youth to this complaint. The 74 cases in the table may be thus divided—

Under 1 year	2
Between the ages of 1 and 5	15
„ „ 5 and 10	21
„ „ 10 and 15	7
„ „ 15 and 20	8
„ „ 20 and 30	14
„ „ 30 and 35	6
Above 35 (a man of 50)	1
	74

Mr. Rigden's table, divided in the same way, stand as follows:

Under 1 year	0
Between the ages of 1 and 5	10
„ „ 5 and 10	17
„ „ 10 and 15	6
„ „ 15 and 20	2
„ „ 20 and 30	11
„ „ 30 and 35	2
Above 35 (1, the oldest, being 42 years of age)	7
	55

Mr. Ellis's experience is to the same effect. In his first communication, he says there were "eleven adults out of sixty-nine"; and in his second, "eighteen of the sixty-four cases occurred in persons above the age of thirteen".

II. *Hygienic Conditions; Occupation; Food or Clothing; Purity or Impurity of Air.* On this head our information is not very clear. Out of the 74 cases in the table, it is true that 29 are marked as having been exposed to some depressing agency, either previous illness (Nos. 2, 6, 9, 10, 18, 36, 37, 42, 50, 53, 63); crowded ill ventilated dwellings (Nos. 17, 25, 26, 29, 37, 38, 45, 52, 69); the proximity of stagnant offensive water, or want of drainage (Nos. 1, 5, 25, 26, 29, 30, 31, 34, 55, 59, 62, 74); or a combination of such causes. But we must remember that these are causes from which a large proportion of the children of the poor, among whom this table is chiefly compiled, are never exempt; and that any depressing cause renders the person exposed to it liable to various diseases which have nothing special about them. The most striking example, however, of the apparent causation of diphtheria by neglect of hygienic precautions, was No. 1 of our table. The patient was the child of very rich parents, living in one of the best houses in one of the best situations in London, far from any contagion or other source of disease, except the presence of a stinking cistern at the top of the house near her playroom. On the whole, however, we must say that our table (composed principally of sporadic cases) does not show the action of such causes as these very strikingly; nor do the reports of Mr. Ellis and Mr. Rigden, which refer to distinct epidemics, speak more positively. The former says: "It does not appear that site, meteorological or hygienic conditions, had much if anything to do with the visitation of this frightful disease"; while of the 55 cases reported by Mr. Rigden, it is distinctly asserted in 35 that the residence of the patient, except for crowding in some instances, was in a satisfactory condition.

III. *Meteorological Conditions.* The third column was intended to show the meteorological conditions connected with the rise, progress, and disappearance of the disease. A simple inspection of the dates, however, will be sufficient to show that this is hopeless. The disease has prevailed so irregularly, and in such various and opposite states of the weather, that it would be useless to follow the inquiry further in our tabulated cases; and the same will be found to hold as to those from Leicestershire and Canterbury.

IV. *Presence or Absence of Contagion.* On this head, the evidence which we have collected seems to show that, although the disease may be communicated in this way sometimes, still this is not its usual method of advance. Of the 74 cases, in 26 notes are made of circumstances which render contagion more or less probable (Nos. 2, 5, 14, 26, 38, 40, 41, 46, 47, 48, 49, 50, 51, 56, 54, 60, 61, 62, 63, 64, 65, 67, 70, 71, 72, 74); in 24 cases, the possibility of contagion is denied; and in the others there is no note on the subject. Even in the cases which we have enumerated, the evidence does not show more in many of them than a bare possibility, such as living in the same house, being members of the same family, having recently come from a place where the disease was prevalent: in fine, having been exposed to the causes, whatever they may have been, which had produced the disease in others. The strongest proof of contagion in our list is perhaps Case LI, where the patient appears to have caught the disease from examining the throat of another patient mentioned in the list; and we may mention that a somewhat similar accident occurred to a medical friend of ours after examining a case of diphtheria, except that the sore-throat which soon appeared yielded to appropriate remedies. Mr. Rigden says the disease did not appear to be contagious, inasmuch as, although in some families several members were attacked, they were generally suffering from the disease at the same time; and there were several other families in which only one member was attacked, and yet there seemed no reason for the immunity of the others. Mr. Ellis says: "As to the communicability of the disease, I can scarcely venture an opinion; but, in several cases, two or three in a family were attacked by it."

V. *Scarlatina.* The information under this head goes entirely to negative the idea that the two diseases are in any way connected. In two cases only (Nos. 22, 41), another child in the same family was attacked with scarlatina during the progress of the disease. In the cases in which the facts were known, about an equal proportion had, and had not, had scarlatina. The experience of Mr. Ellis and Mr. Rigden is to the same effect: and in a note received from Mr. Wood of Woodhouse Eaves, he expresses his opinion that the two diseases have nothing in common.

vi. *The Symptoms, when first seen*, have usually been those of depression, accompanied by dysphagia, and, generally, external swelling of the neck, either from œdema or enlarged gland. Rigors and feverishness are only occasionally present. sometimes there were no constitutional symptoms at first, the case commencing merely as a common sorethroat; and it was not till some days afterwards that the patient summoned his medical attendant, and the diphtheritic exudation was detected. Sometimes symptoms of croup, or of inflammation of the trachea and bronchi, showed that the disease, or some other form of low inflammation was extending down the air tube.

vii. *Time and situation of the Leathery Membrane.* In the vast majority of the cases, the exudation was present when the case was first seen. This was so in all our tabulated cases with the exception of eleven. In six only was its appearance delayed till after the second day. In one of these, No. 13, it did not commence till the seventh day. Mr. Rigden confirms this view, "The first symptoms were generally those of the throat, with more or less false membrane, before medical assistance was sought. Great depression of vital power, with other symptoms of low fever."

Thus, it appears that although cases of diphtheria often commence as simple sorethroat, still that sorethroat is manageable, and under efficient medical treatment is usually arrested; so that it is rare to see the diphtheritic exudation commencing while the patient is under treatment.

The situation of the leathery membrane is almost always on the fauces or tonsils. Four cases only are noted in which it appeared on the mucous membrane of the mouth or tongue. Three cases are included in the list, on the authority of different observers, in which, although no false membrane was seen, the history and symptoms of the cases pointed so strongly to the identity of the disease with other cases of undoubted diphtheria, that it was concluded either that some part of the throat out of sight was affected, or that the membrane had been accidentally detached at the time of observation. With reference to the aspect of the mucous membrane under the false membrane, Dr. Ashley, of Kensington, especially noted the peculiar livid surface exposed by the removal of the exudation, which bleeds without any breach of continuity.

viii. As to the *Microscopical Examination* of this exudation with a view to determine the presence or absence of fungus, it is to be regretted that in so few of our cases has this been done. Twelve instances, however, are noted, and in all with negative results, except one, (No. 10) in which a fungus resembling *penicilium glaucum* was found after death. In this case the exudation was unfortunately not examined with the microscope during life; but in another from the same hospital (St. Mary's), and in two others, also from St. Mary's, the notes of which had not been preserved sufficiently to be tabulated, the membrane was carefully examined by Dr. Sieveking, to whom we are indebted for the notes of the examination, and the absence of fungus satisfactorily demonstrated. It will be seen on the other hand, that Mr. Ellis found a "distinct fungoid growth" in the only specimen he examined. On the whole, if we are justified in expressing any opinion from such an imperfect data, it would be that the presence of fungus is an accident, not an essential feature in the disease.

ix. *Other Affections Complicating the Disease.* We have notes regarding these in forty out of the seventy-four cases. In only seven of these was there any albuminuria. In one only was the quantity large (No. 56); in most it was only a trace. Mr. Rigden examined the urine in several cases; but always with negative results as regards albumen. Mr. Ellis says "the urine in general contained albumen; but in the last fatal case presented no trace of it." Thus it would seem that albuminuria is far from being a prominent symptom in this disease. The other affections noted, seem mere accidental complications.

x. *Treatment.* From what we have said about the uniformity, or at any rate, great prevalence of depression at the commencement of the attack, it may be naturally inferred that the general treatment has been of the tonic and stimulating plan; and this course has been so uniformly followed as to deprive us of the opportunity of contrasting it with any other. We are bound, therefore, to assume that the indications for it have been irresistible; although, as we shall see, its success has not been very encouraging. As to special medicines, chlorate of potash and sesquichloride of iron, have been employed about equally, and occasionally marked relief has been noticed to follow either one or the other. But the essence of the treatment seems to have been more in the general tonic plan than in the specific effect of any particular drug. Caustics have been used to the throat in almost all instances, and in some cases (under Mr. Crossman's care, No. 35-38) turpentine seems to have answered when other applications failed. Emetics have frequently been used, and often with good effect. (No. 44).

xi. *Indications and Success of Tracheotomy.* On the former point we have plenty of evidence; as the disease progresses it frequently passes down the back of the epiglottis, and sweeps rapidly down the air tubes, giving rise to all the symptoms of croup, and admitting of no rational hope of benefit after it has made certain progress, except from tracheotomy. The operation, however, has actually been performed very rarely—only three times out of the 74 cases in our table—and has been followed in all with fatal results. In No. 1 marked relief was afforded by the operation, and it seems to have been successful as far as relieving the dyspnœa goes, and the death appears to have resulted from the disease of the blood and not from any obstruction to breathing. In the other two cases it certainly failed (Nos. 3, 74). In the latter, where a perfect cast of the air tube was extracted, and the patient died a few hours after the operation, the broken edge made by removing the cast could be distinctly traced, and the subjacent layers of false membrane appeared to have accumulated in the short interval between the operation and death. In Mr. Moore's cases (Nos. 54-59) he mentions that in several he was nearly recommending the operation; and in some of Mr. Ellis's it was indicated, but not performed, on account of the prejudices of the patients' friends.

xii. *Mortality.* The grave nature of the malady is shown by the fact that out of the 74 cases in the tables, 26 died. Of asthenia fourteen; Nos. 6, 10,* 13, 22, 27, 28, 31, 47, 50, 52, 60, 70,† 72,† 73: of asphyxia seven; Nos. 3, 18, 19, 20, 21, 30, 74: of sudden syncope three; Nos. 1, 15, 32:‡ of bronchitis one; No. 53: of laryngitis, from imprudent exposure during recovery, one; No. 45.

Mr. Ellis reports 17 deaths out of 133 patients: Mr. Rigden. 13 out of 55.

In many of the cases which recovered, the tediousness of the convalescence testified to the severe shock which the constitution had sustained.

xiii. *Post Mortem Appearances.* Here we have to regret that the many obstacles which constant occupation on the one hand, and rustic ignorance and prejudice on the other, throws in the way of country practitioners, has made the number of *post mortem* examinations so scanty. Ten only out of the whole number were examined after death (Nos. 3, 6, 10, 15, 19, 20, 21, 27, 73, 74.)

In some cases the mucous membrane beneath the exudation appeared unbroken; in others, abscess or ulceration had accompanied the diphtheritic inflammation; showing that there is nothing in the disease which prevents a breach of surface. In fact, in one of Dr. Ashley's cases it will be found that extensive phagedenic ulceration occurred, and extended to the neighbourhood of the carotid artery. In one case (74) slight incipient disease of the kidneys was discovered, perhaps the consequence of desquamative inflammation of their mucous membrane, sympathetic of the inflammation of the mucous membrane of the throat; in another (No. 73) the purpuric spots seen in almost every part of the body, on the surface of the heart and liver, and in many other situations, testified to the decomposition of the mass of the blood.

An American Samson. Dr. George B. Winship, of Roxbury, a young physician, twenty-five years old, and weighing 143 lbs., is believed by many persons who have examined into the question to be the strongest man alive. He can raise a barrel of flour from the floor to his shoulders; can raise himself with either little finger till his chin is half a foot above it; can raise 200 lbs. with either little finger; can put up a dumb-bell of 141 lbs.; exercises daily with dumb-bells weighing 100 lbs. each, which he can raise alternately above his head; and can lift with his hands 926 lbs. dead weight, without the aid of straps or belts of any kind. Topham, the strong man of England, could only raise 800 lbs. in the same way; and the celebrated Belgian giant could only lift 800 lbs. With straps it is supposed a person could lift nearly four times as much as by his hands alone. If this is so, Dr. Winship can lift at least 2,500 lbs. Dr. Winship is a thorough gymnast; and when he graduated at Cambridge, five years ago, he was without a competitor. (*Salem Observer.*)

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* With relapse. † Both babies, under 1 year.

‡ Supposed to be caused by the formation of clots in the heart or great vessels.

Original Communications.

CASE OF STERILITY, DEPENDING ON DISEASE OF THE RECTUM, SUCCESSFULLY TREATED: WITH REMARKS.

By Thomas Skinner, M.D., Liverpool.

[*Read before the Medical Society of Liverpool, May 5th*, 1859.]

Case. Mrs. —, aged 20, six months married, of strumous diathesis, but well developed every way, consulted me for the two following reasons: first, that her husband was vexed because she was not likely to have a family; and secondly, she complained very much of obstinate constipation, of the discharge of a fistula, and of the passage of flatus through the same; particularly when in company, as the passage of flatus was wholly beyond the control of the sphincter ani.

On May 10th, 1858, I made a careful examination of the patient. I found her to be the subject of the following pathological conditions:—About one inch or more on the right side of the anus were two fistulous openings, communicating with each other; and at the base of the right labium was a third, also communicating with the other two openings; and all three led to a fistulous communication with the rectum, and apparently opened into an old standing ulcer on the coccygeal aspect of that viscus. The ulcer was larger than a shilling when stretched with the speculum ani, and was situated about one inch above the sphincter.

The patient complained of pain during defæcation, particularly when the bowels were in any way constipated, at which times bleeding would occur. Sometimes the irritation of the ulcer and the fistula would pass on to inflammation, aggravating her misery by the attendant pain and feverish debility; and particularly by the profuse flow of pus from the fistula, staining all her linen and causing a constant disagreeable odour about her person, and a still more disagreeable one by the unavoidable passage of flatus, which, on such occasions, was very much increased.

This patient was also the subject of herpetic and eczematous eruptions of various regions of the skin, and of occasional glandular swellings.

The organs of generation, externally, were perfectly normal, with the exception of the fistulous sinus at the base of the right vulva. Internally, the uterus was completely retroflexed, as ascertained by touch and the use of the uterine sound; the fundus, as usual in such cases, being somewhat enlarged, as also the lips of the os. Internal and external manipulation of the uterus was unattended with pain or inconvenience, and there were no unnatural discharges from the uterine or vaginal mucous surfaces.

While examining the cervix and os uteri, I was struck with the crescentic form of the os, and the enlarged condition of the cervix, which was much expanded laterally. Although she was only six months married, I suspected a previous pregnancy; the more so as the cavity of the uterus measured nearly three inches. Fearing to be caught in a mistake on so delicate a point, I passed my hand over the right iliac side of the abdomen, and discovered the distinct presence of the *lineae albicantes abdominales*, characterised by Montgomery as evidence of the previous existence of an abdominal tumour of considerable dimensions; and, to make more sure, I examined the right breast, the areola of which was distinctly not that of a virgin. Taking these signs into account, I had little doubt that my patient had been previously delivered of a child; and I asked if such was not true. In great consternation, she asked me how I knew? I told her I strongly suspected so from the symptoms I have just narrated. She then told me she had committed a *faux pas* in a large town in the United States of America some years ago, and when she was nearly six months pregnant her paramour took her to some one whom she believed to be a surgeon, and who induced premature labour for forty of the almighty dollars.

This was direct evidence that at one period of her life the reproductive organs had been in an active and healthy condition. We may safely presume that the retroflexed condition of the uterus was subsequent to the induction of premature labour; and it is more than probable that the fistula, sinuses, and ulcer, were also subsequent to this operation. The patient thought so herself.

I was doubtful whether the sterility at the present time depended upon the displaced uterus, or on the existence of the fistula and ulcer of the rectum, or on both. I judged it wise practice, however, to leave the retroflexion alone, and attend to the state of the rectum and anus.

On May 12th, 1858, she agreed to undergo any operation for the chance of permanent relief, particularly when I told her there was a chance of "killing two birds with one stone," as she might become a mother. I thought it prudent, as a preliminary step, to examine her chest. I found it in every way normal, and there was no reason to suspect disease of the abdominal viscera.

Operation. The bowels having been previously moved by castor oil and an enema of barley water, I exposed the ulcer on the coccygeal aspect of the rectum. I then injected, through the principal cutaneous opening of the fistula, some sweet milk, in order to ascertain the exact situation of the communication with the rectum. The milk was seen to pour into the speculum through the middle of the ulcer. I then injected a little tepid water to clear away the milk. With a tenotome I incised the ulcer in its entire length, without dividing, intentionally, a single fibre of the sphincter ani, as first recommended by Mr. Quain, of London. Immediately thereafter, I injected, through the cutaneous openings of the sinuses and fistula, half a drachm of the tincture of iodine of the Edinburgh *Pharmacopœia;* the strength of which is half a drachm of iodine to an ounce of spirit.

The injection stained some dry cotton wool which was inside the blades of the speculum, so that it had passed through the entire extent of the fistula. This was immediately followed by considerable burning pain, although I had taken every care to protect the mucous surface of the rectum and anus. I immediately introduced a suppository of half a grain of morphia. I would here remark that I have often used this strength, and four times as strong, to inject callous fistulæ; but in this instance the number and the extent of the sinuses, and the supersensitiveness of the tissues, was much greater than I have generally experienced.

The after treatment consisted of a grain of opium night and morning, with good nourishing liquid food and rest on a sofa.

In three days the ulcer was completely cicatrized, and the sinuses and fistula were firmly obliterated with plastic lymph; the skin over the course of the sinuses being much puckered, and a distinct subcutaneous induration was easily discernible by the touch. From this moment my patient considered herself a new being; the discharges and irritation arising from the ulcer and fistula entirely ceased, as also the passage of flatus and the pain in defæcation. I might add, that on the second day my patient felt the same as she did on the third day; and on that day she said she was "as well as ever she had been in her life." This is certainly a very different state of matters from incision, more especially when we take into account the number and the extent of the sinuses.

I have before stated that I operated on May 12th, 1858. On May 20th thereafter, her period commenced; and on the 23rd it ceased. It is interesting to have to add that on February 27th, in the present year, exactly two hundred and eighty days from the day she last menstruated, and two hundred and ninety-one from the day I operated, I delivered her of a healthy and fully developed female child.

I shall now state a few facts in connection with the history of her period of utero-gestation:—

Reduction of the Gravid Uterus. At a period corresponding to the close of the eighth week, I reduced the retroflexed uterus with ease, by a method somewhat my own, the description of which I will reserve until our Annual Meeting, in Liverpool.

When she was four months pregnant, I was suddenly called to her, as she had fallen, face foremost, from the top of a wooden staircase of fourteen steps. I suspected that at least there would be a return of the displacement; but, on my arrival, I found her all right; and that she was more frightened on account of the danger to her four-month-old, than hurt herself.

About the eighth month, I was again called to her, on the occasion of a similar mishap, as she had fallen down another staircase of twelve stone steps, on her back. As on the previous occasion, both mother and fœtus escaped with impunity. Within twelve days of her confinement, she again fell, when rising from her chair at the fire, injuring her right eye and ankle; producing considerable ecchymosis of the eye, and a contused wound of three inches in length on the ankle. On

this occasion, a large quantity of clear, limpid urine was discharged involuntarily; but not altogether unconsciously. In spite of all these accidents, the uterus retained its normal position, and completed its natural term of uterogestation with safety, both to mother and child; which was twelve days after the date of the last accident, two hundred and eighty from the cessation of the catamenia, and two hundred and ninety-one days from the date of my operations.

I may observe that these repeated accidents were the result of a hysterical form of epilepsy, answering very much to the "*petit mal*" of French authors, as they were attended with little more than a momentary loss of consciousness. They were limited to the latter half of the term of gestation. Zinc and arsenic, with good diet and open air exercise, seemed to have great control in lessening the frequency of the attacks.

To complete her history, I may briefly state that her labour was every way natural; not so her recovery. Her child died on the third day from syncope, during an attack of infantile colic. The patient herself then had a severe rigor, and was threatened with inflammation of the left breast, which was checked by the timely application of leeches and other antiphlogistic measures. On the ninth day, she was seized with scarlatina anginosa. She weathered this fearfully fatal complication; but one of its terminations, or sequelæ, was the formation of a phlegmonous abscess, pointing in the site of the old fistula; and, though an early opening was made, it was followed by a renewal of the fistula; which also communicated by ulceration with the rectum. I am happy to be able to state that I have since repeated the operation by injection, with similar success; and she called on me on April 16th, to state that she "had ceased to be pooriy, and had been sick at the stomach for the last two days, particularly during the fore part of the day."

So far as the retroflexion is concerned, although every means and care were taken to prevent its return during and after confinement; yet, when I examined her the other day, it was as much, if not more, retroflexed than it was before her first conception. Notwithstanding this, there is every likelihood she has again conceived.

Remarks. It may be disputed whether this is a case of genuine sterility; but it must be remembered that sterility does not depend upon endometritis alone, or any of its results, as was observed in most of the cases recorded by Dr. Whitehead, of Manchester, and others who have specially directed their attention to this subject. Sterility, I conceive, is a general term, synonymous with barrenness, and ought not to be restricted to those cases only, the etiology of which depends solely upon a pathological condition of the internal or external organs of generation. Mr. Baker Brown has very properly observed, "That any irregularity, or interference with the functional action of any one part of the body, affects more or less the whole body. If this law pertained to the body generally, how much more must it pertain to the female organs of generation, where the slightest deviation from normal functional action must materially interfere with the delicate physiological process of impregnation, and the contiguous organs. It must be borne in mind that both the *rectum and uterus* are supplied with blood from the internal iliac artery, and with nervous influence from the sacral plexus; and that, therefore, disease, or functional derangement, in the one part, or organ, must interfere with the other." (*Lancet*, February 28th, 1857.) In other words, the sympathy between the uterus and rectum is very great, both physiologically and pathologically. We know the value of stimulating enemata in *inertia uteri* during labour; we know that drastic purgatives and medical substances having a specific action on the lower bowel tend to bring on abortion, and I have no doubt they are a frequent source of sterility in those females who are in the constant habit of using them; we know how very often spurious pains depend upon the accumulating of fæcal matter, or vitiated secretions in the lower bowel, with their accompanying flatulence. In the same number of the *Lancet*, Mr. Brown alludes to fissure of the anus by reflex actions, giving rise to all the phenomena of uterine inflammation, and leading, or rather misleading the medical attendant to the needless employment of leeches and caustics to the cervix uteri for months and years. I feel sure that most of us can indorse Mr. Brown's statement by our own experience, thereby proving the intimate physiological and pathological relation existing between the uterus and rectum.

I am perfectly willing to own that females with fistula *in ano*, with ulcers and hæmorrhoids of the rectum, yea, even with far advanced cancer of the uterus and rectum, may conceive and bring forth, but they are far from being the rule.

Although the case I have narrated was only six months sterile, the query may reasonably be advanced, how much longer might she not have remained so, if I had not interfered? Besides, as conception has followed so close on the cure of the ulcer and fistula on two separate occasions, *notwithstanding the existence of retroflexio uteri*, I am inclined to believe with Mr. Baker Brown and other observers, that fistula *in ano*, and other morbid conditions of the rectum and anus, may be in themselves efficient causes of sterility.

I am aware that this interesting case embraces several important practical points in obstetric surgery; but as space forbids any further remarks, I will prepare them as an original article for a future number.

Note.—On revising the proof for the press, June 21st, 1859. There is no longer any doubt about the second conception, as the lady has miscarried.

SIMPLE COLIC.

By John Watson, M.D., Southampton.

The art of medicine has in many respects failed to keep pace with the science which it should represent. The growing distrust among us of medication founded on mere habit, and having no well understood or definite object to accomplish, is one of the proofs of this position. Rest, exercise, the application of heat or cold, climate, aëration, appropriate diet and regimen—the bringing to bear of physiological laws upon pathological conditions—such means of combating disease have become increasingly available, and their efficiency a great and important truth. One consequence of this is, that all medical treatment is growing simpler and more rational.

These thoughts have been suggested by the recent treatment of a severe case of simple colic, on the recollection of the roundabout method of managing such cases which in my own practice has insensibly of late years become superseded by one very plain and inartificial. I am only expressing general experience, in saying that by temporising management many of these cases are converted into serious forms of abdominal disease, or tedious and protracted states of indisposition. When it is borne in mind that the spasm which constitutes the disorder under notice is caused, in the vast majority of instances, by the presence of some *irritant*, either indigestible food or acrid secretion, etc., retained in contact with the mucous surface of the gut, what can be clearer than that its expulsion is indicated? And yet the indication to relieve pain by the exhibition of repeated large doses of opium, which add greatly to the difficulty of fulfilling this ruling indication, is very commonly allowed the precedence. In a matter of common-place it is not necessary to enter into much detail. It will be sufficient to say that, both in adults and infants, I have found the administration of an enema of castor oil and gruel, or of warm water only, answer admirably, by almost immediately exciting the peristaltic action of the bowels, and so in a very few minutes removing the pain and tension which characterise the attack. Should one enema prove ineffectual, it may be repeated, and have its strength increased by adding a proportionate quantity of oil of turpentine. The abdomen may be fomented, and the patient restricted to demulcents. If not thus relieved, the case has probably passed from the category of simple colic, when the ordinary antiphlogistic measures are imperatively called for.

I apprehend that the action of an enema in the removal of distant spasm, under ordinary circumstances (that is to say, all vital and mechanical causes of obstruction being absent), is easily explained. The normal movement of the upper portions of the alimentary canal is very closely dependent upon the portion immediately below them; and thus, step by step, the lower part by being emptied becomes in a state to receive the contents of that above it, and this latter is rendered by a sort of consent sensitive to the presence of its contents, which induces a reflex action in its muscular coat; and thus an expulsory movement in the rectum propagates itself sympathetically along the colon to the whole of the intestines. These considerations render it very intelligible why in the cases before us the enema cannot be displaced by a purgative given by the mouth.

I confidently recommend this simple mode of treating simple colic to such of my readers as have not yet fallen into the use of it.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY
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Lecture III.

Healthy Urine. III. Inorganic Constituents. *On the Salts generally; Changes effected in the Composition of the Salts by Incineration: Proportion of the Saline Matter in Urine: Phosphates; Common Phosphate of Soda; Alkaline Phosphate of Soda; Acid Phosphate of Soda; Phosphate of Soda and Ammonia; Phosphate of Magnesia; Phosphate of Ammonia and Magnesia; Phosphate of Lime; Estimation of the Alkaline and Earthy Phosphates; Quantity: Sulphates; Quantity; Estimation: Carbonates: Chloride of Sodium; Quantity; Detection; Circumstances affecting the Excretion of Chloride of Sodium: Bases in Urine: Soda and Potash: Lime: Magnesia: Iron: Silica: Alumina: Systematic Quantitative and Qualitative Examination of the Saline Matter of Healthy Urine.*

III.—Inorganic Constituents of Healthy Urine.

[*Continued from page* 468.]

Earthy Phosphates.

The earthy phosphates met with in the urine are—1. The *ammoniaco-magnesian phosphate*, also termed *triple phosphate*, or *phosphate of ammonia and magnesia*; 2. *Basic phosphate of ammonia and magnesia*; 3. *Phosphate of Magnesia.*

These earthy phosphates occur in very small quantity in urine. The secretion in health contains not more than from 1 to 1·5 parts in 1000, and the solid matter contains from 1·5 to 2 per cent. The quantity present in different cases undergoes but slight variation, and seems to be determined, to a great extent, independently of the chemical changes going on in the body. Most of the solids and fluids of the organism contain small quantities of the earthy phosphates. The amount depends in great measure upon the quantity of alkaline earths present.

In healthy urine, these earthy phosphates are held in solution, in all probability, by the free acid of the urine, and in some measure by the acid phosphate of soda. The chloride of ammonium present may also contribute to maintain the earthy phosphates in solution in the urine (Dr. G. O. Rees). Very slight changes are sufficient to cause the precipitation of the ammoniaco-magnesian phosphate; and beautiful crystals of this salt are sometimes formed in urine which has a decidedly acid reaction.

We must carefully distinguish between *excess* of phosphates in the urine and a *deposit* of earthy phosphate; for we may suppose a large quantity of earthy phosphate in urine to pass unnoticed by the practitioner, because it is in a state of *solution;* while a smaller quantity in an *insoluble* state is likely to receive from him a larger share of attention than its slight importance demands.

Precipitation of Earthy Phosphates by Heat. It is very important to bear in mind that the earthy phosphates are precipitated from some specimens of urine by heat. This precipitate closely resembles that which is produced, in many specimens of albuminous urine, upon the application of heat. It is, however, at once distinguished from albumen by the addition of a few drops of nitric acid, which instantly dissolves the phosphate, while albumen is unaffected by it. Such a mistake has many times been made; and I need hardly say how important it is to avoid the possibility of such an error, as it may lead the practitioner to form an unfavourable prognosis in a case in which there is really no cause whatever for anxiety. The cause of this occasional precipitation of earthy phosphate is obscure. By Dr. Rees it is attributed to an excess of the phosphates being held in solution by chloride of ammonium. Dr. Brett considers that in these cases it is dissolved by carbonic acid; while Dr. Bence Jones attributes this precipitation to the excess of free acid of the urine being neutralised by an alkali, or by common phosphate of soda.

Phosphate of Lime—3 Ca O, PO^5—exists in healthy urine dissolved in acids, in certain salts, or in organic matters. Phosphate of lime is soluble in a solution of carbonic acid, in bicarbonates, and in chloride of ammonium. Albumen and fibrine always retain a certain quantity, and casein holds a large amount in solution. It is found in almost all the tissues, and, when separated, usually occurs in an amorphous state. The ash of urine contains between 2 and 3 per cent. of this phosphate, and that of excrements upwards of 12 per cent. It may be obtained in quantity from bones.

Acid Phosphate of Lime—2 Ca O, HO, PO^5+3 HO. The existence of this phosphate in urine constantly, is questionable; but, as before remarked, the composition of the phosphates is constantly altering; and an acid phosphate of lime is readily formed by the action of an organic acid on the neutral phosphate of lime.

Phosphate of Ammonia and Magnesia, Triple, or Ammoniaco-Magnesian, Phosphate—NH^4 O, 2 Mg O, PO^5+12 HO. The presence of this salt, which is so frequently met with in the animal fluids, usually depends upon decomposition having commenced, in which case the ammonia set free combines with the phosphate of magnesia to form the triple phosphate. At the same time, there can be no doubt that crystals of triple phosphate are sometimes found in acid urine—not merely forming a pellicle which alone is alkaline, while the fluid beneath retains its acidity (Thudichum)—but as a distinct deposit, leaving a clear supernatant fluid. Lehmann and other observers doubt the correctness of this observation; but the fact has been observed in this country several times, and I have noticed it myself more than once or twice. It is quite possible that the acid reaction may depend upon chloride of ammonium, or some other neutral salt which reddens litmus, and not upon the existence of a free acid.

Crystals of triple phosphate are slightly soluble in pure water, but are rendered quite insoluble by a trace of ammonia and ammoniacal salts. They give beautiful colours when examined with a ray of polarised light.

Phosphate of Magnesia—3 Mg O, PO^5+7 Aq. This phosphate is found in considerable quantity in the urine of certain herbivorous animals, and it appears to be a constituent of certain urinary calculi. It is doubtful if it is often present in human urine; but Robin and Verdeil have discovered it in several organs, and also in morbid products. In animal fluids generally, the phosphate of magnesia combines with ammonia, forming the salt which has just been described. When discussing the deposits of phosphates, I shall have to revert to this subject.

Microscopical Characters of the Earthy Phosphates. The phosphate of lime is usually deposited from urine in an amorphous form. Under the microscope, even when the highest powers are employed, the deposit is found to consist of minute granules. (*Illustrations*, Plate xxi, fig. 4.) Occasionally it occurs as round or oval particles of a high refractive power. Sometimes two of these small particles are connected together, and produce a crystal of the dumb-bell form. They vary much in size, but are usually very small.

The phosphates of magnesia crystallise in several different forms, which seem to be determined by slight changes in circumstances. The first is the stellate form, which occurs when ammonia is added to healthy human urine. The crystal consists of from four to five feathery rays, with a minute oval mass situated at the origin of each ray from the centre. These crystals gradually assume the more common form of the triple phosphate: secondly, that of a beautiful triangular prism, with obliquely truncated extremities. Great variation, however, is observed in the form of these crystals; sometimes they appear almost square; and frequently they might be mistaken for octohedra, in consequence of approximation of the obliquely truncated ends, and the shortening of the intermediate portion of the crystal. The feathery crystals of triple phosphate are represented in the *Illustrations*, Plate ix, fig. 2. After standing for some time, the rays alter in shape, and gradually little triangular crystals begin to make their appearance, as represented at *a*. After the lapse of some days, they are entirely converted into the ordinary triangular crystals. (Pl. ix, fig. 1; Pl. xxi, figs. 1, 3; Pl. xxiii, fig. 1.) An unusual form of magnesian phosphate crystals is represented in fig. 237, p. 324, of *The Microscope in its Application to Practical Medicine.*

Estimation of the Earthy and Alkaline Phosphates. The earthy phosphates (*phosphate of lime* and *phosphate of magnesia*) are easily detected by ammonia. If I add a few drops

of solution of ammonia to this specimen of healthy urine, a turbidity is soon observed, owing to the precipitation of phosphate of lime in an amorphous form, and triple or ammoniaco-magnesian phosphate in flocculent snow-like crystals, which increase in size for some time after their first precipitation. Stirring favours the separation of the phosphates; but the form of the crystals must, of course, be studied in a mixture which has been allowed to remain quiet. If it is required to estimate the proportion of these earthy phosphates, it is only necessary to separate them by filtration, ignite in a platinum capsule, and weigh the ash.

Alkaline Phosphates. The phosphoric acid combined with the alkalies may be precipitated from the fluid filtered from the earthy phosphates by the addition of a salt of lime or magnesia, when an insoluble deposit, composed of phosphate of lime or phosphate of ammonia and magnesia, is produced. If we wish to ascertain the quantity of alkaline phosphates present, it is only necessary to filter the precipitate, dry, ignite, and weigh it. From the phosphate of lime or phosphate of magnesia it is easy to calculate the proportion of phosphoric acid present; but, for ordinary purposes, it is enough to consider the weight as corresponding to the quantity of alkaline phosphates present in the urine, there being but slight difference in the equivalent numbers of the salts. The volumetric method of estimation, in which the phosphate is precipitated by a persalt of iron, will be described in a future lecture. Nitrate of silver produces in urine a yellow precipitate of tribasic phosphate of silver, which is soluble both in excess of ammonia and also in nitric acid. Upon adding a few drops of the former to the yellow deposit in this test-tube, it instantly dissolves. Now, when I add just nitric acid enough to neutralise the ammonia present, the yellow precipitate reappears; but, when I allow one drop more to fall in, it is immediately redissolved. I might repeat this many times. The precipitate of *chloride* of silver is quite *insoluble* in nitric acid, although soluble in ammonia; so that, in testing for chloride of sodium in urine, it is always important to add a few drops of nitric acid, to prevent the precipitation of the phosphate of silver.

Sulphates. Unlike the phosphates, the sulphates are present in very small quantities in the fluids of the body generally. The urine, however, contains a large quantity. This class of salts is not present in the milk, bile, or gastric juice. The blood contains only ·20 per 1000; while, in healthy urine, sulphates exist in the proportion of from 3 to 7 parts per 1000.

The proportion of sulphates undergoes a considerable increase after violent exercise, and under the influence of a purely animal diet—conditions under which the urea suffers a considerable augmentation. In fact, in all those conditions which are associated with an increased formation of urea, a large proportion of sulphates will also be observed. It would appear that the oxygen, hydrogen, carbon, and nitrogen of the albuminous substances, are eliminated in the form of urea; while the sulphur is removed in the state of sulphuric acid.

Dr. Bence Jones's experiments have shown that both vegetable and animal food increase the proportion of sulphates in the urine. When sulphuric acid, sulphur, or sulphates, are taken internally, the amount of these salts is augmented. These facts prove that the sulphates found in the urine are in great part formed during the disintegration of tissues. They must be regarded as excrementitious, and are probably not concerned in the nutrition of tissues.

The sulphuric acid eliminated in the urine occurs in the form of sulphate of potash and soda.

The urine contains about 3·5 grains per 1000 of sulphate of potash, and about 3·0 grains of sulphate of soda. About thirty grains of sulphuric acid, corresponding to about fifty-seven grains of the mixed sulphates, are excreted by a healthy man in twenty-four hours.

Sulphate of Lime has not been detected in human urine, but it has been found in that of animals, and is a constituent of some urinary calculi. I have seen crystals of sulphate of lime in the uriniferous tubes; and it is probable that it may be present in the urine, in some cases, in appreciable quantity. Traces of sulphate of lime are found in the blood. It is found in the pancreatic juice which has been kept for a few hours in a warm place, so that decomposition of some of the organic materials may take place.

The sulphates present in the urine are all soluble, like the alkaline phosphates; and, in order to prove their presence in a fluid, it is necessary to add some salt, the base of which forms an insoluble precipitate with sulphuric acid. Baryta salts are the most convenient for this purpose. Either the nitrate of baryta or the chloride of barium may be employed. In testing for sulphates in urine, it is necessary to add a little free nitric or hydrochloric acid previous to the addition of the baryta salt, in order to prevent the precipitation of a *phosphate* as well as a *sulphate* of baryta. The former is very soluble in free acid; the latter quite insoluble. If the quantity of sulphate is to be estimated, it is necessary to boil the mixture, or to drop the baryta salt into the boiling solution; otherwise the precipitated sulphate of baryta will pass through the pores of the filter. The phosphoric acid may be estimated in the clear fluid which passes through the filter by the addition of ammonia, which throws down phosphate of baryta. The contact of the air must, in this case, be avoided.

Carbonates. Carbonate of soda is not usually reckoned as a constituent of healthy urine, as its presence is entirely dependent upon the kind of food which the person has taken. For instance, carbonate of soda will often be found in the urine after large quantities of fruit have been eaten, in consequence of the salts of the vegetable acids becoming converted into carbonates during their passage through the organism. In the urine of herbivorous animals, alkaline carbonates are found; and frequently the carbonate of lime is also present. In the urine of rodents, these salts, particularly the latter, are abundant. Moreover, carbonate of soda may actually have been present in the urine, although it cannot be detected in the ash; for, if common phosphate of soda be heated with carbonate of soda, the carbonic acid is expelled, and the tribasic phosphate of soda remains. Hence the absence of carbonate from the ash of urine is not always a positive proof that the fluid did not contain lactates before it was subjected to chemical operations. On the other hand, a carbonate may be detected in the ash, although none was present in the urine, in consequence of the decomposition of oxalates and lactates during incineration.

Testing for Carbonate. The presence of carbon is very easily recognised by the effervescence set up immediately a little dilute acid is added to the ash. The best plan to test for carbonate in the ash is the following. A small portion of the dry ash is placed on a glass slide, and covered lightly with an ordinary square of thin glass. A drop of acid is then allowed to fall on the glass, so that it will gradually pass between the glasses by capillary attraction, and come into contact with the salt. If any bubbles of gas escape in consequence of the action of the acid, they will be confined beneath the thin glass, and one cannot fail to see them. If they be very small, the specimens may be subjected to microscopical examination. In this manner, the slightest trace of carbonic acid can hardly escape notice.

If the quantity of carbonate is to be estimated, the ash must be placed in a little apparatus, from which it is conducted by a tube into another vessel containing lime or baryta water; or it may be caused to pass through the potash apparatus used in organic analysis. From the weight of the carbonate, that of the carbonic acid is easily calculated. In the last case, its weight is obtained directly.

Chloride of Sodium. Common salt is always present in healthy urine, although the proportion is liable to great variation, owing to the circumstance that the chloride of sodium is always derived from the food. The importance of this substance to the organism is sufficiently proved by the fact that all kinds of food contain a certain quantity, and almost every specimen of water holds some proportion in solution. Again, it is well known that the health of animals deprived of the proper amount of salt deteriorates. It is to be detected in nearly all the tissues of the animal body, and is found in large quantity wherever cell-development is actively going on. This is true both with regard to healthy tissues and morbid growths. Common salt crystallises in cubes; but, in the presence of urea and some other organic substances, it assumes the form of a regular octohedron. As is well known, it is readily soluble in water (31·84 parts in 100), diffuses itself rapidly through a large bulk of fluid, and, in a dilute state, permeates tissues with great facility.

Besides common salt, urine also contains a certain quantity of chloride of potassium.

Quantity. Healthy urine contains from three to eight grains of chloride of sodium in 1000; the solid matter, about 6 per cent.; and the fixed salts, about 25 per cent. or more. Under ordinary circumstances, from 100 to 300 grains of salt are removed from the body in twenty-four hours; but the proportion is influenced by a great variety of circumstances, and is especially affected by the quantity of fluids taken. The amount is very variable in different individuals, according to the proportion of salt taken with the food. The secretion of

chloride of sodium, as you would suppose, attains its maximum a few hours after a meal, and but little is eliminated during the night.

Detection. Chloride of sodium is very easily detected in urine. It is only necessary to acidulate the specimen with a few drops of nitric acid, and then add nitrate of silver. The white precipitate of chloride of silver is quite insoluble in nitric acid, but soluble in ammonia. In order to make a quantitative determination, the chloride of silver is to be dried; and it should be burnt and fused in a *porcelain* capsule before being weighed. The volumetric process, however, is the most accurate.

Circumstances affecting the Excretion of Salt. Chloride of sodium is not formed in the organism, but seems to exert some important and beneficial effects during its passage through the tissues; and whenever the nutritive changes are very active, there seems to be an unusual demand for chloride of sodium. But the precise part which the substance plays is at present unknown. The quantity of salt excreted in the urine undergoes great changes in certain diseases. We shall consider them in a future lecture. The proportion also varies considerably from day to day, under the influence of an ordinary diet in health; and the ingestion of large quantities of water causes the elimination of a greatly increased amount of common salt. Thus, in one experiment, continued for four days, the following results were obtained: During the first three days, about thirty-six ounces of urine were passed per diem; the specific gravity varied from 1015 to 1024. The total quantity of solid matter passed in twenty-four hours was about 750 grains, and the chloride of sodium amounted to 113 grains. On the fourth day a large quantity of water was taken; 258½ ounces of urine, of specific gravity 1003, were passed; containing a total of 1034·48 grains of solids, and 232·8 grains of chloride of sodium. The phosphoric acid was diminished, and the sulphuric acid was increased by upwards of one-third.*

Soda and Potash. In healthy urine but a very small quantity of potassium is present in the form of chloride; but of soda salts there is a large proportion. The potash salts, as was first pointed out by Liebig, are found in considerable quantities in the muscles, while the soda salts predominate in the blood. Although phosphate of potash be taken in the food, the corresponding soda salt, which is necessary to the blood, is still found in that fluid; and there can be no doubt that in the organism the chloride of sodium is decomposed by the phosphate of potash—a phosphate of soda, and a chloride of potassium being formed.

To separate the sodium from the potassium in urine, a somewhat tedious analysis, of which I will just give a rough outline, is necessary. After destroying the organic matter by ignition, the whole of the phosphoric and sulphuric acids are removed, and the potassium and sodium converted into chlorides. A solution of bichloride of platinum is then added, and a chloride of potassium and platinum, and a chloride of sodium and platinum are formed. The potassium salt is most insoluble, and separates in the form of small octohedra, which do not polarize light. These may be separated by filtration. The sodium salt remains in solution, and may be obtained in the form of crystalline needles by concentrating the solution. These crystals exhibit the most beautiful colours when a ray of polarized light is transmitted through them.

Lime may be detected in urine by dissolving the salts in acetic acid, and adding a little oxalate of ammonia to the filtered solution. Oxalate of lime is precipitated as a white, granular powder, which passes through the pores of a filter, unless the mixture be boiled previous to filtration. As already mentioned, lime occurs in urine as a phosphate, and occasionally as a carbonate. It forms a urinary calculus very rarely met with in man; but not uncommon in some herbivorous animals. The urine of the horse always contains a number of spherical masses, composed of carbonate of lime, which may be regarded as microscopic calculi.

Magnesia must be precipitated as ammoniaco-magnesian phosphate, from a concentrated solution of the salts after separation of the lime. The solution should be evaporated to a small bulk, and when quite cold a little of the solution of phosphate of soda should be added to the mixture, rendered alkaline by the previous addition of ammonia; unless there be already a sufficient quantity of ammoniacal salt in the mixture, some muriate of ammonia should be added, as the magnesian salt is slightly soluble in pure water, but insoluble in solutions of ammoniacal salts.

* These analyses were performed by my friend and former assistant, Dr. Von Bose.

The solution should be stirred in all cases, and by this means a precipitate can often be produced, although before not the slightest turbidity was observable.

Iron. Traces of iron may be detected in healthy urine if a large quantity of the secretion be operated upon. Like many other mineral substances, iron passes off in small quantities in the urine, and is generally found in the urine of persons taking preparations of iron. Dr. Harley has shown that iron is a constituent of one of the colouring matters of the urine (*Uræmatine*).

Silica. Berzelius, many years ago, demonstrated the presence of *silicic acid*, or silica, in urine. Mere traces are met with in the ash after the removal of the salts insoluble in water, by the addition of strong nitric acid. The silica remains undissolved. This substance is derived principally from wheat, which, like other plants belonging to the cerealia, contains a considerable proportion of silica. Silica has been occasionally met with in urinary calculi, in appreciable quantity.

[*To be continued.*]

Transactions of Branches.

EAST YORK AND NORTH LINCOLN BRANCH.

PRESIDENT'S ADDRESS.

By Thomas Sandwith, M.D., Beverley.

[*Delivered at the Annual Meeting, May 26th*, 1859.]

Gentlemen,—If we are to believe many of our contemporaries, we have not only *new* diseases, but *new* remedies and *new* methods of treatment. A little medical antiquarianism, however, will, I think, show them the fallacy of some of these opinions, and satisfy them that there really are no new diseases, and that many of the remedies and practices supposed to be new were familiar to our forefathers. The same scepticism which, in times past, consigned to oblivion many valuable medicines, prevails at present, even in quarters where better things might have been expected; and, when a new *Pharmacopœia* makes its appearance, many formulæ we now regard as almost infallible will, no doubt, be sent to "the tomb of all the Capulets", hereafter to appear as new inventions and discoveries.

1. The profession was under deep obligations to the late Mr. C. Haden for the revival of the use of *colchicum* in gout and rheumatism, in which diseases the remedy is so singularly efficacious as to be entitled to the appellation of a specific. But the virtues of colchicum were known to Schroder, who flourished more than two centuries ago, and who, in his *Pharmacopœia* (p. 654), says: "Pituitam crassam, lentam, aliosque humores viscidos, peculiariter a juncturis efficaciter trahit; ob id articulorum affectibus, chiragræ, podagræ, etc., conducit."

Whether the root called *hermodactyls* is colchicum, is uncertain. Some suppose it to be the *colchicum Illyricum* of Linnæus. It appears, however, to have been a certain remedy for the gout, and for this purpose was employed by Alexander of Tralles. In an old London *Pharmacopœia* (1627) is a formula for an electuary called Caryocostinum, the principal ingredients were hermodactyls and diagridium; and of its singular efficacy, Barys, the inventor, gives an instance in his own person. "When he was brought so low with the gout", says Harris, "that he could move neither hand nor foot, nor any part of his whole body besides the tongue; yet, upon taking half an ounce of the said electuary, after it had given him but four or five stools, he found himself so mightily relieved, that he was able to go of himself to and from his place of ease, and could take a walk freely into his study, although, upon the first operation of it, he was fain to be carried or lifted upon the stool by no less than four men. Nay, the very next day he was perfectly freed from his distemper." (Harris's *Pharmacopœia Anti-Empirica*, p. 296.) I need not add that, in the present *Pharmacopœia Londinensis*, there is no formula for the Caryocostinum.

The faculty were startled, some years ago, by the recommendation of large doses of *emetic tartar* in pneumonia by Laennec; but the claim to priority is due to old Marryatt, who, in his *Art of Healing* (1775), recommended the same practice in ardent fevers, peripneumony, and pleurisy. He began the treatment with five grains of emetic tartar, with a drachm of nitre or sugar, divided into six papers, one of which was to be

given every three hours. On the second day, the antimony was increased to seven grains, and on the third to ten. In the tenth edition of his work, he retracts a statement he had made in the first; viz, that "until sickness and vomiting were excited, the medicine was not to be depended on," having seen many instances where a paper had been given every three hours without any sensible operation, either by sickness, stool, or sweat; and, although patients had been unremittingly delirious for more than a week, with subsultus tendinum, and all the appearances of hastening death, they have all perfectly recovered, without any other medicinal aid, a clyster every other day excepted. (*Art of Healing*, 10th edit., p. 7.) I am told that the use of emetic tartar in pneumonia is exploded: why, I know not; for it is a very efficacious remedy.

Denarcotised opium, or the salts of morphia, is a great boon to the profession; but it was no secret to Paracelsus and Van Helmont. Cook, in his *Marrow of Surgery* (p. 616), gives a a formula for a preparation of opium made with the juice of quinces, and which is styled "*Laudan. liquid. cydoniat.* (Helmont). This", he says, "Dr. Willis gave me, engaging me not to discover it till after his death; which engagement I kept. He told me he had it from a German gentleman, who had the use of his chambers at Oxford, and said he had it from Helmont himself.

In the old London *Pharmacopœia* already mentioned, there is an analogous preparation, called *Nepenthes Opiatum*, in which the laudanum is first prepared with distilled vinegar, and then with spirit of wine. It is marvellous that so valuable a formula for an acetate of morphia should have been banished from the *Pharmacopœia Londinensis;* but so it is.

Experience has taught us that, on account of its narcotin, laudanum is a specific for delirium tremens, and that the salts of morphia are better adapted for pain in the stomach and bowels. This, however, was no secret to Thibaut, chemist to the French king, who says: "If the design be to appease the headache and correct insomniums, then laudanum prepared with spirit of wine is the best; but if it be to stop a diarrhœa or dysentery, or assuage the pains of colic, then laudanum prepared with vinegar is fittest." (*Art of Chemistry*, 1665; p. 195.)

An old method of denarcotising opium was *torrefaction*, which was strongly recommended by Harris. That the application of heat has this effect, is probable from this writer's account of the drug when thus treated. He observes: "If it be not so stupefactive as it was before, if it will not so suddenly ascend up to the brain, and inviscate the spirits so powerfully, it is so much the better for use; the more dangerous parts being separated, and those that remain being sufficient for our purpose." (*Pharmacopœia Anti-Empirica*, p. 204.) Another method was *evaporation.* The great Lord Bacon, who seems to have left nothing untried in the way of experiment, says: "Opium venenatæ quiddam qualitatis deperdit, si evaporaveris mixtum cum spiritu vini, aut simili quopiam." (*Sylva Sylvarum*, page 14.) Yet the late Dr. Curry, of Guy's Hospital, brought this forward as a discovery of his own.

The power of *mercury* in reducing enlargements of the liver was known to Helmont, and probably led to the indiscriminate use of mercurials in all hepatic affections. "Vidi enim frequenter, ex jecoris inordinatâ excretione, ventris tensionem mentiri hydropisin. Immo et in tabe extinctis, summàque macilentis, vidi jecur supra modum excrevisse, penitùs licet exsangue. Vim ergo crescitivam mercurius ille necat. De proprietate itaque mercurii est, vim accreticem hepatis extinguere." (*Ortus Medicinæ*, p. 417.) The combination of *calomel* and opium in the treatment of inflammations, so recently recommended by Elliotson, is but a revival of the plan of Dr. Hamilton, of Lynn Regis, who practised in Norfolk nearly eighty years ago. (*Med. Commentaries*, 1783, p. 191.)

And what are *iodine* and its salts—so efficacious in removing bronchocele—but the *spongia usta* of the older writers? The only discovery is, that burnt sponge owes its efficacy to iodine.

With what a flourish of pens was recently introduced the use of *mineral acids* in diarrhœa, which at that time were strictly forbidden in bowel complaints. The practice, however, was no secret to Boerhaave, who says: "Violent purging is suppressed and moderated by the use of soft oily medicines and emulsions, and by *acids*." "Even hellebore," he tells us, "given with spirit of sea-salt, will not purge; and scammony is so tamed with the fumes of sulphur, as also to lose its purgative force; so powerfully do *acids* resist the operation of purging." (*Academical Lectures*, vol. vi, p. 410.) Again, William Fordyce speaks of the wonderful power of mineral acids, mixed with opiates, in the cholera morbus (*On Putrid and Inflammatory Fevers*, p. 104); and the celebrated Sylvius cured himself of a diarrhœa of four months standing in a few days, by the use of vinegar.

The late Dr. James Johnson took no small credit to himself for recommending *ammonia* in the advanced stages of pneumonia, when expectoration had ceased; and in this he was followed by Dr. Chapman of Philadelphia; but the practice is not new. Sir John Pringle, in his work on *Diseases of the Army*, says: "When the patient was reduced by frequent bleedings, I found sal cornu cervi, joined to spermaceti, not only proper for raising the pulse, but for promoting expectoration." (p. 144.) Old or new, the practice is very important, and is especially applicable to pulmonary affections in old subjects.

2. It was regarded as a capital improvement in ophthalmic surgery when the surgeons of the Eye Infirmary in London broke through the trammels of Ware and others, and, guided by an enlightened pathology, boldly bled, and produced mercurial ptyalism in *amaurosis*. But the practice was not new. Mead, in his *Præcepta et Monita Medica*, had already published cases in proof of the efficacy of this heroic treatment.

"The disease", he says, "proceeds from various causes, of which the most common is an obstruction gradually formed in the arteries of the retina by a sizy blood. Wherefore," he continues, "first of all, blood is to be drawn from the arm and jugular, and to be repeated according to the degree of the disease; and it will be of use to apply cupping-glasses with deep scarifications under the occiput; then it will be necessary to give cathartics, especially such as purge gross humours. But, as nothing is found more powerful than quicksilver for incising gross and viscid humours, it will be proper to join calomel to other cathartics. This method often succeeds when the disease is recent; but if of some standing, it requires a more powerful treatment; that is, a plentiful salivation raised by taking mercurials inwardly, in small quantities, and at short intervals." (*Precepta et Monita*, p. 162.)

Practitioners in midwifery were taken by surprise when, in 1813, Stewart recommended large doses of *laudanum* in uterine hæmorrhages; but here, again, the practice was not new. Motherby, in his *Dictionary* (1775), says: "The floodings which happen after delivery are sometimes very dangerous. This kind is generally owing to the womb being suddenly emptied; and so, not having time to contract the diameters of the vessels, they remain open, and the blood, by its own specific gravity, pours out. The chief intention here is to contract the uterus; to which end the properest means is the application of cloths dipped in vinegar or vinegar and water; these should be laid on the back and the region of the womb. A hand may be placed on the belly, to press the uterus towards the pubis. But the greatest specific in this case is an opiate: it should be given in large doses; for if the woman can be once composed, if it is but for a few moments, the flooding will almost entirely cease; and, when it once ceases, it rarely returns." (*Dictionary*, Art. "Abortion".)

3. The opinion of those observers who deny the identity of *English* and *Asiatic cholera*, or, in other words, affirm that "the two diseases are widely and specifically distinct", is clearly unfounded. A difference in degree cannot constitute a difference in kind. In several epidemic diseases, asphyxia is sometimes the only symptom; the victims are struck down as by a stroke of lightning, without any premonitory symptoms or evidences of reaction; and yet such cases are not considered new diseases. Great stress is laid on the rapid termination of Asiatic cholera, as a proof of its being a new disease; but the same fatal swiftness was noticed two hundred years ago. James Bontius, who practised in the East Indies, relates the case of a patient "qui horâ sextâ vespertinâ, adhuc valens, subitò cholerâ corripitur, et ante duodecimam noctis horam, vomendo simul ac per alvum dejiciendo, cum diris cruciatibus ac convulsionibus, miserrimè expiravit." (*Medicina Ægyptiorum*, p. 220.) Much has been said of the blueness of the skin as a proof of the novelty of Asiatic cholera, but I have witnessed the same thing in English cholera. The truth appears to be, that the disease is more malignant and intractable than ordinary cholera; and so are scarlatina, measles, and dysentery, when epidemic. It is, to use the language of naturalists, a variety, and not a new species.

What is the *diphtheria* now epidemic, but the putrid, ulcerated sore-throat of Fothergill? His description tallies with the symptoms of the disease as it exists at present. "On inspection," he says, "the uvula, the tonsils, pharynx, and the whole fauces, appeared of a remarkably red colour, like that

attending an erysipelas. On the same day, or on the day following, such parts of the fauces as at first appeared of a deeper colour than the rest, turned *white*, ash-coloured, or black. The neck and throat soon after began to swell externally. About the fourth day, this tumour was generally grown very large, and the white places in the fauces began to turn black; a putrid corrosive sanies was discharged by the mouth and nostrils; the breath grew extremely offensive; respiration, if hitherto not much affected, now became difficult; and the patient expired in a very short time." (Fothergill's *Works*, p. 186.) It appears to me that the disease is an undeveloped *scarlatina;* that is, the disease without the rash: and this opinion is confirmed by my having had eight cases in one village, in the last of which the scarlet rash was fully developed. The disease yields readily to ammonia, which is an antidote for scarlatina maligna.

The only plausible part of *homœopathy*, to wit—that "similia similibus curantur"—is derived from Drellincourt's *Paradoxa Medica*. Among other matters of the same description, he says: "Lassitudinem solvit labor, uti diarrhœa diarrhœam sistit, atque vomitus vomitum sedat, ambustioque ambustionem lenit atque persanat." (*Opuscula Medica*, p. 45.) In all ages, medical men have more or less acted on this principle in the treatment of diseases, endeavouring to overcome slighter degrees of morbid action by exciting others that are more manageable. In this manner, sore-throats have been cured by a gargle of capsicum; burns by the application of spirit of turpentine; and whitlow by plunging the inflamed finger in hot water; etc.

Hahnemann's use of infinitesimal doses of medicines, which, he tells us, increase in power the more they are diluted, and his pretended discovery that all diseases have their origin in itch-miasm, are his only claims to originality; the honour of which no sober-minded medical man will, I am persuaded, be inclined to dispute. The former is, after all, only a revival of the method of curing diseases by expectation; and all that need be said of the latter is, "Valeat quantum valere queat".

In regard to *hydropathy*, after the able papers of our worthy chief, Sir Charles Hastings, the only remark that need be made is, that "what is true is not new, and what is new is not true". The manner in which the practice was carried out by Priessnitz is positively atrocious, and must have caused many deaths. On this point, the cases related by Sir Charles are fearfully instructive. The real founder of hydropathy was Herman Vander Leyden, who wrote a book in the Walloon language, in which he recommended cold water, both externally and internally, in the treatment of gout, rheumatism, diarrhœa, dysentery, articular distempers, and the like. (Boerhaave's *Method*, p. 132.)

To conclude: in these few illustrations, I have driven a shaft into a mine, which I would recommend the younger members of the profession to explore more diligently than I have done. The perusal of our older writers would, I am persuaded, confirm their faith in rational medicine. They would find graphic descriptions of diseases, solid observations, rational practices, and honesty of purpose in everything. But, in vindicating the claims of our forefathers, I would not be understood to decry the moderns. We owe to our cotemporaries hydrocyanic acid—a valuable remedy; bismuth, the trisnitrate of which is so powerful in diseases of the stomach, and which was formerly only used as a cosmetic; the ergot of rye, for which we are indebted to Dr. Stearns of New York; and we are under great obligations to the chemists for the vegetable alkaloids.

I cannot, I think, close this address better than in the words of William Fordyce, which, if there are no medical sceptics among us, will find an echo in the breast of every bedside practitioner.

"No man that has experienced the soothing and cooling effects of sal nitri, when worn out with pain and thirst, or Riverius's saline mixture when heated by fevers, or restless almost to despair, can sufficiently admire that art which taught us to investigate and combine such powers. No man that has felt fevers of the most depressing sort, loading his shoulders, and ready to light on his already aching head, removed in a few hours by sal polycrest and rhubarb, as by a miracle, but must be struck with their effects. And who, that has tried in vain, by all the variety of sudorifics to moisten the skin in the course of putrid fevers, till he applied Mindererus' spirit, will hesitate a moment to acknowledge its diaphoretic and composing qualities?" (*New Inquiry*, p. 114.)

Reviews and Notices.

The Diseases of the Stomach, with an Introduction on its Anatomy and Physiology; being Lectures delivered at St. Thomas's Hospital. By William Brinton, M.D., Fellow of the Royal College of Physicians, etc. Pp. 406. London: John Churchill. 1859.

Dr. Brinton comes forward with highly favourable antecedents as an observer of, and writer on, Diseases of the Stomach; and the work now before us will increase his well earned reputation. It is, he informs us, founded on the large opportunities afforded him during twelve years as a physician to public institutions, as well as on his gleanings from the large field of observation furnished by the hospitals and museums, by the recorded cases of other authors, and by the stores of information which have been accumulating in medical periodicals. He has made for himself, therefore, a legitimate claim to write a book, and to be looked to as an authority in the subject on which he professes to instruct.

An introduction to the book is occupied with a description of the Anatomy and Physiology of the Stomach. The subjects treated of in the six Lectures are: 1, The Symptoms of Gastric Disease—pain, eructation, regurgitation, vomiting, hæmorrhage, and flatulence; 2, Circumstances connected with the Examination of the Stomach after Death; 3, Ulcer of the Stomach; 4, Cancer of the Stomach; 5, Cirrhotic Inflammation or Plastic Linitis, Suppurative Linitis, Tumours, Hypertrophy, Atrophy, Dilatation, and Secondary Inflammation; 6, Dyspepsia.

Among the various evidences of the diligence and acuteness of observation which characterise Dr. Brinton's labours, may be mentioned his remarks on the distinction between ordinary gastric ulcer and certain results of cancer of the stomach; and on an affection which he describes as "secondary inflammation"—a condition hitherto undescribed, except casually.

In the fourth and fifth Lectures, Dr. Brinton points out the distinction between two diseased states which, though unhappily nearly equally fatal and obstinate to treatment, are nevertheless different; viz., cancer of the stomach and cirrhosis, or, as he calls it, "plastic linitis." This cirrhosis generally affects the pyloric portion, and seems to be often mistaken for cancer; at least, for *incipient* cancer. At present, the diagnosis is of pathological interest; possibly it may be of great therapeutic value at some future day.

"The chief characters which distinguish this lesion from scirrhus may be enumerated as follows. In marked specimens, the change involves the whole of the stomach in a moderate thickening, which, while it allows the three coats to be still distinguished and separated from each other, increases their bulk in a tolerably equal proportion. The uniform expanse of stomach involved in the change is yellow, tough, and elastic; instead of having the peculiar pearly-white appearance and gristly section of cancer. The muscular tissue is almost always discernible: and is generally hypertrophied in the earlier stages of the disease. And not only does the perfectly homogeneous deposit offer none of those varieties which commonly mark the later progress of a cancerous deposit (in the shape of colloid and medullary matter surrounding the original and central schirrus); but its microscopic examination shows, either an absence of the characteristic cells of cancer, or a few spindle-shaped cells of fibrous import, scattered sparingly throughout a mass of laminated (but scarcely otherwise organised) exsudation. The absence of secondary cancer in other organs aids the diagnosis of this benignant lesion. Ulceration, too, is less early, frequent, and extensive, than in cancer. Finally, the pathological contrast of the two diseases is rendered complete by cases which suggest that the lymph thus deposited by a kind of cirrhotic inflammation around the gastric vessels, occasionally undergoes a development into cartilage; rarely even, into bone." (P. 285.)

And, with regard to the diagnosis of the cirrhotic disease during life—

"The grounds for identifying, during life, the malady we are

considering, must be sought chiefly in its long duration; in the subordinate rank taken by vomiting and hæmorrhage; in the infrequency and lateness of ulceration; in the absence of secondary cancer; and (last, but not least) in the uniform gastric thickening (rather than tumour) which careful manipulation finds in the epigastrium. To the latter result of experience, I can only add the presence of great anorexia, and intense headache; together with an indistinctness, or absence of local pain and tenderness, as affording some confirmation to the conjectures thus adducible from the pathology of the legion to any individual case." (P. 330.)

The work gives ample proof that Dr. Brinton is an accomplished pathologist in stomach diseases; but what is of equal, or rather, of greater importance, he is manifestly a sound rational therapeutist. His *Pharmacopœia* is not overburdened with a host of empirical remedies; what remedies he employs, he employs with judgment, and with a full sense of the difficulties which obstruct his efforts; and, what is of the highest importance, there runs through his therapeutic doctrines an indication to base treatment as strictly as possible on physiology. We do not say that he here stands alone; but this characteristic of his practice constitutes an additional claim, on his part, to our confidence.

On the Hygienic Management of Infants and Children. By T. Herbert Barker, M.D.Lond., Fellow (by Examination) of the Royal College of Surgeons of England, etc. Pp. 120. London: Churchill. 1859.

This volume is for the most part a collection of essays on the management of infants and children, which have appeared in the *Sanitary Review* and elsewhere. The motive which Dr. Barker has had for publishing his observations in their present form, will be admitted to be a sound one.

"While others, not without reason, are calling loudly for improvements in the dwellings of the poor, and for other measures urgently demanded by the increasing population of our towns, I would contend the right management of infants and children lies at the root of all other plans of social amelioration. What can good subsequent measures avail, for a constitution already hopelessly injured by errors in the opening of life?

"Just as a twig is bent, the tree's inclined."

The following are the subjects successively treated of in the work:—Mortality of Children; Diet of Infancy and Childhood; Clothing; Temperature; Air; Sleep; Bathing, Washing, etc.; Light; Exercise and Amusements; Nursery and Nursemaids; Vaccination; Dentition; and Education. On these subjects, Dr. Barker gives sound instruction in simple language, which the general as well as the professional reader will readily understand. Earnestly commending the work to the careful perusal of all classes—medical men, parents, and nurses—we would join with the author in calling attention to the importance of bodily health in relation to moral development.

"The physician may be supposed to travel beyond his proper range, when he ventures to treat briefly of *moral training*; but the fact is, this topic is not so entirely unconnected with the *physical* management of childhood, as some persons would imagine it to be. A sound and quiet state of physical health is one of the greatest helps to a good moral development. A feeble and irritable condition of the bodily frame is likely to be associated with an excitable temper. With regard, therefore, even to the future moral character, we would add stress to the observations already made on the importance of general health. If you would have your moral lessons successful, take care that the digestion is good, the head clear, and the constitution free from irritability and feverish excitement. Regularity in plain diet, sleep, exercise, and moderate study, is a powerful, though indirect, aid in moral training. With regard to more *direct* means, we certainly would not have them neglected, even in very early life. The moral education of the child commences in early infancy, and is often, perhaps, decided for good or for evil before the stage of childhood is terminated. In moral qualities, the child is, indeed, 'father to the man', and the training of these requires the most anxious attention, even during infancy. All the passions and affections are designed for good, and our object must be not to obliterate them, but to guide them into a system of harmonious operation with each other." (Pp. 112-13.)

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, JUNE 25th, 1859.

MEDICAL SOCIETIES AND OUR BRANCHES.

Some few weeks since, we drew the attention of the Association to the fact that a number of isolated medical societies were in existence throughout the country, which might with a little management be induced to amalgamate with our Branches. From the number of letters we have since received, it is evident that the thought to which we gave utterance has long been floating in the minds of the associates, and that it only requires thoroughly ventilating to bear fruit. Indeed, we already see that an attempt has been made to realise our proposition; inasmuch, as at the meeting of the Committee of Council on the 21st, proposals for the union of the North Staffordshire Society and of the Cornwall Medical Society with the Association were discussed. We are not aware of the terms on which it is suggested the amalgamation shall take place, which we rather regret, inasmuch as it may serve as a model for the guidance of other societies, and so clear the ground of a certain difficulty.

The Committee of Council, it will be seen, agreed to recommend an alteration in the wording of Law 25, which provides that members of Branches shall also be members of the Association. Now there are, doubtless, very many members of local medical associations who are deterred from joining Branches of our Association, although otherwise inclined to do so, for the reason that membership of the Association implies an annual guinea subscription. If, however, the law were so altered that members could gain admission on payment of the local subscription for local privileges only, we have no doubt that we should be enabled to recruit our Branches very largely. The only difficulty we see arising out of this arrangement would be with respect to printing papers in the Journal. It may be said that it would be scarcely fair to give purely local members of a Branch the same privileges in this respect, as those members who are also members of the Association. But we think the tendency of such liberality would be to make local members the more inclined to join the Association altogether. It would be a powerful recruiting element; inasmuch as the natural love a man has to see his own ideas in print would lead non-members of the Association to purchase particular numbers of the Journal; and probably an exceptional demand would ripen into a constant one. At all events, we have no doubt whatever that, if the Branches were enabled to recruit local members as well as full associates, the result would

speedily make itself felt in a rapid increase of the Association. Without exactly likening old members of Branches to tame elephants, who would gradually lead younger local associates to avail themselves of the full privileges of our powerful body, we may yet fairly reckon upon the *esprit de corps* of our body to accomplish much in this direction. We think very few of the suggested local members, for instance, could long withstand the infection of our annual Branch gatherings, with their good papers, good feeling, and good dinners. It must be a very determined local member indeed, who would be able long to hold out against such social contagion as these items include.

We rejoice, then, to find that the Committee of Council have set themselves practically to work to remove one of the most serious stumbling-blocks in the way of the proposed amalgamations. Our body has now become so powerful, that it is far easier than formerly to make it all powerful. We must attack outlying medical societies in every direction; and if we can offer to them greater privileges and advantages than they at present possess—which we undoubtedly can, including, possibly, publicity for their papers in the Journal—we see no reason to doubt an unequivocal success.

We are anxious to draw the attention of the members to this scheme at the present moment, for the reason that the annual meetings, which are just now coming off, will afford occasions for its ventilation, and for discussion, of which probably the General Council may be glad to avail themselves when the recommendation of the Committee of Council is brought forward. Herein we have the means close at hand to strengthen our position throughout the country; and we do not think we are asking too much of our Associates, at their Annual Meetings, to bring their earnest aid to the fulfilment of what appears to us to be a very feasible scheme, and one fraught with most important issues to the welfare of our body.

THE WEEK.

An old man, named John Burton, who has spent the greater part of his life as a "billy-spinner" in a cloth factory at Stroud, in Gloucestershire, but for the last eight or ten years has practised as a herbalist and general "doctor" among persons of his own class, has recently been committed for trial on the charge of falsely declaring himself to have been in practice before 1815, and thus procuring himself to be registered under the Medical Act. The case was heard, on the information of Mr. Richard Blagden, surgeon, of Stroud, in petty sessions, on Friday, June 17th. The defendant is said to be very poor and illiterate. He has not charged for medicines or advice, but for time and walking. Mr. Clutterbuck, solicitor, who conducted the prosecution, read a letter sent by Burton to the Registrar, in which he forwarded the following declaration: "I, John Burton, hereby declare I was practising in Stonehouse before the 1st August, 1815." He added, "If you will kindly answer this by return of post, and let me know the charge for being registered, I will send it by next post." This was written in a legible hand, and evidently not by himself. A printed form of declaration was sent down, which was required to be attested by a magistrate. This was declared, and on being returned his name was entered on the register. Mr. Blagden put himself in communication with the medical authorities in London, and, with the cooperation of other medical gentlemen, instituted these proceedings, his only object being to have the profession ridded of an improper character. Mr. Clutterbuck put in the declaration made before a magistrate, signed by the defendant, and the extract from the register, signed by Dr. Francis Hawkins, the Registrar. Thomas Tocknell, a labourer, nearly sixty years old, had known defendant for nearly fifty years. When he first knew defendant, he was a sawyer, and afterwards he worked as a labourer, and then as a spinner in a factory eight or ten years. While witness was working with defendant, he hurt his hand, but defendant did not do anything to cure it, and defendant did not at the time act as a medical practitioner. Witness never heard of his practising medicine till ten or twelve years ago. James Alder, a labourer, sixty-seven years of age, had known Burton for more than fifty years. The first time witness ever heard of the defendant going "quacking" was eleven or twelve years ago. Henry Hague worked at the same mill as Burton in the year 1827, for three months, as spinner. This was defendant's regular employment, and he did not practise medicine. He first heard of his doctoring twelve years ago. Daniell Darke, innkeeper, deposed to knowing defendant for ten or fifteen years. Defendant had told witness that he dared not charge anything for advice or attending, but he charged for his labour in walking, and it averaged about 14*s*. or 16*s*. a week. Witness knew of defendant's practising medicine for about eight or ten years. He should not consider defendant a competent medical man. Mr. Ball, in defence, contended that the defendant had "practised medicine" prior to the 1st August, 1815, in making pills, salves, etc., and all that he had done since was to deal in herbs and simples. He could produce evidence that defendant had so acted prior to August, 1815. The defendant said he was not guilty. The Chairman said the Bench had decided to commit the case for trial. There were many points of difficulty which would be raised at Gloucester; but it was the first case of the kind, and a sufficient *primâ facie* case was made out. The ends of justice had probably been answered by the name being expunged, and as defendant was an old man, and had acted in this irregular way for some time past, and might not have known when he made the declaration that he ought not to make it, perhaps those who set this information in motion might not proceed to trial. Defendant was then committed for trial, but admitted to bail, himself in £20, and two sureties of £10 each.

At the Central Criminal Court, on June 16th, Thomas Smethurst was placed at the bar, before the Common Serjeant, for the purpose of pleading to the indictment found by the grand jury and the coroner's inquisition, both of which charged him with the wilful murder of Isabella Bankes. The prisoner pleaded Not Guilty to both charges. Mr. Serjeant Ballantine, in support of an application he had made on the previous day for a postponement of the trial, put in an affidavit made by Mr. Teasdale, the solicitor for the prosecution, which stated that the case was one of a very intricate character, and that there were thirty witnesses to be examined for the prosecution, and the evidence already taken extended to very great length, and there had not been sufficient time to prepare the proofs to be laid before counsel. The affidavit also stated that it would be necessary to procure some additional formal evidence relating

to the property of the deceased lady, which it was very important should be laid before the jury, and this evidence could not be obtained at the present session; and the affidavit concluded by Mr. Teasdale expressing his opinion that it was absolutely necessary for the ends of justice that further time should be granted to get up the case, and that they might be frustrated if the trial were to take place at this session. After some discussion, it was agreed to postpone the trial to the next session—the case to be brought forward on the first day, if possible.

A correspondent of the *Times* calls attention to certain abuses in the lace-factories in Nottingham. He says:

"The hosiery and other trades are, as is well known, regulated by the Factory Act; but the workers in lace are not under it. The consequence is, that the abuses which fourteen or fifteen years ago excited the sympathy of Lord Shaftesbury and others, and which caused the passing of the Factory Bill for the manufacturing districts of the north, are at this time prevailing in and around Nottingham, and increasing with the population. Some thousands of children and young persons are employed, at ages varying from 6 to 18, and day and night are alike devoted to labour. Twenty-one hours out of twenty-four are consumed in this way by relays of children and young people, who work in succession. I saw lately, between 11 and 12 at night, about twenty-five children and young people at work in an extensive establishment, who, in addition to day labour, were kept at night from 6 P.M. until 1 A.M. The labour is divided as follows:

First set, from 4 A.M. until 9 A.M. Breakfast.
Second set, from 9 A.M. until 1 P.M.
First recommences at 1 P.M. until 6 P.M.
Second recommences at 6 P.M. until 1 A.M.

"This is the routine for the whole year. It involves great cruelty to young children, and demoralises the youth of the district to an extent that can only be appreciated by those who live around, or who remember the vice and misery in the manufacturing districts before the passing of the Factory Bill."

In the Court of Queen's Bench, on June 20th, an action was tried, in which C. J. Jackson, formerly a sergeant in the Hertfordshire Police, sought to recover damages from Mr. F. R. Spackman, a surgeon at Harpenden, for negligent and unskilful treatment of a broken leg. In May 1857, a dogcart, in which the plaintiff was riding, was accidentally overturned; and, in jumping out, he broke his leg. He was taken home, and the defendant was sent for; but before he arrived another practitioner placed the leg on a pillow, and applied splints. The defendant, on his arrival, placed the leg on Liston's apparatus, and bound it up. When the bandages were removed, the plaintiff observed, he said, a projection at the inner ankle; which, however, the defendant assured him was callus. The plaintiff became an inmate of Guy's Hospital from August to October 1857, and again in March 1858, when he had a portion of the projecting bone, about three-quarters of an inch long, sawn off. There was a shortening of the leg to the extent of nearly two inches. The evidence of Mr. Cock and Mr. Hilton, surgeons to Guy's Hospital, went to show that the fracture had not been properly treated. The defendant pleaded that there was no shortening of the leg when he was first called in, and that the portion of bone removed was probably a piece of the tibia, which had been splintered by direct violence. Mr. Erichsen and Mr. Shaw were of opinion that, if the defendant's account were correct, he had treated the leg with proper skill and care. The jury returned a verdict for the defendant.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Committee of Council will meet at one o'clock on Wednesday, at the Medical Institution, Mount Pleasant.

The General Council of the Association will meet at half-past two.

Wednesday, 27th. 7 o'clock, P.M. First General Meeting of the Association. The retiring President will make a few remarks. The new President will deliver an address. The Report of Council will be presented, and other business transacted.

Thursday, 28th. *Morning*, 8.30. Public Breakfast at the Adelphi Hotel.

10 o'clock. Meeting of the members of the new Council. At 11, the Address in Medicine will be delivered by Dr. E. Waters of Chester. Cases and Papers will be read.

The meeting will adjourn at 1, and reassemble at 2. The Report of the Benevolent Fund will be received. Cases and Papers will be read.

Evening. There will be a *Soirée* at the Royal Institution, in Colquitt Street.

Friday, 29th. 11 A.M. The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool. Papers and Cases will be read.

6 P.M. Dinner. Tickets a Guinea each.

Members are requested to enter, on arrival, their names and addresses in the Reception Room in the Medical Institution, Mount Pleasant, where all the meetings will take place, and where further information will be supplied.

Members who wish for previous information may communicate with A. T. H. Waters, Esq., 27, Hope Street, Liverpool.

It is particularly requested that all members who propose to read papers will communicate with the General Secretary without delay.

Philip H. Williams, M.D., *General Secretary*.

Worcester, June 21st, 1859.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South Eastern. [Annual Meeting.]	New Town Hall, Dover.	Wednesday, June 29th, 12 o'clock.
Cambridge and Huntingdon. [Annual Meeting.]	George Hotel, Bishop Stortford.	Tuesday, July 5th, 2 P.M.
Reading. [Annual Meeting.]	Council Chamber, Reading.	Wed., July 13, 4 P.M.
Metrop. Counties. [Annual Meeting.]	32a, George Street, Hanover Square.	Tuesday, July 19th, 8 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Birmingham, on the 21st instant.

Present:—Sir Charles Hastings (in the Chair); Mr. Humphreys; Mr. Ellis Jones; Mr. O. Pemberton; Mr. H. Terry; Mr. A. T. H. Waters; Mr. Watkin Williams; and Dr. P. H. Williams.

Sir C. Hastings having read a letter, in which he tendered the resignation of his offices, as President of the Council and Treasurer of the Association, at the next annual meeting, it was resolved, that while this Committee consent to enter Sir Charles's letter on their minutes, they are unanimously of opinion that the laws relating to the existing President and Treasurer should be strictly observed.

Letters from Dr. Bell were read on the subject of a proposed union of the North Staffordshire Society as a Branch of the British Medical Association. A similar proposition was made by the Cornwall Medical Society, at the last meeting. It was agreed to recommend an alteration in the wording of Law 25, so as to obviate an existing difficulty.

A letter from Mr. Roper was read, expressing a wish that the Annual Meeting in 1860 may be holden in Exeter or Plymouth.

The proposed Report of Council to be presented in Liverpool was read and considered.

It was resolved—That the Report of Council, as now read by Dr. Williams, be approved, and that it be printed and distributed to the members of Council previously to its presentation at the ensuing annual meeting.

Charles Hastings,
Philip H. Williams, M.D., *General Secretary.*

Worcester, June 22nd, 1859.

DUBLIN BRANCH: QUARTERLY MEETING.

The first Quarterly Meeting of this Branch was held in the Council Room of Apothecaries' Hall, Dublin, on June 17th. Present:—W. D. Moore, M.B., President, in the Chair, and several other members.

The following resolutions were proposed, and passed unanimously:—

1. That the British Medical Association, having for its object the promotion of the dignity and influence of the entire profession, and being *now* represented in each part of the United Kingdom, claims the support of every qualified medical practitioner; and if the Association be sustained, as it deserves to be, it must afford a centre of unity and of power most beneficial for the advancement of the social and political status of the profession.

2. That this Association records its grateful sense of the benefit which has been conferred by the recent Royal Warrant, upon the medical officers of the army and navy, whereby their rank and pay have been increased in a degree commensurate with their important duties and social position; and that the requirement of a medical qualification, in addition to a surgical diploma, to entitle candidates for the appointment of assistant surgeon, maintains a principle which in the opinion of the Association should be the rule in filling up all civil medical appointments.

3. That this Branch shall carefully scrutinise the appropriation of medical titles by persons whose names do not appear upon the authorised registry; with the view of reporting all such persons to the Medical Council for prosecution under the Medical Act.

4. That the President of this Branch be requested to attend the approaching meeting of the British Medical Association, to be held at Liverpool, on 27th, 28th, and 29th of July next; and that his expenses be paid by this Branch.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ANNUAL MEETING.

The Annual General Meeting of this Branch was held at the Hen and Chickens Hotel, Birmingham, on Friday, June 10th, 1859: J. B. Melson, M.D., of Birmingham, President, in the Chair.

There were also present: H. Adkins, Esq. (Meriden); A. Allcock, Esq. (Smethwick); A. Baker, Esq. (Birmingham); E. Bartleet, Esq. (Birmingham); T. Boisragon, M.D. (Birmingham); F. T. Bond, M.D. (Birmingham); P. Chavasse, Esq. (Birmingham); E. H. Coleman, Esq. (Wolverhampton); P. A. Cotterell, M.D. (West Bromwich); W. Downes, Esq. (Handsworth); H. Duncalfe, Esq. (West Bromwich); G. Fayser, M.D. (Henley-in-Arden); A. Fleming, M.D. (Birmingham); Bell Fletcher, M.D. (Birmingham); T. S. Fletcher, Esq. (Bromsgrove); S. J. Jeaffreson, M.B. (Leamington); W. E. Johnson, Esq. (Dudley); G. Jones, Esq. (Birmingham); F. Jordan, Esq. (Birmingham); W. J. Kite, Esq. (West Bromwich); J. Manley, Esq, (West Bromwich); G. H. Marshall, Esq. (Birmingham); E. Moore, Esq. (Halesowen); O. Pemberton, Esq. (Birmingham); J. Postgate, Esq. (Birmingham); T. W. Ransom, Esq. (Darlaston); J. Russell, M.D. (Birmingham); J. V. Solomon, Esq. (Birmingham); T. Swain, Esq. (Birmingham); T. J. Walker, M.B. (Birmingham); C. Warden, M.D. (Birmingham); T. W. Williams, Esq. (Birmingham); G. Yates, Esq. (Birmingham).

E. H. Coleman, Esq., of Wolverhampton, the retiring President, introduced J. B. Melson, M.D., as the President for the ensuing year.

The President addressed the meeting, referring, in the course of his remarks, to the fact of the Registration Act of August last having originated with the Association, and pointing out the advantages which were likely to result hereafter from its operation.

REPORT OF COUNCIL.

Mr. Oliver Pemberton, one of the Honorary Secretaries, read the following report:

"In presenting their report for the past year, the Council of the Birmingham and Midland Counties Branch of the British Medical Association desires to call the attention of its members to the signal fact, that since the meeting of June 1858, when the doubtful prospects of Medical Reform constituted a subject of anxious speculation, a Medical Registration Act has received the sanction of the Queen and Parliament. This recognition on the part of Government of the claims of medical men to protective legislation, it is hoped, will form the basis of future consideration, and may lead to a review of some of those regulations which have been so long permitted to exist; no less on the ground of safety to the public, than on that of justice to the profession. In thus, however, congratulating you on the possession of a measure of reform, it must not be forgotten that to the British Medical Association, and to its founder, Sir Charles Hastings, is due almost the entire merit of having compelled, by its organisation, its intelligence and numbers, the attention of successive ministers to our requirements.

"The present year will record, also, the passing of the warrant for regulating the rank and pay of the medical officers in the navy, and placing them on the same footing as that which has been so recently obtained for our brethren of the army.

"The poor-law officers as yet labour beneath the pressure of incessant toil and inadequate remuneration; but, under the persevering agitation of their cause by Mr. Griffin, an entire revision of the present system of management cannot long be withheld.

"More immediately looking to the objects contemplated in the formation of a society like this, your council cannot omit to declare its approbation of the vigour with which the affairs of the British Medical Association are now conducted. In its Journal; in the numbers and character of its members; and more—in the possession of collateral associations in populous districts, under the designation of Branches—the British Medical Association has a power for the advancement of the true interests of the profession, which, if rightly used, cannot fail to result in its elevation in a scientific no less than in a social and political degree.

"The Birmingham and Midland Counties Branch maintains its position. During the last year its numbers have been considerably augmented, and the questions of importance in medicine, surgery, and the collateral sciences, which have been

considered, have attracted a full attendance at the bi-monthly meetings.

"The following Papers and Cases have been communicated during the past year:

"1. On Infantile Lientery. By W. F. Wade, M.D.

"2. The Relations of Saccharine Urine to General Obesity or Fatty Degeneration of an Asthenic Variety. By J. Johnston, M.B.

"3. A Specimen, and Case, of Depressed Fracture of the Inner Table of the Skull. By O. Pemberton, Esq.

"4. The Vitality of the Teeth, and its Relation to Caries. By T. Howkins, Esq.

"5. Three Cases of Resection of a Nerve for Sequences of Traumatic Injury. By Redfern Davies, Esq.

"6. Paraplegia in Relation to Renal Disease. By Wm. Hinds, M.D.

"7. Certain Points in the Operation for the Radical Cure of Reducible Inguinal Hernia. By O. Pemberton, Esq.

"8. On Vaccination, and the Laws relating to it and the Registration of Births. By T. S. Fletcher, Esq."

Dr. Melson proposed, Dr. Jeaffreson seconded, and it was carried unanimously—

"That the Report now read be received, adopted, and entered on the minutes."

TREASURER'S REPORT.

Mr. T. W. Williams (Treasurer) read his balance-sheet, by which it appeared that there was a balance of cash in the Treasurer's hands to the amount of £25 : 1 : 3.

Mr. Moore proposed, Mr. Bartleet seconded, and it was carried unanimously—

"That the Treasurer's Report be received, adopted, and entered on the minutes."

ELECTION OF OFFICERS AND COUNCIL.

Mr. Bartleet proposed, Mr. Coleman seconded, and it was carried unanimously—

"That Edward Moore, Esq., J.P. (Halesowen), be President-elect for the ensuing year."

Mr. Downes proposed, Mr. Allcock seconded, and it was carried unanimously—

"That the following gentlemen be the Council of the Branch for the ensuing year:—*For the Town:* A. Baker, Esq.; E. Bartleet, Esq.; A. Fleming, M.D.; Bell Fletcher, M.D.; J. J. Hadley, Esq.; J. W. Keyworth, M.D.; G. H. Marshall, M.D.; W. F. Wade, M.D. *For the County:* G. Ayton, Esq. (Kenilworth); E. H. Coleman, Esq. (Wolverhampton); G. Fayrer, M.D. (Henley-in-Arden); Sir C. Hastings (Worcester); J. H. Houghton, Esq. (Dudley); J. H. Kimbell, Esq. (Knowle); J. Kite, Esq. (Westbromwich)."

Mr. Adkins proposed, Dr. Cotterell seconded, and it was carried unanimously—

"That the following members be elected representatives of the Branch in the General Council:—Edwin Bartleet, Esq. (Birmingham); H. Carden, Esq. (Worcester); Pye H. Chavasse, Esq. (Birmingham); E. H. Coleman, Esq. (Wolverhampton); S. J. Jeaffreson, M.D. (Leamington); J. B. Melson, M.D. (Birmingham); O. Pemberton, Esq. (Birmingham); T. Watkin Williams, Esq. (Birmingham); and J. V. Solomon, Esq. (Birmingham), *ex officio*."

Dr. Jeaffreson proposed, Dr. Fleming seconded, and it was carried unanimously—

"That Mr. T. W. Williams be re-elected Treasurer for the ensuing year."

Dr. Russell proposed, Mr. Moore seconded, and it was carried unanimously—

"That Mr. J. V. Solomon and Mr. Oliver Pemberton be re-elected Honorary Secretaries for the ensuing year."

NEW MEMBERS OF THE BRANCH.

The following gentlemen, having been elected members of the Association, were unanimously elected members of the Branch:—Francis G. Bond, M.D., George Vernon Blunt, M.D., and Thomas P. Heslop, M.D., of Birmingham; and W. Lynes, L.M., of Wednesbury.

NOTICES OF MOTION.

Mr. Alfred Baker gave notice that, at the next General Meeting of the Branch, he should propose an alteration in the mode of electing the Council of the Branch and the Council of the Association.

Dr. Jeaffreson addressed the meeting on the subject of the desirability of establishing a kind of Providence and Insurance Institution in connexion with the General Association; and, after a conversation, it was determined that the subject should be considered at the next meeting of the Council.

VOTES OF THANKS.

Mr. Alfred Baker proposed, Mr. Kite seconded, and it was carried by acclamation—

"That the best thanks of this meeting be given to E. H. Coleman, Esq., for his able and considerate conduct as President during the past year."

Dr. Jeaffreson proposed, Dr. Bell Fletcher seconded, and it was carried by acclamation—

"That the best thanks of this meeting be given to J. B. Melson, M.D., for his admirable address, and for his able conduct in the chair this day."

THE DINNER.

The annual dinner subsequently took place at the Hen and Chickens Hotel, Birmingham; and was most numerously attended by the profession in the town and neighbourhood. Dr. Melson presided, and Mr. E. Moore occupied the Vice-chair.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 24th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

ELEPHANTIASIS OF THE SCROTUM: OPERATION: RESULTS.
BY HAYNES WALTON, ESQ.

Mr. Walton had been consulted by two patients with elephantiasis. Both were from Barbadoes. The first was in 1847. The disease was incipient. An operation was recommended; but overruled. The second was in September of last year, in the person of an athletic quarantine officer, aged forty-one. The scrotum was rough and indurated, with the characteristic firm and solid swelling. There was neither pain nor inconvenience beyond that caused by the bulk. The skin of the penis was similarly affected. Just four years ago inflammation appeared at the lower part of the scrotum, and, on subsiding, left some hardness. Each year there have been several similar attacks, and every one has added to the enlargement. Treatment, both general and local, failed in the hands of different men. The patient desired an operation rather than submit to the inevitable fate of steady increase of the disease. Mr. Walton recommended operating, especially as the growth had not yet attained to that size by which the great dangers from shock and loss of blood are risked. The possibility of being obliged to remove the testes was clearly pointed out. The evident vascularity of the part, and the known tendency to hæmorrhage, difficult to control, induced Mr. Walton to adopt the following plan, which served the double purpose of effectually preventing the possibility of untoward bleeding, and enabling him to get the testes completely out of the way:—The scrotum was raised and pressed on for a few minutes, so as to empty it of as much blood as possible, and then with a large needle, such as is used by upholsterers, threaded with strong twine, he tied it in segments close to the trunk—first pushing up the testes, so that they were quite above all that he intended to remove—and cut close to the nooses. As each strangulated part was liberated, the vessels were secured, and, altogether, twenty were tied. An attempt was made to effect adhesion by first intention, and with the best results, Although it was necessary to push up the testes, and draw the wound together with much force, which produced great strain on the sutures, nearly the entire wound united at once. The penis was then denuded of its diseased skin. This healed over quickly. Respecting the pathology, the author remarked, that subacute diffuse cellular inflammation of the integuments produced the organic changes. As to the morbid anatomy, it appeared that the epidermis was much thickened, but the true skin particularly so. The connective tissue between the scrotum and the testes was greatly hypertrophied, and intersected by large areolæ. The patient left London six weeks after the operation.

PECULIAR VASCULAR TUMOUR OF THE RECTUM.
BY R. QUAIN, ESQ., F.R.S.

The object of this paper was to describe and to discuss the nature of a tumour of the rectum, of which the author had

found no account in books. The chief characters of the growth were its vascularity and the absence of hardness, the surface being studded over with thick papillary vascular prominences of various shape. These, in fact, formed the chief and most characteristic part of the mass. The tumour had no connection, except with the mucous membrane of the bowel, from which it was an outgrowth. The author believed the disease not to be malignant, and he grounded his judgment upon the history of cases, upon a comparison with other cases, and upon the result of the examination of the structure of the tumours he removed in practice.

Mr. Spencer Wells had removed a growth, of a character similar to that in Mr. Quain's case, from the interior of the bladder of a woman. This patient was at first thought by the gentleman who saw her to be suffering from stone; but, on sounding, no calculus could be detected. There was considerable bleeding after each act of micturition, the blood following on the evacuation of the urine. Gallic acid was administered, and the bleeding diminished; but the hæmorrhage again returned, and the woman was reduced to an alarming state of anæmia and debility. She was again sounded, but no calculus was discovered. He (Mr. Wells) now determined to examine the bladder more fully, and dilated the urethra by means of a sponge-tent. The dilatation was effected in two or three hours. Near to the neck of the bladder a soft villous tumour, about the size of a large strawberry, was found. This was cut away with a pair of scissors; no ill effects followed, and the woman remains well. He thought, with Mr. Quain, that it was evident these tumours were not of a cancerous nature.

Mr. Henry Lee related the case of a man who died in King's College Hospital after severe hæmorrhage from the bladder. After death, a tumour similar to the one in Mr. Quain's case was found. The villous projections were about half an inch high, with ragged terminal vessels, whence the bleeding had proceeded. This case was one of chronic disease.

Dr. O'Connor mentioned the case of a woman who was operated upon successfully in the Royal Free Hospital by Mr. Gant. She suffered from a tumour in the rectum similar to that in Mr. Quain's case.

PREPARATIONS FOR PRESERVING ANIMAL SUBSTANCES.

BY W. BRINTON, M.D.

Dr. Brinton stated that the preparations before the Society were exhibited by Professor Raddi, Honorary Professor of Zoology, and formerly one of the Conservators of the Museum at Florence. They illustrated three processes discovered by that gentleman. The first showed a specimen so hard and heavy as almost to deserve the name of a petrifaction (the liver, heart, and lungs, attached to each other), was intended for permanent dry preparations, in which the colour and size of the original tissues were completely preserved. The second formed a dry preparation, which, on being moistened, could be dissected as though it were fresh. The third was a process applicable to meats, etc., intended for eating (and therefore devoid of the poisonous ingredients of the two preceding processes); and was illustrated by a piece of cold roast sirloin, thus prepared some two or three months ago, and retaining its characteristic colour and smell, though a little shrunken in size. As regarded the latter process, Dr. Brinton regretted that the proverbial proof of its perfectness it was not at present in his power to give. The Government, and various *savans*, intended, he believed, to test its usefulness. Certainly, if he fulfilled its promises, it would not only be much simpler and cheaper than the costly methods of preserving in tins, but would probably avoid that comparatively monotonous sodden flavour which the existing means of preserving meat implied; and flavour, he need not say, was in some sense a test of food, as well as an inducement to eat it. The second process, too, seemed likely to be valuable. But it was by the first that he thought the Society would be most interested. Many teachers of anatomy and medicine (in which term he of course included surgery) must have felt, as he had, the deficiencies of our museums in respect of large dry preparations. In wax, they demanded a high order of talent for their execution; and their costliness was only equalled by their fragility; so that a lecturer scarcely liked to uncover a valuable wax cast from its glass shade, and send it round a large class. Plaster, again, admirably adapted, when coloured, to give a cheap and effective representation of diseased surfaces or limbs, utterly failed to convey the details or relations of internal parts. Avoiding all these faults, Dr. Raddi's method did seem to him (Dr. Brinton) to promise to supply a great desideratum—large pieces of healthy or morbid anatomy, perpetuated (rather than represented) with perfect accuracy. How few, for example, were the good natural skeletons of our London museums! How useless, for accurate teaching, the artificial and distorted thorax of a skeleton, as ordinarily articulated! But Dr. Raddi's process promised to give, not only all the costal cartilages, but all the viscera beneath, with their normal size, shape, and relations. It was Dr. Raddi's wish, he believed, to dispose of his secret, either to a single institution, or to any museums or similar institutions which might combine to purchase it; and that, for its application, a mere immersion of the preparation, without dissection or injection, would suffice.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, June 1st, 1859.

Edward Rigby, M.D., President, in the Chair.

Thirty Fellows were elected.

The President exhibited a preparation of the liq. ergot., made by Messrs. Curtis, which he had been in the habit of using with advantage for some time.

Mr. Pound, of Odiham, exhibited an Encephalous Monster.

A CASE OF INFANTILE SYPHILIS: WITH REMARKS.

BY T. H. TANNER, M.D.

In August 1851, a married lady was delivered of her first child, which was strong and healthy, and has since continued to be so. Soon after her labour, the husband contracted a syphilitic sore from a prostitute, for which he put himself under the care of an eminent surgeon. He took mercury, and was salivated; but two months after an apparent cure, he became affected with secondary symptoms, for which he again took mercury. Being nervous as to the consequences, he did not have intercourse with his wife until after the lapse of nine months from the date of his being primarily affected. At the commencement of 1853, the wife's health began to suffer, though not very materially; but on June 12th of the same year, she was delivered at the seventh month of gestation of a still-born child. Some months afterwards, her health began more decidedly to fail; spots appeared on her skin; she had a sore-throat, and her hair came off. In May 1854, she gave birth to her third child; it was dead, and she fancied she had not gone more than six months and a half with it. In the November of the same year, she aborted at the third month. In August 1855, she had a child born dead at the sixth month; and in October 1856, she was delivered at the eighth month of pregnancy of another dead child.

In March 1858, she first became a patient of Dr. Tanner, and was then put upon a course of bichloride of mercury for three months. On September the 24th last, she was delivered of a seemingly healthy live child. The labour took place some three weeks before its proper time. The infant only remained well about a fortnight, when it manifested all the symptoms due to constitutional syphilis. The treatment consisted in the inunction of mercurial ointment, no medicine of any kind being given by the mouth. In a month the child was apparently well in every respect, so that all medical treatment was discontinued; but a fortnight afterwards it died suddenly. At the *post mortem* examination every organ was found healthy, the brain, lungs, thymus gland, heart, etc., all presenting a perfectly natural appearance. The only change was in the blood, which seemed to be more watery than it ought to be.

The paper concluded with some remarks upon constitutional syphilis in infants, and with the recital of a case partly resembling the foregoing, recorded by old Richard Wiseman, Sergeant-Chyrurgeon to Charles the Second.

INVAGINATION OF THE INTESTINE, IN A CHILD AGED TWENTY MONTHS, SUCCESSFULLY TREATED.

BY T. BALLARD, ESQ.

The child became affected with invagination of the intestine, in consequence, as the author believed, of "fruitless sucking." The facts in support of the theory of fruitless sucking being a cause of this and other disorders of infancy, he had already brought before the profession. In the instance now adduced the child was cured, the sucking having been discontinued, and certain remedies administered.

ON THE MORE FREQUENT USE OF THE FORCEPS AS A MEANS OF LESSENING BOTH MATERNAL AND FŒTAL MORTALITY.

BY PHILIP H. HARPER, F.R.C.S.

The author first examined the question,—What are the ill

effects, either to the mother or child, produced by the forceps?—and endeavoured to show that not one of those usually ascribed to them could properly be attributed to use of the instrument itself; but only to its abuse. It appeared, from various authorities, that the causes of maternal death after their use, were the same as after unassisted tedious labour, and, therefore, that their origin must be sought in the delay, rather than in the use of the instrument; especially so long as it was only applied in the extreme cases of tedious labour. The causes of the large fœtal mortality were likewise to be found in the long continued and violent efforts made by the uterus on the child previously to its application, and which are more fatal than the compression of the instrument in the proper direction. The cases of unassisted, tedious labour, reported by Johnston and Sinclair, pointed to the fact that mere duration alone, without any abnormal circumstance, was a main element in rendering labour dangerous. Both the maternal and the fœtal mortality in their cases was greater in tedious labour than in their forceps cases. The maternal mortality in their craniotomy cases was greater than in either. Having spoken of the general powers of the instruments as extracters and rectifiers, Mr. Harper examined them as compressors, in order to discover how much compression might safely be exercised upon the fœtal head. He mentioned some experiments of his own upon children still-born after footling, and other such cases, where he applied forceps immediately after birth, and fastening the handles together with India-rubber springs, had left them on for a time, with the effect of much altering the form of the head, and diminishing its diameter, without any apparent injury to the brain. These cases, of course, only bore slightly upon the question of compression previously to the child's death. The brain must be pressed in a direction parallel with the base of its anterior lobes, to produce the dangerous effects spoken of by Radford and others. In practice this was not really so easy as it was to apply the forceps so as to exert pressure upon the prominent parts of the frontal bone anteriorly, and the junction between the middle and lower thirds of the occipital bone posteriorly. When they were applied thus, and compression gradually exerted, the posterior mass of brain was lifted into the hollow of the forceps, whilst the anterior lobes were depressed: this movement being similar to the one adopted by nature in moulding the head into the long oval shape. The author then spoke of the various states which may call for the use of the forceps, dwelling more particularly upon those dependent upon some such peculiarity existing in the uterus itself, such as rheumatism, spasm, irregular action of its fibres, irritability and debility, and which were very frequent causes of lingering and tedious labour. The period of the labour at which they should be applied was a very important question. It was not enough to show a small maternal mortality, but we must also have a small fœtal mortality. The second stage of labour ought to be steadily progressive, and if such be not the case we ought to interfere. The element of time ought not to be considered. Careful study of the positions assumed by the child's head, whilst passing through the pelvis, and not subjected to forcing pains without progressing, showed that the earlier the forceps were applied, the more favourable was the position in which they compressed the head. The mother was unexhausted, flooding was avoided, the soft parts were uninjured, and the child was alive. In examining the various states in which their early use is advisable, the author dwelt especially upon inertia and sluggishness of the uterus. To rouse an overworked and overtasked organ to fresh exertion was a very questionable proceeding. He brought forward statistics to show that ergot exerted a most deleterious action upon the fœtus. He had long ceased giving it under any circumstances previous to the birth of the child, but always used the short forceps instead, and with very great advantage, both to mother and child. In cases of disproportion, which for any reason did not admit of turning, the forceps should be applied early, especially as there was nothing more dangerous than the head being impacted in any one position. In bringing forward various statistical tables to prove the proposition, that "the earlier and more frequently the forceps are applied in proper cases, the more maternal and fœtal lives are saved," he separated all arm, breech, footling, and placental presentations, together with their maternal and fœtal mortality. It was necessary, also, to separate puerperal fever cases and those in which death arose from other labour causes, or from constitutional causes coincident with the occurrence of labour. The necessity for thus dealing with the statistics, in order to arrive at a just conclusion, prevented his using all the obstetric histories which had been published, as they did not all contain these data. He examined Collins, Hardy, and M'Clintock, Johnston and Sinclair, and his own statistics, and from them considered the proposition confirmed and proved.

Mr. Harper, in answer to questions from Dr. Barnes and Dr. Druitt, stated that in his private cases there had been no maternal mortality; there was a mortality, from all causes, of one in five hundred. The class of cases was mixed; four thousand and upwards were in a mining district.

Dr. Tyler Smith thought the facts related by the author were peculiar. Six thousand cases was a large number for one man to have attended, amounting to three hundred per annum for twenty years. The results were gratifying in an extraordinary degree. There were three hundred forceps cases, and only two deaths. Usually, the deaths were one in twenty. In Johnston and Sinclair's recent work, with the worst cases eliminated, the mortality was one in twenty. In Mr. Harper's cases it was stated to have been one in two hundred and fifty; and he appeared to have used the forceps with extraordinary frequency—once in twenty-six cases. Believing that the forceps might be much used, he yet considered this proportion far too frequent. There was an advantage in the statistics from public institutions, that they were perfectly reliable and open to investigation. He would certainly like to have some guarantees of the practice detailed in the paper. The consultation practice detailed was large.

Dr. Murphy was old-fashioned, and sufficiently "parrot-like" to repeat the adage that a "meddlesome midwifery is bad." The forceps had been used by the author of the paper to an unwarrantable extent. He remarked on the absence in the paper of details as to the causes producing the prolonged labour. False figures were infinitely worse than false facts. He would ask, had the Fellows met with the high mortality from tedious labours, in their everyday practice, which was laid down by the author? In face-presentation the forceps was not necessary. Nature required time, and time should be given her. He believed that more lacerations were caused by the forceps than in any other way.

Dr. Barnes observed that in the Royal Maternity Charity, the statistics of which he would adduce, the mortality was very low. In ten thousand cases the mortality was one in four hundred, or one in five hundred, rarely over one in four hundred. In that charity the kind of practice detailed by Dr. Murphy was faithfully carried out. Nature was allowed to act, and the forceps was rarely used. He thought that, to serve a useful purpose, the author should have divided his facts into two kinds,—those in which he did not, and those in which he did, use the forceps extensively. Disposed to go as far as anyone in reason, he still thought the use of the forceps once in twenty-six cases was far too frequent.

Dr. Granville had formerly much experience, and in many thousand cases directly or indirectly under his control he believed the forceps had been used only fifty times. He was astonished, both at the number of cases, and at the number of applications of the forceps.

Mr. Harper, in reply, stated that many questions put by Fellows would have been unnecesssary had there been time to read all parts of the paper *in extenso*. With reference to the facts upon which comment had been made, he could only say that they were as stated. He had practised until lately in a large mining district, where it was not at all unusual for one medical man to put five hundred women to bed in one year.

Editor's Letter Box.

THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

Sir,—Is there any reason why the diplomas in medicine granted *in absentiâ* by sundry German universities, as Jena, Erlangen, etc., for a pecuniary consideration, accompanied by a certificate or two from some medical practitioners, should be rigorously excluded from registration as legal qualifications, while the license of the College of Physicians of Edinburgh, obtained in precisely the same way, and equally honourable or dishonourable to the holder, is held valid? In neither case is a previous examination or diploma in *medicine* required: a diploma in *surgery only* satisfies the Scotch physicians; and even this restriction was forced on them, or fifteen years unlicensed practice would have been sufficient. The certificate of *one* hospital physician is the only testimonial required by

them; and a statement by the candidate himself (uncorroborated) of preliminary and professional education; the space allowed in the schedule of queries sent by the College for the description of professional education being just five inches by two. Why, I ask, should the Medical Act shut up the German "Refuge for the Destitute", merely to encourage the Scotch?

Against the permanent regulations of the Edinburgh College of Physicians little objection can be urged, although it may be doubted if any addition to the number of licensing bodies be desirable. The temporary rules of the College are, however, very different: they are obviously intended to offer a cheap and easy (not to say dirty) protection to the numerous persons practising both medicine and surgery in England, but holding diplomas in surgery only, and who have either failed in passing an examination in medicine, or, for substantial reasons, decline making the attempt. It was not until the passing of the Medical Act made the license of the College available throughout Great Britain, that the Edinburgh Physicians offered their diploma without examination. The blind put forward is an implied intention of raising the *status* of the general practitioner, as if the license of the College were only intended as an honorary distinction, and granted to persons already legally entitled to practise medicine. This, unfortunately, it is not. Appended to the advertised regulations of the College is the following note:—"N.B. Under the *Medical Act*, Licentiates of the College of Physicians can claim to be entered in the Register, and can practise medicine in any part of Her Majesty's dominions," etc.

There is a remedy provided by the Act itself, in Sections xx and xxi, which authorise the General Council, in case it appear to it that the course of study and the examinations to be gone through, in order to obtain a qualification from any College or body, are not such as to secure the possession of the requisite knowledge and skill, to represent the same to the Privy Council, who may, if they see fit, order that the qualification granted by such body or College shall no longer confer a right to be registered under the Act.

As the British Medical Association was so instrumental in obtaining the passing of the Medical Act, with the hope of thereby regulating and elevating the profession, it will also, I trust, aid in preventing the same Act being abused by the greediness of a corporation, to the degradation of the profession. I would therefore suggest that, at the coming Annual Meeting of the Association at Liverpool in July, memorials to the General Council of Medical Education and Registration, and to Her Majesty's Privy Council, be adopted, requesting them to exercise the power vested in them, by refusing the right of registration as practitioners of medicine to all persons whose only title thereto is the license granted by the College of Physicians of Edinburgh without previous examination.

I am, etc., S. D.,
Licentiate in Medicine and Surgery.

June 14th, 1859.

PUBLIC VACCINATORS AND PUBLIC VACCINATION.

Sir,—In March last a circular was issued by the Poor-law Board, headed, "Instructions for Vaccinators;" in which certain rules were laid down to guide us in the operation. But some medical men, when they got them, did not feel quite so grateful as they might have done. At least, old hands like myself, who had been vaccinating for years past, thought it almost superfluous to be reminded *how to suck duck-eggs.* I write thus bluntly, because I thought then, and I think now, that it would be much more to the purpose if government and the Poor-law Board would awake to the fact that the "Compulsory Vaccination Act" is, to all intents and purposes, an immense sham. I do not deny that certain individuals have been fined for non-compliance with the Act, but such instances are rare; and, though it is *everybody's* business to see that the Vaccination Act is complied with, that monster does not appear to have delegated his duties to anyone in particular.

When I first began practice, I commenced a crusade against the non-vaccinated; but older heads than mine rested on shoulders that shrugged themselves at such mistaken zeal. "*Cui bono?*" was the cry of brother practitioners, coupled with the warning, "Never come the *compulsory* in practice." Reflection on the point showed me that the worldly-wise men were quite right; for, if the laws themselves concerning public health are slovenly and inefficient, private individuals cannot be expected to be martyrs for the national benefit. Nevertheless, like Walter Scott's old covenanter, I will "take up my testimony" against the absurdity of the present system. System! how can it be called a system? Why the very registrar in my parish has ceased to issue the papers to parents reminding them that it is their duty to have the child vaccinated; and though I have remonstrated on this laxity in writing, I do not think much benefit will accrue from it. The conviction is strong in my mind that till small-pox comes down upon England like "a wolf on the fold," the compulsory Vaccination Act, in its entirety, will never be carried out. Practically, at the present time, from the want of any one to wield the weapon, it is not worth a rush.

And yet how simple is the remedy for this! Why not invent such an individual (or set of individuals) as a Vaccination Inspector; dress him, not in "a little brief," but in permanent authority, and let it be his business from time to time to ascertain, in various unions, the births, deaths, and numbers vaccinated; the individuals who refuse to have their offspring protected *à la Jenner*, and so that the extent of the present evil may be defined and a cure may be applied. Mark my words: if no governmental inspection is ever instituted, the time will come in many rural districts when vaccination will degenerate into desuetude. It is not worth the parish surgeon's while to ride—

"O'er hill and dale, o'er moss and moor,"

to have a two-handed clack with some ignorant woman, and endeavour to talk down all her anti-vaccination nonsense. So, case by case, and child after child, will be, as they are, passed over; hereafter, perhaps, with some sort of retributive justice, to set up small-pox and send it home with Mr. Redtape's linen.

I am, etc.,
A Public Vaccinator with his hands tied.

June 14th, 1859.

P.S.—This very day I have been into one house with six children. Not one of them is vaccinated, nor likely to be. This is a specimen of numerous families round. I attend the mother in her confinements, and unless I lay an information before a magistrate and offend my patient, who will put in force the Compulsory Vaccination Act? I should like to know what other public vaccinators have to say on this subject.

TREATMENT OF WOUNDS OF THE PALMAR ARCH BY FLEXION OF THE ELBOW.

Letter from J. Toogood, M.D.

Sir,—In a conversation with the late Mr. Guthrie, some years since, on the best mode of treating wounds of the palmar arch, he agreed in opinion with me that injuries of this kind were often serious and perplexing, and that surgeons differed much in their practice; some advocating the tying the divided vessels in the palm, whilst others preferred placing a ligature on the radial, or ulnar, or the brachial artery. He admitted that cases had occurred in which all these modes had failed, and amputation had been resorted to.

In the British Medical Journal of May 14th and 28th, a Case of Wound of the Superficial Palmar Arch is related as having occurred in the practice of Mr. H. C. Johnson, in which ligatures were placed on the radial and brachial arteries unsuccessfully, and the arm was amputated: the case terminated fatally. I asked Mr. Guthrie to try the effect of bending the elbow to an acute angle, so that the fingers may rest on the point of the shoulder, keeping his other hand steadily on the pulse on his own person. He was much struck to find the current of blood so easily and effectually controlled by this simple process, and asked me where I got the "wrinkle". I referred him to my *Reminiscences of a Medical Life*, in which some cases are related. The plan proposed by M. Darwell, of forcible flexion, will, I think, be found generally successful, particularly if adopted as early as possible after the receipt of the injury. The principle he lays down is, "that in most arterial lesions of the forearm, forcible flexion supersedes the ligatures of the vessels".

I have seen this practice successful in a wound of the forearm accompanied with profuse and repeated hæmorrhages, the source of which was rendered uncertain from the swollen and altered state of the limb, but which was supposed to be from the interosseous artery. I suggested to Mr. Guthrie (as I often have since to medical friends) that the same practice may probably be adopted in some wounds of the lower extremities, and in some cases of popliteal aneurism; and, on making the experiment, he expressed his surprise at the ease with which the current of blood could be regulated.

I am glad to see in the Journal two cases recorded in which the practice of flexion of the knee-joint was most successful in cases of popliteal aneurism. I am, etc.,

Jonathan Toogood.

Torquay, June 6th, 1859.

DOCTORS IN THE MARKET PLACE.

Sir,—"Let us not shout until we are out of the wood!" The proverb is a good one, and your leader in this day's Journal has reminded me of it. My good sir, you are mistaken. Jack-puddings do still "plant their booths in the market-place"; aye, literally so. "The day has" *not* "gone by for this method of doing business." Read the following two advertisements, which I have clipped out of the column containing the "business announcements" in a recent number of the *Stamford Mercury*, a local newspaper in extensive circulation in these "diggings".

A CARD.

MR. THURLOW, Surgeon, &c., attends Alford Market every Tuesday, from 12 till 3.

☞ Stall in the Market-place, opposite the Windmill Inn.—Anatomical Diagrams, &c.

A CARD.

MR. JOHNSON, Surgeon, Hogsthorpe, attends Alford Market every Tuesday, from 12 till 3.

☞ Rooms at Mr. Goodhand's, shoemaker, opposite the George Inn.

The gentleman whose advertisement stands second—himself doubtless, in his own estimation, *nulli secundus*—and who has succeeded in what would seem to be a very perfect imitation of the "card" of his competitor, the proprietor of the "stall in the Market place", and of the "anatomical diagrams, etc.,"—is, I believe, *proh pudor!* a Member of the Royal College of Surgeons, and professes to be "a rigid observer of professional etiquette"!! At any rate, he figures on certain handbills as "Joseph Johnson, Esq., M.R.C.S.Eng."

I fancy the other gentleman's only qualification is a loud voice and a good deal of *cheek*.

The manager of the advertisement department of the *Stamford Mercury* must have had mischief in his eye when he placed the "business announcements" of these *Arcades ambo* in such close proximity. He saw, probably, that they were at least *cantare pares!* I am, etc., W. U. R.

From the Marshes of East Lincolnshire, June 18th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Browne. On June 20th, at 10, Bethell Place, Camberwell, the wife of Charles F. Browne, Esq., Surgeon, of a daughter.

Collum. On June 15th, at 1, Chester Place, Hyde Park Square, the wife of Robert Collum, M.D., of a daughter.

Dalby. On June 9th, at Glen Friars, Jedburgh, the wife of W. B. Dalby, M.D., of a son.

Gardner. On June 12th, at Westbourne Terrace Villa, Upper Westbourne Terrace, the wife of Harry Gardner, M.D., of a son.

Gillett. On May 27th, at Brooke, Norfolk, the wife of *George Gillett, Esq., Surgeon, of a daughter.

Mould. On June 15th, at 1, Onslow Crescent, the wife of *John T. Mould, Esq., Surgeon, of a daughter.

MARRIAGES.

Currey—Heygate. Currey, B. Scott, Esq., to Helen, eldest daughter of *James Heygate, M.D., F.R.S., of Derby, on June 16th.

Elwin—Noble. Elwin, Charles J., Esq., Surgeon, of Broad Street Buildings, City, to Laura, youngest daughter of George Noble, Esq., of Surbiton, Surrey, on June 16th.

Lamburne—Bargrove. Lamburne, Edward, Esq., Surgeon, to Margaret, only daughter of the late William Bargrove, Esq., of Dundall Farm, Kent, at Trinity Church, Southwark, on June 14th.

Laver—Johnson. Laver, Henry, Esq., Surgeon, of Colchester, to Louisa, eldest daughter of Walter Johnson, Esq., of Colchester, on June 15th.

Smith—Ross. Smith, Alexander, Esq., Surgeon H.E.I.C.S., to Frances Louisa, widow of the late Rev. W. H. Ross, chaplain in the same service, at St. Pancras Church, on June 11th.

Sopp—Bush. Sopp, George, Esq., of Ivy Church, Wilts, to Amelia, daughter of the late Charles Bush, Esq., Surgeon, at Writtle, on June 21st.

Thurgar—Willins. Thurgar, W. C., Esq., Surgeon, to Caroline Eliza, youngest daughter of the late Henry J. Willins, Esq., 30th Regiment Madras Native Infantry, at Heigham Church, Norwich, on June 21st

DEATHS.

Arnould, Joseph, M.D., aged 72, at Whitecross, Wallingford, Berks, on June 15th.

Baylis, John H., M.D., at 30, Princes Road, Kennington, aged 49, on June 15th.

Fox. On June 12th, at 10, Berkeley Square, Bristol, aged 6 months, Edward Long, infant son of *Edward Long Fox, M.D.

Heale. On June 17th, at Brighton, Henry Newton, second son of James Newton Heale, M.D., of Winchester.

Noyes. On June 15th, at Lee, Kent, aged 3 months, the infant son of H. G. Noyes, M.D.

Stewart, David, Esq., Surgeon H.M. 92nd Highlanders, at Bombay, aged 43, on May 10th.

Thompson. On June 11th, at 42, Sussex Gardens, Hyde Park, Charles Thomason, only son of Charles T. Thompson, M.D., aged 2 years.

Wallace, Richard, Esq., Surgeon, at 1, Trafalgar Place West, Hackney Road, aged 57, on June 11th.

Williams, St. George, M.D., Assistant-Surgeon Madras Army, at Kurnool, of cholera, aged 35, on May 2nd.

APPOINTMENTS.

Guy, William A., M.B., Physician to King's College Hospital, appointed Medical Superintendent of Millbank Penitentiary, in the room of William Baly, M.D., F.R.S., resigned.

Savory, William S., M.B., elected Lecturer on General Anatomy and Physiology in St. Bartholomew's Hospital, in the room of James Paget, Esq., F.R.S., resigned.

*White, Joseph, Esq., was unanimously elected one of the Surgeons to the Nottingham General Hospital, at a Special General Board of Governors, held on June 22nd.

PASS LISTS.

Apothecaries' Hall. Members admitted on Thursday, June 9th, 1859 :—

Bruce, Robert, Hamilton, Lanarkshire
Bronner, Edward, Bradford, Yorkshire
Cookson, John Fowler, Preston, Lancashire
Croome, William, Barnsbury Park, Islington
Fry, John William, Maidstone
Nicholls, Lucius, Eton, Bucks
Rickards, Richard, Clifton, Bristol
Sass, Edwin Etty, Henrietta Street, Brunswick Square
Thompson, Alfred Boyle, Coleraine, Ireland

The following gentlemen also, on the same day, passed their first examination :—

Roberts, John, Carnarvon
Franks, John, Sevenoaks, Kent
Moore, Thomas, Hales Owen, Worcestershire

Thursday, June 16th :—

Barter, Clement Smith, Bath
Candy, John, Bombay
Lawrance, Frederick, Bleadon, Somersetshire
Taylor, Charles, Worcester
Wilkinson, John, Salford

The following gentlemen also, on the same day, passed their first examination :—

Edger, William, Barnstaple
Baines, Charles William, Bradford-on-Avon

University of Cambridge. Degrees conferred on Saturday, June 18th:—

Doctor of Medicine.

Humphry, George Murray, Downing College
Martin, Robert, Caius College

Bachelor of Medicine.

Carver, Edmund, St. John's College
Dickinson, W. H., Caius College
Liveing, Edward, Caius College

HEALTH OF LONDON:—WEEK ENDING JUNE 18th, 1859.

[*From the Registrar-General's Report.*]

The deaths in London, which have shown a continual decrease during the last seven weeks, declined to 913 in the week that ended last Saturday. In the ten years, 1849-58, the average number of deaths in the weeks corresponding with last week was 973; but, as the deaths returned for last week occurred in an increased population, they can only be compared with the average raised in proportion to the increase, namely, with 1,070. The fact that the deaths of last week were less by 157 than the number that would have occurred if the average rate of mortality had prevailed, is a proof of a comparatively satisfactory state of the public health.

Diarrhœa exhibits an increase; the deaths from this complaint, which were six in each of the two previous weeks, having been twenty last week. Besides these, two deaths from cholera are returned as follows:—"On June 13th, at Weitzell Cottage, Kensall Road, Chelsea, a boy, aged five months, choleraic diarrhœa (three days);" and "On June 15th, at 47, Wells Street, Marylebone, a dealer in fried fish, aged 39 years, choleraic diarrhœa (four days)." Small-pox was fatal in 14 cases, scarlatina in 43, and diphtheria in 13. In addition to the three cases mentioned in the last report as having been fatal in the same house, a fourth child is returned as having died last week, at 46, William Street, Kensington, from scarlatina and diphtheria; all the deaths in this family have occurred within ten days. Four children and two adults died last week from syphilitic disease; three persons from intemperance, besides four who are returned as having died from delirium tremens; four infants from cyanosis; two deaths were by murder; seven by suicide.

Last week the births of 852 boys, and 841 girls, in all, 1,693 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1,470.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·812 in. The barometer rose from 29·55 in. on Sunday, to 30·01 in. on Saturday, being respectively the lowest and highest readings in the week. The mean temperature of the week was 59·7°, which is 0·7° above the average of the same week in 43 years (as determined by Mr. Glaisher). The thermometer in the shade reached its *highest* point on Monday, when it was 77°, and fell to its *lowest* point, 47°, on Friday. The extreme range of the week was therefore 30°; the mean daily range was 21·5°. The range on Sunday was 11·5; that on Saturday was 27·3°. The difference between the mean dew-point temperature and air temperature, was 8·4°. The mean degree of humidity of the air was 73; on three days it was only 65. The mean temperature of the water of the Thames was 65·8°. The wind blew most frequently from the north-west. The rain-fall of the week was 0·23 in., all of which occurred on Sunday. On this day there was a thunder storm in the afternoon: and at Lewisham, rain fell to the depth of more than half an inch.

THE MEDICAL PROFESSION IN ITS RELATIONS WITH THE PUBLIC.

The *Morning Post* of Monday, June 20th, contains the following remarks:—

"The ethical relations which ought to subsist between society and the medical profession; or, in other words, the duties and rights of each to the other and to themselves, is a subject which has hitherto received a very inadequate amount of public discussion, although it is frequently thrust into public notice by scandalous disclosures. Within the medical profession, we admit, its right understanding has, of late, been considerably promoted by the formation of district ethical associations. With the general public, the question has hardly made any progress. This is explained by the fact that fundamental principles have been less treated of than the details of etiquette which have been deduced from them, and by the social bearings of offences against professional propriety having been seldom intelligently discussed by the press, except within the narrow limits of medical journalism. Such offences, probably in all, certainly in most, cases, are crimes against society, so that it is a great error to confine debate regarding their causes and remedy to a single section of the community.

"The success of the swindling tricks of irregular practitioners is so manifestly the result of popular ignorance in its grosser forms, that we need not, for the present, say more regarding this description of impudent imposture, than this—that the only hope of preventing it lies in diffusing accurate knowledge regarding the structure and functions of the human frame, and the general laws which regulate health and disease. There are, however, offences besides those of cheating by false pretensions to possess power over disease. Have not cases recently occurred in which legally qualified medical men have been both truly and falsely accused of prostituting their professional status and knowledge to the foulest purposes?

"In very recent times, members of the medical profession have been arraigned for abetting and perpetrating, under the cloak of proper service, such crimes as murder by poison, fœticide, seduction, indecent assault, and tampering with the weak in regard to the disposition of property. Such offences by medical men are not common, but they occur with sufficient frequency to admit of being so analysed as to afford a clue to the means which ought to be taken for their prevention. Speaking generally, the medical men who have been convicted of perpetrating crimes against society by the aid of their profession, have been essentially defective in general education, and notoriously lax in their professional ethics. As only a limited portion of the public can apply these tests to the practitioners who swarm in every neighbourhood, it clearly follows that good would result from diminishing as much as possible the number of youths who begin the study and practice of medicine without an adequate educational basis. It would also be wise to endeavour to establish a few medico-ethical rules, acceptable to, and comprehensible by, all intelligent persons, lay as well as professional.

"The Medical Council will, it is expected, be able for the future, to prevent the various competing boards from receiving candidates till they have given satisfactory evidence of a sound general education. The institution of the preliminary educational test will debar many improper persons from access to the official medical register, the first edition of which, we are glad to observe, is announced for publication on July 1st. There is, therefore, every reason to believe that within a few years it will be impossible for illiterate adventurers, by the aid of coaching and cramming, to enter at a bound the lists of legal practitioners. Of course the public will be allowed, as at present, to entrust their health and lives to quacks of every species; but it will no longer be possible for quacks to pass themselves off as regularly educated. This fraud has hitherto been exceedingly common. The general recognition of a medico-ethical code by doctors and patients would, in conjunction with the new register, accomplish all that can be hoped for. The violators of the code would soon become known, and be trusted or distrusted, according to the taste of individuals for the regular or the irregular practitioner. It would be intolerant and absurd to interfere with the homœopathic, mesmeric, or other private enterprises opposed to the ordinary or eclectic medical practice. All that can be legitimately asked by the public from the professors of rival medical systems is that they should openly and always fly their real colours.

"Touching the difficulty of giving any guarantee of the general respectability, as well as of the professional status of practitioners, a writer in the British Medical Journal of Saturday, makes some reasonable remarks. He suggests that facilities should be afforded to all respectable doctors of medicine and surgeons, on attaining the age of twenty-eight or thirty, to become incorporated members of the Colleges of Physicians and of Surgeons. Before attaining that age a practitioner has generally shown whether he is worthy or unworthy of the confidence of his professional brethren, and, therefore, *pro tanto*, admission at that age into one of the corporations might fairly be regarded as a certificate of general good conduct, provided the only obstacle was a questionable or bad character. If certain colleges renounced their exclusiveness, and others their laxity, and admitted to corporate privileges, on easy pecuniary terms, all reputable practitioners of mature age, the medical register would be, on a large scale, a list of certificates of professional respectability, as well as of legal qualifications. The change

of policy now advocated would require to be cautiously inaugurated; but its successful accomplishment seems to offer so many benefits that we trust the difficulties with which it is surrounded may not deter reformers within the corporations from attempting it. The manner in which the Edinburgh College of Physicians has lately opened it portals, has undoubtedly produced no public benefits, and much confusion. The writer already quoted admits this. He says:—'It is an ugly fact that the Edinburgh College is at present drawing its recruits almost exclusively from practitioners living in England, and not known in Edinburgh for good or for evil.' Dr. Godfrey, who, according to his own account of himself, practises as a physician in one metropolitan locality, and vends drugs in another, is a recently elected Fellow of the Edinburgh College. This circumstance we do not mention to his disparagement, but to show that the Edinburgh College, when they elected him to a Fellowship, can have known very little about him; because all colleges of physicians profess to exclude practising apothecaries. We do not wish to believe all that has been alleged against Dr. Godfrey, at the two trials recently reported in our columns; but, even if we dismiss accusations of doubtful validity, he is convicted, on his own confession, of improprieties which, if reconcilable with the status of a fellow of a college of physicians, reduce the dignity of that status below zero. The question for the public is this—Cannot all the Medical Colleges be induced to co-operate for the purpose of making their fellowships tests of professional approbation? It is only when such titles are so regarded that they possess the slightest value.

"The contemplation of exceptional cases of delinquency on the part of individuals, must not, however, lead us to forget that probity, delicacy, and self-sacrifice, preeminently characterises the British medical profession in its every grade. It cannot be for lucre only that the Gideon Grays toil and die. Mungo Park, alluding to the hardships of the life of a country surgeon, exclaimed, 'I would rather go back to Africa than practise again at Peebles.' The high tone and self-sacrifice of the medical profession is nobly sustained by the lofty ethical spirit which pervades the teachers in our leading medical schools. There the students are frankly told that the ways of the tactician and the charlatan often lead to affluence, while not unfrequently the sole reward of patiently studying disease is an approving conscience. The result is apparent. Thousands practise the profession of medicine, not merely for a livelihood; but likewise as a means of doing good, fully recognising that the temporal life of an immortal being is a solemn trust, for which an account must one day be rendered."

TESTIMONIAL TO ARCHIBALD ROBERTSON, M.D., F.R.S.

Above one hundred members of the medical profession, in Northampton and the neighbourhood, have recently presented a testimonial of their respect and esteem to Dr. Archibald Robertson, Physician-Extraordinary to the Northampton Infirmary, and one of the Vice-Presidents of the British Medical Association. The testimonial consisted of a silver urn, accompanied by an ornamented volume containing the names of the donors, and by the following address:—

"*To* Archibald Robertson, M.D., F.R.S., *Northampton.*

"Sir,—At a meeting of the South Midland Branch of the British Medical Association, held at Wellingborough, on September 30th, 1858, it was proposed and carried by acclamation, that a testimonial of professional regard should be presented to you, limiting the subscription of each medical man to one guinea; and the result has been that we are enabled to offer for your acceptance the accompanying piece of plate.

"You will not, sir, consider this small tribute of our affection with reference to its money value, for if you did so, it would be an unworthy gift; but you will consider it as one of those spontaneous offerings of the heart which impress upon it an intrinsic value exceeding gold and silver. It is presented nearly by one hundred and twenty of your professional brethren, who have long known your worth, who appreciate your talents, and value you for the possession of qualities as rare as they are excellent.

"No one amongst us but has personally experienced your kindness, partaken of your hospitality, enjoyed that gentleness and urbanity of manner which is your peculiar characteristic, and been enlightened by your wisdom and judgment in the trying moment of professional difficulty.

"Upwards of thirty years intimacy with an individual necessarily developes his character; but many of us can speak of you for a much longer period. We assume, then, that we understand the nature of the spirit within you, and that this little gift will be fairer and brighter in your eyes than one of infinitely more value presented under other feelings, however excellent those feelings might be. Ours is a token of love, not induced by any of those extraordinary acts performed, or assumed to have been performed, which renders this an age of testimonials, but excited by the kindly exercise of noble qualities which have ever graced, and we believe always will grace, your character.

"The widow's mite was acceptable in the sight of God because the heart accompanied the gift; so will our gift be acceptable to you, as so many have combined their best feelings to present it.

"May you, our esteemed and valued friend, long live in the quietness of your retirement, blessed with such a measure of health and happiness as will render your latter days calm and peaceful. May those who are near and dear to you be preserved to exercise their love and tenderness, and be to you a solace and a joy, and may God's Holy Spirit animate and console you, so that when it pleases Him to remove you from your temporal home, He may transfer you to that 'rest which is prepared for the people of God', and to that mansion 'not made with hands, eternal in the heavens'."

To this, Dr. Robertson has returned the following reply:—

"Gentlemen,—No language of mine would be adequate to express the depth and fervour of the gratitude I feel for your unexpected, and, I may add, undeserved kindness. My intercourse with all and each of you, for a series of years, has stamped upon my heart and memory many pleasing recollections, which will end only with my life.

"Your munificent gift of the silver urn and ornamental volume of names, will hand down to those that come after me the high distinction that has been conferred upon me—a distinction which will be prized amongst their proudest recollections.

"Believe me to be, gentlemen,

"Your ever obliged and faithful servant,

"Archibald Robertson.

"Northampton, May 31st, 1859."

TO CORRESPONDENTS.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Dr. Thomas Sandwith; Mr. G. M. Humphry; Dr. Lionel Beale; Dr. T. Inman; Mr. L. Lodge; Mr. G. May; Mr. Alfred Higgs; Mr. William Gorman; Dr. P. H. Williams; Dr. E. L. Ormerod; Mr. T. Holmes; Dr. J. Heygate; Mr. Joseph White; Dr. T. Skinner; Dr. J. Watson; Mr. Oliver Pemberton; Dr. Hyde Salter; and Mr. T. M. Stone.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. A Treatise on Vital Causes. By James Newton Heale, M.D. London: John Churchill. 1859.
2. On Hallucinations: a History and Explanation of Apparitions, Visions, Dreams, Ecstasy, Magnetism, and Somnambulism. By A. Brierre de Boismont, M.D. Translated from the French by Robert T. Hulme, F.L.S. London: Henry Renshaw. 1859.
3. Lectures on Pathological Anatomy, delivered at Guy's Hospital during the Summer Sessions of 1857 and 1858. By Samuel Wilks, M.D.Lond. London: Longman & Co. 1859.
4. On the Treatment of Internal Aneurism by the Method of Valsalva: being a Paper read before the Surgical Society of Ireland. By T. Brady, M.B., T.C.D. Dublin: Fannin & Co. 1859.

BRITISH MEDICAL JOURNAL:

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

TEALE'S AMPUTATION AFTER RESECTION OF THE ANKLE.

Under the care of W. BOWMAN, Esq.

HENRY H., aged 26, was admitted on March 21st, under Mr. Bowman's care. He had had the ankle-joint excised by Mr. Statham. He had been previously in this hospital, and had obtained benefit so far that there remained only one small sore above the outer malleolus, from which a slight discharge proceeded; and he had very little pain in the foot when at rest. Still he could not bear to put the foot to the ground, on account of the pain which was thus occasioned; and he was anxious to be rid of the annoyance of a useless and painful member.

Accordingly, on March 26th, Mr. Bowman proceeded to operate, after the method recommended by Mr. Teale, at the junction of the lower and middle thirds of the leg. The lines of incision were previously marked in ink, and the operation performed in other respects as nearly as possible after Mr. Teale's description. In completing the dissection for the anterior flap, a small branch of the anterior tibial was divided so close to the main artery that it became necessary to divide and tie that vessel just as it entered the flap. No other material difficulty was experienced during the operation. Metallic sutures were used, and no dressing whatever was employed. On opening the joint, it appeared that the whole astragalus had been removed, and the ends of the bones of the leg sawn flat; and that the bones of the foot were united to those of the leg by a thick fibrous tissue of some length (more than half an inch). This tissue appeared to have been firmly inserted into the bones above and below, but had been cut across before we had an opportunity of inspecting the specimen. The bones were set aside for maceration and preservation in the museum.

The stump went on well for the first four days, but was then attacked with erysipelas; and its outer angle sloughed at the reflexion of the anterior flap. This was followed by rather profuse discharge, and the stump remained irritable for some time. He was also in very weak health, suffering from want of appetite, nausea, etc.; so that his recovery was tedious. Still the sutures were allowed to remain in for about a fortnight, without producing any irritation; and when the stump healed, it was found that so large a pad of soft tissue was left over the end of the bone, that it formed a projecting mass two inches in length, on which the muscles could be seen acting so as to move it upon the end of the tibia.

He got up on May 3rd, and soon afterwards left the hospital convalescent.

REMARKS. Excisions of the ankle-joint have not been very frequently practised; and the result, as far as we know, is hardly favourable enough to recommend the operation, except in some rare cases. The late Mr. Statham, whose zealous advocacy of the operation of resection was well known, and who had been a pupil of the German surgeons in the Schleswig Holstein campaign, where so many and such successful operations of this kind were performed in gun-shot injuries,—has published, in the appendix to his translation of the treatises of Stromeyer and Esmarch on this subject, the cases in which he had had the opportunity of excising joints—few in number, since the early failure of his health obliged him soon to relinquish the toil of London practice. Three of these are excisions of the astragalus, or of that bone with the others forming the ankle-joint; the last of which is supposed to be that of the patient whose case we have given above, although there seems some error as to the age. In the case referred to (*op. cit.*, p. 118), it seems that two operations were performed, the former involving the removal of the astragalus only, while in the second the malleoli were taken away, and the end of the tibia was gouged. Mr. Statham says: "I had wished to remove about an inch from the bones of the leg at the time of the last operation, but was otherwise advised. Of the ultimate recovery I do not doubt; and the present state of his joint appears as if no further operation would be required." Later on, however, he refers to the case as one which remained "in a doubtful condition merely because an insufficient quantity of bone was removed". It is possible, therefore, that this was one of the many cases of chronic disease of the joints in which excision fails because it is not carried far enough. With this doubt about the case, no very definite argument for or against the operation itself can be deduced from it, unless as showing the difficulty of the diagnosis in these diseases. With reference to the case when it was in King's College, there was no question about the propriety of removing the foot; while the diseased condition of the parts which had been concerned in the resection, and in the long continued morbid processes following it, was sufficient to contraindicate Syme's operation. The method of amputation appeared to impress those who watched the case favourably; and, as we have noticed in previous cases, the man recovered without any of those tedious and painful dressings which are so distressing in the old methods of amputation.

ST. MARY'S HOSPITAL.

I. DISEASE OF THE TARSUS: EXCISION OF THE ASTRAGALUS: AMPUTATION.

Under the care of A. URE, Esq.

As a companion to the above case, we give the notes of one which was under Mr. Ure's care some time ago, and in which an attempt was made to preserve the limb by a partial operation, but without success. It should be remembered that these cases are not brought forward, because they were unsuccessful, to decry the operation, far less to reflect on the conservative and judicious attempts made to preserve the limb, but merely on account of their intrinsic interest, and perhaps with some little sense of the justice of the remark so often made, that we hear more of the successful excisions than of those which fail. Mr. Ure's method of amputation deserves also to be well considered: it is one which we have often seen adopted, especially in children, with excellent results. We have also been favoured with notes of another similar amputation by Mr. Ure, which we subjoin.

Thomas Roseblade, aged 10 years, was admitted into Blomfield Ward, St. Mary's Hospital, under Mr. Ure, on April 24th, 1856. During the preceding June, while at a fair at Ealing, he jumped off a stage, which was about six feet from the ground, and fell with his left ancle twisted under him. He felt considerable pain in the ankle-joint at the time, and was advised to apply a bran poultice, which he accordingly did. He took but little heed of the hurt, which, although it disabled him from running and the like, did not prevent his walking. The week before his admittance, the joint became swollen and painful, and thus laid him up.

At the date of admission, the ankle-joint was considerably swollen. There was tenderness on pressure over the inner ankle. Instead of the depression which naturally presents itself under each ankle, there was a tense prominence. The skin surrounding the joint was, if anything paler than usual. Distinct pain was experienced in approximating the articular surfaces. Leeches were applied, and afterwards, mercurial inunction of the part was resorted to, with temporary relief; for on May 14th the pain was much abated, and the boy could even bear some pressure on the foot. Four days later, however, the pain recurred, and the circumference of the diseased ankle ex-

ceeded that of the other by an inch and a half. The superficial veins were blue and distended. Recourse was now had to Scott's plan of treatment. Soon after this his parents took him home.

On June 12th, he was re-admitted as a patient. There was a large abscess pointing at the inner side of the ankle, which evidently communicated with the joint. Acute pain was evinced on the slightest movement of the foot. The limb was from three degrees to four degrees hotter than the other. Mr. Ure laid open the abscess and afforded egress to about an ounce of sero-purulent matter from the cavity of the joint. On careful examination it was ascertained that the astragalus was extensively diseased. It was obvious from the suffering state of the boy's health, and the serious morbid change of structure which had taken place, that the foot must be amputated; or else an attempt made to save it by removing the astragalus, apparently the chief seat of disease. Mr. Ure preferred the latter alternative, considering that, in the event of failure, amputation could still be performed.

This operation was accordingly put in practice on June 17th, the boy having been rendered insensible by chloroform. Mr. Ure commenced his incision at the margin of the tendo Achillis, and continued it across the inner side of the joint, so as to include about two-thirds of the instep. By this procedure no muscular tendons were divided, and the joint was at once laid freely open. The astragalus, which was found to be thoroughly carious, was removed, partly with the gouge and partly with the bone pliers. No vessels needed to be tied. The edges of the wound were retained in contact by means of sutures, and a pledget of wet lint completed the dressing. The limb was placed on a splint with the foot bent forward upon the leg. The boy went on favourably till the fourth day, when, after a bad night, there was loss of appetite, and an erysipelatous blush spreading up the leg to within two inches of the knee, which in the course of a couple of days extended as far as the lower third of the thigh. The wound was granulating. His pulse was frequent, and he was irritable, complaining of pain, referred to the foot, whenever he was moved.

After the lapse of a fortnight, the erysipelas subsided, the wound was filled with flabby granulations, suppurating copiously. His general condition was, however, far from satisfactory. The pulse was frequent, the appetite capricious, the sleep unrefreshing, and in spite of a generous diet, aided by stimulants and tonics, he did not gain flesh and strength.

On July 31st, he was observed to be getting rapidly weaker, losing all appetite for food, and visibly wasting away. There was a hectic flush on the cheeks, the foot was œdematous, the site of the wound was occupied by a mass of unhealthy granulations, which were prone to bleed. No proper union had taken place.

As amputation of the foot seemed to afford the only chance of saving the boy's life, Mr. Ure, after consultation with his colleagues, performed it on August 3rd, just seven weeks after the operation of removal of the astragalus. The boy being fully under the influence of chloroform, Mr. Ure, with a large strong-backed scalpel, made two semi-lunar incisions through the integument on each side of the limb, close above the ankle-joint, with their convexities downwards. The flaps thus formed were detached from their subjacent connexions, especial care being taken to preserve, as far as possible, the cellular tissue, a point of great importance as regards the healing process. The muscles were next divided by a circular sweep of the knife, on a level with the line where the saw was applied. Three vessels were tied. Very little blood was lost during the operation. The edges of the flaps were retained in apposition by means of sutures; a pledget of wet lint, with a few turns of a roller, completed the dressing. On laying open the ankle-joint, it was found filled with degenerate pulpy synovial membrane; the articular surface of the tibia was eroded; the portion of the os calcis, which had articulated with the astragalus, was of a dark hue, extensively carious; the posterior facet of the scaphoid bone was carious, and stripped of its cartilaginous disc. The most remarkable feature, in a pathological point of view, was the great amount of morbid pulpy synovial membrane occupying the cavity, and in relation with the outward granulations.

On recovering sensibility, the boy was in a state of high hysterical excitement, complaining loudly of pain, but was soon quieted by opium with ammonia.

He passed a good night after the operation, and slept comfortably; the pulse was 120, rather weak; the tongue clean and moist. He seemed to relish food. He had his usual allowance of wine (six ounces) and arrow-root with brandy.

August 10th. The stump had a healthy appearance; his general health was vastly improved.

August 12th. The improvement was sustained.

September 3rd. He was convalescent; he voided *per anum* several lumbrici.

September 9th. There was now a firm, solid, well-padded stump; the boy had gained flesh and strength, and was about to leave the hospital.

The result shows, as Professor Syme states, that a covering of muscle is not essential to the formation of a good stump.

P.S. The boy passed several lumbrici by the anus, and was attacked directly afterwards with violent irritative fever, attended with head symptoms, from which he succumbed.

II. STRUMOUS DISEASE OF THE FOOT: AMPUTATION.

Under the care of A. Ure, Esq.

Robert Herrick, aged 26, labourer, of a scrofulous habit, having enlarged glands in the neck and thigh, and an eruption of acne over the face, neck, and shoulders, was admitted into St. Mary's Hospital under Mr. Ure's care, March 26th, 1858, on account of long standing disease of the right foot. The foot was swollen and inflamed. There were several fistulous openings over the anterior part of the tarsus, which communicated with diseased bone in various directions, and gave vent to a discharge of a sero-purulent character. His general health was much impaired. Three years ago a piece of iron fell upon the foot and bruised it severely. This casualty laid him up for three days. He recovered, and was able to get about for six months, when the great toe became enlarged, and he applied for relief at the hospital as an out-patient. Leeches and poultices were employed. After the lapse of four months he was taken into the hospital, on the 8th of August, 1855. Mr. Walton removed several fragments of diseased bone from the first metatarsal bone, and Mr. Coulson some additional portions on the 3rd September, 1855. Shortly afterwards an abscess formed over the inner malleolus, which was laid open. This was followed by the formation of several other abscesses on different parts of the foot, which opened spontaneously and left sinuses. He improved in health and quitted the hospital after a sojourn of nine months. In the month of September last the foot became again troublesome, and was getting gradually worse up to the date of his admission.

March 31st. It has been decided in consultation that amputation was the only alternative, and to this the patient was quite prepared to submit. Mr. Ure was desirous to remove the foot at the ankle-joint, believing the joint to be sound, which the event proved it to be, with the exception of a few delicate filmy adhesions between the astragalus and tibia. The patient, however, had made up his mind to have the limb removed at the lower third, and having been rendered insensible by chloroform, the operation was performed by Mr. Ure in the following method. A semilunar flap, including the integument and subjacent cellular tissue, was made on each side of the leg of about three inches in length. These flaps having been carefully dissected up, a circular incision was made through the muscles down to the bones, which were then sawn across. Two vessels were secured by ligature, and the edges of the tegumentary flaps were held in apposition by a few points of suture. A pledget of wet lint completed the dressing. On examination of the foot extensive disease was found in the anterior tarsal and metatarsal bones, with destruction of the ligamentous and articular structures. The astragalus and os calcis were sound. An opiate was administered immediately after the operation and repeated at night.

April 1st. Pulse 84, of good strength; the tongue was clean, the skin natural, the countenance good. He was ordered to have six ounces of sherry in the day; one pint of milk, and fish diet.

April 3. Pulse 90, firm; the tongue was a little coated. His appetite was tolerable; he passed tranquil nights. The stump looked well and was suppurating healthily. The sutures were removed this morning, and strips of adhesive plaister applied.

April 5th. He felt comfortable; he had but little pain.

April 7th. The stump was very healthy; the discharge was moderate. He experienced little or no uneasiness, and slept well. His appetite was good; bowels open; pulse 78.

April 11. He was doing well. The opiate night-draught was omitted.

April 13th. The flaps were quite united, except at the posterior angle. His pulse was 74; tongue clean and moist; bowels regular.

April 15th. The posterior angle presented a small granulating surface, which was touched with nitrate of silver.

April 17th. About a tablespoonful of dark coloured puriform matter oozed out from the posterior angle of the stump. There was a little inflammation round the stump and pain on pressure, which he attributed to his having moved too much about the ward the preceding day. The pulse was rather quicker than it had been previously.

April 18th.—He was much better in all respects than on the previous day; the discharge had almost ceased; the pain and redness had disappeared.

April 19th. The lower angle was touched with nitrate of silver.

April 20th. There was scarcely any discharge. His general health was greatly improved.

April 22nd. The stump was entirely united.

May 19th. He left the hospital, moving about comfortably on a wooden leg.

Original Communications.

ON UNUNITED FRACTURE.

By W. J. Moore, Esq., H.M. Indian Medical Service, Bombay Establishment; formerly Senior Resident Surgeon at the Queen's Hospital, Birmingham.

[*Continued from page* 444.]

The pathological condition of non-ossific union varies in different cases. There may either be a confused mass of fibro-cartilaginous substance between or about the ends of the bones; they may be bound pretty tightly together, by means of a more strictly fibrous medium; or there may be formed what can be termed a false joint. That is to say, there will be a cavity between the ends of the bones, and the deposited tissue lined with a surface which presents all the appearances of a secreting synovial membrane. According to Paget (*Surgical Pathology*, vol. ii, p. 260), this fibrous tissue is an example of arrested development of the reparative material. The same author says:—"In other cases, failure seems to occur earlier, no reparative material is formed, and the fragments remain quite disunited. This may be the result of accidental hindrances; but it sometimes appears like a simple defect of formative power—a defect which cannot be explained, and which seems the more remarkable when we observe the many changes which may at a later period be effected, as if to diminish the evil of want of union," such as the formation of a "quasi" synovial membrane and the irritation of a fibrous capsule.

A man, about 35, had his thigh amputated in the Queen's Hospital for ununited fracture. The following was the condition of the parts:—The skin was thickened; the cellular tissue plentiful, and exuding a yellow serum; the muscles were atrophied, discoloured, and interspersed with softer patches. The nerves also were discoloured. The arteries and veins were healthy. The fractured ends were joined together by, and embedded in, a dense fibrous mass, in the centre of which a smooth surface was visible, evidently the commencement of a secreting membrane between the fragments. Another case of false joint I examined in the same hospital presented appearances simulating those described; but this being of old standing, the "quasi" articulating surfaces were more apparent. Sometimes tuberculated or cauliflower deposits of bone are found round the sides of the extremities of the fragments.

The period after a fracture when it may be supposed the powers of nature are insufficient to produce the full reparative process, varies in different cases. Supposing the patient to be affected with any constitutional disease, or to be placed in localities, miasmatous or otherwise, inimical to health, suspicion of non-union would soon arise. Malgaigne says:—"It is difficult to say, unless five or six months have passed away, if we have to deal with delayed union, or actually a false joint." No definite rule can be given on this point; but at least for four or five months neither retentive apparatus or hopes of cure should be abandoned. On this head, Mr. Stanley observes (after recording a successful instance):—"Since in this case the firmness of union had not commenced at the expiration of four months from the occurrence of the fracture, it almost warrants the conclusion that no period is too late for the commencement of that stage of the reparative process of fractures, upon which union depends." (*Medical Gazette*, Nov. 29th, 1844.)

The treatment of these cases will of necessity vary according to the class with which we have to deal. It will be right to give the patient the benefit of a trial of constitutional remedies, and these, according to what we may suppose, after due consideration, retards the union of the fracture. I believe I have saved several from the calamity of a false joint by the timely exhibition of quinine; and I consider that this resulted from the alkaloid repairing the anæmic condition of the system, produced by malarious atmosphere.

Sir Benjamin Brodie, in the twelfth volume of the *Medical Gazette*, relates an instance where union was promoted by an allowance of spirits, to which the patient had previously been accustomed. Fergusson (*Practical Surgery*, chap. 19, part I) gives cases of the same kind. B. Cooper mentions that mercury given to salivation cured a patient (Druitt's *Surgeon's Vade-Mecum*, p. 222); and Mr. Colles, of Dublin, recommended this mineral with success. (Sir Astley Cooper *On Fractures and Dislocations*, p. 575.) It is, however, quite an empirical method of treatment; and it is difficult to understand, with our present knowledge of the action of mercury on the human frame, how it could aid a case of the kind. I should not feel much inclined to try it, excepting perhaps as a *dernier ressort* in cases where a syphilitic taint existed.

Liquor calcis and phosphate of lime, phosphorus and phosphoric acid, have also been recommended, the second particularly, by Dr. Druitt and some German writers.

Should none of these remedies, combined with perfect apposition and rest, succeed, some more active interference becomes necessary; and the indication is to excite just sufficient inflammatory action to lead to reparation and no more. The most usual method of attempting this, and what should always be tried in most instances during the time of constitutional treatment, is, rubbing the ends of the bones together. This is a very ancient practice, and is mentioned by Celsus (lib. viii, chap. x, sect. vii, "si quando vera ossa," etc.); it is, however, very uncertain in its results; but inasmuch as a cure sometimes follows, and the practice is safe, it should never be neglected.

Some, chiefly continental, surgeons have applied pressure externally over the seat of fracture, by means of graduated compresses, tourniquets of different constructions, or apparatus acting in the same manner; but, as far as I am aware, these means have not been followed by any satisfactory result in this country, although three cases of cure are related in the *American Journal of Medical Science*, vol. ii, p. 70.

An unsatisfactory result has also followed the application of irritants: as blisters, nitrate of silver, iodine, and potassa fusa, to the surface; and, indeed, it is not very easy to explain what indication induced surgeons to try such means.

The limb may be put up firmly in gutta percha, leather, or the starched apparatus, and the patient allowed to move about. This treatment has been modified, or rather extended by Mr. Smith of the United States, who places the limb in an apparatus combining pressure on the fracture with power of movement, and reports ten cases of cure out of fourteen so treated. Mr. Stanley, after recording the cure of an individual who was allowed to move about with the femur in a starched casing, appears to suppose the result might be due "to the influence of the action of the muscles around the fracture." (*Medical Gazette*, Nov. 29, 1844.)

It has also been proposed to allow the patient to use the limb for a time, without any retentive apparatus. In an instance where I saw this plan tried, it failed to produce any excess of inflammatory action, and perhaps made matters worse. A successful case of this kind, however, has been recorded by Mr. Houghton, of Dudley, in the *Provincial Medical and Surgical Journal* for October 16, 1850. Amesbury, in his work on fractures (p. 273), recommended an apparatus which he used, by means of which the broken ends of the bones were pressed firmly against each other, and gives cases of cures by such means. Regarding this plan, Mr. Stanley observes: "It should not be the object to maintain the fractured ends of the bones in contact, but rather that the two portions of the bone should overlap, to allow of the periosteal surfaces being pressed together from which osseous deposits immediately proceed."

Galvanism has been proposed by Mr. Bowman (*Edinburgh Monthly Journal of Medical Science*, Feb. 1840), who gives a successful case, but the limb was well kept in apposition during the whole time. We may therefore doubt if the galvanism was

the curative agent, especially as it has been tried in other instances without good effect.

Next, there are operative proceedings, consisting in the introduction of one or other description of instrument to the seat of injury. The fracture may be cut down on and caustic potash applied, as recommended by the younger Cline. Small holes may be drilled in the bone, and ivory or silver pegs driven in. This was first proposed by Dieffenbach, and several cases terminating successfully after this treatment have been recorded; one by Mr. Stanley, occurring at St. Bartholomew's Hospital; others by Mr. Bowman, of King's College, and Mr. Teale, of Leeds. The originator of this method was first led to employ the pegs from noticing that a leaden bullet, embedded in bone, gave rise to osseous formations around it; but the late experiments of Dr. Brainard, of the United States, on the effects of foreign bodies when allowed to remain in contact with bony tissue, tend, for the most part, to prove they promote absorption, and, and induce no tendency to the production of callus (*American Journal of Medical Science*, Jan. 1858). Indeed, Dr. Brainard proposes as a means of cure in some forms of exostosis, the introduction of silver or ivory pegs. Next, the ends of the bones may be cut down on and scarified. A seton, as first used by Dr. Physick in 1802, may be passed between them, or, as is better, to the one side. Erichsen mentions a plan of passing a silver wire round the fracture and, by gradually tightening, cutting through the false joint. Professor Porter of Edinburgh cured two cases by using the chain-saw in the same manner (*Edin. Medical and Surgical Journal*, Jan. 1842). A metallic cannula and heated wire have been recommended by the German surgeons. Injections of irritating fluid have been spoken of. A piece of silver wire has been used in lieu of a seton. Nitrate of silver or butter of antimony have been applied to the fragments. Lastly, the broken ends may be sawn off.

Of all these operations, there are few I should feel inclined to countenance, and then only on the failure of the method presently to be mentioned. The application of potassa fusa, nitrate of silver, antimony, etc., cannot, in my opinion, afford any prospect of cure; neither should I much like to inject irritating fluids into a patient's leg or arm. Dieffenbach's pegs, and the seton, have failed in numerous instances; and sawing off the ends of the bones is an operation too dangerous to be lightly undertaken, especially so in the arm or thigh. Liston (*Practical Surgery*, p. 100), while admitting the uncertainty of most operations, seems to have placed most reliance on the seton, and gives a caution regarding the length of time it should be permitted to remain; and by way of enforcing this, brings forward a case which occurred, where the seton was allowed to remain thirteen months; for what purpose it is difficult to say, and, of course, without any good result.

The operation of sawing off the ends of the bones was first practised by White, in the middle of the last century, but has been condemned by very many authorities. Mr. South considers sawing off applicable to the fore-arm and leg, but not to the upper arm or thigh (*Chelius*, p. 889); and Mr. Lawrence is, or was, of the same opinion (*Lectures*, *Lancet*, 1830, vol. ii). Miller (*Principles of Surgery*, chap. 21, p. 246) states the operation proved inadequate in practice, and may now be considered abandoned, while Erichsen, Fergusson, and Syme, speak of only as a "*dernier ressort*".

The operation has, however, in some instances succeeded. Two successful cases are recorded in the *Lancet* (Feb. 5, 1859) by Mr. Davies, of Merthyr Tydfil. Mr. Spence, of Edinburgh, performed the operation with success, after the seton had failed (*Edin. Medical and Surgical Journal*, Nov. 1855). Other instances may be found in the medical journals; while from the statistics of Norris, referred to in an earlier part of this paper, we learn, that out of thirty-eight cases in which the ends of the bones were either resected or scraped, twenty-four were cured, seven received no benefit, and six died. It is unfortunate that it is not stated what number had the ends of the bones sawn off, or how many died from that operation alone. In six cases, the particulars of which I am familiar with, where resection was performed, two died, three recovered, and one received no benefit.

Had I to take my choice of these operative proceedings, I should first prefer scarifying the ends of the bones, making a very small external opening, as recommended by Dr. Brainard; next to that, the silver wire seton, taking care to retain it only till inflammatory action was excited; and not before I had tried these means should I take into consideration the propriety of sawing off the ends of the bones, and then only should the limb prove too great an incumbrance for the patient to bear. This, however, does not always happen. I have seen a man with an ununited thigh-bone, who, having the part well supported by a strong leather apparatus, went about his daily avocations; and I have also seen several instances of false joint in the upper extremities, which appeared to give the patient very little inconvenience. A case of this kind is also mentioned by Mr. Crompton, of Birmingham (*Medical Gazette*, Nov. 15, 1850).

In attempts, therefore, at cure or relief, such cases must be borne in mind. The position in which the patient may be placed, and his means of livelihood must be considered, and not unless the limb prevents him following his employment, or earning his living, should he be advised to incur a serious risk, for what may, after the lapse of a short period, become merely an inconvenience or slight incumbrance.

[*To be continued.*]

CONTRIBUTIONS TO CLINICAL SURGERY.

By Oliver Pemberton, Esq., Surgeon to the Birmingham General Hospital.

V.—The Radical Cure of Reducible Inguinal Hernia.

Owing to the ability and perseverance of Mr. Spencer Wells, the lecturer on surgery at the Grosvenor Place School of Medicine in London, an operation for the radical cure of reducible inguinal hernia, on the principle of the invagination of the scrotal integument in the inguinal canal and rings, has at length taken firm hold on the attention of the profession.

Since 1850, when Mr. Wells, for the first time, performed the operation in this country, but more especially since 1856, when Mr. Holmes Coote carried it into effect at St. Bartholomew's Hospital, the procedure has been gaining ground; so that at this time we may deem it as undergoing the fairest test as to both utility and permanence.

The invagination of a plug of skin taken from the scrotum, and its subsequent retention at the mouth of the sac, or at the margins of the internal ring, appears to have had origin in the plan proposed by Gerdy, who published his account of the proceeding in 1835, and again in 1837.

Here, then, was a principle fairly started, possessing the claim to consideration of being apparently free from those dangers which had beset well-nigh all previous operations proposed for the radical cure of reducible hernia. But the closure of the rings and canal was not permanent. The mode adopted for effecting this failed in the majority of instances; so that it remained for the followers of Gerdy to advance the principle a step further.

This has been accomplished by Wützer and Rothmund. Wützer happily devised, to retain the plug in the inguinal canal, the use of a cylinder perforated by a needle which fixed it effectually, for a time, to the margin of the internal ring; whilst carefully regulated pressure, by means of covers fitted so as to press on the inguinal canal and its contents, ensured the production of such a degree of adhesion between the plug and the canal, or such an amount of contraction at the internal ring, that protrusion of the bowel was prevented.

Rothmund modified the shape of the cylinder; but the merit of perfecting the principle suggested by Gerdy belongs to Wützer.

The instruments essential to the accomplishment of this operation, as approved of in the present experience of the profession on the subject, consist, then, of a cylinder, nearly oval in shape, capable of being fitted to side pieces of various dimensions, according to the size of the canal. The cylinder carries within it a passage terminating a little short of its extremity in an aperture destined to give exit to a silver pointed needle, by the protrusion of which, when the cylinder has taken the place of the index finger in the canal, the scrotum is fixed to the margin of the internal ring. Lastly, a cover, slightly concave in shape, is fitted over the point of the needle, and, by the aid of adjusting screws, is made to exercise a pressure, capable of exact regulation, on the structures between it and the cylinder, so as to more certainly ensure the retention and adhesion of the plug of scrotal skin in its new situation. Where it is desired, the cylinder can be so constructed that two or more needles can be made use of to retain the invaginated scrotum.

With such an apparatus, modified according to the features of the individual case, the operation for the radical cure of reducible inguinal hernia may be accomplished, without doubt, in many instances.

As to the best method of using this, a few words are necessary. For my own part, I prefer to stand or sit behind the pelvis of the patient, and to use the left forefinger to invaginate the scrotum on either side. By thus using the finger from behind, the structures forming the roof of the inguinal canal can be more strongly raised, so as to define more clearly the rings and passage, and enable the cylinder to slip along in its place with increased facility.

The only precautions necessary to be observed are, to avoid perforating with the needle short of the margin of the internal ring; and to be satisfied, when the cylinder has advanced such a distance as to render this accident unlikely, that it has not slipped between the tendon of the external oblique and the integument: in other words, that it has not passed altogether out of the canal.

To avoid the first misfortune, care should be taken to begin the invagination of the scrotum sufficiently low down, so as to secure the introduction of a piece long enough to reach fairly, and without straining the internal ring; nothing being so likely to embarrass the proceeding as a neglect of this observance.

The cylinder should be well oiled previous to introduction; and it may or may not be smeared with blistering cerate. If the cerate be used, the patient will undoubtedly suffer a good deal more annoyance than he would otherwise have, owing to the smarting and tenderness to which it will give rise; but I do not consider that he will derive a corresponding advantage. I have met with quite as great success with it as without; and I therefore, in general, should not recommend its adoption.

At the point of perforation, the integuments may be protected both from undue irritation and from pressure by the use of a small piece of prepared Indian rubber, or better, by the felt plaister recently introduced, and which may be obtained of Ewens, of Jermyn Street, London. Great care should be taken, during the retention of the instrument, to support the scrotum, not only with the view of avoiding any strain on the plug, but also with the object of saving the loose tissue of the part from the chances of œdema and consequent inflammation. After the removal of the instrument, this care becomes even more necessary; and the scrotum must then be firmly held up by a suspensory bandage, at the same time that the parts in the inguinal canal and the rings are firmly and accurately compressed by pads of lint and a well applied roller.

As to the length of time necessary for the instrument to be retained, this must vary according to the symptoms presented in individual cases. Some persons will bear the irritation of its presence without manifesting annoyance; whilst others, becoming irritable and nervous, cannot sustain it with the same requisite degree of patience. Where this susceptibility of irritation exists, it will be better to remove it at as early a period as practicable, with the prospect of benefit from the operation. I have, for such a reason, removed everything as early as the fourth day; and the case was most successful. This is, however, I doubt not, an exception to what would generally result. On the average, the time may be said to vary from the sixth to the seventh or eighth day; but little benefit being likely to arise by the treatment being prolonged beyond this.

There appears to be no danger of peritoneal inflammation in these cases; although the peritoneum may have been punctured, and frequently is, through more than one of its layers. I have witnessed nothing more alarming than, on one occasion only, a slight attack of erysipelas, which took its rise from near to the point of exit of the needle, and occurred in a patient of reduced and feeble habit.

I am not aware that any other complications have arisen in connexion with this proceeding which would tend to weigh against its reception, as to safety. The experience, indeed, of all surgeons who have investigated the question, has given the most decisive assent to this conclusion.

The question of safety being therefore established, can we say as much of the not less important ones of success and permanency?

Mr. Spencer Wells tells us that the operation in this country has been "almost uniformly successful". Abroad, Professor Rothmund, according to the same authority, has operated "a thousand times". He had not a fatal case, and scarcely a failure. Wützer counts by hundreds, but they were not all cured. In this town, my friend Mr. Redfern Davies, of the Workhouse Infirmary, has availed himself of the large numbers of ruptures presenting themselves in such an institution, to test very fully its value. I am informed that the results in the cases treated by Mr. Davies are highly successful. In addition, he has applied the operation to the cure of femoral and of ventral or direct hernia, and has thus been the first to afford the profession an assurance of the safety and success of the measure in these cases. (*Med. Times and Gazette*, Feb. 12th, 1859.)

These are prosperous results, abroad and at home, sufficient, one would think, to establish the reputation of a proceeding of far greater moment than this; and if the cases were selected —young, strong adults, with recent herniæ, the canal and rings firm—then I can fully believe that the profession possesses data enough to establish the certainty of cure in any number of similar instances that may hereafter undergo the operation. But this class of hernia is not the one most commonly met with: it is not that kind which will be found in large numbers claiming at our hospitals the aid of the radical cure.

The effect, more or less, of all protrusions of the intestine through the canal and rings, will be to approximate the latter; and in some instances, where the hernia has descended into the scrotum, to so shorten the former that the internal ring entirely disappears, and a wide external one communicates at once with the abdominal cavity in an almost straight direction from the pubes to the sacrum. My experience of the examination of ruptures, some thousands in number, during the past twelve years, tells me that these features are those most commonly to be recognised in the cases applying for trusses. To this class of cases, pretty much as they presented themselves in the out-patient room of the hospital, I have applied the radical cure—with what amount of success, I shall presently detail; but I may here state that it has not been by any means "uniform". As I have no wish to cast a doubt on the value of this operation, for it must even now be ranked amongst the most promising that has ever been laid before us for the cure of an almost universal malady; but I do desire that we should be in possession of more of the attendant characters of the cases treated, in order that its individual usefulness may be really estimated. I cannot but fear that certain cases only have been selected for the proceeding; so that, at best, we possess only a partial knowledge of its applicability to the most frequent and most disabling forms of herniary protrusions.

Without entering into the question of the particular mode in which the sac, the plug, and the integument, form a common bond of adhesion for the effectual attainment of a cure, beyond expressing my opinion that Mr. Spencer Wells's very simple and accurate diagram (*Dublin Quarterly Journal of Medicine*, May 1858) most probably conveys to us a knowledge of the real state of the parts, I am, nevertheless, anxious to record my own experience in reference to certain points in connexion with the adhesions formed by the plug, in reference to the contiguous inflammation established, and also as to its permanency in its new situation.

The construction of the instruments at present in use for the radical cure of hernia admits of the needle penetrating the superjacent textures of the anterior margin of the ring only: consequently, the attachment of that part of the plug behind the cylinder depends on the amount of contiguous inflammation which the cylinder, the needle, and the sustained pressure, may set up. I am quite satisfied that this adhesion is a very slight one; and that it is one easily broken down by the impetus of the intestine, in many instances, the cases I have observed lead me without hesitation to affirm.

On the other hand, it does not appear to me that it is absolutely necessary in all cases for the plug to remain firm, in order that a cure may take place. I believe that, in many instances, a sufficient degree of inflammation is set up about the ring and canal, possibly between the sac and canal, so that a closure is the result.

I am the more inclined to this opinion, as in cases under my own notice, where some time has elapsed from the operation, and where no relapse has occurred, yet there has been every evidence, from the appearance of the scrotum, that the invaginated plug has subsided to its former position. Mr. Holthouse (*Medical Times and Gazette*, Oct. 1858) confirms the correctness of this view in the description of a case in which a similar result obtained.

I shall now offer a tabulated statement of eleven cases in which I have performed the radical cure at various times previous to the last three months, leaving for a future report more recent instances. The table, with the single addition of the occupations of the patients, is on the plan suggested by Mr. Wells.

No. of case.	Sex.	Age and occupation.	Variety.	Size of ring and canal.	Duration.	Date of operation.	Immediate effects.	Date of removal of instrument.	Result, etc.
1	Male.	38 Handcuff-filer.	Right oblique inguinal hernia, descended into the scrotum; of large size.	Ring of the width of a finger and a half; canal shortened.	Twelve months.	Jan. 1, 1859.	Tenderness about the seat of puncture, with some sickness on the third and fourth days.	Jan. 5.	Successful. Despite an incessant cough, there has been no protrusion at the end of six months.
2	Male.	37 Coach-maker.	Left oblique inguinal, descended into the scrotum; of very large size.	Ring of the width of two fingers; canal short, and textures around relaxed.	Five weeks.	Jan. 19, 1859.	Hardly any irritation at the seat of puncture. The lower part of the cylinder by friction and pressure on the scrotum, produced a small slough.	Jan. 26.	The plug of scrotum remained firm; but on coughing, protrusion of the bowel took place slightly behind. To wear a truss.
3	Male.	50 Porter.	Right oblique inguinal hernia, descended into the scrotum; of the size of the two closed hands.	Ring of the width of three fingers; canal almost lost, and textures around flabby and relaxed.	Eighteen years.	Jan. 19, 1859.	No symptoms beyond ordinary. A small slough at seat of puncture.	Jan. 25.	Fourteen days after the operation, protrusion took place behind the plug; this remained firmly adherent. Enabled for the first time for eight years to wear a truss, and keep the bowel in place.
4	Male.	29 Baker.	Left oblique inguinal hernia; small.	Ring well defined; canal short.	Four years.	Jan. 19, 1859.	No symptoms beyond ordinary. Being an inmate for the cure of stricture, some additional irritation of the urethra was the natural consequence.	Jan. 25.	The plug remained firm; but at the end of a fortnight the bowel descended behind the invaginated scrotum. Desirous of having the operation renewed.
5	Male.	42 A retired soldier.	Right oblique inguinal hernia, descended into the scrotum; very large.	External ring communicating almost at once with the abdominal cavity, and is of a width of nearly four fingers.	Sixteen years.	Feb. 2, 1859.	On the sixth day, a little sickness and pain at the lower part of the bowels. Has an incessant bronchial cough. On the seventh, an erysipelatous blush formed and extended itself about the seat of puncture. Small slough at the point of perforation.	Feb. 9.	The plug remained firm. Thirteen days after the operation, his cough continuing incessant, protrusion took place behind the invaginated scrotum. He requests a second operation.
6	The same patient.	—	——	——	—	Mar. 12, 1859.	No irritation followed the use of the instrument. A large mass of the scrotum was invaginated internal to the former portion pushed up.	Mar. 19.	The second plug remained firm. A month after the operation, on violent coughing, there was protrusion behind the plugs. He can wear a truss, and keep the bowel in place.
7	Male.	47 Glass-maker.	Left oblique inguinal hernia.	Ring firm; canal narrow; slightly shortened.	Nine months.	Feb. 23, 1859.	No symptoms of irritation.	Mar. 2.	Successful. No protrusion on coughing or straining. To wear a truss for a few months.
8	Male.	30 Carpenter.	Right oblique inguinal hernia.	Ring firm; canal narrow; slightly shortened.	Four months.	Mar. 16, 1859.	No symptoms of irritation. Very free suppuration of the canal.	Mar. 22.	Successful. No protrusion on coughing or straining. To wear a truss for a few months.
9	Male.	36 Fireman.	Right oblique inguinal hernia, descended into scrotum.	Ring small and firm; canal slightly widened and shortened.	Six years.	Mar. 30, 1859.	No symptoms of irritation. A slough at seat of puncture of the size of a sixpence.	April 6.	Successful. The plug very marked and prominent.
10	Male.	12 Errand boy.	Right inguinal hernia.	Ring and canal firm.	From a few months after birth.	Mar. 16, 1859.	No symptoms of irritation. A slough at seat of puncture, and free suppuration of the canal.	Mar. 22.	Successful.
11	Male.	7	Right oblique inguinal, descended into scrotum; very large.	Ring large, easily admitting one finger; canal shortened.	Observed at birth.	Mar. 30, 1859.	No symptoms of irritation.	April 6.	Unsuccessful. On removing the cylinder in the ordinary way, the plug of scrotum returned with it.

In all the cases in the preceding table where the canal and rings were of largely increased dimensions, Rothmund's instrument was applied, in order to combat the anatomical changes of the parts by the aid of the side-pieces. In most of the others, Wützer's was made use of.

Case I, aged 38, is altogether a remarkable one. The instrument was removed on the fourth day, in consequence of some little tenderness and sickness, which soon subsided. The cylinder had not been smeared with the unguentum lyttæ. No bandage was applied, the puncture being dressed with simple ointment, and merely a support being used for the testicles. There was free suppuration about the seat of puncture, and a good deal of ulcerative irritation about the entrance to the invaginated scrotum. There was no evidence, during the three weeks that this patient was confined to his bed, of the plug having slipped down into its place again.

The following is his condition six months from the time of the operation:—No protrusion of intestine through the internal ring. No trace of plug to be felt in the canal. Rugæ of scrotum, on the side operated on, natural, save a slight redness in one spot. The internal ring itself can be distinctly localised, and is felt to be contracted and thickened.

I submitted this man to the examination of the members of the Birmingham Branch of the Association, at their meeting in April last. A very numerous assemblage of surgeons manipulated the rings under the influence of the patient's cough, which had never left him. I heard no opinion expressed that did not affirm my own, as to the ring being effectually closed against protrusion, and likewise that the invaginated scrotum had subsided to its former position.

Case II, aged 37, had one of the largest and most unmanageable ruptures I ever felt. All the parts were flabby, and he had an incessant cough. He had been ruptured for eighteen years, and for the last eight had not been able to wear a truss. The external ring communicated almost immediately with the abdominal cavity. Despite these drawbacks, the operation enabled him to wear a truss for the first time for eight years, and to keep his rupture effectually in place.

In Case IV, aged 29, the plug remained firm, but the bowel descended slightly behind at the end of a fortnight. This patient suffered from obstinate stricture, frequently complicated by retention of urine; this latter condition being aggravated during the wearing of the instrument.

In Case V, aged 42, on the seventh day of wearing the instrument, an erysipelatous redness of distinct character, and accompanied by the ordinary constitutional disturbance, spread about the abdominal wall from the seat of puncture. The cylinder was at once removed, and the symptoms soon subsided. The man had a bad habit of body, and had lived freely. There was no undue pressure exercised, and not more than the ordinary slough at the seat of puncture.

In Case XI, aged 7, the boy had a large scrotal rupture, observed at birth. The canal was shortened and much straightened. In removing the cylinder, on the seventh day, with ordinary gentleness, the plug of scrotum descended with it. There was free suppuration about the puncture, and a good deal of adjacent inflammation in the canal, so that the bowel did not protrude for some few days; but the internal ring was a very large one for so young a subject, or I might have hoped for the curative contraction and adhesion to have been set up, as in Case I. This ended, however, in the bowel coming down into the scrotum, as before.

Of the preceding instances, then, five have resulted, at present, in the closure of the inguinal canal against all protrusion of the intestine. Five have so lessened the width of the passage that the amount of bowel escaping has been diminished considerably; so that a truss, in some instances for the first time for many years, could be worn. One failed altogether, from the slipping down again of the plug of scrotum, on the removal of the instrument.

In the cases in which the bowel came down, the plug of scrotum yet remaining attached, the escape invariably occurred behind its position, at the anterior margin of the ring.

One case alone evidenced during the treatment some alarming symptoms: these were, however, accounted for by the advent of a slight attack of erysipelas.

The sloughs, which generally formed at the point of exit of the needle, were limited in size, and soon healed; whilst the suppuration in the canal of the plug, and in the inguinal one also, were throughout of the most manageable character.

Taking into consideration, therefore, the varieties of reducible inguinal ruptures in especial regard to the utility of this operation, my opinion is, that we may fairly estimate their prospects of cure, improvement, or absolute failure, according to certain characteristics which place them in three divisions.

In the first, we number the small, firm, well defined internal ring in the narrow canal, not much shortened. The more muscular and youthful the subject, the better.

In the second, a large ring, relaxed, with a broad short canal and surrounding flabby textures, as in so many old ruptures.

In the third are the protrusions of persons in very advanced life, the features of which are marked by vast size, by long continuance, and by their constant enemy, the bronchial cough.

INFLUENCE OF VITALITY UPON SECRETION: REPLY TO MR. SPENDER.

By T. Inman, M.D., Liverpool.

I am afraid that the explanation offered by Mr. Spender, of the phenomena to which I called attention in my communication of April 30th, is inadequate to satisfy the circumstances of the case. It assumes that there are two forms of secretion, *active* and *passive*; and it goes on to define the latter as "an almost entirely physical act, independent of nerve power," "scarcely deserving the name of a vital function at all." Again, in illustration, he speaks of "the diminished tone of the capillary walls allowing the water of the blood to permeate them," "the haste with which the water filters through the Malpighian tufts .....the act is less a vital than a physical one," and he says, "where nerve-force is lessened, the secretional product must be lessened in an equal ratio."

In few words, Mr. Spender seems to think that where there is increased secretion with diminished power, we have the usual amount of solid matter, plus a considerable quantity of water, and nothing more.

This simple way of putting the matter suffices for a refutation of one idea promulgated; but the subject is too interesting to be thus summarily dealt with. I propose to consider it, therefore, more at length.

First, as to "nerve-power." What do we really know of its influence on secretion? We know that under certain mental emotions, certain secretions are increased or diminished; that the effects of dividing nerves, going to certain organs, is uncertain, and there our real knowledge ceases. *Per contra*, we see secretion going on in plants, where there is no nervous system. The same may be said of the "actiniæ", in which no such system can be demonstrated; and the same of transparent larvæ, whose every nerve we can trace. We can see in the transparent part of the kidney of the triton, that the renal tubes and Malpighian bodies and capsules are unaccompanied by nerves—and yet secretion goes on. We cannot demonstrate the presence of nerves in the membrane lining the Haversian canal, or in the lacunæ of bone or cartilage. No nerve can be demonstrated in the membrane covering articular cartilage, nor does the anatomist pretend that there is a nerve for every small lobule of the liver, or for every individual air-cell in the lung. The peritoneum, pleura, and pericardium, are not universally covered with nerves, and I do not think that any microscopist has discovered an abundant supply for the arachnoid—yet all these parts secrete their own peculiar fluid. If, then, secretion will go on without nerve-power being demonstrably present, we must not appeal to that force to get us out of our difficulties; this is, simply to explain something, of which we know little, by referring it to something of which we know less—a very common error nevertheless.

Secondly. Is the increased secretion of which we have spoken simply a physical act? If so, we should have its analogue in the dead body; we should find in every corpse the evidence of gonorrhœa and perspiration, leucorrhœa and dropsy; but we have no such phenomena. Perspiration does not break out in a limb just about to mortify, or where it is already dead from ligature of its principal artery; nor does it occur in death by all diseases. Bronchitis does not always attend old age, or dropsy invariably wait upon debility. If these increased secretions are due to physical causes *chiefly*, they would occur equally in all cases of extreme asthenia.

Thirdly. Is the so-called "passive secretion" simply the natural one diluted with fluid? In some instances, as in diabetes insipidus, it may be so; but, as a rule, we find that the *quantity* of solids discharged is excessive, and the *quality* is changed. Thus, in health, the mucous membrane of the nose of the bronchi, and of the bladder, secrete only a very small

quantity of mucus; but when they are debilitated by struma, age, or accident, they secrete enormous quantities, not of *mucus*, but of *pus*, and no one can demonstrate that the latter is only a dilution of the former.

But there is yet another point, of great practical importance, bearing on this subject. There is scarcely any disease attended with more intense debility than diphtheria; yet it is characterised by an immensely congested condition of the throat, etc.; and a very abundant *dense* secretion from the mucous membrane, and, *under the influence of strong general and local stimulation, the secretion is thinned in consistence and reduced in amount.*

The bearing of this upon the common "cynanche trachealis" must be at once apparent, and it ought to be a question how far the density of the secretion of false membrane in that disease may not have frequently been promoted and increased by the state of debility into which the patient is too often reduced by antiphlogistic treatment. I can only say that after a diligent hunt after cases, I have found that those in which death has taken place under twenty-four hours, and where the formation of false membrane has been most dense and abundant, have been those where the patients have been copiously bled at the outset, and where the vitality is consequently very low.

We cannot refer the false membrane formed in diphtheria, or the reduction in density and quality which follows in that disease, from the use of local and general stimulants, to any physical agency whatever. Consequently, we must reject the notion that excessive secretion, with debility, has chiefly a physical cause.

But there is still another way in which Mr. Spender's explanation must be examined; viz., the influence the doctrine would have on practice. If excessive perspiration in phthisis be simply the exudation of an unusual quantity of the aqueous part of the blood, and a physical process into which vitality enters little, it ought not to weaken the patient so long as he is able to supply the blood with the water which has been drained away. If infantile diarrhœa be nothing more than a copious loss of fluid from weakened blood-vessels, it might be easily compensated for by an abundant use of aqueous drinks. And if, in diabetes insipidus, the only thing to be noticed is that "the haste with which the water filters through the Malpighian tufts leaves scarcely any time for it to be impregnated with the contents of the epithelial cells that line the uriniferous tubes," there will be no difficulty in keeping the patient "up to the mark" by making him drink as much water as he expends.

We know that such physical ideas are unprofitable in the main to the living man.

Mr. Spender, however, guards himself by saying that what he calls *passive* secretion is *almost entirely* a physical act. These two words, to a great extent, show that our ideas are not directly opposed. As a matter of philology, I object to an *act* being spoken of as *passive*. As a matter of fact, I believe that all living matter comes under the laws of inorganic force, in direct proportion to the diminution of organic power. In that we agree.

My wish is to show that there is a condition of the body intermediate between perfect health and absolute death, which has not yet been sufficiently studied. The living body has certain powers and tendencies, which we speak of as organic or vital. The dead body has certain others, which we know as physical and inorganic. Of the mutual reaction of these opposing forces, when the former is weakened, we really know little.

Circumstances have induced me lately to investigate them as closely as I can. The results attained are of extreme interest. I will not enter into them, however; but sum up the question before us in the words of one of the most original thinkers of the day, Mr. Lewes. "What is the organic process on which this excess of secretion (in debility) depends? Vitality is only a general phrase. I cannot help thinking that the old idea is correct which says that increased secretion results from an increased activity of the secreting organ, increased *special* power, though caused, perhaps, by an organic disturbance which is coincident with diminished *general* power. The latter point being brought to light, the attention should be directed to the *modus operandi*."

I doubt myself whether we can consider that "increased special power" can be present in an organ secreting over abundantly, when such secretion is diminished by *local* stimulants as much as by general ones; but the problem is so fairly put that I will leave it as it is, feeling sure that if it be worked out fairly, it will eventuate in a vast improvement, both in pathology and practice.

Clinical Lecture
ON
ASTHENIC PNEUMONIA,

DELIVERED TO
THE STUDENTS OF THE BIRMINGHAM GENERAL HOSPITAL.

By J. Russell, M.D., one of the Physicians to the Hospital, and Lecturer on Pathology at Sydenham College.

Gentlemen,—There are at present in the Hospital two cases of acute rheumatism, which we have watched with considerable interest, on account of their presenting the serious complication of pneumonia of a low type affecting both lungs. From whatever circumstances it arises, it is an unquestionable fact, that the low forms of pneumonia are far more common—in towns, at least—than those of a more sthenic character. Asthenic pneumonia, or typhoid pneumonia, as it is often called, by an unfortunate misapplication of terms, is a disease of by no means infrequent occurrence, often presenting itself as a complication of some preexisting disease, sometimes existing as a simple primary affection; under either condition, it possesses some peculiar features which merit your especial attention; and which I propose to make the subject of the present lecture.

The descriptions of disease which are given in systematic treatises and lectures are generally derived from certain typical forms, and it is necessary that this should be so; but in applying the knowledge you have thus gained to clinical observation, you will be perpetually reminded that the proportion of cases which realise, in all respects, the descriptions you have read, is very small indeed; and you must be prepared to encounter many and wide deviations from the model form which has been placed before you. Such is eminently the case with inflammation of the lungs. Perhaps no malady is attended with less uncertainty in its diagnosis than a genuine case of simple sthenic pneumonia: on the contrary, there are few more insidious than the same disease in its asthenic form. Where asthenic pneumonia exists as a secondary affection, it is not infrequently so entirely destitute of special symptoms that its presence may be entirely overlooked; and were it not for our knowledge of the circumstances under which its occurrence may be expected, our attention might never be directed to the chest. In each of the cases at present under our consideration, there was no reason whatever to suspect the existence of the disease prior to the physical examination of the lungs. In feeble or unhealthy subjects, again, pneumonia, although it be the sole or primary affection, is often deprived of some of its most characteristic signs.

When pneumonia occurs as a secondary affection, it is spoken of as intercurrent. It is a more or less frequent complication of many diseases, which are produced by the presence of a poison in the blood; thus it is met with in the course of typhus fever, in erysipelas and surgical fever, in scarlatina, measles, and influenza, in remittent and yellow fever, and, as we have also found, in acute rheumatism. It appears not improbable that it may sometimes exist as the direct consequence of a morbid poison where no other indications are afforded of the presence of that poison in the blood, just as in every epidemic of scarlet fever we find isolated cases in which the characteristic affection of the throat is the only symptom of the disease which is present. Thus, whilst erysipelas is prevailing in the wards of a hospital, and the subjects of wounds or of operations are liable to be seized with that malady, instances every now and then occur of patients similarly circumstanced suffering from asthenic pneumonia, which we have every reason to refer to the poison of erysipelas, although the usual cutaneous inflammation be absent.

But the disease is also met with where we have no reason to suspect the existence of any specific poison in the blood; it may occur after exposure to cold, or to the operation of any ordinary cause of simple inflammation, in enfeebled individuals who have been exhausted by overwork, by anxiety, or by other depressing agencies, or who have lowered their health by intemperance, or by unhealthy habits of life. Such appear to be instances of ordinary inflammation, occurring in a debilitated constitution, which imparts to them their asthenic type. Yet,

in many of these cases the early development of delirium, or of diarrhœa, or, as I have seen more than once, of jaundice, together with a manifest and alarming tendency to sinking, affords reason for the suspicion that some poison has either preexisted in the blood, or has been produced by the exciting cause of the disease; and this suspicion is strengthened by the observation, that in such cases the urgency of the symptoms bears no proportion to the extent of the inflammation; thus, I have seen these serious symptoms present, and hasten rapidly to a fatal termination, where the inflammation has been limited to one lung, and absent when it involved the entire lower lobe of both lungs.

Now, where pneumonia is present under any of the circumstances I have indicated, the signs of its existence may be obscure; the energies of the constitution may be so deeply depressed by the injurious influences under which they have been labouring, that the power of reaction is prostrated, and the indications of the disease are proportionally deficient. It is surprising what an amount of inflammation may be inflicted upon the body under certain circumstances, without its appearing sensible of its presence. This want of reaction will generally bear a proportion to the depressing nature of the poison, or of any other cause which has been previously in operation; thus, the poison of measles does not generally exert any very lowering influence upon the system, and the signs of pneumonia, when it occurs, are sufficiently indicative. On the other hand, with the extreme prostration which attends the presence of the typhus poison, the greatest vigilance is necessary to render ourselves aware of the occurrence of the inflammation. Such differences arise, not from any diversity in the inflammation itself, but in the circumstances under which it takes place.

Nor is pneumonia singular in this respect; other inflammations, occurring under the like conditions, may be equally insidious. In puerperal fever, *e.g.*, we not infrequently meet with instances in which inflammations of other solid organs, of the serous membranes, or of the joints, even runs on to suppuration, without its presence having been ascertained until it has been revealed by a *post mortem* examination.

In the two cases which form the subject of the present remarks, the inflammation affected both lungs. This is consistent with the usual operation of poisons, and warns us, when we encounter the disease on one side only, to keep our attention alive to the condition of the opposite side.

I will now briefly compare the ordinary symptoms of pneumonia with those which are presented by the form now under our consideration. Even in the sthenic form, considerable allowance must be made for variation of symptoms in particular cases; but where the pneumonia has assumed an asthenic character, deviations from the normal type are much wider and more numerous.

The Inflammatory Fever. In cases where a specific poison exists in the blood, the inflammatory fever is, of course, merged in the peculiar fever which attends the operation of such poison, and is of a low type. Where no specific poison is present, the inflammation may set in with a rigor, and sometimes with sharp feverish reaction; but the symptoms speedily assume an asthenic character, and may be attended, even at an early stage, by delirium and other serious symptoms; and the patient may manifest a marked tendency to sink. In all these particulars, however, there is great variety. In a case of uncomplicated pneumonia, which I saw the other day, the pulse sank below one hundred after the third day. In another similar case, in which *both* lungs were involved, the intellect was clear, and the pulse was below one hundred after the third day; whilst in two others, in each of which only a single lung was affected, the pulse was rapid; there was low delirium, and in one, retching, diarrhœa, and floccitation; and death occurred in both, at an early period, with every symptom of exhaustion.

Pain in the Side may be absent, even in ordinary pneumonia; it is more frequently so in the asthenic form; or, if present at first, may speedily sink into a very subordinate position. In some cases, the pain occupies a situation more or less remote from the seat of disease. Such deviation is by no means peculiar to the asthenic variety; but it becomes of greater importance in that form, on account of the absence of other indications, and the consequent danger of misleading the observer. In one case the pain was seated in the upper and anterior region of the chest, the lower lobe being affected; in another it occupied the region of the left hip; and so free from urgency were the other symptoms, that the patient had actually weathered the first stage when I saw him, and had come down stairs. His hurried breathing, with his cough, directed my attention to his chest, and I found the entire lower lobe of the lung consolidated. Pain in the flank, or iliac region, is sometimes an attendant of inflammation, probably of the base of the lung. In one remarkable instance, I believe the pain was seated in the pillars of the diaphragm, as it was chiefly occasioned by hiccough, which followed the presence of food in the stomach, and was so intense on any attempt to move the trunk, that it was next to impossible to examine the posterior region of the chest.

Cough and Expectoration are subject to much variation; the cough is not infrequently slight. In one of our hospital patients we should hardly have paid attention to it, although there was no dulness of sensibility, and his intellect was perfectly acute. On the other hand, it may be remarkably violent; I have seen it almost spasmodic. It is important to know that expectoration is often scanty, and may be entirely absent. It was trifling in quantity in both of our patients. It was entirely absent in three cases which I call to mind, although in one of them, which was examined after death, the inflammation had affected both lungs. When present, the sputum is often composed of semitransparent mucus, of considerable adhesiveness; but without the peculiar gelatinous tenacity and the rusty colour of the expectorated matters in the sthenic disease.

The Respiration presents, perhaps, the most unvarying physiological symptom. There may be little or no complaint of oppression; but, excepting in instances of great prostration, the breathing is much increased in frequency. This symptom will often be very evident by comparison with the pulse; whilst the latter may vary in the number of its beats day by day, the breathing continues steadily frequent, thirty-six, forty, or more respirations being performed in a minute.

The reason is evident. The amount of space available for the purposes of breathing being lessened, compensation is made by increase in the frequency with which the air is transmitted through the lungs. In asthenic pleurisy, also, this symptom is present. Cases of this disease, which sometimes present themselves in the out patient's room, in which the patient makes no complaint of the chest, often first arouse our suspicion by the unhealthy frequency of the breathing. I need hardly refer you, however, to one of our cases as obscuring even this symptom. In the girl in ward sixteen, frequent and irregular breathing was sufficiently accounted for by rheumatic affection of the intercostal muscles; and you may have noticed her distress on more than one occasion, when, on awaking from sleep, her irritable muscles were suddenly required to assume a state of greater activity.

In the obscurity which attends the general symptoms of asthenic pneumonia, our great dependance must be placed upon our knowledge of the circumstances under which the disease is most liable to occur; and it very fortunately happens that when our attention has been directed to the state of the chest, the clear indications which are afforded by the *physical signs* at once deprive the case of all uncertainty. One physical sign, however, usually present in the acute form of the disease, I have found absent in some cases. I allude to crepitation; bronchial breathing being the first abnormal sound I have discovered. It is possible that, from the obscurity of the general symptoms, the first stage of the disease may have passed before the examination has been made; but this explanation certainly does not apply to every case, and the scanty amount of the expectoration sometimes observed, affords corroborative evidence in favour of the statement I have just made. Sometimes the signs of consolidation are preceded by crepitation in the small bronchial tubes, the pneumonia occurring as a sequel of capillary bronchitis. From the absence of crepitation, especially when coinciding with deficient expectoration, it is possible to mistake the case for one of pleurisy. The diagnosis, however, is easily effected; for, besides that vocal vibrations are present, with abnormal intensity, on the affected side, the peculiar limit of the dulness forms a distinctive sign of great certainty, when the inflammation is seated in the lower lobe. The lower lobe of the lung occupies the entire posterior region of each side of the chest, excepting only the supraspinous fossa. The lateral and anterior regions correspond with the upper lobe on the left, with the upper and middle lobes on the right; consequently, in the cases I am now speaking of, whilst the chest is dull behind, even to the spine of the scapula, in the lateral space and in front—as was the case with both our patients—it is clear; the line of demarcation approaching a vertical direction—a direction of course impossible with free fluid in the chest. The only form of pleurisy which could afford a similar sign is that in which the fluid effusion is limited by adhesions.

You may, perhaps, expect me to assign the absence of the chlorides from the urine as an additional diagnostic sign of the

presence of pneumonia; but since attention has been drawn to this subject by the observations of Dr. Beale and others, the symptom in question has been found to be by no means peculiar to inflammation of the lungs; but to be present in other forms of acute disease.

Asthenic pneumonia, like all low forms of disease, is more liable to irregularity in the manner of its occurrence than the sthenic form. It may present itself in the upper lobes of the lung, or in the central parts. In a case the other day, the patient, who had been depressed by severe anxiety and worry, was attacked with fever, pain in the chest, and rapid breathing (from thirty to forty); but no physical signs presented themselves, excepting some prolonged expiration in the lower lobe of the lung for five or six days, when the usual signs of consolidation were manifested, preceded for one day by crepitation and rhonchus. It is probable that in this case the inflammatory action commenced in the centre of the lung.

In forming your prognosis, there are two elements for your consideration; the inflammation, and the condition of system with which it is associated. Now of these two, the latter is by far the more important. Pneumonia, though a sufficiently serious disease, has, if uncomplicated, a strong tendency to recovery; but this tendency may be overcome by the noxious influence of a poison in the blood, or by a state of constitution in which the powers of the body have been prostrated by debilitating influences. Hence your judgment will be regulated rather by those symptoms which relate to the state of the patient's general health, than by those which indicate the extent of the inflammation. The same circumstances will influence the progress of recovery. A state of cachexia will not only retard this process, but may even turn it into a very unfavourable direction. It promotes degeneration rather than repair, and hence may create a tendency to suppuration or gangrene. We had a striking illustration of the truth of what I have said in the hospital the other day. (British Medical Journal, May 7th.)

There is one awful accident which sometimes happens in this disease, of which it is very necessary that you should be aware—the occurrence of sudden death by fainting. I have twice seen this unhappy termination to the low form of pneumonia; and once to acute bronchitis occurring with miliary tubercles, and with the heart in an early stage of fatty degeneration. Two of the three patients had suffered from much anxiety, and from overwork; of the third I have no information in this particular. I have also been told by a friend, of a case of subacute pleurisy, in which death took place in the same manner. One of my patients died as she was in a semirecumbent posture, arranging her hair. Another literally passed from sleep to death, and was found in the attitude of quiet repose.

The subject of treatment would afford matter for an entire lecture. I shall content myself with simply indicating the principles by which you must be guided. I have already stated that pneumonia, when uncomplicated, has a natural tendency to recovery. The danger, therefore, arises more from the circumstances which attend it, than from the inflammation itself; and such circumstances must receive a considerable share of attention in the treatment. Not that I would lead you to disregard the inflammation; I only desire to place the other elements of the case in their proper position. The more accurate physiological knowledge we now possess, has defined with greater precision the position held by the blood-vessels in the process of nutrition, and has taught us that changes in the circulation of one organ, must be explained by alterations in the nutritive condition of the organ affected, or of the system at large. We no longer regard inflammation as an entity of itself; but as one of a series of changes in the nutritive process; and these other changes often demand a still larger share of our attention. Impure states of the blood, depraved conditions of nutrition, the presence of tubercle or of cancerous deposits, often assume greater importance in our estimation than the local inflammation they may provoke.

Now in the disease in question, the concurrent circumstances indicate either that the cause itself of the inflammation seriously depresses the nutritive powers, or that it is allied with some other agency which tends to produce the same effect; and we have to do our best to prevent the favourable tendency of the inflammation from being overborne. On this account, sedatives, especially tartar emetic, which are of much use in sthenic pneumonia, are often quite inadmissible; and in favourable cases, can only be employed in the early stage, and in moderate doses.

Blisters, on the other hand, which are of questionable utility in the early stage of the sthenic form, are of much service. A few leeches also may afford much relief to the pain. Mercury has the high sanction of Dr. Watson. I would, however, venture to suggest that it is apt to be attended with the inconvenience of producing troublesome diarrhœa; and I have seen recovery imperilled by its occurrence.

In consequence of the tendency to depression which is so frequently prominent in these cases, stimulants will very often constitute most important remedies. Their quantity must be suited to the requirements of the particular case. In a case to which I have already referred, the patient did well with only a few doses of ammonia. Here, a stronger stimulant would have been unnecessary, and therefore injurious. On the other hand, in the pneumonia of typhus, or of erysipelas, or in the uncomplicated form, where delirium appears, with a rapid pulse, and other signs of prostration, wine and brandy must be given with a free hand. Between these extremes there will be every gradation. The object of stimulants is to keep up the energy of the circulation; and their employment must be regulated by the state of that function. On the other hand, wine and spirits do not contain nitrogen, and therefore cannot be appropriated by the tissues as food; they are no doubt entirely eliminated. It will, therefore, be desirable not to load the blood with an unnecessary quantity of excremental matter, especially when so important an emunctory for carbonaceous matter as the lungs, is diseased.

With these precautions, stimulants must hold a very high place among the remedies for asthenic pneumonia, especially as it presents itself among our town populations.

Opium, which so frequently accompanies stimulants in the treatment of disease, often proves a very valuable remedy. Regard must, however, be had to the tendency of the particular case. Some morbid poisons are narcotic in their action, and tend to produce stupor. This is sometimes the case with the typhus poison, for example; when such a tendency is observed, the employment of opium, at all times dangerous, would be doubly so with the respiratory surface seriously lessened. It is when the symptoms of asthenia exist without this complication, that this medicine lends its invaluable aid.

I need not say that due attention must be paid to the state of the secretions, and particularly to the alvine evacuations; and that while you secure the necessary relief to the action of the bowels, you must avoid weakening your patient by the undue administration of purgatives, particularly those of the more powerful class. Support, by light, nutritious diet, is of great importance. By the judicious administration of beef tea, in small quantities, at short intervals, you may, in mild cases, even avert the necessity for stimulants, or at least for those of the stronger kind.

Transactions of Branches.

MIDLAND BRANCH.

ON RETENTION OF URINE: PUNCTURE OF BLADDER, AND PERINÆAL SECTION.

By Thomas Paget, Esq., Leicester.

[*Read June 23rd*, 1859.]

The paper of Mr. Norman, read before the Bath and Bristol Branch, April 21st, 1859, and published in the Journal of the 4th of the present month, contains a case in which, relief having been obtained by puncturing the bladder above the pubes, the cannular track cicatrized, and an opening was thus left through which a female catheter was habitually introduced for micturition. "No urine escaped except when the catheter was passed, nor did a drop ever pass through the urethra." In this course, the patient, an old man, held on smoothly for two or three years.

Having, in my notes, three cases bearing upon Mr. Norman's, one of which too involves a much longer period of observation, and proportionably confirms his suggestion of a new treatment for urethral obstruction. I have thought them worth recital before the Association. They bear also, I think, importantly upon the question of perinæal section.

The first is that of Mr. N., who has raised himself from the ranks by application, quick insight, and entire reliability of character, to a position of considerable command in the glove trade of this place. (Leicester). From early life he has suffered much from stricture, which resisted the varied efforts of

several surgeons for its removal, and latterly, for some years would not admit any instrument through it into the bladder. His attacks of stoppage of urine had fortunately given way to the introduction of bougies *into*, not *through*, the stricture. In May 1842, when near the completion of his sixtieth year, this mode of relief failed him, and on the 21st, after suffering for several days from entire retention, he submitted to have a well-curved trocar introduced above the pubes. After about ten days it was thought desirable to remove the cannula, in the hope of compelling the bladder to resume its function, which it had so far shown no disposition to do. The patient however firmly insisted that he should be allowed to live as long as he could be enabled to by any modification of the instrument, and then die, rather than part with it to return to his old state. This being plainly a determination with him, which a few days talking to did not shake, I got him some gum-elastic tubes, about three inches long, and a silver shield like those of the bladder trocars, with a tube about half an inch long, the tube furnished inside with as deep a screw thread as the thickness of the metal would admit. Into this the elastic tube being screwed when warm was securely fixed. A thin elastic webbing passes round the pelvis from eye to eye of the shield, and fixes the instrument, which is perfectly easy. It is completed by a wooden plug, made watertight by a slight covering of muslin, and a spiral coil of silk thread.

This has been his only resource for now seventeen years. He is a hale, lively man, full figured, fresh in complexion, and rejoices in his opportunities and capabiltiy of walking four or five miles, which he does perfectly free from pain. The tube he changes himself nearly every day. If it remains any length of time, particularly if his digestion be amiss, lithic incrustation irritates the bladder. I have occasionally, during the seventeen years, found his urine mucous, and even muco-purulent from this cause, and from uneasiness produced by the extremity of the tube where it presses posteriorly upon the bladder. When the latter cause is recognised, a variation in the length of the tube changes the point of contact and gives relief. Rest, however, in bed, spare diet, and an aperient, have more commonly removed the muco-purulency in a few days. His only semblance of urine passing by the urethra, is a very rare perception of moisture from the penis.

If the second case is more recent, its result, to the present time, is quite as satisfactory. It is that of Mr. F., aged seventy, who has also suffered, for the larger portion of his life, from stricture. Of late his attacks of retention have yielded to small bougies, or catheters, introduced only *into* the stricture; and it is reported to me that only once for about twenty years has an instrument of any kind reached his bladder, when, Mr. Cooper tells me, he succeeded in passing one of the thinnest elastic catheters. He has frequently tried in vain since this one fortunate occasion.

October 22nd, 1855. The usual mode of relief, by passing a small instrument *into*, not through, the stricture, having failed us for three days, Mr. Cooper and I recommended puncturing above the pubes, having in view, for permanence, the same means of micturition as in the former case. The curved trocar was introduced, and on removing the cannula on November 6th (fifteen days), no difficulty was found in passing the same apparatus, with gum elastic tube. The track was well established either by cicatrix or adhesive effusion sufficiently consolidating the structures the trocar had pierced.

June 1859. The plan succeeded perfectly in making him comfortable. He soon acquired freshness of complexion and increased substance, is now to be seen, walking erect, and looks at seventy-four a better man than for the last twenty years. No water ever passes his urethra.

The third case shows that, the cannula track healing, the same fortunate circumstance as occurred in Mr. Norman's case, of a valvular opening retaining the contents of the bladder for the use of a catheter will not always be the result. Other peculiarities also in this instance of bladder puncturing seem to make it worthy of being narrated here.

A gentleman about seventy without previous stricture suffered retention, which he ascribed to being obliged to delay micturition when much incited to it. His urging and pain were unusually distressing, and I was unable to pass the catheter for him.

A physician, and a man of prompt decision, he insisted on relief by paracentesis vesicæ. I could not persuade him to endure his misery beyond forty-eight hours, and punctured above the pubes.

Anticipation, of course, was high that a simple spasm would soon relax, and the power of micturition return. Nearly three weeks, however, elapsed before urine passed, and then a large quantity of red lithic crystals came with the gush. The collection of this in the prostatic part of the urethra, at nearly 70 years of age, was probably the clue to the attack and to its main features, violence of pain and urging, failure of attempt at catheterism, as well as subsequent delay in the resumption of bladder function.

Even now the case was not at an end; for when the cannula of the trocar was removed, my patient became miserable from the constant escape of more urine through the artificial opening than was made by the urethra; and after much annoyance for three or four weeks more, during which we waited for obliteration of the cannular track, it seemed certain that its cicatrising was completed, and I was obliged to pass a suture-pin across it, about which, in a figure of 8 form, a thin strip of lint was wound, as for hare-lip. The newly formed film of cicatrisation was quickly destroyed, the track healed, and my friend was quite well.

A fourth case of micturition above the pubes was mentioned to me by Messrs. Weiss, when I named to them in 1842 the purpose for which I required the silver shield with screw tube. It had occurred some years before by the track of the cannula not becoming closed, and the patient had been dead two or three years. I think it was in the practice of the late Mr. Young, of Bucklersbury, London; and the object of the apparatus Messrs. Weiss made for the case was, as I recollect, to catch the urine which was constantly escaping.

These cases, each more or less, point to a new way of treating both impermeable stricture and, as Mr. Norman intimates, prostatic obstruction. My friend Mr. Henry Thompson, in a note, page 185 of his excellent work on *Enlarged Prostate*, names the existence of two of these cases. I had only cursorily mentioned them to him in conversation; he therefore could not be more explicit.

We have seen how complete and permanent is the relief afforded by the plan, and seem to have only to anticipate what objection may possibly weigh against its general adoption. The only one that occurs to my own mind has relation to seminal matters. Of course, in all impermeable strictures, where the obstruction is anterior to a certain point of the urethra, the seminal function is lost. Where urine cannot pass, semen—a fluid of greater crassity—cannot be ejected; nor can we assume for our present plan, that it would at all restore the function. But neither can we expect to find this consideration operating as an objection in practice. In the first, or stricture class of cases, the disease is slow in attaining a hopelessly impermeable state; and the patient has reached an age at which his constant distress in micturition, his emaciation, sleepless nights, and still more the agony of frequently recurring retention, will induce him to purchase most gladly his release, even if he do not get back the function in question. He would then only lose it a few years, probably very few, earlier than his compeers in age. Indeed, what have we to promise him from any other course? Has the result of perinæal section been investigated in regard to this point? In what proportion of operations does its groping dissection spare the parts sufficiently to leave this function intact?

The phrase "hopelessly impermeable" is not an unadvised one. I quite agree with Mr. Norman, that until this state is attained, dilatation has the control of the case, and interference either with knife or trocar is wholly forbidden. I believe it will not be long before perinæal section is looked back upon as a matter of history; and its performance, when a grooved instrument can be got through the stricture, is stigmatised as a mere flourish of the knife, discreditable to surgery and sound judgment.

There is another objection, I am aware, which some will allege against tapping the bladder above the pubes; namely, the danger of the operation: and, if obliged to adopt in its performance the directions of the highest authorities of the day, I own I should feel the objection to be fatal to the optional use of it.

Mr. Thompscn's recent work already referred to directs (p. 182) that "a vertical incision, about *an inch and a half or two inches in length*, be carried through the linea alba, so as just to admit the tip of the finger to reach the distended bladder."

Mr. Fergusson, in his *Practical Surgery*, says: "*An incision three inches long* should be made above the symphysis through the skin and linea alba, when the cellular tissue in front of the bladder will be exposed, and the viscus may be opened with the point of the knife, or, what will be better, with a trocar and cannula."

But it is no such operation as this that I am advocating; no

such incision through a tendinous sheet, sure to be kept open by reason of a peculiar connexion between this tendon and the abdominal muscles, and by their action upon it; no such exposure of the cellular tissue in front of the bladder, or perhaps even the peritoneum itself. With the operation above described in view, I cannot but feel that Mr. Thompson's conclusion is a very judicious one, like others to be met with in his excellent treatises. He says: "In reviewing the comparative merits of these four forms of operative procedure, the task may be narrowed at the outset by dismissing one of them, the puncture above the pubes, with but few remarks. Most surgeons appear to be pretty well agreed that this is the most dangerous mode of reaching the bladder." And again he says: "It is always attended with some risk of extravasation and suppuration behind the pubic symphysis, or beneath the peritoneum."

The only mode of paracentesis vesicæ I have ever witnessed is the simple piercing of the skin, parietal substance, and bladder itself, by a well-curved trocar introduced from half an inch to an inch above the pubes, and with its point upwards in a direction for the lumbar vertebræ, to allow for the subsidence of the bladder when emptied. The cannula should have its end received well into a recess or rebate in the stem of the trocar.

This operation I have seen and practised for fully forty-five years: how frequently I cannot say; but I have done it thrice in the same individual, twice of which were within forty-eight hours, in consequence of his getting the cannula out during sleep a few hours after its first introduction. I believe I should be safe to say that in our Infirmary, and in private, I must have witnessed and done more than twenty-five of these operations. I have not once seen any bad result from them; neither urinous infiltration, suppuration, nor even inflammation; and am throughly convinced that surgeons, on further experience of this simple, safe, *almost subcutaneous* proceeding, will be "pretty well agreed" that it is not "the most dangerous mode of reaching the bladder". There is comparatively no wound to inflame; there is no violence done to the tendinous sheet of the linea alba; no disturbance of the muscular covering of the abdomen; no exposure of the cellular tissue in front of the bladder. These, of course, are the causes of inflammation and suppuration. Infiltration is next to impossible while the cannula is tightly embraced by the skin, tendon, and contracted bladder.

If it is required permanently to adopt the short flexible tube for micturition, of course it will be right to be in no hurry about the exchange, but to retain the silver one for some days, to allow its track to become consolidated by the adhesive process. I have, in the two cases now reported, found twelve and fifteen days quite enough; probably they are more than enough.

I have no hesitation in saying, that Mr. Fergusson has fallen short of the judgment and quickness of apprehension which no less than amplitude and clearness generally characterise his *Practical Surgery*, when he delineated a straight trocar for puncturing above the pubes; and that his delineation represents the upper part of the distended bladder very much too far from the umbilicus, the peritoneum consequently unfairly within the reach of an inexpert operator.

In conclusion, I have to remind my brethren that no such substitute for natural micturition, as I have here shown to be perfect and enduring for so many years, can follow any other mode of puncturing the bladder. Fancy a tube worn in the perineum or rectum; fancy it walked with or sat upon; or fancy the symphysis pubis in its endeavours to accommodate itself to such a presence.

I have also to exhort them to throw aside the idea of danger while merely piercing the parietal integuments, linea alba, and bladder, an inch above the pubes, its fundus being felt at or near the umbilicus, and the peritoneum of course lifted with it.

Drinking Fountains for Bristol. During the past week two of a series of drinking fountains for Bristol, the gift of various gentlemen, and erected under the superintendence of the local board of health, have been opened for public use. Several others are in course of erection, and will be speedily completed.

Vacancies. The Professors' Chairs of Comparative Anatomy and Physiology, and also of Surgery, to the Royal College of Surgeons, are now vacant by the resignations of Professors Busk and Hewett.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, JULY 2nd, 1859.

ILLEGAL DETENTION IN A LUNATIC ASYLUM.

The action which has lately been brought in the Queen's Bench by Mr. Ruck against Dr. Stilwell, for illegal detention, comes as a great blow and a heavy discouragement to the proprietors of licensed asylums. It is said misfortunes never come singly; and certainly a combination of circumstances has lately taken place which will, we fear, tend to prejudice the public mind with respect to private asylums, and to lead towards legislation of a nature anything but favourable to this speciality. There can be no doubt that the charge made by Mr. James, for the prosecution, against Dr. Conolly, of having taken a percentage on the patients sent through his instrumentality to Moorcroft House, is a very grave one—one that will shake the faith of the public in consulting alienist physicians connected with private lunatic asylums to its very foundations. It must be remembered, however, that as yet we have had only an *ex parte* statement—a statement supported by the production of documents, no doubt, but still an *ex parte* statement; and, as we hear that it is probable that another trial will be called for, we trust that some satisfactory explana- will be given of a transaction which, in its present aspect, we cannot view without deep sorrow.

Turning from this part of the subject, however, to its more general bearings, we may state that the public view this trial in anything but its true light. In reality, the matter tried was whether the certificates on which Mr. Ruck was detained at Moorcroft House were legal or not. The jury decided in the affirmative; but the public seem to believe that the trial had reference to the illegal detention of a sane man. Now, we cannot help thinking that this misapprehension has been brought about by the nature of the evidence adduced before the court by the prosecution. Medical evidence was paraded to prove that Mr. Ruck never was insane in the sense in which Dr. Conolly signed his certificate, the opinions of discharged servants being relied upon to back it up; and we must confess that, to our minds, the one was worthy of the other. We have seen of late sufficient of professional disparagement to make us doubt that the medical millennium has come with the Medical Act; and certainly the evidence of Dr. Johnson, and of Messrs. Skey, Gay, and Canton, in this particular trial, does not weaken that impression in our mind. We know that it is the new doctrine to say that, the more a man has studied a speciality, the less he knows about it—that is the gist of a contemporary argument; but to that doctrine we have never given our adhesion, and therefore have a right to combat it. We are certainly at a loss

to know how these medical witnesses for the prosecution could have so rapidly jumped at the conclusion that Mr. Ruck had been suffering simply from *delirium tremens*. The evidence of the case certainly led to a totally opposite conclusion; and it is not therefore without surprise that we find them giving such a decided opinion in opposition to that of a professional brother in a matter affecting his medical reputation. Let us for one moment suppose Dr. Conolly called on to pass judgment on Mr. Skey or Mr. Canton for their treatment in the setting of a broken leg. Would not the whole profession shout with derision? They would; and justly so. Yet the *dictum* of Mr. Skey in the witness-box is received as perfectly unimpeachable; and the public, knowing no better, give it as much weight as though the shade of Pinel had spoken.

Mr. Skey tells us that, "in thirty years experience, he could not recollect any case of *delirium tremens* going out of a hospital to a lunatic asylum". Very probably so. The cases that come into a hospital are always the most acute cases; and the patients either go out of the world at once, or recover for the time. But what does Mr. Skey know of the final end of such cases? Nothing; but probably the officers of public asylums do; and they will, we venture to say, tell a very different story. Dr. Johnson, in this particular, directly contradicts the evidence of Mr. Skey. He admits that "*delirium tremens* sometimes passes into insanity"; and we must say that any man who doubts this must have made but sorry use of even "thirty years experience".

We think the profession at large are deeply interested in the manner in which medical men speak publicly of the opinions of their brethren; for the reason that, here, professional lies at the bottom of public estimation. We may multiply medico-ethical societies to an indefinite extent, and all to no purpose, as long as the profession tolerates the spectacle of medical men thus lightly, most lightly, passing judgment upon each other in cases where judgment is indeed difficult. Those who triumph for the time in this ignoble game, should see that they are slowly, but surely, lowering the tone of the whole profession in the eyes of the public, which is thus taught to use the phrase "When doctors differ, etc.," as a covert sneer against all professional opinion whatever.

PROPOSED NEW FELLOWS OF THE COLLEGE OF PHYSICIANS.

Considerable excitement marked the meeting of the Comitia Majora of the College of Physicians on Saturday last. At this meeting, the Consiliarii submitted to the Fellows at large the names selected by themselves from among the Licentiates for admission to the Fellowship. The list proposed did not meet with the approval of the Comitia. A very general feeling was expressed that many names among the Licentiates had been passed over to whom the Fellowship was justly due, and that others had been nominated rather as matter of private interest than on account of public desert. After considerable discussion, a motion for adjourning the election to October next was carried by a large majority. None of the proposed list were elected, but the question of a new or amended list was referred back to the Consiliarii. From the feeling displayed by the Fellows, it is evident that no list will be adopted by the Comitia Majora which does not deal even-handed justice both to the Licentiates by examination, and the Licentiates by admission under the recent bye-laws. The Consiliarii have, no doubt, a difficult task to perform; but if they act in a spirit of strict impartiality and justice, the College may be strengthened rather than weakened by the present commotion. What is required is, that a large and generous list should be prepared from the town and country Licentiates, both of old and recent standing. The country Licentiates require no favours at the expense of those belonging to the metropolis; and the College will only strengthen its borders by enfranchising a large body of the present Licentiates, both in town and country. The days of ruling the College by cliques and sections are passed: it can henceforth only be guided by public opinion, as expressed by the majority of the Fellows.

THE WEEK.

The Milan correspondent of the *Times*, in a letter inserted June 29, gives a description of the accommodation provided there for the sick and wounded in the present war. There are, he says, twenty-five military hospitals, large and small, in Milan. All the barracks have been converted to this purpose; and the troops, in their way through the town, are compelled to encamp in the neighbourhood. The twenty-five hospitals were said to contain about ten thousand patients, a large proportion of these being wounded. The hospital of San Ambrosio, formerly a convent, is described as containing 1250 patients, and as being admirably adapted for its present situation: it has lofty, airy rooms and corridors, and spacious internal courts, covered with grass, shaded by fine trees, and surrounded by cool porticoes. The kitchens and pharmacy are very clean. If there be, it is said, a deficiency in any respect, it is in lint, bandages, and sheets. There is little, however, to be said in the way of fault-finding: the air is sweet and pure, and an offensive odour is scarcely to be encountered in the whole place. The hospital of San Luca, recently a barrack, is in an unfinished state, and cannot be reported of so favourably as to its power of impressing the olfactory nerves. Hospital gangrene is said to be very rare—indeed, one case only is mentioned. Chloroform has been much used in amputations, of which many been performed. The medical men in most of the military hospitals of Milan are civilians, who have been invited to volunteer their services; there are also some Austrian surgeons. The Milanese ladies nurse the sick by turns—those of the allied armies, at least; for the narrator hints that the Austrian wounded prisoners do not come in for any share of their nursing, or of the comforts provided for those who have been fighting on the Italian side.

The papers of the past week have contained an account of the recent exposure in the Lambeth Police Court, of the doings of certain worthies who have been manifesting a great anxiety for the integrity of the ears of the public. Will said public listen to facts? or will it remain intellectually as well as physically deaf? Surely, one would think, the revelations of the witnesses in the examination of the so-called "Dr." Watters, and the announcement that they had been deluging their ears and heads with urine, at the cost of some pounds,

must cause the dullest wight to inquire whether all is true that he hears trumpeted forth by the Protean proprietors of Free Ear Infirmaries and such like institutions. "Dr." Watters and his coadjutor Edwards have been committed for trial before a superior court. We trust that they will there receive the reward they deserve; and that they will soon be joined by such other members of their fraternity, as still give this metropolis the benefit of their wisdom and experience.

The following papers, received lately by the Secretary of State for India, and published in the *London Gazette* of June 28th, do not, we think, require comment. Every member of the medical profession who reads them must derive the highest gratification from their perusal.

"No. 1. *General Order.*

"Fort William, March 29.

"No. 423.

"His Excellency the Governor-General in Council has much satisfaction in publishing the accompanying letter from the Right Hon. the Commander-in-Chief, in which Lord Clyde warmly recommends the Medical and Commissariat Departments to the notice of the Government of India.

"The Governor-General in Council desires to express to the Director-General, Dr. Forsyth; to the Inspector-General of Her Majesty's Hospitals, Dr. Linton, C.B.; to Colonel Ramsay, late Commissary-General; and to Lieutenant-Colonel Thompson, C.B., the present Commissary-General of the Bengal Army; and to all the officers of the Medical and Commissariat Departments who have been employed in the field, or who have elsewhere furthered the service by their exertions in providing for the welfare and the wants of the troops; the cordial acknowledgments of the Government of India for the important services they have rendered."

"No. 2. *The Commander-in-Chief in India to the Governor-General.*

"Lucknow, February 21.

"My Lord,—The military operations in the Presidency of Bengal which ensued on the great mutiny of 1857, having happily been now brought to a close, I have the greatest satisfaction in recommending warmly to your Excellency's protection two great departments of the military administration to which the troops, and the officers who have commanded them in their long campaigns, are under real and great obligations. I allude to the Medical and Commissariat Departments.

"The former, being composed of officers belonging to the two services, has shone equally in the matters of general organisation and of regimental arrangements. The Director-General, Dr. Forsyth, and the Inspector-General of Her Majesty's forces, Dr. Linton, C.B., in Calcutta, have worked successfully to meet the great requirements made on them; and the staff and regimental medical officers have well maintained the credit of their noble profession and the reputation for self-sacrifice which belongs to the surgeons of Her Majesty's armies—a reputation which is maintained in the field on all occasions, as well as in the most trying circumstances of the hospital.

"It has been remarked throughout the army that, from the time of the slender forces taking the field against Delhi, and from Allahabad, in the summer of 1857, the system of the Indian Commissariat has been found equal to the tasks imposed upon it, in spite of the extraordinary circumstances in which it was suddenly placed, and of the actual loss of the resources—viz., the great contractors and agents, with which it had been the custom to work.

"For this system the army is in great measure indebted to the late Commissary-General Colonel Ramsay, and his successor, Colonel Thomson. The latter officer, being in personal charge, supplied the field force of Delhi under unexampled circumstances, when Sir A. Wilson stood before that city, almost cut off from the rest of India.

"The Commissary-General has been nobly supported by his subordinates; and I do but speak the truth when I affirm that no department has ever possessed a more efficient staff of officers than those forming the establishment of the Bengal Commissariat. I have, etc., Clyde,

"General, Commander-in-Chief, East Indies."

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Committee of Council will meet at one o'clock on Wednesday, at the Medical Institution, Mount Pleasant.

The General Council of the Association will meet at half-past two.

Wednesday, 27th. 7 o'clock, P.M. First General Meeting of the Association. The retiring President will make a few remarks. The new President will deliver an address. The Report of Council will be presented, and other business transacted.

Thursday, 28th. *Morning*, 8.30. Public Breakfast at the Adelphi Hotel.

10 o'clock. Meeting of the members of the new Council. At 11, the Address in Medicine will be delivered by Dr. E. Waters of Chester. Cases and Papers will be read.

The meeting will adjourn at 1, and reassemble at 2. The Report of the Benevolent Fund will be received. Cases and Papers will be read.

Evening. There will be a *Soirée* at the Royal Institution, in Colquitt Street.

Friday, 29th. 11 A.M. The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool. Papers and Cases will be read.

6 P.M. Dinner. Tickets a Guinea each.

Members are requested to enter, on arrival, their names and addresses in the Reception Room in the Medical Institution, Mount Pleasant, where all the meetings will take place, and where cards will be supplied which will secure admission to all the proceedings, and contain such information as may be useful to those who are strangers to the town.

Members who wish for previous information may communicate with A. T. H. Waters, Esq., 27, Hope Street, Liverpool.

It is particularly requested that all Members who propose to read Papers will communicate with the General Secretary without delay. Arrangements will be made for the Sectional Reading of Papers, if a sufficient number be promised to render such a plan desirable.

Among the principal Hotels are:—the Adelphi, Ranelagh Place; the Waterloo, Ranelagh Street; the Angel, Dale Street; the Feathers, Clayton Square; the George, Dale Street; the Grecian, Dale Street; the Neptune, Clayton Square; the Queen's, Lime Street; the Royal, Moorfields; the Stork, Queen's Square; the Union, Parker Street; the Victoria, St. John's Lane; the Wellington, Dale Street.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 30th, 1859.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Cambridge and Huntingdon. [Annual Meeting.]	George Hotel, Bishop Stortford.	Tuesday, July 5th, 2 P.M.
East Anglian. [Annual Meeting.]	Royal Hotel, Lowestoft.	Friday, July 8th, 2 P.M.
Reading. [Annual Meeting.]	Council Chamber, Reading.	Wed., July 13, 4 P.M.
Bath and Bristol. [Annual Meeting.]	The Institution, Bristol.	Thurs., July 14th, 3 P.M.
Metrop. Counties. [Annual Meeting.]	32a, George Street, Hanover Square.	Tuesday, July 19th, 8 P.M.
North Wales. [Annual Meeting.]	Royal Hotel, Rhyl.	Tues., July 19th, 1 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

Reports of Societies.

ROYAL SOCIETY.

May 26th, 1859.

ON THE MODE IN WHICH SONOROUS UNDULATIONS ARE CONDUCTED FROM THE MEMBRANA TYMPANI TO THE LABYRINTH IN THE HUMAN EAR. BY JOSEPH TOYNBEE, ESQ., F.R.S., F.R.C.S.

The opinion usually entertained by physiologists is, that two channels are requisite for the transmission of sonorous undulations to the labyrinth from the membrana tympani; viz., the air in the tympanic cavity which transmits these undulations to the membrane of the fenestra rotunda and the cochlea; and, secondly, the chain of ossicles which conducts them to the vestibule. This opinion is, however, far from being universally received. Thus one writer on the Physiology of Hearing (Mr. Wharton Jones) has contended that "the integrity of one fenestra may suffice for the exercise of hearing" (*Cyclopædia of Surgery*, article "Diseases of the Ear," p. 23); another (Mr. Brooke) has expressed his conviction that "the transmission of sound cannot take place through the ossicula" (*Lancet*, 1843, p. 380); while Sir John Herschell, in speaking of the ossicles, says, "they are so far from being essential to hearing, that when the tympanum is destroyed, and the chain in consequence hangs loose, deafness does not follow" (*Encyclopædia Metropolitana*, article "Sound," p. 810).

The object of this paper was to decide by experiment how far the ossicles are requisite for the performance of the function of hearing. The subject was considered under two heads; viz.—1. Can sonorous undulations from the external meatus reach the labyrinth without having the ossicles for a medium? and 2. Does any peculiarity in the conformation of the chain of ossicles preclude the passage of sonorous undulations through it?

1. *Can Sonorous Undulations reach the Labyrinth from the External Meatus without the aid of the Ossicles as a Medium?* This question had often been answered in the affirmative, apparently because it had been ascertained that in cases where two bones of the chain had been removed by disease, the hearing power was but slightly diminished. But the absence of the stapes or even its fixed condition (ankylosis) was always followed by total or nearly total deafness; and the following experiments, which demonstrated the great facility with which sonorous undulations pass from the air to a solid body, indicated that the stapes, even when isolated from the other bones of the chain, might still be a medium for the transmission of sound to the vestibule.

Experiment I. Both ears having been closed, a piece of wood, five inches long and half an inch in diameter, was held between the teeth, and a vibrating tuning fork, C, having been brought within the eighth of an inch of its free extremity, its sound was distinctly heard, and continued to be heard for between five and six seconds,

Experiment II. One end of the piece of wood used in the previous experiment being pressed gently against the outer surface of the tragus, so as just to close the external meatus without compressing the air contained within it, a vibrating tuning fork, C, placed within a quarter of an inch from its free extremity, was heard very distinctly at first, and it did not cease to be heard for fifteen seconds.

Experiment III. Three portions of wood, of the same length and thickness as that used in the previous experiments, were glued together so as to form a triangle, somewhat of the shape of the stapes. The base of this triangle being placed against the outer surface of the tragus, as in the previous experiment, the tuning fork, C, vibrating within a quarter of an inch from its apex, was heard for twelve seconds.

Considering, as shown by the above experiments, the great facility with which sonorous undulations pass from the air to a solid body, it might, Mr. Toynbee thought, be assumed that the undulations on the tympanic cavity might be conveyed to the stapes, even when this bone was isolated from the rest of the chain, and conducted by it to the vestibule; and when it was also considered that the absence of the ossicles on the fixed condition of the stapes is productive of deafness, there was strong evidence in favour of the opinion that sounds from the external meatus cannot reach the labyrinth without the medium of the ossicles.

2. *Is there any peculiarity in the construction of this chain of ossicles to prevent the passage of sonorous vibrations through it?* This question had also been answered in the affirmative, on account of the various planes existing in this chain, and of the joints between the several bones composing it. (Mr. Brooke, *loc. cit.*) The following experiments indicated that neither the variety of planes, nor the several joints in the chain, will prevent the passage of sonorous vibrations through it.

A.—*Experiments respecting the Influence of the variety of Planes in the Chain.*

Experiment I. Three pieces of wood, each five inches in length and half an inch in thickness, were glued together so as to represent the planes in which the malleus, incus, and stapes are arranged, while three similar portions were glued end to end so as to form a straight rod. A watch was placed in contact with one end of the straight rod, while the other was pressed gently against the tragus, so as to shut the external meatus. The result was that the watch was heard nearly as distinctly as when in contact with the ear. When a similar experiment was performed with the angular portion of wood representing the chain of bones, the watch was also heard; but less distinctly than through the straight portion.

Experiment II. A vibrating tuning fork, C, was placed in contact with one extremity of the angular piece of wood, the other end being placed against the tragus of the ear. As soon as the sound ceased to be heard, the straight portion was substituted, when the tuning fork was again heard, and continued to be heard for about three seconds.

Experiment III. A vibrating tuning fork, C, was placed at one extremity of the angular piece of wood, the other extremity being held between the teeth. The fork was at first heard very distinctly, and when its sound ceased to be heard the straight piece was substituted, and it was again heard for the space of two seconds.

Experiment IV. Instead of the horizontal portion of wood, representing the stapes, three portions of the same size were made into a triangle, and this was glued to the anterior extremity of the piece, representing the incus. The previous experiment was then repeated, with the substitution of this apparatus for the angular one, and with nearly the same result; viz., the fork was heard through the straight piece about three seconds after it had ceased to be heard by the apparatus representing the chain of bones.

B.—*Experiments Illustrative of the Influence of the Articulation in the Chain of Ossicles.*

Experiment I. Three pieces of wood, each about five inches long and half an inch in thickness, were separated from each other by pieces of India rubber as thick as ordinary writing paper. They were then fastened together so as to assume the angular form possessed by the chain of ossicles. The tuning fork, C, being placed at the free extremity of the chain, the other extremity being held between the teeth, it was found that the sound was heard as distinctly, and for as long a time as when it passed through the chain formed of three portions of wood glued together.

Experiment II. When eight layers of the India rubber were placed between each piece of wood, the intensity of the sound was still nearly the same as when it passed through the portions of wood glued together.

The inference from the two series of experiments was that neither the variation of the plane existing in the chain of os-

sicles, nor the presence of the articulations, is sufficient to prevent the progress of sonorous undulations through the chain to the vestibule. The experiments, dissections, and observations, detailed in the paper, led to the following conclusions:—

1. The commonly received opinion in favour of the sonorous undulations passing to the vestibule through the chain of ossicles is correct.

2. The stapes, when disconnected from the incus, can still conduct sonorous undulations to the vestibule from the air.

3. So far as our present experience extends, it appears that in the human ear sound always travels to the labyrinth through two media: viz., the air in the tympanic cavity to the cochlea, and through one or more of the ossicles to the vestibule.

EPIDEMIOLOGICAL SOCIETY.

Monday, June 6th, 1859.

B. G. Babington, M.D., F.R.S., President, in the Chair.

PRACTICAL REMARKS ON CHOLERA MORBUS: ITS ORIGIN, NATURE, AND TREATMENT: WITH CASES. BY A. CAMERON, ESQ., SURGEON FIRST BATALLION ARTILLERY, H.M. INDIAN FORCES.

[*Read by* Dr. McWilliam.]

The author, after adverting to the multiplicity of views entertained by the profession with reference to the causes, nature, and treatment of cholera, advanced the opinion that this disease was caused by a poison existing in the atmosphere; and that it was not contagious, but that it required a certain condition of the system to be influenced by the poison. He considered that the great source of error, in theorising upon the nature of cholera, was mistaking the *effect* for the *cause* of the disorder. Vomiting and purging were present, and caused by cholera, it was true; but they were not cholera itself, any more than were the peculiar state of the blood and the cramps which characterised this disease. Cholera was considered by Mr. Cameron a disease in which the nervous system alone was engaged, the cholera poison acting on it so as to produce spasm and the other symptoms of cholera. In support of this view, he said that *post mortem* investigations had revealed no morbid appearances of the viscera; and that it was only by microscopic examination that the phenomenon of the minute vessels of the intestines being open-mouthed, from having lost their contractile power, had been discovered, accounting for the absence of serum in the blood, and the peculiar appearance observed in the choleraic motions. If it were admitted that the nervous system was really the seat of the disease, one great step had been taken in the inquiry, which would lead to a rational method of treatment. The tremendous shock which the nervous system had sustained was to be met and combated, and its effects remedied; and vitality, which was at its lowest ebb, restored. Mr. Cameron considered that chloroform by inhalation was capable of effecting these ends. He also recommended the internal administration of chloroform with camphor mixture and ammonia; but his chief reliance was on chloroform by inhalation.

A discussion followed the reading of this paper, in which Dr. Babington, Dr. Murchison, Dr. Greenhow, Dr. Camps, and Dr. McWilliam, took part.

Editor's Letter Box.

NORWICH UNION LIFE OFFICE AND MEDICAL FEES.

Letter from W. H. Ranking, M.D.

Sir,—I have, as one of the directors of the Norwich Union Life Office, much pleasure in announcing the following resolution of the Board, with reference to the payment of medical fees:—

"At a meeting of the Board of Directors of the Norwich Union Life Office, held on the 23rd inst., it was unanimously resolved—That all medical fees required, be from this time paid by the office." I am, etc.

W. H. Ranking, M.D.

Norwich, June 24th, 1859.

THE READING OF PAPERS AT THE ANNUAL MEETING.

Letter from Edward Smith, M.D.

Sir,—Can you give us any information as to the arrangements which are made for the convenient reading of papers at the approaching annual meeting at Liverpool? The associates are again invited to prepare papers; and you know that every year loud complaints are made as to the uncertainty when each paper will be read. No doubt the associates care less for the reading of papers than for the opportunity of seeing friends and becoming acquainted with the locality; and the more so, that they think they shall have the opportunity of reading them quietly in the pages of the Journal. But it certainly is due to all parties, either that papers should not be invited, or that, when prepared, they should be read at a known time, and to an audience of more than half a dozen members. There is a grievance; and where there is an evil, there should be a remedy. I would commend the subject to the careful consideration of the Council, with a view to the abolition of the present plan of reading papers, or to the rigid appointment of fixed periods for each address and paper. If original matter is desirable in papers, time must be expended in obtaining it; and some courtesy is due to those who give it.

I am, etc., Edward Smith.

6, Queen Anne Street, Cavendish Square, W.

RESULTS OF OVARIOTOMY.

Sir,—Mr. Baker Brown publishes in the Journal five cases of ovariotomy. Three of these cases ended in death. In his book he published seven other cases. Five of these cases were fatal. Am I to understand that Mr. Brown's practice in ovariotomy shews eight deaths out of twelve cases? Or will he favour us with his actual experience.

I am, etc., F.R.C.S.

London, June 25th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Blackman. On June 26th, at 129, High Street, Whitechapel, the wife of Charles T. Blackman, Esq., Surgeon, of a daughter.

Harding. On June 26th, at Stourbridge, the wife of *Thomas Massey Harding, Esq., Surgeon, of a son.

Kirby. On June 22nd, at 1, Taviton Street, Gordon Square, the wife of E. A. Kirby, M.D., of a son.

Legge. On June 28th, the wife of *William Legge, Esq., Surgeon, Wiveliscombe, of a daughter.

Moffat. At King's Kettle, Fifeshire, the wife of *Robert Moffat, M.D., of a daughter, lately.

Oliver. On June 24th, at Harleyford Place, Kensington Park, the wife of J. R. Oliver, M.D., of a daughter.

MARRIAGES.

Axford—Mitchell. Axford, John B., Esq., of King Street, Finsbury Square, to Mary, daughter of the late Thomas Mitchell, Esq., Surgeon, of Whitehaven, at Islington, on June 23rd.

Beazeley—Martin, Beazeley, Michael, Esq., son of Commander Beazeley, R.N., to Janet, third daughter of *Adam Martin, M.D., of Rochester, on June 23rd.

Bratton—Allen. *Bratton, James, Esq., Surgeon, of Shrewsbury, to Mary, younger daughter of John Allen, Esq., of Herne Hill, Surrey, on June 28th.

Burrell—Towne. Burrell, Joseph, Esq., of 48, Old 'Change, London, to Lucy, only daughter of the late Leonard Towne, M.D., of New York, at Mansfield, on June 27th.

Cayzer—Rolls. *Cayzer, Thos., Esq., Surgeon, of Aigburth, near Liverpool, to Alice Ann, youngest daughter of the late Samuel P. Rolls, Esq., at Hornsey, on June 23rd.

Chandler—Kirk. Chandler, A. H., M.D., of Dorchester, New Brunswick, to Elspeth R., daughter of James Kirk, Esq., Regent's Park, London, at St. Pancras Church, on June 25th.

Elmslie—Tatham. Elmslie, James Aberdour, Esq., to Mary Ann, second surviving daughter of Christopher Tatham, Esq., Surgeon, Poplar, on June 28th.

Goldie—Kenrick. Goldie, the Rev. George, B.A., to Julia, eldest daughter of *George C. Kenrick, Esq., Surgeon, of Melksham, Wilts, on June 22nd.

Hilliard—Saunders. Hilliard, George B., Esq., eldest son of *G. R. Hilliard, L.R.C.P., of Chelmsford, to Fanny Isabella, eldest daughter of Edward Saunders, Esq., of Brunswick Square, and Whitelands, Kent, at St. Pancras Church, on June 25th.

Marshall—Backhouse. Marshall, John, Esq., Surgeon, to Sarah, younger daughter of Benjamin Backhouse, Esq., of Ipswich, at Lewisham, on June 21st.

Pacotta—Woodforde. Pacotta, Monsieur, of Paris, to Helen Maria, youngest daughter of the late James Woodforde, M.D., of the Honourable East India Company's Service, at Paris, on June 23rd.

Rayner—Franks. Rayner, T., M.D., of Great Malvern, to Mary Sophia, youngest daughter of the late George A. Franks, Esq., of Chester, at Charlbury, Oxon, on June 16th.

Wallace—Whistler. Wallace, Alexander, M.A., B.M.Oxon., of Clerkenwell, to Anne, eldest daughter of Edward Webster Whistler, Esq., of Bembridge, Isle of Wight, of June 21st.

Wolstenholme—Williams. Wolstenholme, John H., Esq., Surgeon, to Lucy, second daughter of the late *Peter Williams, M.D., of Holywell, Flintshire, on June 23rd.

DEATHS.

Bodington. On May 12th, at Bura Ghat, on the river Nerbuddah, in India, aged 29, Richard Bodington, Esq., Assistant-Engineer in the Great Indian Peninsular Railway Company's Service, second son of *George Bodington, Esq., Surgeon, of Sutton Coldfield.

*Edwardes, George, Esq., Surgeon, at Wolverhampton, of diphtheria, aged 51, on May 29th.

*Griffith, Samuel, M.D., Physician-Accoucheur to St. Thomas's Hospital, at Torquay, on June 23rd.

White. On June 21st, at Storey's Gate, Westminster, aged 9, Peter Llewelyn, fourth son of John White, Esq., Surgeon.

APPOINTMENTS.

*Bond, Francis T., M.B., elected Physician to the Queen's Hospital, Birmingham

*Gibson, W. L., M.D., elected Attending Physician to the Royal Infirmary, Dundee.

Greig, David, M.D., elected Attending Surgeon to the Royal Infirmary, Dundee.

Waller, Augustus, M.D., F.R.S., elected Physician to the Queen's Hospital, Birmingham.

PASS LISTS.

Royal College of Physicians. At the Comitia Majora, held on Saturday, June 25th, the following gentlemen, having undergone the usual examination, were admitted Licentiates of the College:—

Dyster, Frederick Daniel, M.D., Tenby
Harvey, Edward Robinson, M.D., Clarges Street
Ingram, Charles Penfold, M.D., Guildford Street

Also, at the same Comitia, the following gentlemen were admitted Licentiates under the recently enacted temporary bye-laws:—

Elliot, Robert, M.D., Carlisle
Wall, Cavendish Lister, M.D., Kensington

[The election of New Fellows which was to have taken place was adjourned to Saturday, October 22nd.]

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, June 24th, 1859:—

Barton, Henry Thomas, Newcastle-on-Tyne
Byles, James Cotton, Victoria Park Road, Hackney
Davies, Edward, Llansilin, Denbighshire
Dean, Thomas, Slaithwaite, Yorkshire
Goode, Henry, Derby
Hadlow, Henry, George Street, Minories
Harris, Herbert Roby, Swan River, Australia
Rickey, Joseph, Clones, co. Monaghan
Scard, Thomas, Army

HEALTH OF LONDON:—WEEK ENDING JUNE 25TH, 1859.

[*From the Registrar-General's Report.*]

The total deaths in London, which had fallen to 913 in the previous week, rose to 970 in the week ending last Saturday. In the ten years, 1849-58, the average number of deaths in the weeks corresponding with last week, was a thousand; but as the deaths that are returned for last week occurred in a population that has increased, they can only be compared with the average raised in proportion to that increase, namely, with 1,100. The comparison shows that the deaths of last week were less by 130 than the number which would have occurred if the average rate of mortality for the third week of June had prevailed.

The returns of mortality in former years have shown that the season now passing is, for London, the healthiest in the circle of the months; but there is already indication that the complaint peculiar to summer, and which is so fatal to children, has begun to prevail. Diarrrhœa was fatal in two previous weeks in six and twenty cases respectively; last week the number rose to thirty-four, of which all except five occurred to children. Besides these, a child died at 8, Bird Street, Marylebone, from "choleraic diarrhœa." Twenty-three deaths occurred last week from small-pox, three of which, on the 18th and 19th inst., were in one family, at 3, Charles Court, Southwark. Another death from the same disease occurred a short time previously in the same family. Scarlatina was fatal in thirty-nine cases, diphtheria in twelve. Five children and two adults died from syphilis; nine infants from inanition and want of breast milk; also seventeen who had been born prematurely. Five persons were registered who had attained the age of ninety years or upwards, one of whom was a woman, 98 years old; and there was also a centenarian, the widow of a labourer, who died on the 20th instant, at 1, Whitehind Alley, Southwark, and whose age is stated to have been 105 years.

Last week the births of 936 boys, and 829 girls, in all 1,765 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1555.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·840 in. The barometer rose from 29·67 in. on Tuesday, to 29·97 in. on Friday, being the lowest and highest readings in the week. The mean temperature of the week was 60°, which is just equal to the average of the same week in forty-three years (as determined by Mr. Glaisher). The *highest* and *lowest* readings of the thermometer in the shade were obtained on the same day, viz., Saturday, and were respectively 78·8° and 43·5°. The extreme range of temperature of that day, and also of the week, was therefore 35·3°. The mean daily range was 20·8°. The difference between the mean dew-point temperature and air temperature was 9·3°. The mean degree of humidity of the air was 72; the humidity on Thursday was only 60. The mean temperature of the water of the Thames was 64·8°. The wind blew most frequently from the south-west. The rain measured was 0·16 in., which fell on Monday.

Medical Autographs. At the sale of the manuscript library of the late Dawson Turner, Esq., many of which lots were purchased for the British Museum, there were some very interesting medical autographs. Lot 657 was the *Album* of Philip de Montigny de Glarges, containing the extremely rare autograph of William Harvey, the discoverer of the circulation of the blood. This Album was purchased by Mr. Turner for £17, from the Van Sypestein Collection, and now fetched £20. The literary and scientific correspondence, in eight volumes, of Henry Baker, author of the *Microscope made Easy*, realised £10. A Medical Treatise, entitled *Purgantia*, by Hesman Boerhaave, fetched only 6*s*. Dr. Cheyne's letters to Richardson fetched £1:7. All the medical autographs were sold at low sums, considering their great interest. The five days sale of this extraordinary collection realized the large sum of £6558:8, through the energy of Messrs. Puttick and Simpson, to whom all autograph collectors are much indebted for the most elaborately compiled and descriptive catalogue we have ever seen. The same firm is about to dispose of the interesting library, etc., of the late George James Squibb, Esq., F.R.C.S., the owner of one of the finest collections of medical portraits in the kingdom.

ACTION AGAINST THE PROPRIETOR OF A PRIVATE ASYLUM.

RUCK versus STILWELL.

In August, 1858, a Commission of Lunacy was held for the purpose of ascertaining the state of mind of Lawrence Ruck, Esq., of Sittingbourne, in Kent, and Montgomeryshire. An account of the inquiry was given in the British Medical Journal for September 4th, 1858, to which we refer our readers for the particulars of the case. It will be sufficient to state here that the principal question was, whether the aberration of mind which Mr. Ruck had exhibited was of a permanent or a temporary nature. The jury, at the conclusion of the inquiry, returned a verdict in favour of Mr. Ruck's sanity.

Lately, an action has been brought, in the Queen's Bench, by Mr. Ruck, against Dr. Stilwell, the proprietor of the Asylum in which he had been lodged, and Dr. Conolly. The case was tried in the *Nisi Prius* Court, before Mr. Justice Hill, on June 21st, 22nd, and 23rd.

Mr. Edwin James, Q.C., Mr. Serjeant Petersdorff, and Mr. Gordon Allan, appeared for the plaintiff; and Mr. M. Chambers, Q.C., Mr. Serjeant Ballantine, and Mr. Honyman, for the defendants. The first count was for assaulting and imprisoning the plaintiff in a house, called Moorcroft House, in the parish of Hillingdon, and detaining him there, among lunatics and persons of unsound mind, for a period of ten months. The second count alleged that the defendants were the keepers of a house licensed for the reception of lunatics, and received the plaintiff upon an order, signed by one Mary Ann Ruck, as a private patient, and with two medical certificates; that while the defendants had such charge of this plaintiff he recovered; which the defendants well knew, and it was thereupon their duty to transmit notice of such recovery to the said Mary Ann Ruck; but that they neglected to do so, and they also wilfully neglected to transmit notice of his recovery to the Commissioners of Lunacy; but, under colour and pretence of the said order and certificates, kept the plaintiff in custody for ten months, etc. To these two counts the defendants pleaded several pleas, denying all the material allegations.

Mr. Edwin James said this was an action of trespass, brought by the plaintiff, Mr. Lawrence Ruck, against Dr. Stilwell, the proprietor of a private asylum for the reception of lunatics, at Moorcroft House, in the county of Middlesex. The plaintiff had been confined in the defendant's house from November 5th, 1857, down to August 27th, 1858, when he was discharged; and the questions would be as to the legal right of the defendant to detain him, and the validity of the medical certificates. The jury would find that the plaintiff was of sound mind, and that there was no justification for confining him, either in law or morality. The plaintiff, in August 1857, went down to Manchester, with his wife, to see the Exhibition, and there met a Mr. Barnett, who was one of the gentlemen who signed the medical certificate. After staying at Manchester some little time, he went to Wales, and there continued till the month of October. In consequence of some domestic circumstances, the plaintiff then gave way to great intoxication, and his mind became affected. He then went to Welchpool, and met with Mr. Barnett, and though it was well known to everybody that the plaintiff was not in a state of insanity, Mr. Barnett took him to Reading, where his wife was. There had been domestic differences; but he (Mr. James) made no charge against Mrs. Ruck, who had acted on the advice of Barnett and his attorney. There was no pretence whatever for charging the plaintiff with insanity; and yet, even after a jury had found that he was of sound mind, the defendant made an entry in his book to the effect that in his, the defendant's judgment, the plaintiff was still "a dangerous lunatic." His wife had slept with him at Reading the night previous to the day when Mr. Barnett and Dr. Conolly signed the medical certificates. The learned counsel referred to the sums which was sometimes paid to the keepers of private lunatic asylums—£300, £400, £500, a year, and, in one instance, as much as £2,000 a year. This was a great temptation, and therefore the legislature had interfered for the protection of the public by passing several enactments, one of which was the 16 and 17 Victoria, cap. 96. The fourth section of that statute enacted that no person should be received as a lunatic into any licensed house without an order, signed as directed; nor without two certificates, signed by two persons, each of whom should be a physician, surgeon, or apothecary, who had respectively examined the person to whom the certificate related; and, by the 36th section, the physician, surgeon, or apothecary, must be one who was in actual practice. It would be shown that Barnett had not been in practice for years, and that both Dr. Conolly and the defendant (Dr. Stilwell) knew that fact. His certificate, therefore, had no legal weight at all; and the defendant (Dr. Stilwell), in receiving a patient on such a certificate, was guilty of a misdemeanour. The other certificate was signed by a gentleman, for whom he (Mr. James) personally, had great respect, and in whom the public had great confidence; but he was astonished to find, that with the knowledge of the Act of Parliament, Dr. Conolly should have put his hand to a certificate which confined the plaintiff in a lunatic asylum for ten months. The twelfth section of the statute enacted that "no physician, surgeon, or apothecary who, or whose father, brother, son, partner, or assistant, is wholly or partly the proprietor of, or a regular professional attendant in, a licensed house or hospital, shall sign a certificate for the reception of a patient into such house or hospital," etc. Notwithstanding that enactment, he (Mr. James) regretted to say, Dr. Conolly, who had signed one of these certificates, was actually a partner in the defendant's establishment. Dr. Conolly received fifteen per cent. of the profits of the establishment, and he had actually received his percentage of the profit of the detention of the plaintiff. The learned counsel here read an extract from the defendant's book, from which it appeared that in March 1858, Dr. Conolly had received a sum of £15 in respect of Mr. Ruck (the plaintiff). Dr. Conolly was to receive £60 a year out of Mr. Ruck's payments. He was the medical attendant at the asylum, and received as his salary fifteen per cent. on the payments of all confined in the asylum. Mr. James trusted the jury would express their opinion by vindicating the plaintiff for the imprisonment which he had suffered during ten months. The plaintiff ought to have been discharged within a few days of his admission; but, in consequence of his detention, he had been put to an expense of £1,100 in procuring his release.

The plaintiff, Mr. Ruck, was examined and cross-examined at considerable length: after which three ex-keepers of Dr. Stilwell's establishment deposed as to the absence of symptoms of insanity on the part of Mr. Ruck while he was in the asylum, They stated also that the asylum was visited from time to time by Dr. Conolly, and by Dr. James Stilwell, of Uxbridge, an uncle of the defendant.

The medical certificates, and order for the admission of Mr. Ruck into Moorcroft Asylum were put in and read.

Dr. Conolly's certificate, dated the 3rd of November, 1857, stated that he had examined the plaintiff, Lawrence Ruck, at Reading on that day, "separately from any other medical practitioner," and that he was a "person of unsound mind," etc., and he formed that opinion on the following grounds:—

"1. *Facts indicating insanity observed by myself.* A disposition to talk openly of his having had ocular proof of the infidelity of his wife, and speaking of it as if it would not interfere with their future comfort; and an exaggerated manner of talking of the value of quarries on his estate.

"2. *Other facts (if any) indicating insanity communicated to me by others.* An uncontrollable disposition at intervals to intemperance, acts of extravagance and fits of depression, in which he has spoken of suicide. He has also the habit of carrying firearms with him. (Communicated by one of his friends, Mr. Barnett, of Reading, and by Mrs. Ruck.)

"J. Conolly, M.D., Hanwell."

Mr. Barnett's certificate, dated the 5th of November, 1857, stated that, "being in actual practice as a surgeon and general practitioner," he, "separately from any other medical practitioner," had examined Mr. Ruck, and that he was a "person of unsound mind," etc., and that he formed that opinion on the following grounds:—

"1. *Facts indicating insanity observed by myself.* Charges of cruelty against others, which are false: restlessness, and a determination to wander forth, with complete infirmity of purpose; indulging in intemperance, and a profligate expenditure of money; taxing his wife with infidelity; inconsistent in alluding both to his agricultural operations and to the value of the land, from a supposition of immeasurable amounts of mines, lead, copper, and slate, contained therein.

"2. *Other facts (if any) indicating insanity communicated to me by others.* Going about with loaded pistols; threatening those who have always been in close bonds of friendship with him; building walls one day, and altering them the next; in

all his actions presenting the converse of his former self; excess of intemperance, or total abstinence; embarking money injudiciously or recklessly in speculations. (Mrs. Ruck.)
"11, Victoria Square, Reading. Richard Barnett, M.R.C.S."

The order for the plaintiff's reception, by Dr. Stilwell, at Moorcroft House, signed by Mrs. Ruck, was read.

Mr. James called for extracts from one of Dr. Stilwell's books, headed "Dr. Conolly." They were produced and read, thus:—

"Mem. for Dr. Conolly, for
Quarter ending the 30th of March, 1858.
February 5th, Ruck - - - £15 0 0
Mem. for Dr. Conolly, for
Quarter ending June 1858.
May 5th, 1858, Ruck - - - Qy. £15 0 0"

Mr. James put in the entry made by Dr. Stilwell in his book after the close of the inquisition, as follows:—

"August 27. Mr. Ruck was discharged by the decision of the jury on his case, the full particulars of which are fully given in the morning papers. All that is necessary for me to state is, that I still adhere to my opinion that he is a most dangerous lunatic. "G. J. S."

Dr. George Johnson examined Ruck on the 11th and 12th of August, 1858. The symptoms of his disease were those of *delirium tremens* arising from intemperance. He did not consider that a person in such a state required detention. The safety of letting a man out of an asylum depends on the nature of his delusions. There are in our pauper asylums many who suffer from *delirium tremens*. That sometimes passes into insanity. The delusion as to the fidelity of one's wife is attended with risk.

Mr. Skey examined Mr. Ruck on the 12th of August, and he appeared to be in a sound state of mind. The delusions which arise from *delirium tremens* generally pass off. Such cases are cases for detention, but not for detention in lunatic asylums. Such cases require watching; but he decidedly objected to such cases being sent to a lunatic asylum, unless there was a part of the asylum devoted to such cases. He saw nothing in Mr. Ruck to show that he was insane or dangerous. Some patients were better under individual observation, and kept alone; and some were better when placed in an establishment, such as a lunatic asylum. If a person had *delirium tremens*, he would place him under the eye or charge of a medical man, but also under a keeper. There was danger of violence in the early stages of *delirium tremens*. Delusions arising from *delirium tremens* soon vanish and pass away. In thirty years experience, he could not recollect any case of *delirium tremens* going out of the hospital to a lunatic asylum.

Mr. J. Gay gave similar evidence to the previous witnesses.

Mr. E. Canton examined Mr. Ruck in August last, and believed him to be in a state of sound mental health. He attributed the delusions which he had when he entered the asylum to *delirium tremens*. It was not proper treatment to put such a person in a lunatic asylum.

Mr. Chambers submitted that the order and certificates which had been put in established a defence to the first count, under the 99th section of the 8th and 9th Victoria, cap. 106, which enacted that any keeper of a licensed house receiving a patient under a "proper order" should be authorised to detain him until he died, or was removed or discharged by due authority. The order was sufficient, if it was good on the face of it, and accompanied with proper certificates. The second count was framed on the 19th section of the 16th and 17th of Victoria, cap. 96, which enacted that, when the patient recovered, the keeper of the asylum was bound to give notice to the person who signed the order for the admission. That was disproved by the evidence, for it appeared the defendant was always of opinion that the plaintiff was a dangerous lunatic.

After the counsel on both sides had addressed the jury, Mr. Justice Hill summed up the evidence. The questions left for the decision of the jury were, whether Dr. Conolly was partly the proprietor of, or a regular professional attendant in, Moorcroft House; whether Dr. Conolly examined the plaintiff separately and apart from Mr. Barnett; whether Mr. Barnett was in actual practice as a surgeon; whether the jury could rely on the plaintiff's evidence in contradiction of the certificates, which stated that the parties had examined him "separately from any other medical practitioner"; and whether Dr. Stilwell kept the plaintiff *bonâ fide*, or whether he kept him there for his own gain.

The jury retired to consider their verdict; and, on the return into court, found that, if receiving the money as shown in the book made Dr. Conolly a part proprietor, they found the fact of receiving the money. They found that Dr. Conolly was the regular professional attendant. As to Barnett's not being in practice, the jury found they had not sufficient evidence that he was not; nor had they sufficient evidence to satisfy them that the plaintiff had not been examined separately by Mr. Barnett and Dr. Conolly.

Mr. Justice Hill then directed the jury to find their verdict for the plaintiff, with £500 damages, which was done accordingly.

ROYAL COLLEGE OF PHYSICIANS: HARVEIAN ORATION.

The annual oration in memory of the immortal Harvey was delivered at the Royal College of Physicians on Wednesday, June 29th, by Dr. Aldis, one of the Fellows of the College, and Medical Officer of Health for St. George's, Hanover Square. The chair was occupied by Dr. Mayo, President of the College, supported by the officers, numerous Fellows of the College, and many literary and scientific gentlemen.

The orator commenced by adverting to the honour due to those medical men who by their learning, counsel, and experience, had contributed so many and great things to the improvement of their profession. The art of healing might be considered as a legacy left to us by former ages, and enriched by ancient writers, and, no doubt, ordained by a benevolent Creator for the benefit of His creatures, who, being endowed with reason, were enabled to prosecute medicine and the collateral sciences with wonderful sagacity. The following topics were then eloquently alluded to in the course of the oration:—The origin of medicine, the impossibility of learning it properly by experience alone, and the necessity of studying both ancient and modern writers. But, in the words of Harvey, "men were not to swear such fealty to their mistress Antiquity, as openly, and in sight of all, to deny and desert their friend Truth". Medical history, unfortunately, afforded many examples of despisers of the mighty dead, and of eminent living authorities. Paracelsus burnt the writings of Galen and Avicenna before his pupils, and proclaimed himself the king of medicine. Hahnemann much resembled Paracelsus; for he despised the inspection of dead bodies, and preferred the homœopathic doctrine to pathology; but both had dared to do "aliquid Gyaris vel carcere dignum". Hahnemann's doctrine, that numerous chronic diseases originated in the itch, was neither new, safe, nor true. Dr. C. G. Zieger had many years before promulgated the same idea in a dissertation published at Leipsic in 1758, without boasting, as the other did, that he was engaged twelve years in the discovery. False theories, however, with scientific pretensions, had flourished through many ages. Hence arose homœopathy, kinesipathy, table-turning, and various despicable "isms" of the present day. But, happily for the poor, at least, such lies could not exist in the schools of Harvey, Baillie, and Hunter.

The low condition of medicine at the time of Linacre, and its improvement with the aid of Henry VIII and Cardinal Wolsey, were then mentioned. Linacre, the founder of the College, and Dean Colet, the founder of St. Paul's School, of grateful memory to the orator, were among the first to restore ancient learning to this island. The College of Physicians having been established, its members were separated from vulgar empirics; but by a new law homœo-empirics may be registered, which was nothing less than legal homicide, and strongly to be protested against. Notwithstanding this error, it was hoped that, under a Medical Council, the profession might arrive at that state of society which it eminently deserved. The advantages to society, social and otherwise, arising from medical science, were not to be disputed, but its rewards were few; nevertheless, its followers "went about doing good".

The election of Dr. Watson, as representative of the College in the new Medical Council, and the labours of Dr. Francis Hawkins, as registrar, were noticed. The remarks upon Harvey's grand discovery of the circulation of the blood appropriately introduced the consideration of those epidemic diseases which contaminate the vital fluid and destroy numbers of the population. Hence the vast importance of sanitary science, not as a specialty, but as a component part of medicine. This subject having been prominently brought forward, it was thought that the exertions of the Earl of Shaftesbury in improving the dwellings of the poor, and of the Earl of Carlisle in obtaining the enactment of the Nuisances' Removal and

Diseases' Prevention Acts, deserved the highest praise, as well as those of Drs. Southwood Smith and Arnott, who were the pioneers of preventive medicine. Honour had also been conferred upon the college by Dr. Robert Lee's discoveries of certain cardiac nerves. A well merited and feeling eulogium was then passed upon the late Drs. Bright, Hughes, and John Scott, with a notice of their lives and writings. Reference was made to the attention bestowed by the fellows on the formation of a new charter, by which it was intended to embrace within the college those physicians who had been too long dispersed and disunited. The college was now to be congratulated upon its increasing numbers and extending usefulness.

A statue had been erected to the honour of Jenner under the auspices of the Prince Consort; and if he deserved this tribute, surely Harvey, the fountain and origin of modern medical science, merited similar reverence. The remains of Harvey are now lying in a neglected state; but an inquiry had been commenced by the College with the view of removing such a scandal. The statue formerly placed by the Fellows of the College had unhappily perished by fire and had never been replaced. The orator concluded by expressing a strong wish that a grateful country would either erect another statue, or at least found a scholarship, in honour of the learning and genius of Harvey.

Royal College of Surgeons. Messrs. John Hilton, New Broad Street, City; James Luke, of Broad Street Buildings, City; and Frederick Carpenter Skey, Grosvenor Street, who are the three Fellows of the College, Members of the Council, going out of office by rotation, in accordance with the terms of the charter, have given notice to the secretary that they are candidates for re-election, as Members of the Council, at the annual election, which has been fixed for July 7th.

Prison Discipline in America. An ancient mode of punishment for the refractory has been revived at the Sing Sing Prison, consisting of a box about three feet square, and as high as the tallest man. The convict enters by a door and puts his head through a hole in the top, after which a sliding collar of wood is fastened around his neck and keeps him in his place. A false bottom in the box is raised or lowered, by means of a pulley, so that it may be adapted to the height of the man to be punished. This bottom is raised so that the convict's legs are bent as if about the knees. He cannot straighten up, nor can he kneel down without suspending himself by the neck,—he must bear his weight by his muscles alone, for his knees can touch nothing to sustain them in position. It is impossible to believe that anybody could endure this torture for more than a few minutes without great risk of life. Last week a tall stalwart negro was taken out of it, with animation so far suspended that resuscitation was for a long time doubtful. (*New York Police Gazette.*)

TO CORRESPONDENTS.

Ignorant. 1. A Licentiate of the Faculty of Physicians and Surgeons of Glasgow is, we think, entitled to call himself "physician and surgeon;" but, in England his more appropriate title would probably be "general practitioner". 2. He registers under the Medical Act simply according to his qualification as "Licentiate of the Faculty of Physicians and Surgeons of Glasgow." The Act does not decide on *titles*. 3. He is not entitled to call himself Doctor in virtue of his license from the Glasgow Faculty.

Communications have been received from:—Mr. Oliver Pemberton; Dr. James Russell; Dr. B. Chevallier; Mr. W. Copney; Dr. Tyler Smith; Dr. Thomas Inman; Mr. T. Holmes; Mr. Thomas Paget; Mr. C. H. Roper; Dr. J. H. Pring; Mr. R. Logsden; Dr. E. Smith; Dr. R. Moffat; Mr. C. Sanders; Mr. J. Gatis; Mr. J. C. S. Jennings; Mr. T. M. Harding; Mr. H. Greenwood; Mr. H. W. T. Ellis; Mr. W. Lewis; Dr. P. H. Williams; Mr. D. K. Jones; Mr. C. Leonard; Mr. W. Legge; Mr. W. W. Moxhay; Mr. T. M. Stone; Dr. Markham; F.R.C.S.; and Dr. Thomas Skinner.

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BRITISH MEDICAL JOURNAL:

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

I. CARIES OF THE SPINE, FATAL BY HÆMORRHAGE FROM THE AORTA.

Under the care of H. W. FULLER, M.D.

THE following case is an example of a complication which sometimes, though rarely, accompanies caries of the bones; viz., ulceration of one of the neighbouring arteries. We have seen one of the branches of the carotid laid open in caries of the jaw, and the hæmorrhage from this vessel proved fatal. In the subjoined case, however, the original disease was so latent, and the history so imperfect, that no acumen in diagnosis could have led to the detection of the state of parts. It seems quite clear that the extravasation had occurred after the patient's entrance into the Hospital, and that the syncope noticed on the day subsequent to this was the sign of its occurrence. The man then rallied for a short time, the opening in the vessel being probably closed by a clot, which was again detached in the effort which he had been making just before his death.

James G., aged 30, was admitted on June 1st, under Dr. Fuller's care. He was a house-painter, said to be of dissolute habits, and had been ill since Christmas, suffering from pain in the loins and left hip. This pain was much increased by stooping. He complained of inability to empty the bladder, but not of pain in micturition. He had had rheumatism once, four years ago. He had been able to work till within a few days of his admission. At that time he seemed very languid and weak; his complexion was very sallow; skin cold and moist; tongue pale and furred. The pulse was 120, and very weak. The appetite was gone, and he had had but little sleep for some nights. He was ordered some opening medicine. Next morning, the bowels had not been open, so that the purgative was repeated. A swelling was now noticed on the left side of the abdomen. On getting out of bed to go to stool, the patient fainted, and complained of much pain on the left side. Next day, the swelling was carefully examined. It seemed to be on the left side of the middle line; was solid, smooth, and hard to the touch; and extended from the diaphragm to the level of the anterior superior spine of the ilium. It was solid, hard, and pulsated visibly; but no *bruit* was heard. The urine was scanty, and contained lithic acid. There was tenderness and pain in the region of the tumour, more especially at its lower part. No positive diagnosis of the nature of the tumour was arrived at; but it was thought possible that it might be an enlarged spleen, deriving pulsation from some vessel against which it rested. The blood was accordingly examined, and was found to contain an unusual quantity of white corpuscles. The bowels were opened by an injection, and a morphia draught was administered at night. Next day he was better. There was not so much tenderness in the abdomen, but much flatus. At 9 P.M. he went to stool, and was getting into bed again, when the nurse's attention was called to him, as having suddenly fainted. He died in a quarter of an hour.

On *post mortem* examination, it was found that the anterior surfaces of the two last dorsal and two upper lumbar vertebræ were extensively carious; and in one of these bones a cavity, more than half an inch in depth, and of a rounded form, was found. The intervertebral discs seemed healthy. The tumour which was observed during life was found to have been formed by a large clot of blood, firmer in some parts than others, but not laminated nor decolorised in any part. The greater part of it had about the consistence of currant jelly. A quantity of fluid blood was found in the cavity of the peritoneum, but the part where this membrane had given way was not discovered. In the greater part of its extent, it was stretched firmly over the front of the clot. The left kidney was imbedded in the clot, and the pancreas and descending colon adhered to it.

The abdominal aorta was pervious throughout, and lay on the right side of the coagulum. Opposite the diseased vertebræ, there was an ulcerated opening in the coats of the aorta, about as large as a silver penny, around which the coats of the vessel were thickened, projected into the cavity of the vessel, and appeared of a red colour, as though from the effusion of blood between them. It was observed that this opening corresponded exactly to the position of the openings of the lumbar arteries out of the aorta. There did not appear to be any psoas abscess; and if any pus had been in connexion with the diseased bones, its presence was masked by the clot.

As a companion to this case, we append another case of internal bleeding, in this instance from injury, in which the same thing took place; a temporary check being soon followed by the reopening of the vessel, and the recurrence of fatal hæmorrhage. The injury in this latter case was a curious one, since the omentum was not adherent below; so that it is difficult to conceive why this moveable membrane should give way to the blow, in preference to the more fixed viscera with which it is connected.

II. LACERATION OF THE GREAT OMENTUM FROM A BLOW.

Under the care of E. CUTLER, Esq.

John B., aged 44, was admitted on May 19th, under the care of Mr. Cutler, having been kicked by a horse just to the right of the umbilicus. Some brandy had been given him, after which he had vomited. When admitted, he rolled about in great agony, and would allow no one to touch the part where he had been kicked. There was no swelling. He vomited again soon after admission, bringing up the brandy and food he had taken. There was no blood in the vomit. His face was very pale; pulse slow and weak. Twenty leeches were applied to the painful spot; and he was ordered three grains of calomel, and one of opium, every three hours. During the day he continued very much collapsed, and in great pain. He retched much, but was not actually sick. The motions and urine were passed free from blood. Next day, his countenance was less distressed, and he was in less pain; still he could bear no pressure on the part. He had been frequently sick, but had brought up merely his food. The pulse was 90, stronger. One dose only of the draught and of the calomel was given this day. Next day (May 21st) the improvement continued. He had not been sick since the previous afternoon, though he still retched a good deal. The tenderness of the abdomen was less; the pulse fuller; the tongue clean. He had passed a fair night. As the bowels had not acted since just after his admission, a simple enema was given.

May 22nd. He was greatly improved. There was no more retching; the tenderness was much less; the bowels had acted four times naturally. During the evening, he had some griping pain about the injured part; but this was quite relieved by the administration of a grain of opium, with two of calomel, till next afternoon, at 2½ P.M., when he was seized suddenly with faintness, almost leading to fatal collapse, and pain in the belly. His pulse was scarcely perceptible, and the sweat poured off his body. Restoratives were given, but he continued to sink. Distressing vomiting came on, which lasted till his death on the following day, at 1 P.M. Calomel and opium were given, and he was kept alive by means of brandy; but nothing seemed to give him any real relief.

On *post mortem* examination, a large quantity of blood,

partly solid and partly fluid, was found in the cavity of the peritoneum. The surfaces of this membrane did not look inflamed. On examination, a laceration was found at the root of the great omentum, near its attachment to the small end of the stomach. The omentum was here a good deal contused; and several small rents existed in it, both in the descending part and in the part passing on to the colon. In one of these, a large artery was found laid open; and, by pressing on the part, grumous blood could be made to start up from the divided vessel. The viscera of the abdomen were all uninjured and healthy.

SOUTH LONDON OPHTHALMIC HOSPITAL.

I. PARALYSIS OF THE SIXTH NERVE: OPERATION.

Under the care of J. Zachariah Laurence, Esq.

Martha H., aged 30, applied at the South London Ophthalmic Hospital on February 16th, 1859. About eighteen years ago, she was driving herself down a steep hill in the country, when the horse ran away: she jumped out of the cart, but her feet got caught in its step, and she was in this way dragged head downwards from the top of the hill to the bottom. She was picked up insensible, and bled a great deal from the mouth, throat, and ears. She ultimately recovered completely; but the right eye was noticed to "turn" about four and twenty hours after the accident, and continued so ever since, notwithstanding an operation which, she states, was performed on the eye in 1852. The right eye was now inverted to a degree not often seen; the plane of the cornea being turned at right angles to its normal position. She possessed the power of moving the eyeball slightly in every direction, but outwards. Closure of the left eye imparted no additional mobility to the distorted one. Her vision with this eye was practically useless, from its malposition.

March 19th. Mr. Laurence divided the internal rectus muscle: this was found hard and thickened, and grated distinctly under the scissors. On now attempting to evert the eye by means of a forceps, it was found as immovable as ever; and further examination showed it to be bound down by adhesions so numerous and so extensive, that it became necessary to lay bare the sclerotic to a degree that no surgeon would have dared to do in a case of ordinary strabismus. The eyeball was then kept in a central position by a ligature passed under the conjunctiva, and fastened by strips of plaister to the temple. This gave way during the night, and the eyeball was then found considerably inverted again. In fact, in the course of the case, several such ligatures had to be reinserted.

April 22nd. All traces of the operation are gone. The eye now turns in, as it would from a moderate squint; but the patient is so satisfied with the great improvement of appearance and vision, that she does not wish any further operation for the present.

Remarks. This was probably a case of paralysis of the sixth nerve from intracranial extravasation. The strong and extensive adhesions noticed in this and other recorded cases are analogous to the adhesions formed in the elbow and knee-joints, when these have remained in one contracted position for any considerable period.

II. ACUTE RHEUMATIC OPHTHALMIA: RECOVERY UNDER MORPHIA TREATMENT.

Under the care of J. Z. Laurence, Esq.

Sarah S., a middle aged woman, was admitted to the hospital on November 3rd, 1858, suffering from a severe attack of acute rheumatic ophthalmia. The sclerotic was intensely injected, the conjunctiva slightly: the "sclerotic zone" was well marked. She suffered such intense shooting pain, as to render her quite sleepless: this pain she referred to the eyeball, eyebrow, and infraorbital region. Her vision was not materially impaired, excepting by the excessive pain, which seemed to affect also the sight of the sound eye.

She was ordered to foment the eye frequently with warm water, and to take a quarter of a grain of hydrochlorate of morphia every third hour.

November 6th. She took the morphia regularly up to 4 P.M. yesterday, when she took the last powder. Towards the evening of the 4th, the pain in the eye began to abate: now, the severe shooting pains have entirely left her; she experiencing only an aching in the eye when it is exposed to the light. The sclerotic vascularity has considerably diminished.

The eye now rapidly recovered under the treatment of an ordinary case of conjunctivitis.

Remarks. Mr. Laurence has now treated a number of cases of inflammation of the sclerotic and iris by morphia, without the use of mercury or blood-letting (usually employed in these cases). He finds that the majority yield to this very simple (morphia) treatment, especially those in which intense pain is a prominent symptom; but that a certain number of cases remain, in which the old plan of treatment is the better to pursue.

ROYAL BERKSHIRE HOSPITAL.

CALCULUS IN A CHILD: ALLARTON'S OPERATION.

By W. W. Moxhay, Esq., Surgeon to the Hospital.

Frederick W., aged 8, the subject of stone for some time, was operated on by the median section, made in the way directed by Mr. Allarton, on April 11th, 1859, at noon. The stone was ovoid in shape, very rough, and spiculated; it measured, round its longest circumference, two inches and a half. The wound made was hardly an inch in length. The operation was done under chloroform, and occupied about three or four minutes. Ten minims of tincture of opium were given immediately.

9 P.M. The finger has been passed three times into the bladder, each time followed by a gush of urine. A slip of oiled lint was now passed. The laudanum was repeated.

April 12th. He is quite easy. There is some slight swelling about the wound; no abdominal tenderness; pulse 124.

April 13th. Some urine passed by the natural channel.

April 14th. The urine comes chiefly through the wound. Pulse 104. He was allowed to have beef-tea.

April 15th. Pulse 94. He was allowed meat.

April 16th. There is a little œdema of the scrotum.

April 17th. Pulse 94. The bowels have acted; a large lumbricus has passed. The œdema is nearly gone.

April 23rd. He has passed most of the urine by the natural passage for the last two or three days. The wound is quite healed.

April 26th. He was discharged from the Hospital, convalescent, on the fifteenth day after the operation.

I may add my testimony to the truth of the statement Mr. Allarton makes in his book, that the anxiety about the case ceases, or, at any rate, that it is very slight indeed, after the operation. About the operation itself there seems to be no difficulty.

Original Communications.

ON THE ÆTIOLOGY OF ASTHMA.

By HYDE SALTER, M.D., F.R.S., Fellow of the Royal College of Physicians, and Assistant Physician to Charing Cross Hospital.

Two kinds of Causes of Asthma: I. *Causes of the Paroxysms: Respiratory Causes; Alimentary Causes; Nervous Causes; Psychical Causes.* II. *Causes of the Disease:* A. *Organic and Acquired;* B. *Constitutional and Inherited. Conclusion.*

The ætiology of asthma is undoubtedly the most obscure and difficult part of the whole subject.

The causes of asthma are of two kinds; the causes of the paroxysms, and the causes of the disease: the one the immediate provocative of the paroxysm, the other the original and essential cause of the asthmatic tendency. And this division is strictly natural, the two kinds of cause being entirely diverse: the cause of the paroxysm not producing the disease, and the cause of the disease not producing the paroxysm.

As for the causes of the paroxysms—the immediate excitants of the asthmatic spasm—they are plain enough. The experience of every asthmatic gives him very certain information on this point. It is of the essential cause of the disease—that which has originally rendered the individual an asthmatic, that obscure something that disposes him from time to time to fall into the asthmatic state on the occurrence of the exciting cause of the attacks, the *fons et origo mali*—that I speak, when I assert the difficulty of the subject.

I.—The Immediate or Exciting Causes of Asthma: the Provocatives of the Attacks.

Though not in logical order, I shall consider these first, because they are so manifest and well known; and because they throw some light on the nature of the essential cause of the disease.

They differ entirely in different cases. There are probably no two cases alike in the list of things that will bring on an attack; what will be certain to do so in one case will be innocuous in another, and what will be fatal in the other will be innocent in the one; so that no one thing can be declared an inevitable provocative of asthma; but each case is constant, and the excitants of the spasm constitute a part of the individuality, and form an unchanging portion of the clinical history, of each case. In nothing, I think, does asthma shew its caprice more than in the choice of its exciting causes; every case almost furnishes something new and curious in this respect. The mere enumeration of the whole list would be portentously long. I shall merely notice the most common and characteristic, and shall group them, for order's sake, under the four following heads:—

1. Irritants admitted into the air passages in respiration.
2. Alimentary irritants (errors in diet).
3. Sources of remote nervous irritation.
4. Psychical irritants.

1. *Respired Irritants.* These constitute the most numerous class of all the excitants of asthma. Some of them are such as naturally offend the air passages; and, if admitted, produce such an irritation of the bronchial mucous membrane as secures their immediate expulsion by cough; some even, such as pungent and stifling gases, will occasionally produce temporary bronchial spasm (the true asthmatic dyspnœa and wheeze) in persons that have no asthmatic tendency; ordinarily, however, explosive cough, soon over, is the only result of breathing them. But in asthmatics the case is very different; the respiration of them immediately inducing a regular fit of asthma. Dust, smoke, pungent fumes, mephitic vapours, cold air, are irritants of this kind. And in respect to them the peculiarity of the asthmatic consists, not in their irritating his air passages, for that they do in all; but in their producing, as a result of that irritation, not a mere cough, or a slight, transient, bronchial stricture, but intense and persistent asthmatic spasm. Of these, I think the worst—the most apt to produce asthma—are dust and certain smokes, such as the smoke of pitch, or of an extinguished candle. I have known some asthmatics who could not tolerate the least dust. One in particular I remember, a clergyman, with otherwise but a slight tendency to asthma, who never dared to be present at the annual assortment and distribution of blankets to the poor of his parish, as the dust and fluff disengaged always brought on a violent fit of asthma. In another case, the small amount of smoke generated by the imperfect combustion of a night light was always sufficient to bring on an attack.

But there is another class of respired irritants, that ordinarily are no irritants at all, but that in certain asthmatics infallibly produce their disease, such are the emanations from hay, from ipecacuan, from certain animals. One asthmatic is obliged to expatriate himself in the hay season, and take a sea voyage; another cannot stay in a room in which a bottle of ipecacuanha is opened; a third cannot stroke a cat; another cannot go near a rabbit hutch; another cannot go near a privet hedge; another cannot sleep upon a pillow stuffed with feathers; and one young lady I knew who did not dare to pass a poulterer's shop. One would hardly believe these things were not their reality placed beyond doubt; there is neither invention, nor imagination, nor exaggeration about them. I have known the presence of ipecacuanha in a room where there was no reason to suspect it, at once detected by the oppression and asthma that it produced. I have known some incredulous people open an ipecacuanha bottle, unknown to the asthmatic, for the sake of experiment, to see if he would find it out, but it was always immediately discovered. I have known the same with regard to other of these agents. Dr. Watson mentions an analogous anecdote with regard to the detection of the neighbourhood of hay. It is indeed in its intolerance of these and similar subtle and inappreciable emanations that asthma exhibits its most extravagant vagaries.

2. *Alimentary Irritants.* Errors in diet are a very fruitful source of asthma. Food may induce asthma in three ways: by being of the wrong quality; by being excessive in quantity; and by being taken too late in the day. In respect to quality, all foods generally acknowledged to be unwholesome and indigestible are apt to produce asthma; but there are some especially and above all others that have this tendency, and that quite out of proportion to their unwholesomeness. For a list of these, and for a discussion of the whole subject of the relation of food to the production of asthma, I must refer the reader to a paper on the Dietetic Treatment of Asthma in the *Lancet* for Nov. 6th, 1858.

3. *Sources of remote Nervous Irritation.* Various sources of irritation existing at, or applied to, parts of the body far removed from the chest, may act as exciting causes of asthma. In cases of hysterical asthma the source of irritation is uterine. In one case that came under my observation, a loaded rectum would always bring on an attack; in another, the sudden application of cold to the feet would instantly induce it; and in more than one case I have known organic disease of the brain the apparent exciting cause of true asthma. These cases, then, show that sources of irritation affecting the organic nervous system (uterus and rectum), the cerebro-spinal (cutaneous surface), and the brain itself, are capable of acting as the immediate excitants of asthma.

4. Lastly, there are many examples to show that psychical stimuli—excitement, fear, or other violent emotions—are adequate to the immediate production of asthma.

II.—Essential Cause of Asthma.

The essential cause of asthma—that in which the asthmatic differs from other men—which constitutes the asthmatic *tendency*, and renders the exciting causes operative—what is it?

I do not see that I can discuss this question, or arrive at clear ideas respecting it, better than by endeavouring to answer the following questions:—

Is organic disease at the root of the asthmatic tendency?
Is organic disease *necessarily* present in all cases of asthma?
Is asthma, in its essence, a systemic or a local affection?
Is there necessarily in asthmatics some constitutional peculiarity, inherited, congenital, or acquired?

There is one circumstance in the history of asthma that is strongly suggestive of the idea that some organic injury of the lung is at the root of the asthmatic tendency: it is that, in the narrative of cases of asthma, it will be so frequently found that the asthma dates from some disease that implicates the lungs, and in such a way as to imply injury of an organic nature, though apparently temporary, as, for example, whooping-cough, bronchitis, and measles. These diseases are, beyond a doubt, the commonest of all the causes of asthma: a large proportion (as much as 80 per cent.) of cases of asthma in the young date from one or the other of them. In two of them, a specific bronchitis forms an essential part of the clinical history. I think this fact does not admit of misinterpretation. I think this frequent association of asthma with an antecedent event implying organic, although apparently temporary, injury of the lung, must have a very important influence on our notions of the ætiology of the disease. A child reaches the age of ten years, and up to that time has never shown any tendency to asthma: it then has measles; and, although it perfectly recovers from the bronchial affection, from that time forward it is liable to attacks of spasmotic asthma. From this I think we cannot but conclude both that this disease, by some change that it works in the organisation of the lung, may leave behind it as a legacy a permanent tendency to asthmatic spasm, and that it may be the sole and efficient cause of the disease.

There is another circumstance that strongly favours the view that the cause of asthma is organic, and seated in the lungs themselves; it is, the relative frequency of asthma in the two sexes. Purely functional nervous derangements are undoubtedly commoner in women than in men. Men, on the other hand, are much more exposed than women to sources of lung-injury, and their lungs are accordingly much more frequently the seat of organic diseases. Now, if asthma was primarily nervous and purely functional—if it were a simple neurosis—we ought to find it commoner in women than in men; whereas, according to my experience, men are more frequently the subjects of asthma than women in the proportion of two to one.

In those cases in which the attacks are produced by some irritant admitted into the air-passages we have no reason for thinking that the cause of the asthma is situated anywhere but in the lungs themselves; we have no reason for believing that in these cases there is any general constitutional vice of the nervous system, but every reason on the contrary for thinking that the mischief begins and ends in the lungs, and that, what-

ever it is in its absolute nature, it is something that renders the pulmonary nervous system unduly irritable and impressible.

This morbid sensitiveness of the pulmonary nervous system would appear to be due, in a large number of cases, to something that has organically damaged it, something that has damaged that surface to which its perceptive portion is distributed; for I think it will be found that in the majority of those cases in which the excitants of the attacks are stimuli admitted into the air passages, the original cause of the disease has been something organically affecting the bronchial mucous membrane—catarrhal bronchitis, measles, whooping-cough. In these diseases the bronchial mucous membrane is the seat of inflammation, often intense and prolonged, and in two instances specific; and it is probable that some organic although inappreciable change has been wrought in it, producing a morbid exaltation of its sensibility to which the tendency to spasms is immediately due, according to that law of the organisation of the bronchial tubes to which I have referred in a paper on the "Absolute Nature of Asthma," in the *Medico-Chirurgical Review* for July 1858. At any rate, in those cases in which the tendency to asthma is manifestly dependent on organic bronchial disease (as in asthma accompanying chronic bronchitis), the provocatives of the paroxysms are preeminently stimuli applied to the bronchial surface—smoke, fog, cold, etc. If then this is so, the converse is probably true,—if in asthma depending on organic bronchial disease the excitants of the attacks are stimuli applied to the bronchial surface, then, in those cases where the excitants of the attacks are stimuli applied to the bronchial surface, the asthma probably depends on organic bronchial disease.

But is this always so? Probably not. In cases of ipecacuan-asthma the excitant of the paroxysm is something applied to the bronchial mucous membrane, but there is nothing in the history of these cases to imply that this surface has ever been the seat of organic disease. The same in cases of hay-asthma.

While, then, the induction of spasm by bronchial stimuli furnishes a *presumption* that the asthma is due to some cause that has organically injured the bronchial mucous membrane, it does not furnish a *proof* of it,—in most cases it probably is so, in some not. And I think we may go a step further, and say, that where the mucous membrane exhibits a *general* irritability, where a great number and variety of irritants are capable of producing the asthma, there the original cause is something that has damaged the mucous membrane; where, on the other hand, the membrane exhibits a *special* irritability, where the irritant is specific and single, there is no such antecedent organic lesion. In the asthma of chronic bronchitis, for example, a multitude of irritants inhaled will give rise to the spasm: in hay and ipecacuan-asthma, on the other hand, the source of offence is single and specific. In the one case the cause of the asthma is something that has happened to the individual during his life, and the asthmatic tendency is acquired; in the other the cause is innate, and the tendency inherent.

But is it probable that there is some organic peculiarity in the lungs of *all* asthmatics? Certainly not. In a large number of cases there is not the slightest warrant for entertaining such a supposition. Take, for example, a case of emotional asthma such as the following:—A gentleman who has never suffered from any lung affection, and who is at the time in perfect health, is suddenly seized with difficulty of breathing, which proves to be spasmodic asthma, in consequence of extreme alarm from thinking that he has administered poison by mistake. His lungs were perfectly sound; there was no history of any pulmonary affection in his case; and he never suffered from dyspnœa under any other circumstances, either before or since. Moreover, the exciting cause was one not appealing to the lungs, but to the nervous system. In hay-asthma, too, there is generally no history of previous lung disease, and in every part of the year, except in the hay-season, the lungs give the most positive evidence of their anatomical and physiological soundness.

What, then, *is* the cause of the asthma in these cases? I do not see that we can say anything more definite than that it consists in the asthmatic tendency itself; in that special irritability of the pulmonary nervous system (as in the case of ipecacuan asthma), or that general irritability of the whole nervous system (as in emotional asthma, etc.), which constitutes the asthmatic idiosyncrasy with which the individual was born.

That in some cases a congenital asthmatic tendency does exist is strongly implied, I think we may say positively proved, by the undoubted hereditariness of the disease: in some families asthma is as much *the* disease as gout is in others. I have lately had under my care a gentleman whose father, paternal grandmother, and two paternal uncles, as well as himself, were asthmatic. Now, there is no doubt what is inherited must be congenital—inborn.

But, Is any congenital peculiarity *necessary?* No; there appears to be no reason that a person may not *become* asthmatic, that the tendency to the disease may not be *acquired*, indeed, evidence as positive as can be imagined for believing that it may, that an asthmatic may at one time have differed in no respect from others, but that the tendency to his disease may have been engrafted on him by something that has happened to him. For example, the case of asthma as a sequela of measles, which I instanced just now. It is not conceivable that all the children whom this disease, or whooping-cough, leaves asthmatic, had any antecedent peculiarity. In no respect do they seem to differ from other cases, except that the disease from which the asthma dates has generally been of unusual severity.

It would appear, then, that in respect to causation, all cases of asthma may be broadly divided into two groups:—

1. Cases in which the essential cause of the disease—that which constitutes the individual an asthmatic—is some organic lesion, possibly not appreciable, either in the bronchial tubes, or in some part physiologically connected with the bronchial tubes.

2. Cases in which any organic lesion is not only inappreciable, but non-existent; in which the tendency to asthma is due to something from within, not from without; in which the essential cause of the disease is a congenital, and possibly inherited, idiosyncrasy.

I steer, therefore, a middle course between those who say that asthma always has at the root of it some organic disease within the chest, and those who deny that genuine spasmodic asthma ever depends on organic lung disease, and maintain that it is always a pure neurosis. I think I have shown, on the one hand, that there are numberless cases in which the supposition of any organic cause would be purely gratuitous, and in direct contravention of all clinical evidence and pathological reasoning; and on the other, that we have every reason for believing that many cases, of the pure spasmodic variety, do really depend on some organic, though inappreciable injury that previous disease has inflicted on the lungs.

CROTON OIL AS A COUNTERIRRITANT IN HYDROCEPHALUS.

By John Watson, M.D., Southampton.

It has been my lot on several occasions to witness the successful application of this remedy to the scalp, after the setting in of most formidable symptoms. The case which first led me to its use may be outlined.

C. B., aged 2 years, a strumous-looking child, came under my notice for eczema of the scalp. The eruption, which was general and attended with copious discharge, got well under ordinary treatment. A few weeks afterwards, he had an attack of acute hydrocephalus. Leeching, cold lotions to the shaved head, calomel, and antimony, etc., were immediately resorted to, but unavailingly; for the second stage of the disease came on. He now lay semi-comatose, with the neck extended, the eyes half-closed, and the pupils dilated. The pulse also had become slow and irregular, the respiration frequently interrupted with a sigh, and he had strabismus occasionally. A blister was now applied behind each ear, with no effect. Thinking it possible for his present attack to be connected with the previous condition of the scalp, as a means of best imitating the eczematous eruption, the croton oil suggested itself. With the sanction of the gentleman who was attending with me, I directed the croton oil liniment (croton oil, half a drachm; turpentine liniment, half an ounce) to be rubbed over the entire head every four hours till a plentiful crop of pustules should make their appearance; after which we soon had an amelioration of all the symptoms, and he gradually became convalescent, though he was unable to speak for several days, and could not stand alone for a considerable period.

It is now several years since the occurrence of this case, which made a deep impression upon me; for I did not remember to have seen a recovery under such unfavourable circumstances. In the same stage of the disease, whatever may have been its assumed cause, I have since adopted the

same course, and, as far as individual experience goes, bear testimony to its efficiency. It is not so objectionable to the little patient's friends as a blister, and is at the same time more manageable; and, from the extent of surface to which it is applied, decidedly more powerfully revulsive.

REMOVAL OF RINGS FROM SWOLLEN FINGERS.

By E. Garraway, Esq., Faversham.

The following method of removing a ring from a swollen finger, I have reason to believe, is not so generally known as it deserves. Whence I derived the idea is out of my remembrance; but the claim of its origin certainly does not rest with me.

A patient, in whom I have just had recourse to it, was suffering from acute rheumatism. The fingers were swollen; and the wedding-ring and its keeper had become imbedded, causing no little pain, and considerable alarm at the prospect of having the rings filed or broken off. The mode of proceeding is this. A reel of cotton is wound evenly round, beginning on the extremity of the finger and bringing each coil into close apposition with the preceeding, until the ring is reached. A needle is then threaded with the cotton, and passed under the ring, and the thread is carefully unwound from the finger. The ring follows each coil as it is successively unrolled, and by almost imperceptible degrees is brought over the knuckle and removed. Care must be taken that the cotton is wound on evenly, particularly over the protuberant and swollen knuckle, or an entanglement will occur in the unwinding. A small curved needle will pass more readily under the ring than a straight one. The process requires time, care, faith, and patience; but the reward is ample in the gratitude of the suffering patient, the signet of whose marriage bond has been saved from destruction.

Transactions of Branches.

SOUTH-WESTERN BRANCH.

PRESIDENT'S ADDRESS.

By C. Radclyffe Hall, M.D., Torquay.

[*Delivered June 23rd*, 1859.]

Gentlemen,—My first duty is the very pleasing one of giving you a hearty welcome, on the part of myself and my medical brethren of Torquay, and of assuring you how highly I esteem the honour of being appointed your president for the ensuing year. To most of those whom I have the honour of addressing, the place in which we are met together needs no introduction, yet on one or two points I may be permitted to allude to it. If Torquay, from its modern origin, can offer none of the historical associations in which Exeter and Plymouth are rich, as pre-eminently a health-town its youth is a great advantage. Free from all the disqualifications of age, it has grown up into its present size within the very recent period during which alone sanitary considerations, on a large scale, have been deemed worthy of formal attention. Its principal attractions of situation, climate, and beauty, are, of course, as old as the hills over which its buildings spread; but its urban advantages are only just completed. Torquay ought now to be the model town of England, as regards sanitary arrangements. I am not sure that it is not so. Fresh air, pure water, effective drainage, all in abundance, constitute almost all which public bodies can do to render their town healthy. Looking at the geology and general aspect of Torquay, a stranger would suppose it impossible for it to be otherwise than well drained by nature. But man has great power to thwart the beneficence of nature; and when cholera visited this place in 1849, it pointed out accurately, as with a black line, where the drainage was imperfect. Under the government of our Local Board of Health, which, through good report and evil report, has proved of immense service to the town, all this is now rectified.

Effective drainage is impossible without an ample supply of water. From the absence of any large source of fresh water in the immediate neighbourhood, it has been necessary to obtain it from a distance of fourteen miles, on the margin of Dartmoor, at a cost to the town of between £40,000 and £50,000. This water is very pure, having trickled merely through the granite of Dartmoor; and, whether from the disintegration of the granite having given to it some minute portion of alkali, or from some other cause, it is found to be actually softer than the rain-water collected here. Heretofore we have been chary of saying much in favour of Torquay as a place of resort for patients who suffer from chronic affections of the kidneys, because, however useful in such disorders it may be to reside in a mild climate, which promotes the action of the skin, yet, as a rule, a hard calcareous water does not suit renal affections; and our spring water is very hard. Like water of this kind elsewhere, it is bright, clear, and sparkling; pleasant to the taste, and possibly not without its virtues for those whose bodies betray a want of lime: certainly not without its chemical potency out of the body; for, but for its presence, we must have suffered from lead-poisoning on a large scale. I suppose every house that has a pump is supplied with spring water through lead pipes; yet we never see any instance of lead poisoning from this cause, either slight or severe. And this is not because the water does not act upon the lead, since we find that the pipes are coated on their interior, and eventually, in places, eaten through in a worm-eaten fashion. Yet reagents shew no trace of lead in the water. Evidently the water forms an *insoluble* compound with the lead, which is precipitated in the shape of carbonate and hydrated oxide. Excepting water so impure, from contamination with drains, as to contain alkaline nitrates and chlorides in solution, as a general rule we know that the purer and softer the water, the more dangerous for lead; and, consequently, the immunity we have hitherto enjoyed must not, as a matter of course, be taken for granted to apply to the new water. As this, however, requires a new and distinct service, and the custom is to use iron pipes for it, the question will not be put to the test by the public. Experimentally, though it acts rather too freely upon iron, I find this new water does not dissolve lead. Torquay can now boast not only of good water in abundance, both hard and soft,—and so suit both ricketty children and gouty parents,—but it also possesses, for the external employment of water, whether fresh or sea, perhaps the finest baths in the kingdom. Erected at a cost of nearly £10,000, these excellent baths—as I think the quiet splendour of this saloon, in which, by the liberality of the directors, we are now sitting, will testify—reflect great credit on the public spirit of those private individuals who have thus deserved so well of their town.

Of the winter climate of Torquay, it is unnecessary to say one word; but respecting its summer climate, a passing remark may not be misplaced. Mr. Vivian has proved beyond all question that figures substantiate the coolness of our summer climate. Yet no one believes him;—excepting those only who have stayed at Torquay during the summer. The air is always a soft air, but never an over hot air; you do not find your lips parched or your mouth dry. Of course, the direct heat of the sun in this clear atmosphere is often considerable; but on the hills, or in open places, in summer the air is soft and fresh. "I know nothing about the mildness of Torquay in the winter, because I have never been here in the winter," said a Cheshire gentleman to me, "but I know this that it is the coolest place in England in the summer"! And, to a certain extent, it ought to be. Being almost a peninsula, the same modifying influence of the sea which causes its winter-mildness, must render it cool in summer. The sea, being a worse conductor of heat than the land, cools less in winter, and heats less in summer; and accordingly, the sea-breezes warm the air over the neighbouring coast in winter, and cool the air in summer. Moreover, the adjoining land being thus cooled down by the sea air every night in summer, cannot accumulate heat during the persistence of hot dry weather as it does in inland places.

Having adverted to our obligations to Mr. Vivian on the subject of meteorology, I cannot resist referring to his recent work in editing, at the cost of no inconsiderable labour, Mc Enery's *Cavern Researches*, in which the geologist will find the most interesting information respecting our world-wide celebrated Kent's Cavern, and Ossiferous Caves in general—such, for example, as the newly discovered one at Brixham, now in process of investigation under the superintendence of Mr. Pengelly, the Torquay geologist *par excellence*.

Torquay possesses three medical institutions. The Torbay Infirmary and Dispensary, which does all that the most admirable institution of this kind can, has a staff of three physicians, three surgeons, and a House-Surgeon. The honorary officers of this institution have here, as elsewhere, the privilege of bestowing their constant charity in deeds of active exertion for the benefit of the sick and needy;—a kind of charity, which in actual benefit so far transcends the mere giving of

pecuniary aid, that one would have supposed the fact could never be overlooked, had not recent proceedings in an adjoining county showed that honorary medical officers are sometimes treated as if they were merely stipendiary servants. The Hospital for Consumption now admits fifty in-patients at once, all of whom can remain for the entire season of eight months, from October to June. Twenty-five males are accommodated on the lower, twenty-five females on the upper story. During the past season we have had sixty-seven patients. This Institution is maintained solely by voluntary contributions, and stands in great need of additional help. It has a staff of four physicians and one surgeon. The Erith-House Institution for Reduced Gentlewomen affected with Pulmonary Diseases, has likewise the same staff of four physicians and one surgeon. This is partly supported by voluntary subscriptions, partly self-supporting. Each inmate contributes a guinea per week, for which sum she has everything which her case can require. The average cost is about two and a half guineas per head; the difference being made up by the subscriptions of the public. Owing to the liberality of Mr. Palk, M.P., in presenting us with a site, and to the munificent gift of £500 by Sir Culling and Lady Eardley, provided we can obtain a similar sum from the public, in addition to sums previously collected, we shall be in a position to erect a suitable building, and so for the future sit rent-free. Both these Institutions are peculiar to Torquay, and deserve to be, and are becoming, very widely known; and I heartily trust will eventually be extensively supported.

During the past year, the Medical Act has formally become law; and no sooner had it so become than the two Colleges of Physicians of London and Edinburgh respectively altered their constitution. But how differently! Whilst the London College with just and proper liberality offers to admit within its ranks all respectable physicians who do not already belong to it, the Edinburgh College proffers to make any medical practitioner who is not a physician at all into a physician on his paying to it ten pounds sterling! In virtue of the new Act he can afterwards demand to be registered as a duly qualified physician, having passed no physician's examination whatever! It is to be hoped that the self-respect of our profession will deter its members from supporting this sale of medical indulgences; and so, by rendering the English traffic less lucrative than was anticipated, lead its promoters to remember the purpose for which their college was established. A distinction in letters, whether in medicine, law, or divinity, which may be obtained by merely paying down a few pounds, is worth—precisely what it costs; it proves pecuniary ability; nothing more. The initials of physician by purchase would correctly intimate the estimation in which the possessor of such a distinction will be held by every one but himself. Meanwhile, the profession as a class suffers. There is a want of more of acknowledged authority in our profession; and not of less. And although colleges may have but little power to create this, they are not, as in this instance, without the power to lessen that which exists. I feel personally that faith is not kept with those who formerly considered it creditable to be connected with the Edinburgh College of Physicians; and that in bare justice, every fellow ought to have a vote in deciding whether or not so radical a degradation of his College should take place. Surely there is great defect in the constitution of the Medical Council of Great Britain, if it cannot interfere to prevent so grave an abuse of vested authority as this.

During the past year our division of the kingdom has lost its chirurgical Nestor by the death of Mr. Barnes. Like the Smiths of Bristol, Bickersteth of Liverpool, Robert Thorpe and Wilson of Manchester, and many others, of a class little known to literary medicine, but great and most useful in their several spheres, to Mr. Barnes may we apply the lines which, as we learn from Dr. Brown, were written for Sydenham:—

> Sic te scientem non faciunt libri
> Et dogma pulchrum: sed sapientia
> Enata rebus, mensque facti
> Experiens, animusque felix.

Without attempting anything like a retrospect, there are one or two of the medical subjects of the past year, to which, with your indulgence, I should wish briefly to refer.

I may mention an interesting case which fell under my own care last winter, because it sets at rest the possibility of passing a probang into the larynx. A gentleman in a state of suffocation from laryngitis was recovered from unconsciousness by the performance of tracheotomy by Mr. Paget. It was necessary to continue the use of the tube, and the gentleman came to Torquay with it in his trachea. In the course of subsequent treatment, I frequently passed a sponge-probang, charged with a solution of nitrate of silver, down through the larynx until it came in contact with the silver tube, through which the patient meanwhile was breathing. I cannot say, however, that the larynx ever became so accustomed to the stimulus as not to resent it by exciting cough, and sometimes retching.

The discussion upon the question of inflammation is still going on, and has been argued with great ability, though perhaps too much on *à priori* grounds, in the pages of our Journal. If I may venture an opinion on the logical bearings of the discussion, it would be, that to establish the fact that congestion does not constitute the chief part of inflammation, is no proof that it may not constitute a large part: to show that the tissue-attraction of the inflamed part has the largest share in producing the effects, does not prove that the induced excitement of the general circulation has no share: to find that inflammation is an effort of nature towards good, does not prove that the effort needs no controlling, and will never, by excess or going astray, prove a mortal evil. To argue that increased circulatory action is necessary to feed the exudation and to enable it to go through its normal stages safely, and therefore should be let alone, by no means proves that we may not have far too much of the good thing. That there is an overfeeding which prevents the good progress of inflammatory exudation, needs no telling to the surgeon who finds a quick full pulse check adhesion of wounds, and a quiet pulse permit and promote it. The common sense of the matter is, that *all* the elements which enter into the composition of inflammation may work together for good or for evil: all need watching, and any may need guidance, promotion, or restraint—whether it be the tissue-irritation, the nervous excitement and sympathy, the exudation, the local congestion, or the force and frequency of the general circulation. To discuss which of these elements is the most essential, and takes the lead, is interesting and important; but calculated to mislead, if it causes us to overlook the fact that any one of the secondary elements in the vicious circle of disease may come to play the principal part, and need that kind of attention which, to my mind, experience has long ago established. Optimism soon fails us in disease. We are forced to consider, as well as to accept, the evil together with the good in the process, as much as in the result. And as, in point of opinion, I cannot myself assent to the conclusion that our forefathers were all wrong, because they and we find it necessary to treat the inflammation we see differently—"Vixerunt fortes ante Agamemnona"—so, in point of experience, I feel certain that in the treatment of acute erysipelas—since that is made a typical instance—twenty years ago, in northern country constitutions, by venesection and tartar emetic, I have seen as good results as I now see from treating it with tincture of steel. I feel confident that the results of what would now be considered, and would truly be, over-active practice, were as good in the hands of shrewd practical observers, too busy to read except the book of nature, too sagacious to go wrong twice in the same direction, in their day, as our quieter practice is in ours. There is a fashion in these things; and as homœopathy is the extreme that corrects over-drugging, so the modern bugbear of weakening improperly by proper bleeding is the extreme that corrects Sangradoism. The operating surgeon cannot, if he would, accommodate his practice to the fashion; and I do not know that he is more frightened than formerly at the loss of blood which occurs on the operating-table. My own conviction is, that bleeding, both general and local, in *appropriate* cases, is just as useful and just as safe as ever it was; but that, explain it how we may, for one case in which it is suitable and required now, we formerly saw fifty.

The publication of Brown-Séquard's *Lectures on the Nervous System* during the past year is an epoch in physiology. His experiments constitute quite a neurological Euclid; and if, as is probable, future investigations by adding to his premises modify some of his conclusions, still, to go through the problems to the author's own conclusions as they stand is an excellent mental exercise. In all that concerns the influence of the nervous system on secretion and nutrition, I am happy to find much that confirms and nothing which refutes the results of my own researches on the ganglionic system, as published in the *Edinburgh Medical and Surgical Journal* fourteen years since. I then endeavoured to establish that every ganglion consisted of a spinal element and of a specially ganglionic element; that the use of the ganglion, indeed, was to bring these two elements into contact, and so enable one to react upon the other; that the white spinal nerve controlled and regulated the action of the grey ganglionic cells and nerves, in reflex-secretion and reflex-nutrition, precisely as the cerebral nerve-tubes regulate the reflex action of the grey matter

of the spinal cord as they pass through it; that any power, which a ganglion exercised over muscles, was due to its spinal element; whilst the office of its grey element was to preside over and regulate secretion and nutrition in non-muscular structure, by influencing cell-metamorphosis, whether in the blood or in the tissues. Now, in his discussion of reflex-secretion and reflex-nutrition, Brown-Séquard constantly speaks of the branches of the ganglionic nerves as the *vaso-motor* nerves. In my belief, they are this and something more. To paralysis of these nerves (as by section of them) are referred loss of contractile power in the blood-vessels, their increased fulness with blood, increased nutritive changes, increased secretion, and increased heat. Conversely, to stimulation of the *vaso-motor* nerves (as by galvanism), are ascribed contraction of blood-vessels, lessened afflux of blood, diminished nutrition and secretion, and coldness. I need not remind the readers of the lectures how much of pathological reasoning is made to hinge upon these conclusions; nor how generally these views have been employed in medical reasoning during the last three years. Now, if we have here the truth, I believe we have not, at all events, all the truth. I see no place given to the grey ganglionic element at all. All that appears is due to the spinal element *per se*, for that, as I believe, is the *vaso-motor* nerve. When you cut through a ganglionic nerve, you paralyse its white element, but there is no proof that you paralyse its grey element; on the contrary, you probably for a time irritate that. Both conditions must be taken into account in explaining the distension of capillaries, increase of heat, etc., which result; and when you galvanise a ganglionic nerve, you only stimulate the white components and not the grey, for grey cells and nerves do not respond to galvanism directly applied, and grey nerves will not conduct it. Hence, the constriction of blood-vessels and coldness which here ensue, are due only to excitement of spinal nerves, and not of grey ones. In the new views alluded to, it is interesting to note a return to the old notions of Cullen, of spasm of the extreme vessels in the cold stage of fevers. But we must not forget that the thermometer indicates rise of temperature above the natural degree in the cold stage of intermittents, whilst the sensation of the patient is still that of undue coldness. On looking at the drawings which I have made of the ganglia of the vagus nerve in different animals, and noticing their large size, especially in large gilled fishes, whose gills are constantly covered with copious secretion; on observing the increase of mass in the nerves when they emerge from the ganglia; and especially on remarking a fact, which I think has not hitherto been pointed out, namely, that the large ganglion of the vagus in its situation follows the vocal larynx, so that in vociferous birds, as the duck, and singing birds, as the thrush, we find it (as shown in the drawings) at the top of the thorax instead of at the base of the skull, indicating that its office is that of vocal ganglion, to combine in action the nerves which govern the secretions on the interior of the larynx, with the special nerves which minister to its sensations and movements; we cannot, I think, observe these anatomical facts and consent to take no account of the grey and specially ganglionic element in the sympathetic system of nerves. I may be pardoned for dwelling on this subject, partly because of its intrinsic importance, and partly because within these three years some amount of credit has been appropriated by Dr. Campbell of America for describing an "excito-secretory" system of nerves as something new, whereas it contains no facts which were not already well known as property common to all physiologists.

Leaving subjects scientific, I pass on to touch for a moment upon the doings of the most prominent variety of pseudo-medicine. During the past year, an amusing attempt was made in Paris by the practisers of homœopathy to obtain damages to the extent of £2,000 against the editor of a public paper for exposing the deception inherent in their mode of practice, by showing that in Paris, as elsewhere, under the assumed guise of homœopathy, the practice really adopted bears no necessary relation to that doctrine. It seems that the author of a work advocating homœopathy requested the editor to review his book. He was informed that as such a review must be against him, he had better let the matter rest. However, the author, preferring an unfavourable notice to no notice at all, was pertinacious. The disclosure of the particulars of homœopathic practice which ensued was so displeasing to the homœopaths, that twelve of them combined to bring an action for libel against the editor. If they failed in their suit and had to pay the costs, still they obtained notoriety. Like all persons who adopt a universal principle which is incapable of proof, assuming a mental myth for their groundwork, these persons avoid all examples which admit of demonstration. They luxuriate in the hidden and undemonstrable, because here alone can mere opinion flourish, and disproof be escaped. Thus, as examples of "Like curing Like," the one sole and universal principle of medicine according to homœopathy, and a truth therefore, if it were a truth, from which there ought not to be a single solitary exception, we never find it affirmed that a bruised knee will be cured by giving it another blow; a sprained ankle by a second sprain; an eye inflamed by lime by introducing a little more lime; or hay-asthma by working in a hayfield. No; it is always internal, unseen diseases, about which powerful assertion is alone possible, which furnish the examples adduced. *We* know very well that if internal diseases could only be cured by such agencies as would cause them, or even symptoms like theirs, they would not be cured at all; because, with very few exceptions, we know of no medicines which can cause, or even imitate, most internal diseases. All fevers, all spontaneous inflammations, all dropsies, all degenerations of organ, all organic diseases whatever, we cannot by medicines produce, or even imitate. On homœopathic ground there can be no treatment for any of these. And in the few instances in which we can imitate internal diseases, in no one is the "Like curing Like" true. In every one it proves erroneous. Will a little more fever-poison cure typhus? When arsenic or corrosive sublimate occasions ulceration of the stomach, and lead causes colic or palsy, do we cure by administering a little more of these respective agents? Are the effects or the symptoms of any poison removable by administering a little more of the poison? But then very intelligent people credit it. In former days very intelligent persons believed in witchcraft; and at the present time one of the best mathematicians of the day is a believer in spirit-rapping. Knowledge of the subject, as well as cleverness, is a requisite in forming a judgment. "Ah!" but says a votary, "I know from experience that the system does what they say. I was suffering from sleeplessness and excitement, and had a pulse of 130. Well, they gave me aconite and belladonna; my pulse dropped to 70, and I felt another man. Whenever my pulse got up, I took aconite and belladonna alternately, and after a time I got quite well." Now, was this true or imaginary? Decidedly it was quite true, and the treatment was reasonable also. Only, it has as much to do with homœopathy, as had the Parisian homœopath's administration of seven grains of calomel a day in his case of dropsy. In a healthy person in any dose the tendency of aconite is to paralyse the heart. It kills as a poison in this way. In medicinal quantities, it calms down excitement of the circulation by the same kind of action. Belladonna acts in a very similar manner, and especially quiets the spinal cord. In a disorder, therefore, in which the chief source of evil, or the only removable source of evil, is excitement of the circulation and nervous centres, these are very suitable rational remedies. But where is the "Like curing Like?" Aconite, in potent medicinal doses, and by no means in the infinitesimal quantities speciously professed to the public, is the homœopathist's sheet anchor in the treatment of *all* active affections with excitement of the circulation. Yet the natural action of aconite being to lower the circulation, it ought to be given in over-slowness, not in over-quickness, of the pulse. Brandy ought to be given in over-excitement, laudanum in stupor, aconite in fainting, and gin in gin-drinker's congestion of the liver! A medical practitioner, who pretended nothing, would give aconite and belladonna when necessary to relieve excitement, because *that* was hurtful to his patient, and if required to assign a reason for so doing, would not say that it was because "Like cures Like," whilst at the same time he was administering what would produce just the opposite of like, but merely that he endeavoured to remove the cause of the disorder, and if to do so were impossible, then to remove its effects. The application of this old familiar rule will explain every instance of medical treatment which appears to support homœopathy. But then it is plain and sensible, and without the charm of mystery.

During the past year, something has been done which bears upon this subject. Strychnine has been found to cure St. Vitus's dance. Now chorea is a disease characterised by convulsions, and strychnine, we know, causes convulsions. Here, surely, "Like cures Like;" apparently only. One case of chorea is cured by strychnia; another is made worse by it. The cured case is one in which debility predominated; the other one in which there was feverish excitement. Strychnia being a powerful tonic, cures the nervous

and muscular weakness on which the convulsive movements depend; and with removal of the cause the effect ceases. But in the other instance, by precisely the same action of stimulating nerves and muscles, the strychnia adds to the evil and makes the disease worse. In tetanus, the gravest of all convulsive diseases, strychnia was employed by Mr. De Morgan and made the disease worse, apparently adding its own muscular spasms to those of the complaint. Aconite cured it. Now, if "Like curing Like" were true, aconite should have no power over convulsions, but should cure palsy; strychnia, no power over palsy, but should cure convulsions of all kinds, both, as we well know, being just the reverse of the truth. Dr. Richardson has established the very suggestive fact, that by injecting lactic acid into the peritoneum of dogs, he can artificially imitate rheumatic inflammation of the valves of the heart. This, hitherto, has been a disease which we did not know how artificially to produce. Now, however, that it is rendered open to demonstration, does Dr. Richardson find that the administration of a little lactic acid removes the inflammation from the valves of the heart which the first quantity had occasioned? So, also, Dr. Mackenzie, by injecting lactic acid into the veins, produced local phlebitis. He did not find that the introduction of more lactic acid removed the effects occasioned by the first. We may venture to predict that in no future instance in which a hidden disease becomes open to demonstration, will it ever be found that "Like cures Like." No sooner will the example become open to experimental proof, than it will also become one of the endless "exceptions" to this law,—the only law of nature ever known to have any exceptions. From one of the leaders in a recent number of the *Times*, I extract the following:—"In this country there is scarcely to be found, even in extreme politicians, men capable of exaggerating one idea or one sentiment into the rule of all life, and the foundation of all policy. In religion, in medicine, in art, and possibly other speculative subjects, such monomanias may prevail; but the wildest democrat has at least six points to his charter, with a seventh in reserve. Indeed, give him an atom of responsibility, and he becomes a sensible man, and, perhaps, a bit of a conservative."

I feel that I owe an apology to you for thus taking up your time by alluding to a subject only connected with medicine as an outsider. Had reasoning any considerable power in preventing assumptions that cannot bear investigation, nothing would ever have been needed after the excellent work on *Homœopathy* of Professor Simpson. Still, convinced, as we all are, that never since the world began has medicine been advanced by the assumption of any mysterious principles, or, indeed, by assumption, pretence, or mystification of any kind; all we contend for is, that medical science and medical skill depend solely upon correct observation and correct reasoning. These will, by degrees, give to us all the power over disease which man is permitted to possess. By these is medicine day by day advancing steadily, gaining new light, and keeping its pace with the onward march of all knowledge. By these alone can we hope to aid it. We will not ourselves literally accept Plato's sanction for pious frauds,—"If falsehood be indeed of no service to the gods, but useful to men, in the form of a drug, it is plain that such a thing should be touched only by physicians." Such a thing should be touched *never* by physicians. Whether always expedient or not, truth is at all times right; and, therefore, in season, and—I fear you will say—out of season, in matters medical we are impelled to speak in its advocacy.

SOUTH-EASTERN BRANCH.

PRESIDENT'S ADDRESS.

By William Sankey, Esq., Dover.

[*Delivered June 29th*, 1859.]

Gentlemen,—Allow me to welcome you very cordially to this ancient town and port. In the hope of making this first Annual Meeting of the South-Eastern Branch at Dover one of agreeable reminiscences, I have made arrangements which will enable you to visit, as far as possible, during your very brief stay, all that is considered most worthy of your attention. The ancient edifice under whose roof we are (by the kind permission of the Mayor) now assembled, is of historic interest. It was built by Hubert de Burgh, in the reign of King John, for the accommodation of pilgrims, and still bears the name by which it was then called, the *Maison Dieu*. Henry VIII took possession of it, and Queen Mary converted it into an establishment for victualling the navy. Brewing and baking were carried on within its venerable walls until the peace of 1814. In 1831 it became the property of the Ordnance Board, from which it was purchased by the Corporation of this town in 1834, and converted into Town Hall, Sessions House, and Prison as it now stands. The restoration of the Town Hall is in progress, which, when completed, will be the finest in the county.

The ruins of St. Martin's Priory closely adjoining are well worth a visit, and about two or three miles westward are the ruins of St. Radigund's Abbey. The castle, with its noble keep, ancient pharos and church, its fortifications and newly constructed barracks, are by direction of Colonel Stotherd open to your inspection, as are also the citadel and other fortifications, barracks, etc., on the western heights. The ruins of a small chapel discovered some years ago, and now protected by a fence, near the building intended for the quarters of married soldiers, is known to have belonged to the Knights Templars, and is probably the spot where King John surrendered his crown to the Pope's legate. The Museum contains a fair collection of chalk fossils from our cliffs, several antiquities found in the neighbourhood, and many specimens of natural history; but its chief feature is a collection of rare British birds, presented by Dr. Plomley, of Maidstone.

You will not fail to visit the Admiralty Pier in the immediate neighbourhood of the Lord Warden Hotel. The diving bells employed in this extensive work will be raised this afternoon a little before four o'clock.

Having thus briefly stated the objects most likely to attract your attention, I will not take up your time by professional subjects, aware that many of you, who have come from a distance, wish for a holiday; neither am I desirous to detain you by enumerating the various causes which render Dover eligible as a watering place and residence for invalids. Almost a new town has arisen since I first settled here, nearly forty-five years ago; handsome and commodious houses have been built, the greater part of the town drained, and an abundant supply of the finest water obtained. The sea-bathing is excellent, and the hot and cold baths, though not all that could be wished, are improving.

And now I feel sure you will not consider as foreign to the objects of this meeting a few remarks on medical ethics. In the address delivered at the first meeting of the Provincial Medical and Surgical Association, by Dr. Hastings, at Worcester, more than twenty-five years since, in enumerating the principal objects to which the attention of its members would be directed, the fifth is as follows: "The maintenance of the honour and respectability of the profession generally in the provinces, by promoting the friendly intercourse and free communication of its members, and by establishing among them that harmony and good feeling which ought ever to characterise a liberal profession." From the commencement of my professional career, full fifty years ago, the maintenance of good feeling with my brethren by every means in my power, and preserving unsullied the dignity of our important calling, have been objects of my most anxious solicitude, and it is with no common feelings of thankfulness that I am able to say that I am on terms of friendship with every medical practitioner in this town and neighbourhood. In a well organised profession, there could be no difficulty in adapting to its exigencies the doctrine of general ethics, the principles of which exist in every properly regulated mind and are identical in all circumstances, how variously soever they may be applied. Lord Stanley, in his speech at the seventh anniversary festival of the Royal Medical Benevolent College, terms ours "the noble medical profession"; the ancients spoke of it as almost divine; Cicero, in a brief but enthusiastic sentence (which I trust you will excuse me for quoting), states: "In nullâ re propiùs ad Deos homines accedunt, quàm salutem hominibus dando." In proportion to the dignity of our profession should be the efforts of its members so to conduct themselves as to maintain it unimpaired, and transmit it unsullied to posterity. We may be assured, gentlemen, that no acts of Parliament, no legal enactments, will be of any avail, unless individually and collectively we use our best exertions to support the character of gentlemen and men of science. Let us never lose sight of this, but remember that we are exercising the *profession*, not carrying on the *trade*, of medicine; and, in proportion as we act disinterestedly and benevolently, we shall be honoured by the rich and beloved by the poor.

Reviews and Notices.

An Inquiry into the Curability of Consumption, the Prevention, and the Progress of Improvement in the Treatment. By James Turnbull, M.D., Physician to the Liverpool Royal Infirmary. Third Edition, pp. 195. London: Churchill. 1859.

Dr. Turnbull has in this edition revised his valuable work, of which he has rewritten a great part. He has made good use of the excellent reports of Mr. Simon and Dr. Greenhow, which appeared last year; and has examined the preventive treatment of consumption in a new chapter. We fancy that the author might have said somewhat more on the positive influence of hygienic agents in the cure as well as in the prevention of phthisis; but his book, as it stands, is highly instructive. With regard to the influence of exercise in prevention, he makes the following remarks, which we regard as admirably to the point.

"I believe that for the purpose of preventing the disease, such moderate gymnastic exercises as bring into action the muscles of the arms, and develope those of the chest, and, at the same time, cause deep inspirations, are the most beneficial. A public play-ground, furnished at the private expense of a philanthropic gentleman, has been opened for the use of the lower classes of Liverpool. The crowds that resort to it in summer, in order to avail themselves of the means it affords of obtaining healthful muscular recreation, show that the boon is one which is fully appreciated; and I do not hesitate in expressing the conviction that it must exercise a powerful influence in preventing pulmonary disease. If public parks, with play-grounds for exercise, were more common in the vicinity of our large towns, they would have a powerful effect in diminishing the amount of consumption; and I may here observe, that the commissioners, appointed to examine into the condition of the army, not only recommended that additional barrack room should be provided, so that each man might have a minimum of six hundred cubic feet allotted to him; but also that, as in the French army, gymnastic exercises should be introduced." (Pp. 134-135.)

The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M.D., D.C.L. New Series. No. xv. July, 1859. London: Churchill.

An exceedingly good and searching article on Pauper Lunacy, in this number of Dr. Winslow's *Journal*, will arrest the attention of all those who have anxiously studied the important question. The reader will also be glad to find that the same able hand which wrote the article on the "Artificial Production of Stupidity in Schools," still continues the subject under the title of the Principles of Early Mental Education. An article on the Proposed Legislation in Insanity reviews at length the many absurd alterations which the Earl of Shaftesbury would, if he could, introduce into the law to the detriment—nay, the destruction—of all high-minded followers of this specialty.

Our attention has, however, been more particularly drawn to the following remarks upon the case of Mr. Ruck. They echo most completely our own opinions expressed in last week's Journal: and we trust that they will not be without their due weight upon the profession.

"The evidence in support of these allegations was not of a psychological character. It consisted in the opinions of one physician, and three consulting surgeons, all of whom laid no claim to any particular or special knowledge of insanity. The four medical witnesses examined, viz., Dr. George Johnson, Mr. Skey, Mr. Carter, and Mr. Gay *assumed* that Mr. Ruck's case was one of ordinary '*drunken insanity*,' or *delirium tremens*. Upon this gratuitous assumption, and implied hypothesis, they deduced their conclusions. There was no evidence that proved the case to be one of *delirium tremens*. No doubt Mr. Ruck indulged freely in the use of stimulants, but this disposition to drink to excess, and his occasional paroxysms of intoxication, were clearly, from the facts deposed to, merely symptoms of a prior and chronic state of disordered mind. The tendency to stimulants sprung out of the insanity, being associated with it, and was certainly not its proximate cause.* There was not a tittle of evidence to establish the case to have been, as the medical witnesses affirmed, one of *delirium tremens*. It was admitted on both sides that Mr. Ruck laboured under delusions of a dangerous character, and that he was in the habit of occasionally taking stimulants to excess; but in what respect does this condition of disordered mind resemble *delirium tremens?* Mr. Ruck's was not a case of active acute delirium, caused by a series of debaucheries; for it was clear that, even when entirely free from the influence of intoxicating liquors, his mind was under the influence of the same extraordinary delusions respecting his wife's infidelity. However, it suited the purposes of the action to make it appear that Mr. Ruck's case was one of *delirium tremens*, and the medical witnesses, *assuming* such to be the fact, were of opinion that there was no justification for his being restrained in a lunatic asylum. No practical physician, accustomed to treat cases of *delirium tremens*, and in the habit of distinguishing between this temporary state of mental alienation, caused by the presence of toxic agents in the blood, and legitimate attacks of insanity, would have so confounded the two conditions. There is no excuse for so egregious a blunder, and so serious a mistake of the evidence adduced at the trial; it constituted the basis upon which the medical men referred to grounded their conclusions. Assume that Dr. Johnson, and Messrs. Skey, Carter, and Gay, were right in their diagnosis when asked whether, in their judgment, Dr. Conolly and Mr. Barnett were right in considering Mr. Ruck's case to be one of ordinary insanity, and transferring it to an asylum; their reply was emphatically *in the negative*, thus passing a severe condemnatory sentence upon the sagacity, knowledge, and humanity of Dr. Conolly and Mr. Barnett.

"In the name of common sense, how could these gentlemen have given such evidence? It was utterly impossible for them to pronounce a safe and sound opinion as to Mr. Ruck's state of mind at the time when Dr. Conolly examined him and certified to his lunacy. They may entertain a doubt as to the nature of the case, and question the necessity for restraint; but does this justify them in positively asserting that Dr. Conolly and Mr. Barnett entirely mistook the character of the case? We tread on hallowed ground when called upon to give evidence likely to damage the reputation of a professional brother, and, therefore, we should proceed with the greatest caution, circumspection, and humility, considering well the opinions we express when placed in so trying a position. Supposing a physician, accustomed to deal exclusively with medical cases, were called upon to sit in judgment on a disputed point in practical surgery. We will imagine that Mr. Skey, Mr. Carter, or Mr. John Gay, had been called in to deal with a complex and difficult surgical injury. If, in twelve or eighteen months afterwards, a question were to arise as to whether the surgical case had been treated with scientific skill by any one of these surgeons, and the matter were to be brought into court with a view to obtain compensation for alleged injuries, what would these gentlemen think if Dr. Watson, Dr. Burrows, or Sir James Clark were to go into the witness box, and swear that these gentlemen had grossly misunderstood the character of the surgical case, and had treated it unskilfully? Would not the profession cry shame upon such evidence? Mr. Skey might with justice say to Sir James Clark and Dr. Watson, what do you know of practical surgery? how is it possible for you physicians to give any opinion on the subject? If you had *seen* the case when I was called in to it, and acquainted yourselves with the great difficulties with which I had to contend in its treatment, you might, perhaps, have been able to guess as to whether I had mismanaged it; but without this knowledge your opinion is not entitled to any consideration, and should not be recorded against a professional brother. If Mr. Ruck entertained, as Dr. Conolly and Mr. Barnett represents, at the time of their examination, the most dangerous delusions respecting the fidelity of his wife (against whom the shadow of a suspicion never existed), was he not a fit subject for restraint, and were not Dr. Conolly and Mr. Barnett justified in so certifying? Supposing that Dr. Conolly and Mr. Barnett had hesi-

* "The disposition to indulge freely in the use of intoxicating drinks is unhappily a symptom frequently associated with ordinary attacks of insanity; but this does not constitute them cases of delirium tremens. If every insane person who is disposed to drink to excess is to be said to labour under delirium tremens, how endless and fatal would be the mistakes committed; ending, alas! often in the serious sacrifice of human life."

tated in placing Mr. Ruck under control, and he, influenced by his terrible hallucinations, had sacrificed Mrs. Ruck's life, would not both these medical gentlemen have been seriously censured, and called to account for not recognising Mr. Ruck's dangerous insanity, and for not advising that he should be placed in a position of safety and security?

"There is one remarkable feature in this case to which we wish to direct particular attention. In reply to a series of questions, put to Mr. Ruck by Mr. Montague Chambers, he frankly admitted that the delusions ('suspicions,' he termed them) regarding his wife continued on his mind until Mr. Wainwright undertook to examine into their reality. Mr. Wainwright saw Mr. Ruck at the asylum, and assured him *that he had fully investigated into the matter*, and that his, Mr. Ruck's, impressions regarding his wife had no foundation in fact. As soon as this statement was made to Mr. Ruck, his delusions, it is alleged, respecting his wife's numerous acts of infidelity, immediately vanished. *For ten months previously, Mr. Ruck's mind had never apparently been free from these delusions, and in one moment Mr. Wainwright succeeded in dissipating them from his morbid imagination.* '*Veni, vidi, vici*,' exclaims this wonderful psychological lawyer. Let not the question be asked, '*Who can minister to a mind diseased?*' as long as Mr. Wainwright's valuable services can be obtained for the benefit of the insane."

They should make Mr. Wainwright Chief Commisioner in Lunacy. Such a profound psychologist is certainly out of his place labouring as an unknown attorney—his powers are surely running to waste.

British Medical Journal.

SATURDAY, JULY 9TH, 1859.

THE PRESIDENT OF COUNCIL AND TREASURER OF THE ASSOCIATION.

When the new code of Laws for the guidance of the British Medical Association was enacted at the annual meeting held in Birmingham, in 1856, it was provided that the offices of President of the Council, and Treasurer, should be held for a period of three years; but that these offices should be conferred on Sir Charles Hastings during his life. Such a tribute of respect and confidence was, it was unanimously felt, not more than the due of him who had, with paternal eye, watched the increasing growth and vigour of the Association for a quarter of a century. When the law was passed, Sir Charles Hastings at once expressed his "fixed determination" to place the offices in the hands of the Association at the end of three years, in order that the principle adopted by the Association might be fairly carried out.

This promise is about to be performed. Sir Charles Hastings, as an honourable man, has addressed the committee in a letter, published at p. 548, in which he states it to be his intention, at the coming annual meeting in Liverpool, to resign the offices held by him, in the hope that a better man may be found as his successor. There is but one response to be anticipated from the members. It would be a grievous thought if the official connection of Sir Charles Hastings with the Association were unavoidably about to end. Happily, as matters now stand, the Associates will only find, in the offered resignation of its President of Council and Treasurer, an opportunity of once more expressing those feelings, which the devotion of his life to its welfare must ever keep in activity.

THE MEDICAL BENEVOLENT FUND.

An advertisement in this day's Journal states that the Annual Meeting of the Medical Benevolent Fund will be held at Mr. Churchill's, on Wednesday next, July 12th. The object of the meeting will be the election of officers, and the transaction of other ordinary business; but we hope that not a little will then be added to the treasury of this excellent institution, the characteristic feature of which is to do great good with little noise. As many of our newer associates may not be well acquainted with the working of this Fund, we give an extract or two from the report presented at the last annual meeting of the Association.

"In the year then preceding, with a plentiful balance to resort to, the Committee were able to deal out *bountiful* aid in those distressing cases, where immediate and liberal pecuniary assistance can alone be of service. They accordingly ventured to bestow larger grants than formerly, at the same time that they increased the numbers of the recipients of their charity. In one instance they gave the sum of £50; it was to the widow and family of a medical man, who, having struggled hard, but unsuccessfully, in ill-health, and in misfortune, died, leaving wholly unprovided for, eleven orphans, and his poor widow about again to become a mother. £30 were voted to each of two other cases, and £25 to each of two more. The sum of £792:10 was expended in the assistance of urgent cases during the year, while £214 was given to Annuitants.

"The Committee had the grateful satisfaction of knowing that by the careful investigation of the cases brought before them, and then by placing the money they have voted in the hands of some friend, who watched over its disposal, they had been enabled to uplift the fallen from a condition of degradation and misery, to one in which they have successfully struggled to obtain a livelihood for themselves and their families.

"The experience of the Committee confirmed the wisdom and beneficence of the Founders of the Medical Benevolent Fund and its subsequent supporters, in delegating to a Committee the duty of investigating the applications for relief, and of distributing the funds. Conscious that they were influenced only by a strong desire to do full justice to all, by giving aid according to the real necessities of each case, the Committee ventured to express their conviction, that in selecting the true and worthy objects of charity, by aiding them silently and as liberally as their means permit, and afterwards by watching over them, the Medical Benevolent Fund approached as near as a *public* charity can approach, to that which it trusted never to supersede—the *private* Christian charity which 'letteth not the left hand know what the right hand doeth.' Further than this, the Committee were happy in feeling that instead of superseding private charity, their operations tended to call it forth and foster it; for in many instances the expression of their intention to give aid, *only* as an addition to any that may be supplied by friends, had called forth friends and their effective assistance."

No one, we believe, can calculate the amount of real good that is done by such an institution as our Benevolent Fund. The widow and fatherless, reduced in their pecuniary circumstances by the removal of a husband or parent, are not obliged to come forth and perforce cry aloud their claims: they are visited and questioned in their own home, and, if found worthy, are aided in such a way as to avoid exposure to, it may be, a curious and ridiculing world; while oftentimes absolute poverty is warded off, and a way opened for the earning of an honest, and therefore honourable, livelihood.

With these few remarks, made with the object of bringing

the subject under notice, we leave it to our readers, in the trust that they will do what they can to increase the splendour of what has hitherto been aptly designated as the "jewel in the crown of our Association".

THE WEEK.

We feel the greatest pleasure in stating that another quack has been fairly run to earth. John Goldsworthy, travelling physician to the "University of Cambridge European Institution, City Road, and New Square, Cambridge", will for the next six months have ample time in Truro jail to ponder over some more reputable method of gaining his livelihood than by attempting to usurp medical titles. This adventurer, it will be remembered, has for some months been victimising the people of the West in the most shameful manner, under the plea of the highest philanthropy. He represented himself as the physician of a most important institution, sent by its directors on an errand of mercy to those poor persons in the country districts who could not afford the charges of ordinary medical men; and, under this lying pretence, reaped a rich harvest from the simple people of Devon and Cornwall. We are glad to find that it only requires a little determination to bring such people to condign punishment; and we trust our associates will not fail to give a good account of similar impostors who may happen to infest their neighbourhoods.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, July 1859.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Committee of Council will meet at one o'clock on Wednesday, at the Medical Institution, Mount Pleasant.

The General Council of the Association will meet at half-past two.

Wednesday, 27th. 7 o'clock, P.M. First General Meeting of the Association. The retiring President will make a few remarks. The new President will deliver an address. The Report of Council will be presented, and other business transacted.

Thursday, 28th. *Morning*, 8.30. Public Breakfast at the Adelphi Hotel.

10 o'clock. Meeting of the members of the new Council. At 11, the Address in Medicine will be delivered by Dr. E. Waters of Chester. Cases and Papers will be read.

The meeting will adjourn at 1, and reassemble at 2. The Report of the Benevolent Fund will be received. Cases and Papers will be read.

Evening. There will be a *Soirée* at the Royal Institution, in Colquitt Street.

Friday, 29th. 11 A.M. The Address in Physiology will be delivered by A. T. H. Waters, Esq., Liverpool. Papers and Cases will be read.

6 P.M. Dinner. Tickets a Guinea each. Gentlemen who intend to be present at the dinner, are requested to send notice as early as possible.

Members are requested to enter, on arrival, their names and addresses in the Reception Room in the Medical Institution, Mount Pleasant, where all the meetings will take place, and where cards will be supplied which will secure admission to all the proceedings, and contain such information as may be useful to those who are strangers to the town.

Members who wish for previous information may communicate with A. T. H. Waters, Esq., 27, Hope Street, Liverpool.

It is particularly requested that all Members who propose to read Papers will communicate with the General Secretary without delay. Arrangements will be made for the Sectional Reading of Papers, if a sufficient number be promised to render such a plan desirable.

Among the principal Hotels are:—the Adelphi, Ranelagh Place; the Waterloo, Ranelagh Street; the Angel, Dale Street; the Feathers, Clayton Square; the George, Dale Street; the Grecian, Dale Street; the Neptune, Clayton Square; the Queen's, Lime Street; the Royal, Moorfields; the Stork, Queen's Square; the Union, Parker Street; the Victoria, St. John's Lane; the Wellington, Dale Street.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 30th, 1859.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Reading. [Annual Meeting.]	Council Chamber, Reading.	Wed., July 13, 4 P.M.
Bath and Bristol. [Annual Meeting.]	The Institution, Bristol.	Thurs., July 14th, 3 P.M.
Metrop. Counties. [Annual Meeting.]	32a, George Street, Hanover Square.	Tuesday, July 19th, 8 P.M.
North Wales. [Annual Meeting.]	Royal Hotel, Rhyl.	Tues., July 19th, 1 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

THE OFFICES OF PRESIDENT OF THE COUNCIL AND TREASURER.

The following letter from Sir Charles Hastings was read at the last meeting of the Committee of Council.

"*To the Committee of Council of the British Medical Association.*

"Gentlemen,—Will you allow me the privilege of making you the medium of a communication to the British Medical Association?

"It will doubtless be in your recollection, that, at the Birmingham Meeting of the Association, a law was passed by which the offices of President of the Council and Treasurer should be vacated triennially; but it was specially reserved that the offices should be conferred on me for my life.

"The period of three years will expire at our next anniversary, when I shall place the offices at the disposal of the Association, in the hope that some person better qualified than myself may come forward and be elected to the offices.

"I have the honour to be yours faithfully,

"Charles Hastings.

Worcester, April 4th, 1859.

SOUTH-WESTERN BRANCH: ANNUAL MEETING.

The annual meeting of the South-Western Branch was held in the Bath Saloon, Torquay, on Thursday, June 23rd: C. Radclyffe Hall, M.D., President, in the Chair. Among the members and visitors present, were the following:—H. Appleton, Esq. (St. Mary Church); J. B. Ashford, M.D. (Torquay); T. Balman, M.D. (Torquay); G. Black, M.D. (Torquay); C. H. Brooking, M.D. (Brixham); R. Bryden, Esq. (Uffculme); J. E. Clark, Esq. (Paignton); — Coombs, M.D. (Torquay); P. C. De la Garde, Esq. (Exeter); J. Derry, Esq. (Totnes); J. Derry, jun., Esq. (Totnes); J. Edye, Esq. (Exeter); E. Empson, Esq. (Crediton); R. T. Evanson, M.D. (Torquay); C. Forbes, M.D. (Bovey Tracey); J. J. Goodridge, Esq. (Paignton); J. Goodridge, jun., Esq. (Paignton); L. Harris, Esq. (Totnes); H. B. Hartland, Esq. (Torquay); — Hicks, M.D. (Torquay); J. H. James, Esq. (Exeter); R. Kerswill, Esq. (St. Germains); W. Marrack, Esq. (Liskeard); C. B. Nankivell, M.D. (Torquay); T. E. Owen, Esq. (Totnes); W. T. Plowman, M.D. (Torquay); J. Pollard, Esq. (St. Mary Church); W. Pollard, Esq. (Torquay); C. W. Pridham, Esq. (Paignton); C. H. Roper, Esq. (Exeter); T. Shapter, M.D. (Exeter); J. S. Smith, Esq. (Tiverton); W. K. Spragge, Esq. (Paignton); W. J. Square, Esq. (Plymouth); W. W. Stabb, Esq. (Torquay); J. Toogood, M.D. (Torquay); J. B. Toogood, Esq. (Torquay); A. Waters, Esq. (Exmouth); J. Westhead, Esq. (Torquay); the Rev. T. N. Hicks; R. E. Vivian, Esq.; and the Rev. R. Wolfe.

Mr. Edye, the retiring president, expressed his gratification at the fact that his duties on that occasion would be very short: he had simply to resign the presidential chair he had occupied for the last twelve months to one who was eminently qualified to succeed him, Dr. Radclyffe Hall. It was once observed by a friend of his, who knew a good deal of the world, that no man ever retired from a high and dignified position—whatever had been the trials and difficulties attending it—without feeling some slight degree of regret. If that were true, what must be his feelings on relinquishing an honourable appointment that had been, he might say, a continuous ovation from beginning to end? It was a subject of no small degree of pride and pleasure to him, when he was elected to preside over the body of gentlemen which he saw around him, that he happened to succeed so excellent a predecessor as his friend, Dr. Cookworthy, whom to know was but to esteem; and he felt equally proud and pleased at the fact, that the chair, when vacated by himself, was to be filled by one whose presence rendered it impertinent in him to say more than that his talents and ability in his profession were known and recognised as those of a very distinguished order, and whose private character entitled him to the highest esteem of his fellow men. [*Cheers.*] It would be presumptuous in him to detain the meeting longer, and he would therefore merely refer to one somewhat illustrious occurrence that had happened during his presidency. That Bill which had agitated the profession for the last twenty or thirty years had come to what he trusted was a happy termination, although a variety of opinions were expressed on the subject. He really hoped that it would work better than had been anticipated, and that all those evils which it had been said would result from it, would not be realised. He had now to give up his chair to Dr. Hall, which he did with very great pleasure. [*Applause.*]

Dr. Radclyffe Hall, on assuming the presidential chair, delivered an able address, which is published at p. 541.

VOTES OF THANKS.

Dr. Nankivell proposed a vote of thanks to the retiring president, Mr. Edye, for his kindness and courtesy in the chair. He hoped that, now he had retired, his interest in the affairs of the Association would be in no degree abated.

Mr. Empson seconded the motion, and acknowledged the honour this Branch of the Association last year conferred upon him in sending him as its representative at the parent society's meeting.

The motion was carried by acclamation, and Mr. Edye returned thanks in appropriate terms.

Dr. Black moved a vote of thanks to Dr. Radclyffe Hall for his valuable address, with a request that it should be published; and expressed his gratification at seeing the chair so worthily filled.

Mr. Appleton seconded the motion, and it was carried unanimously.

The President briefly acknowledged the compliment.

NEXT ANNUAL MEETING OF THE BRANCH: ELECTION OF OFFICERS.

On the motion of Mr. Edye, seconded by Dr. Nankivell, it was resolved—

"That the next annual meeting of the Branch be held at Plymouth."

Mr. James moved, Mr. J. S. Smith seconded, and it was unanimously agreed—

"That J. Whipple, Esq., be the President-elect for next year."

The re-appointment of Mr. Roper, as Honorary Secretary, was proposed by Mr. Edye and seconded by Mr. Empson, both of whom bore testimony to the zeal and efficiency with which the duties had been hitherto performed by that gentleman. The motion received the unanimous concurrence of the meeting.

The following gentlemen were then elected new members of the Council of the Branch:—J. C. Cookworthy, M.D.; J. H. Hicks, Esq.; S. Kerswill, Esq.; W. J. Square, Esq.; and P. W. Swain, Esq.

The following members were elected to represent the Branch in the General Council of the Association, in addition to the Secretary:—P. C. De la Garde, Esq.; R. T. Evanson, M.D.; J. B. Toogood, Esq.; and J. Whipple, Esq.

MEETING OF THE ASSOCIATION IN 1860.

Communications from Sir Charles Hastings were read, intimating a readiness, on the part of the General Council, if invited, to hold the next annual meeting (1860) in some part of the south-western district, and suggesting that the present meeting should select the town, and recommend the President for the occasion.

An animated conversation arose as to the town which should be selected for the honour of receiving the Parent Association in 1860: in the course of which, Mr. James and Mr. Edye addressed the meeting. The general feeling at length became unanimous in favour of Torquay.

Mr. Brooking then proposed—

"That the place of meeting of the Parent Association in 1860, be Torquay."

Dr. Nankivell seconded the motion, and was certain that he spoke the sentiments of the medical gentlemen of this town when he said they would be happy to receive the Parent Society, and to do all they could that would conduce to the profit of the visit. [*Hear, hear.*]

The motion was carried unanimously.

Mr. Edye then moved—

"That Dr. Radclyffe Hall be recommended as the President-elect of the British Medical Association for the year 1860."

He was sure that gentleman was in every respect calculated to do honour to so distinguished a position. [*Hear, hear.*]

Dr. Black seconded the nomination.

The President requested, as the question was one personal to himself, that he might be allowed to leave the chair whilst it was considered.

Mr. Edye then took the chair; and, after some remarks, put the motion to the meeting, which carried it with acclamation.

Dr. Hall confessed that he hardly knew in what terms to acknowledge an honour which he had so little expected. Whether their recommendation were endorsed or not by the Parent Association, he should feel equally sensible of the kindly feeling of the gentlemen by whom he was surrounded.

NEW MEMBERS.

A number of new members were proposed and seconded.

VOTE OF THANKS TO THE PRESIDENT.

Mr. James asked the meeting to accord to the worthy President its heartiest thanks for his services on the present occasion. The object of the Association was to promote the improvement of the profession by any and every means in a way that redounded to the honour of the provinces; and he need not tell them that Dr. Hall had on various occasions shewn that he had followed out the study of the profession in a manner that did him great honour, and that was calculated to improve the actual position of the profession itself. [*Hear.*] Another object of the Association was to maintain the honour of the profession; and in this respect Dr. Hall's conduct on all occasions shewed that the presidency was quite safe in his hands. [*Hear, hear.*]

Dr. Nankivell seconded the motion, and said he was sure the members of the General Association would next year have abundant reason to congratulate themselves on having secured the valuable services of Dr. Hall as President.

The President once more expressed his acknowledgments. To be able to stand well in the estimation of his medical brethren, had been the object of his ambition all his life; and he need not say that it was highly satisfactory to him to receive their kind approval. [*Applause.*]

At half-past five the members dined together at Webb's Royal Hotel.

SOUTH-EASTERN BRANCH: ANNUAL MEETING.

On Wednesday, 29th June, the Annual Meeting of this Branch was held at Dover: William Sankey, Esq., President, in the Chair. There were also present:—A. W. Baird, M.D. (Dover); F. E. Barton, Esq. (Dover); J. C. Burrows, Esq. (Mayor of Brighton); J. M. Burton, Esq. (Lee Park, Lee); J. F. Crookes, Esq. (Harewell, Faversham); J. H. Drew, Esq. (Dover); R. Elliott, Esq. (Chichester); F. Fry, Esq. (Maidstone); F. F. Giraud, Esq. (Faversham); Valentine Heyesdall, M.D. (Christiania); W. Hoar, Esq. (Maidstone); G. F. Hodgson, Esq. (Brighton); Jonathan Hutchinson Esq. (London); E. Long, Esq. (Barham); P. Martin, Esq. (Reigate); A. Napper, Esq. (Cranley, Guildford); F. Plomley, M.D. (Maidstone); J. Reid, Esq. (Canterbury); E. F. Sankey, Esq. (Beckley); F. H. Sankey, Esq. (Wingham); G. Sankey, Esq. (Maidstone); A. Sisson, Esq. (Reigate); James Stedman, Esq. (Guildford); J. S. Steele, Esq. (Reigate); C. M. Thompson, Esq. (Westerham); C. Trustam, Esq. (Tunbridge Wells); and H. Whitfield, Esq. (Ashford).

The meeting assembled at Twelve o'clock, at the Ancient *Maison Dieu*, now the New Town Hall, Dover.

The President delivered an address which is published at p. 544.

REPORT OF COUNCIL.

The Secretary read the following Report:—

"The Council of the South-Eastern Branch have to congratulate their Associates on its continued prosperity. The number of members continues to increase. During the last twelve months, thirty-eight members have been added to the Branch, whilst the number to be deducted on account of death, resignation, or removal, only amounts to eight.

"The Council have seen with much pleasure the great success which has attended the district meetings in the Rochester, Maidstone, and Gravesend district. These well managed meetings are largely attended, and are most useful in extending the advantages to be derived from association in the South-Eastern Branch. The Council are very desirous of seeing similar meetings established in other districts of the three counties.

"The Council are happy to say that the subscriptions have for the most part been paid with much promptitude and regularity. There is still however room for improvement, and they would suggest that the subscriptions for the year should always be paid, at the latest, by the time of the Annual Meeting.

"In reviewing the public affairs of the profession since the last Annual Meeting, the Council have to congratulate the members on the passing of a bill for the regulation of the medical profession, from which much advantage may be hoped. The establishment of an authentic register of qualified practitioners is the first step towards the improved status which all are anxious to see; and although doubtless exaggerated expectations have existed, as to what might be done for the profession by legislation, it cannot be denied that the distinctive line, henceforth to be drawn between the educated practitioner and the uneducated pretender, must tend to the elevation of the scientific physician and surgeon.

"Soon after the passing of the Medical Bill, a Special Meeting of this Branch was held, and the three counties were divided into districts, in each of which, committees were formed for the purpose of taking cognizance of the registration, and in each district gentlemen kindly undertook the office of local secretaries for registration. The council believe that the medical registrar has been much assisted by the formation of similar committees, not only within, but without the limits of the British Medical Association, and they fully believe that illegal and fraudulent registration will be almost entirely prevented by their exertions.

"The Council are unwilling to pass without comment the recent publication of the Royal warrants for the reconstitution of the army and navy medical departments.

"The Army Warrant has been for many months before the profession; and it may be confidently said that its provisions, as regards the medical service, are both liberal and just—calculated to attract a portion of the best students, and therefore to promote the interests of the soldier and of the country.

"The Naval Warrant has been more recently issued; but it is founded on the same liberal principles, and it may truly be said that the position of the army and navy medical officers is far more worthy of an honourable profession than it was a few years since. The British Medical Association may well congratulate its members on these improvements; for it has repeatedly urged them on the attention of the legislature, and their adoption may be traced, partly to the growing spirit of liberality which happily may be seen in the conduct of employers, whether as private individuals, or as public bodies, but in a great measure also to the strenuous exertions of the members of the two honourable services aided by this Association, as well as by other professional bodies.

"The Balance Sheet for the past year is appended.

Balance Sheet, 29th June, 1859.

1858.	*Dr.*			
June 24.	Balance in the hands of the Treasurer	£31	8	11
1859.				
June 27.	By 186 Branch Subscriptions	23	5	0
		£54	13	11
1858.	*Cr.*			
Nov. 25.	Postage	£1	0	0
1859.				
Jan. 5.	Postage	1	10	0
11.	Rochester District Meetings	2	17	3
17.	Medical Directory	0	8	6
	Postage	1	0	0
24.	Advertisement, Sussex Express	0	7	0
	Ditto, Kentish Gazette	0	7	0
27.	Allingham, Bill	5	12	10
	Stationery	0	5	0
29.	Balance in the hands of the Treasurer	41	6	4
		£54	13	11

It was moved by Mr. Stedman, seconded by Mr. Fry, and carried unanimously—

"That the Report now read be received and adopted."

PLACE OF MEETING IN 1860: ELECTION OF OFFICERS.

It was moved by Dr. Baird, seconded by Mr. Whitfield, and carried unanimously—

"That the place of meeting in 1860 be Maidstone; and that the following gentlemen be requested to act as officers of the Branch for the ensuing year:—*President:* Frederick Fry, Esq. (Maidstone). *Vice-Presidents:* Wm. Hoar, Esq. (Maidstone); H. Gould, Esq. (Wateringbury). *Local Members of Council:* C. L. Allwork, Esq.; F. Barham, Esq.; F. Plomley, M.D.; J. C. Prance, Esq.; G. Sankey, Esq.; and J. W. Woodfall, M.D. (all of Maidstone)."

The Secretary then stated that the voting-papers which had been returned to him having been examined, it appeared that the following members were elected representatives of the Branch in the General Council for the ensuing year:—W. Addison, M.D. (Brighton); J. Milner Barry, Esq. (Tunbridge Wells); F. J. Brown, M.D. (Chatham); J. C. Burrows, Esq. (Brighton); W. Sankey, Esq. (Dover); J. Stedman, Esq, (Guildford); W. Street, Esq. (Reigate); C. M. Thompson, Esq. (Westerham).

The following gentlemen were declared to be elected members of the Council of the Branch:—G. Bottomley, Esq. (Croydon); A. Carpenter, M.B. (Croydon); R. Elliott, Esq. (Chichester); F. Fry, Esq. (Maidstone); W. A. Greenhill, M.D. (Hastings); A. Martin, M.D. (Rochester); F. Sankey, Esq. (Wingham); T. H. Smith, Esq. (St. Mary Cray); J. Stedman, Esq. (Guildford); W. Street, Esq. (Reigate); C. Trustram, Esq. (Tunbridge Wells); H. Whitfield, Esq. (Ashford).

VOTE OF THANKS TO THE LATE PRESIDENT.

It was moved by Dr. Plomley, seconded by Mr. Napper, and carried unanimously—

"That the best thanks of the members of the Branch are due, and are hereby given, to Mr. Cordy Burrows, for the able manner in which he has discharged the duties of President of the Branch for the past year, and for the kind hospitality with which he has received the members; to Mr. Lowdell, Vice-President, and to the gentlemen of the Local Council and other members residing at Brighton, for the admirable arrangements made by them at the last annual meeting, which was especially successful and agreeable."

NEW MEMBERS OF THE BRANCH.

The Secretary then read the following list of new members who had been provisionally admitted since the last annual meeting, and whose election was now unanimously confirmed.

Barton, F. E., Esq., Dover
Bodkin, T., Esq., Croydon
Burton, John M., Esq., Lee Park, Blackheath
Bush, John, Esq., The Retreat, Clapham
Butler, John, M.D., Woolwich
Butler, William H., Esq., Guildford
Clapton, E., M.D., Wellington Street, London Bridge
Drew, J. H., Esq., Dover
Foreman, R. C., M.D., Church Hill House, Brighton
Gidley, G., L.R.C.P., Sandgate
Gorham, John, Esq., Tunbridge
Grantham, John, Esq., Crayford
Grayling, John, M.D., Sittingbourne
Johnson, J. S., Esq., Croydon
Jones, Charles S., Esq., Chichester
Kelcey, W., Esq., Dover
King, Joseph, Esq., Brighton
Martin, Joseph, Esq., Dartford
Moore, Ebenezer, Esq., Dartford
Owen, Francis, Esq., Leatherhead
Patrick, Jarman, Esq., New Brompton
Robertson, C. L., M.D., Sussex County Lunatic Asylum
Ross, Frederick D., Esq., Guildford
Sargant, Joseph, Esq., Reigate
Slaughter, T. G., Esq., Farningham
Smith, H., Esq., St. Mary Cray
Spurrell, Flaxman, Esq., Bexley Heath
Stedman, Jas. R., M.D., Guildford
Swinhoe, George M., Esq., Charlton
Tyrrell, W., Esq., St. Helen's Place, Bishopsgate
Weekes, R., Esq., Hurstpierpoint

It was moved by the Secretary, seconded by Dr. Baird, and carried unanimously—

"That the following alteration be made in Law 7. Instead of the words 'two members', read 'three members'."

The effect of this alteration is, in conformity to the laws of the Association, to require a recommendation from three members of the Branch for each gentleman desirous of joining the Branch.

CASES AND COMMUNICATIONS.

The following communications were made:—

1. Observations on the Administration of Oleum Filicis Maris in Tapeworm. By F. E. Barton, Esq.

2. Removal of the Tonsils by the Guillotine. By F. E. Barton, Esq.

3. Selection of Surgical Cases. By C. Holman, M.D. (Reigate).

a. Renal Calculus passing through the Abdominal Parietes by Suppuration above Poupart's Ligament.

b. Disease of both Hip-Joints: Dislocation into either Ischiatic Notch, and Spontaneous Exfoliation of the Head of the Right Femur below Poupart's Ligament.

c. Excision of the Head of the Femur, and death by Phlebitis of the opposite Iliac Vein.

d. Successful Operation for Umbilical Hernia.

e. Ligature of the Femoral Artery for Hæmorrhage from the Anterior Tibial, after Operation for Disease of the Head of the Tibia, in which the latter Artery could not be tied.

f. Ligature of the Ulnar and Radial Arteries, for Hæmorrhage arising from Deep Wound of the Wrist-Joint.

4. Mr. Jonathan Hutchinson, Surgeon to the Metropolitan Free Hospital, gave a very interesting Demonstration of Casts, Drawings, and Stereographs, illustrating the Diagnosis of Hereditary Syphilis by the Condition of the Teeth.

It was moved by Mr. Reid, seconded by Mr. Hoar, and carried unanimously—

"That the thanks of the meeting be given to those gentlemen whose papers have been read; and that they be requested to allow of their publication in the Journal."

VOTE OF THANKS.

It was moved by Mr. Thompson, seconded by Mr. Giraud, and carried unanimously—

"That the thanks of the South-Eastern Branch be offered to the Mayor and Corporation of Dover, for their kindness in giving the use of the new Town Hall; to Colonel Stothard, R.E., and to Mr. Druce, for the facilities they have kindly afforded in enabling the members to visit the Fortifications and the Admiralty Pier."

The meeting then adjourned; and, after partaking of refreshments kindly provided by the President, the members proceeded to visit the various objects of interest in the town. Among these were the Natural History Museum, with its interesting collection of British Birds presented by Dr. Plomley; the Fortifications of the Castle and Western Heights; and the Works of the Admiralty Pier, where, by the kindness of Mr. Druce, the resident engineer, the members had an opportunity of witnessing the ascent and descent of the diving-bell, and other interesting operations.

At five o'clock the party sat down to dinner at the Lord Warden Hotel, when Mr. Sankey again presided. In addition to those present in the morning, the following gentlemen attended as visitors:—E. Ferrand Astley, M.D. (Mayor of Dover); Rev. Alfred J. Woodhouse (Incumbent of Trinity, Dover); Rev. F. Owston (Pirbright, Surrey); Colonel Aylmer, R.A.; Edward Druce, Esq. (Resident Engineer of the Admiralty Works); C. V. Wallace, Esq., F.R.S. (Engineer of Telegraphs to the South-Eastern Railway); John F. South, Esq., F.R.C.S.; Pragg Woodfall, Esq., R.A.; Henry Coleman, Esq. (Dover); W. Sutton, M.D. (Dover); J. C. Ottaway, Esq. (Dover); Alfred B. Cutfield, Esq. (Deal); R. G. Davey, Esq. (Walmer).

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 14th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

ON THE TREATMENT OF EMPYEMA BY "DRAINAGE," ILLUSTRATED BY TWO CASES. BY S. J. GOODFELLOW, M.D.

SOME REMARKS ON THE TREATMENT BY DRAINAGE GENERALLY. BY C. DE MORGAN, ESQ.

The object of this communication was to show the advantage to be derived in many, if not in all, cases of empyema, of making two openings in the operation of paracentesis thoracis, and of establishing a free communication between them, and between the cavity of the pleura and the external air, by means of an India-rubber tube, perforated at frequent intervals in the way recommended by Chassaignac for the healing of sinuses. The marked success attending the adoption of this plan of treatment, in the two cases read to the society, seemed to afford strong evidence of its value.

Case I. A boy in the Middlesex Hospital, aged 17, had been suffering for upwards of five years from an opening in the right side of the chest, which communicated directly with the pleural cavity; and, for a great part of this long period, also with a cavity in the lung, the result of an abscess. At the age of twelve years, this boy had an attack of pneumonia after measles, which terminated in abscess. In a short time this abscess burst into the cavity of the pleura: and, ultimately, a spontaneous opening occurred in the chest wall, through which a great quantity of pus, of a very offensive character, continued to be discharged for the five years preceding the adoption of the operation above recommended. During the whole of this period the boy had been for the most part confined to bed; and, notwithstanding the treatment that had been adopted at home, and in a public hospital, but little improvement took place in his general health, and no progress whatever was made towards the healing of the disease in the chest. The counter-opening was made, and Chassaignac's tube inserted on the 5th of January last. In a few days a marked change for the better was observed; the discharge from the opening, instead of being thin, unhealthy, and intolerably stinking, was

thick, much reduced in quantity, and nearly free from odour: his general health rapidly improved; the œdema of the legs, with which he had been afflicted for some years, quickly diminished; and he was able to sit up for several hours every day. In three months after the operation he was dismissed. He was then able to walk a considerable distance without difficulty, and had since been doing well.

Case II. A man, aged 24, for nearly three years had suffered from tubercular disease of the left lung, followed by pneumothorax and empyema. There was every reason to believe that the empyema had been present for more than a year, and that a considerable quantity of fluid was in the pleural cavity. The greatest impulse of the heart was felt about two inches below, and an inch to the external aspect of the right nipple. The first opening was made by Mr. De Morgan, on January 21st, between the fifth and sixth ribs; and the seropurulent matter was allowed gradually to drain away by partly plugging the cannula. In twenty-four hours, upwards of eight quarts had escaped, the opening still freely discharging. Four days afterwards, a second opening was made, and the perforated tube introduced. But it was found, after about ten days, that the counter opening had not been made sufficiently low down in the chest cavity, for the pus remained so long as to become decomposed. A second counter opening was made, as low down as possible; after which the discharge soon lost its offensive odour, quickly diminished in quantity, and the general health of the patieut so rapidly improved that he was able to get up in a few days; and, on April 5th, he was able to return to his home. Since his discharge he has continued to improve in health and strength, and was now able to perform a day's work at an easy occupation.

The benefit to be derived from the plan of "drainage," by means of Chassaignac's tube was obvious. The openings in the chest-wall were always free; the matter was discharged drop by drop as it formed, so that if the tube was suitably placed, there was never any collection whatever of pus in the thorax; no time was given for decomposition; and the pus was, therefore, discharged in a healthy and pure state.

The operation is very simple. A puncture with a trocar, or simple incision, may be made into the cavity of the chest at the usual place—between the fifth and sixth, or sixth and seventh ribs—or, indeed, in any convenient situation. A firm long iron probe, somewhat bent, is then passed through the opening, and directed towards the lower and back part of the cavity—the lower the better. If the end of the probe be made to press against the sides of the thoracic walls, it can be felt from the outside through the intercostal spaces, though, perhaps, obscurely, owing to the thickness and toughness of the false membrane within. The lowest and most appropriate site in which the probe can be felt having been selected, an incision is made upon the end of the probe, which is then brought through the opening thus made. A strong piece of silk thread is passed into the eye of the probe, and drawn through the two openings; and the drainage tube, being firmly tied to one end, is then drawn through by means of the silk; the ends of the tube are tied together, and the operation is completed.

The plan of treatment by "drainage," first adopted by Chassaignac, has been largely and beneficially put in practice at the Middlesex Hospital, in deep-seated and extensive collections of matter. The operation consists in passing through the abscess a fine India-rubber tube, perforated at small intervals; the ends of the tube, which project from the opposite sides of the abscess, are then tied together, and the matter is allowed to drain away, and to discharge itself through the perforations made in the tube.

Editor's Letter Box.

WHAT ARE THE ADVANTAGES TO GRADUATES IN MEDICINE OF JOINING THE ROYAL COLLEGE OF PHYSICIANS OF LONDON?

Sir,—What advantages may graduates in medicine of the Universities of Oxford, Cambridge, or Edinburgh, expect to derive from becoming Licentiates of the College of Physicians, London? I observe the names of many good men and true, who have joined the College under the recent by-laws; and therefore I presume that some benefit is considered likely to accrue to persons already possessed of good qualifications, in return for their twenty-five pounds. Before the Medical Bill was passed, the license might have been a boon; but, unless the fellowship is to follow the license as a matter of course, I am at a loss to discover in what way the license of the Royal College of Physicians, London, is likely to be of any service to a provincial practitioner who has been for more than twenty years

A Doctor of Medicine of the University of Edinburgh.

Bœotia Minor, July 5th, 1859.

RESULTS OF OVARIOTOMY.

Letter from I. B. Brown, Esq.

Sir,—How can I attempt to answer an anonymous correspondent who makes such a wilful misstatement as that contained in your last Journal?

I have only once published "Five Cases of Ovariotomy" in your Journal; and every one of your readers must have seen the heading to be "Five Cases of Ovariotomy: *Three Successful*," etc.; and not, as he states, "*three ending in death*".

I intend during the next autumn to place before the profession the results of my experience in all my surgical operations. F.R.C.S. can then criticise those results, if he do so truthfully.

I am, etc., I. B. Brown.

17, late 16, Connaught Square, Hyde Park, W., July 5th, 1859.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Friday, July 1st, 1859.

LUNATICS.

Mr. Walpole moved for the re-appointment of a Select Committee to inquire into the operation of the Acts of Parliament and regulations for the care and treatment of lunatics and their property. The right honourable gentleman said the former Committee had proceeded a great way with their inquiries; but had not completed them when Parliament was dissolved. He believed all the members of the late Committee but one were members of the present House.

The motion was agreed to.

Monday, July 4th.

PUBLIC HEALTH ACT (1858) CONTINUANCE.

Mr. Lowe, in moving for leave to bring in a Bill to make perpetual the Public Health Act of 1858, explained that it was rather a matter of urgency, the Bill of that year having been passed quite at the end of that Session for the purpose of giving to the Privy Council the powers contained in the Diseases' Prevention Act of 1855, the chief of those powers being that of inspecting and reporting upon diseased districts. The Act of 1858 expired on the 1st of August, so that there was little time for legislation. He proposed to bring in a Bill to make that Act perpetual. It would not contain the compulsory powers incident to the old Board of Health, but would merely give to the Privy Council powers which were necessary and serviceable in the public interest.

Leave was given to bring in the Bill.

Tuesday, July 5th.

THE RIVER THAMES.

On the motion of Sir M. Peto, an address to the Crown was agreed to for returns from the Metropolitan Board of Works, and from all district boards established under the Metropolis Local Management Act, and from the City (of London) Commissioners of Sewers, of any and all operations performed by them between the 25th day of March last and the 18th day of June inst., with the object of preventing the occurrence of noisome effluvia from the river Thames, and particularly of the quantities of lime or other deodorising agents day by day used for that purpose; specifying, in tabular form, when, where and to what amount such agents or any of them were respectively employed, and the sums of money expended on and about the use thereof; tabular returns from the Metropolitan Board of Works and the Board of Conservancy of the river Thames respectively, of the daily or other ascertained quantities of fresh water which have passed into the tideway of the river Thames from the weir at Teddington-lock, and from other principal streams which discharge into the said tideway between Teddington-lock and Chelsea-bridge, and particularly

of the daily quantities in the years 1858 and 1859: from all the metropolitan waterworks' companies of the daily quantities of water delivered by them respectively in the years 1858 and 1859; from the Astronomer Royal, of the daily quantities of rain fallen at Greenwich, and at any other places within the drainage area of the Thames of which he possesses particulars, and of the daily mean temperature of the atmosphere at Greenwich, and of the water of the river Thames for the last three years; from the medical and other officers of Her Majesty's hospital-ship *Dreadnought*, moored in the Thames, of any and all observations and experiments made by them, or under their direction, with reference to the condition of the river in the years 1858 and 1859; and returns from Her Majesty's Office of Works, and from the Metropolitan Board of Works, of any communications, resolutions, and measures of the years 1858 and 1859, in reference to the suggested improvement of the river Thames by embanking the same, and by forming low-level sewers within the embanked spaces. The hon. member then moved for leave to bring in a Bill to provide for the prevention of noisome effluvia from the river Thames within the metropolis; observing that, as he believed the introduction of the measure would not be opposed, he would reserve its details until the second reading. The Bill required the Metropolitan Board of Works, and the various district boards, to make monthly returns with reference to the measures adopted for the improvement of the sewerage, and the prevention of noisome effluvia from the Thames. It might be said that these returns would readily be given without being compulsory, but, as the subject was one of the utmost importance, and as the sanitary condition of the metropolis was so materially affected by the condition of the Thames, he thought that the Metropolitan Commissioners ought to be required to render a very minute account of all their proceedings. He did not mean to impose any restriction upon the commissioners, for the responsibility would still rest with them; but he thought Parliament ought to have the means of ascertaining from time to time whether the commissioners were doing all in their power for the purification of the river. He had also introduced a clause giving increased powers of taxation, in case the existing ones should not be found sufficient; and also a provision that if at any time the state of the Thames was such as not to require the adoption of these measures the Secretary of State for the Home Department might dispense with them.

Mr. Tite entered into a lengthened explanation of the operations of the Metropolitan Board of Works, and said the most active steps were being taken to deodorise the sewers leading into the river.

Mr. Ridley said the effluvium in the committee-rooms of the house was all but insupportable. They were obliged to have all the windows closed, or they must have quitted the rooms.

After a short discussion, the motion for leave to bring in the bill was negatived without a division.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Barlow. On July 3rd, at 5, Union Street, Southwark, the wife of G. H. Barlow, M.D., of a daughter.

Crabb. On July 2nd, at Poole, Dorset, the wife of Alfred Crabb, M.D., of a daughter.

Gravely. On June 30th, at Newick, the wife of *Richard Gravely, Esq., Surgeon, of a son.

Hare. On June 27th, at Great Baddow, Essex, the wife of *H. Hare, M.D., of a son.

Hensley. On June 27th, at Bath, the wife of Henry Hensley, M.D., of a son.

Leach. On July 2nd, at 22, Union Street, Southwark, the wife of Henry Leach, Esq., Surgeon, of a son.

Marriott. On July 4th, at Swaffham, Norfolk, the wife of R. B. Marriott, Esq., Surgeon, of a daughter.

Read. On June 29th, at 1, Gordon Place, Kensington, the wife of Thomas Lawrence Read, Esq. Surgeon, of a daughter.

Rugg. On June 29th, at 7, Clapham Road Place, the wife of George Philip Rugg, M.D., of a daughter.

Sturges. On July 1st, at 1, Sidney Square, Mile End, the wife of Montague J. Sturges, M.D., of a son.

Webster. On June 30th, at Peckham Rye, the wife of George Webster, Esq., Surgeon, of a son.

MARRIAGES.

Dickson—Waters. Dickson, John Frederick, Esq., student of Christ Church, Oxford, eldest son of Robert Dickson, M.D., to Annie, second daughter of the late Rev. R. J. Waters, D.D., at St. George's, Hanover Square, on June 30th.

Gatty—Browning. *Gatty, William Henry, Esq., Surgeon, of Market Harborough, to Elizabeth, second daughter of the late William Hardwick Browning, Esq., of Stoke Newington Green, at Hornsey, on June 30th.

Mackenzie—Dudgeon. Mackenzie, Duncan P., Esq., Executive Engineer, Mysore Commission, son of William Mackenzie, M.D., of Culbo, late of the Madras Establishment, to Cecilia Mary, second daughter of the late William Dudgeon, Esq., of Edinburgh, on July 1st.

Russell—Lorimer. Russell, P. N., Esq., of Sydney, Australia, to Charlotte, eldest daughter of Alexander Lorimer, M.D., Secretary to the Director-General, Medical Department, Madras, at Edinburgh, on June 23rd.

Stunt—Norwood. Stunt, George, Esq., Surgeon, of Haverthwaite, Lancashire, to Mary Ann, elder daughter of W. Norwood, Esq., of the Grove, Bulham, near London, on June 22nd.

Turner—Finch. Turner, Edward Goldwin, Esq., to Catharine Louisa, eldest daughter of Cuthbert Finch, M.D., late of the Bengal Medical Service, at Trinity Church, Paddington, on June 30th.

Wethered—Burder. Wethered, Charles, Esq., Surgeon, of Stroud, Gloucestershire, to Cecilia, youngest daughter of the late John Burder, Esq., of Codham Hall, Essex, at Finchingfield, Essex, on June 30th.

DEATHS.

Anderson, James, Esq., Surgeon, late H.E.I.C.S., at Dalston, aged 67, on July 3rd.

Graham. On July 5th, at Granton Hotel, near Edinburgh, David, second son of the late Robert Graham, M.D., Professor of Botany in the University of Edinburgh.

Harris. On June 28th, at Westbourne Place, Eaton Square, aged 59, Eliza, widow of the late Henry Harris, Esq., Bengal Medical Establishment.

Parkinson, Wm. Handcock, M.D., at Brussels, on June 18th.

Thornton. On June 23rd, at Margate, aged 7, Mary, daughter, of W. H. Thornton, Esq., Surgeon.

APPOINTMENTS.

Dobell, Horace, M.D., appointed Physician to the Royal Infirmary for Diseases of the Chest.

Harley, George, M.D., elected Professor of Medical Jurisprudence in University College, in the room of W. B. Carpenter, M.D., resigned.

Skey, Francis Wakefield, Esq., appointed, by the Queen, Surgeon in the Artillery Company of London for the term of five years.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, July 1st, 1859:—

Cattlin, W., jun., Highbury Place, Islington
Collings, F. H., Clifton
Crotty, C., Dublin
Hayes, H. R., Bandon, co. Cork
Maclure, W. M. G., Nassau, New Providence
Nott, W. F., Lucas Road, Kennington Park
Nunn, Roger, Ixworth
Rumbold, T., Chiswell Street

At the same meeting of the Court—

Macdonald, J. D., passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date June 15th, 1849.

Apothecaries' Hall. Members admitted on Thursday, June 23rd, 1859:—

Browne, Charles William, West Indies

Hudson, Arthur Cort, Shelford, Lancashire
Jones, John Thomas, Llanyrys, Denbighshire
Kent, Edmund Jackson, Hampton, Middlesex
Warden, Thomas Messenger, Stourport, Worcestershire

The following gentlemen also, on the same day, passed their first examination :—

Bromley, John Bourne, Lye, near Stourbridge, Worcestershire
Bush, Danvers Ward, 28, Finsbury Circus
Dawson, Frederick, Union Place, Islington
Fernie, Edward, Wellingborough, Northamptonshire
Miller, Thomas, Boyton, Suffolk
Walker, Richard Pettifer, Birchfields, near Birmingham

Thursday, June 30th :—

Spode, Josiah, Tasmania

The following gentlemen also, on the same day, passed their first examination :—

Jeaffreson, Horace, Framlingham, Suffolk
Lancaster, William James, Barnsley, Yorkshire
Martin, Timothy Henry, Merthyr Tydvil
Mitchell, Thomas Carter, Kempston, Bedfordshire
Royle, Arnold, Southampton
Wales, John, Downham Market, Norfolk
Wingate, Robert, Hareley, near Spilsby, Lincolnshire
Winkfield, Alfred, Bedford

University of Oxford. Degrees conferred at a Congregation held on June 30th :—

Bachelor of Medicine.

Bridges, John Henry, Oriel
Harvey, Edward Robinson, Christ Church
Newman, Augustus, St. John's

HEALTH OF LONDON:—WEEK ENDING JULY 2nd, 1859.

[*From the Registrar-General's Report.*]

The mortality in London begins to increase, as is usual at this period of the year. The deaths, which were 913 and 970 in the two previous weeks, rose to 1,024 in the week that ended last Saturday. In the ten years, 1849-58, the average number of deaths in the weeks corresponding with last week was 1,126 ; but, as the deaths returned for last week occurred in an increased population, they can only be compared with the average raised in proportion to the increase, namely, with 1,238. It appears, therefore, that the deaths registered last week were less by 214 than the number as obtained by calculation ; but it should be observed that deaths on which inquests have been held are now registered with greater uniformity than they were previously, when they were permitted to accumulate to the end of the quarter, a circumstance which to a considerable extent affects the comparison. The average number of deaths from violence registered in the last week of the spring quarter, in previous years, was 107, whereas, last week the number was 48.

The diarrhœa of summer is now making perceptible progress. In the last three weeks the deaths caused by it have been successively 20, 34, and 58. Of these 58, all except two occurred to children, and a very large proportion to infants in their first year. It is remarkable, that while 16 deaths from diarrhœa occurred last week in the west districts, 13 in the north, 17 in the east, and 11 in the south, only one occurred in the central group ; which, besides other districts, comprises St. Giles, Holborn, Clerkenwell, and the City. A child died at 6, Austin Street, Hackney Road, from diarrhœa, in a family where two other deaths have occurred within a month, in consequence, it is stated of deficient drainage, which is now remedied. A boy died of cholera, after six days illness, at 79, High Street, Shadwell ; and another of "choleraic diarrhœa (four days)," at 36, Charles Street, Saffron Hill. A sailor was drowned in the London docks, and the coroner's jury were of opinion, that though he had been immersed only three minutes, recovery was rendered impossible by the foul condition of the water. There were 42 deaths from scarlatina; also 21 from diphtheria, three of these in the sub-district of Belgrave, three in that of Long Acre. A child was choked by a cherry stone, another by a nutshell. A girl, aged three years, died, on June 22nd, from sunstroke. Six persons died from intemperance, besides five whose deaths are recorded as caused by *delirium tremens*.

Last week the births of 883 boys, and 907 girls, in all 1,790 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1610.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·907 in. The barometer increased from 29·73 in. on Sunday, to 30·02 in. on Saturday, being the *lowest* and *highest* readings in the week. The mean temperature of the week was 63.5°, which is 2·2° above the average of the same week in forty-three years (as determined by Mr. Glaisher). The mean daily temperature was about 8° above the average on Sunday and Monday ; it fell below the average on Wednesday and two following days. The thermometer in the shade rose to its *highest* point on Sunday, when it was 81·3°; it fell to its *lowest* on Thursday, when it was 48·5°. The extreme range of the week was, therefore, 32·8°. The mean daily range was 21·1°. The difference between the mean dew-point temperature and air temperature was 7·7°. The mean degree of humidity of the air was 77. The mean temperature of the water of the Thames was 65·6°, or 2·1° higher than that of the air. On Sunday the wind blew from the south-east ; on the last three days from the north and north-east. Rain fell in the week to the amount of 1·24 in., chiefly on Saturday. There was thunder and lightning in the morning of Sunday (the 26th ult.) ; and again a severe thunder storm between eleven and twelve o'clock on the night of Saturday. The lightning, which continued during four hours, almost without intermission, was unusually vivid, and illuminated the whole sky. Rain fell to the depth of 0·8 in. ; but the storm did not approach very near the Observatory, and no damage was done in that neighbourhood.

Cambridge University Medical Hostel. We learn that Dr. Humphry has taken the requisite measures, in accordance with the new statutes, for having his house recognised as a University Hostel ; and that he has done so for the purpose of enabling medical students, who reside with him, to keep terms, graduate in arts or medicine, and enjoy the other privileges of the university, without its being necessary for them to join a college or incur any additional expense beyond the ordinary university fees. It appears that, owing to various changes which have been lately made, the courses of education directed by the Cambridge Medical Board and the College of Surgeons and other Medical Corporations in London, are so harmonised, that while the student is keeping terms and attending lectures in the Medical School of the University and the practice of Addenbrooke's Hospital, with a view to obtain a degree in medicine, he is also qualifying for all the London diplomas in surgery as well as medicine. Moreover, the previous examination of the University, which candidates for M.B. are obliged to pass, is accepted as an equivalent for the preliminary examination for the membership and fellowship of the College of Surgeons, so that those who have passed the former are not required to go in for the latter. The advantages of these arrangements will be best appreciated by those who are conversant with the new Medical Act, and have contemplated the changes in the medical profession that are likely to result from it. One object of them is to unite the University and the College of Surgeons more closely together, and to induce a greater number of that large and important class of medical students who purpose practising surgery as well as medicine, to resort to the University ; it having always been a matter of regret, both on account of the University and the profession, that so few of that class have hitherto been able to obtain the benefits of a university education. Two of the great difficulties—the expense and the time required—are now, in great measure, removed ; for the student may commence residence in a University Hostel, where he is under the immediate surveillance and instruction of the principal of the hostel, and begin to keep terms, at the age at which he usually goes to reside with a medical practitioner, and at about the same cost. He may spend the first three years in acquiring general and medical knowledge in Cambridge, instead of in some other town ; he may then proceed to London for two or three years' study in the great metropolitan schools; and then, having passed the necessary examinations, he can obtain the M.B. degree of the University and the membership or fellowship of the College of Surgeons, and be thereby qualified to practise medicine and surgery in any part of the United Kingdom. (*Cambridge Chronicle.*)

Austrian Red Tape. Dr. Koch, an Austrian staff-physician, who was taken prisoner, amuses himself and annoys his unfortunate subordinates by making them send in daily reports, and by issuing lengthy circulars. The poor man evidently tries to persuade himself that Milan will again fall into the hands of the Austrians, and that he shall get an order or some other reward for his attention to business.

ILLEGAL PRACTICE: HOW THEY MANAGE MATTERS IN FRANCE.

A Mr. R.. residing at Gault, department of Loir et Cher, practising the profession (*sic*) of bone-setter (*rebouteur*), had been attending a lady for a fracture which had remained unconsolidated. Encouraged by the Medical Association, Miss X, the patient, brought an action against Mr. R. for damages. At the same time, the medical practitioners of the department announced their readiness to come forward in aid of the plaintiff. In a fright at these proceedings, the bone-setted compromised with his patient, who accepted an indemnity of 800 francs. Afterwards, on being summoned before the Tribunal of Correctional Police at Vendôme, he offered, an hour before the audience, an arrangement with the medical gentlemen to the following effect:—

"On condition that the proceedings initiated by the profession be set aside, etc., etc., etc., Mr. R., on his part, enters into a formal engagement on his honour to do nothing in future which shall have any connexion whatever (*qui touche de près ou de loin*) with the practice of medicine, and especially to abstain from all operations of bone-setting. And, in assurance of his sincerity in making this engagement, he further promises, and enters into securities, to pay a fine of 3,000 francs to the medical men of the department, in the event of formal proof of his having broken his engagement. The treaty to be in force for five years. Mr. R. to pay all the legal and other expenses incurred. Done at Vendôme, the 10th of June, 1859."

After all this, the poor wretch of a bone-setter was sentenced by the Tribunal, with which a compromise was not possible, to fifteen days imprisonment and a fine of 50 francs; so that he was pretty well *done* at Vendôme. (*Gazette Hebdomadaire*, June 24th, 1859.)

Committal of "Dr. Watters" and his Colleague. On Friday, June 17th, John Nicholl Watters, *alias* Dr. Watters, and Claude Edwards (notorious for their connection with the "Bennett gang", were brought up on remand before the Hon. G. C. Norton, in the Lambeth Police Court, to undergo a further examination in reference to the charge of conspiring to defraud Mr. Thomas Jones of one guinea. Since the first investigation, other charges had been preferred against them, which were gone into on the present occasion. Mr. Jones, who resided in Mount Street, Grosvenor Square, being afflicted with deafness, went to a house, No. 28, Mount Gardens, Westminster Road, which purported to be occupied by the prisoner Watters, and who professed by the medicines he supplied to be able to cure deafness. It was now stated by Mr. Lewis, that he should bring forward evidence to connect the prisoner with an establishment which was a few years ago in existence at No. 32, Spring Gardens, and known as the British and Foreign Free Ear Dispensary, with which the notorious Bennett was at that time connected. Mr. John C. Roope said he was a clerk in the Medical Registration Office, 32, Soho Square. A medical register of qualified practitioners was kept there. There was no such name as John Nicholl Watters in the list. Mary Anne Stanley, 184, Prospect Place, St. John's Wood, stated that in the month of October 1857, she saw an advertisement in the newspaper, in which deafness was purported to be cured at "the British and Foreign Free Ear Infirmary." She saw Edwards there. She asked to see the prisoner Watters, who afterwards came in. He examined her ears and said he could cure her in eight days. He added that he had seen sixty patients that day, and that he had been deaf himself, and had cured himself. Among his patients cured was an admiral, who had been deaf several years. She asked him what he would charge? He replied £8 or £9. She left, and the same night Edwards brought her a box containing three phials. She gave him £9 3s., and he gave her a receipt signed J. N. Nicholls. One bottle contained a lotion to bathe the back of the ear, and another contained medicine to drop into the ear; there was also an embrocation. The medicine did no good. It did an injury at the time. She afterwards had another bottle, which he said was more expensive. After she applied it she got worse. Similar evidence was given by several other witnesses. Inspector Young produced several printed papers found at the prisoner's premises, in Mount Street, referring to the Free Ear Infirmary. The prisoners were again remanded till Friday, June 24th. On being then brought up, Mr. Lewis said that from the inquiries that had been instituted, it had been ascertained that the prisoner Watters had, so far back as about the year 1833, pleaded guilty to a charge of arson, and was sentenced to eighteen months imprisonment; and, subsequently to that, had been tried, convicted, and sentenced to three years imprisonment, for personating other persons at the Surgeons' Hall. His worship would be also told, by a witness whom he should call, that the prisoner had a second fire, of a very suspicious character; but no prosecution took place. Mr. Lewis then read some extracts from evidence, given by Edwards on the trial, of an indictment preferred by Stowell, the informer, against Mr. Haynes, an attorney, for conspiring with the Bennetts to obtain money, and which indictment had been preferred without any previous inquiry. On that trial the prisoner Edwards was called as a witness, and said, "I live at 28, North Street, Limehouse. I was in the employment of Messrs. Bennett, Brothers, of 32, Spring Gardens; they carried on the business of aurists. I know the defendant Haynes. I have seen him frequently at 32, Spring Gardens. I was assistant to compound the medicine, and gave it to the patients. I know the composition of the medicine perfectly well. There were five compositions: ear-drops, embrocation, injection, fumigation, and tincture. This latter contains the embrocation, and this the injection. This is urine. They are all the same, differently coloured. The fumigation has no oil in it. The others have oil. This one is train oil, what they call cabbage oil, and urine. This red mixture is a solution of cochineal and urine. The urine extracts the colour from the cochineal. This one is drops for the ear. Two or three of these went together, and they were charged from 1s., to £2, £3, and £4. It depended on the patients. We had a great many patients. I should imagine twenty or thirty a day. I kept the books and made entries. I have not the books with me. The profit was at least £2,000 for each of the two brothers Bennett." Mr. Joshua Woolrich, of 64, South Street, Grosvenor Square, deposed that in consequence of an advertisement, he called at No. 32, Spring Gardens, and there observed a plate with the words "British and Foreign Infirmary for the Cure of the Diseases of the Ear and Eye," on the door, and also the name of "Dr. Watters." He was shown into a room by a livery servant, and saw the prisoner Edwards, whom he addressed, saying he came for the cure of deafness, and asked for Dr. Watters. Edwards replied that he was Dr. Watters. Commenced examining his ears, and said he was quite confident he could cure him in a fortnight for £2 2s., or £2 5s.; that it was mere nervousness, and that the remedies were to be applied to the ear. He then left the room and came back with a large and small bottle; said he was to use the large one with a syringe to his ears, and the small one was to rub outside the ears. He said the charge was £2 5s. 6d., and he (witness) paid it. He used the "stuff" as directed, but found that instead of its doing him any good it made him ill; and, in consequence, he went the following week, when he again saw Edwards, whom he told he received no benefit; but had suffered great pain by the use of the medicine he gave him. Edwards said the case was worse than he at first thought it to be, and he required a further sum of £2 10s., for a vapour bath, which would cure him; and produced a lamp and tube. The witness here produced a small instrument, about five inches high, which resembled a small lamp, with a small tube at the top, like a blow-pipe. Its appearance created much laughter. The prisoner, he said, on giving him this instrument, told him he was to purchase some tincture of myrrh, soak it in some wool, burn the latter in the lamp, and while it was so burning to place the end of the tube into his ear, so that the vapour might pass in. He paid him the £2 10s. Witness used the vapour bath, and in doing so suffered excruciating pains in his head; and after applying it for seven or eight times became so ill that he was obliged to keep his bed. On the following week he went again to Spring Gardens, and saw a young man, who said he was the brother of Dr. Watters; that the Dr. W. was not at home, and that he (witness) was to keep on the same remedies until the following week. He did so, and on the following week called again, when he saw the prisoner Watters, who represented himself to be merely a friend of the doctor's, and always attended his patients in his absence. The prisoner had no doubt he should cure him in a short time; that he did not think witness had been treated properly by Dr. Watters, but that he should attend to him himself, and had no doubt of effecting a cure. The young man he (witness) at first saw came into the room with a bottle of medicine, for which he demanded 17s. 6d., but witness told him he could not pay it. The young man said he could not have it without paying something on account, and he gave him 2s. 6d., promising to give him the remainder when he next came. He subsequently summoned the party to the Westminster County

Court to recover his money, as the stuff he received was not of the least use to him; but they never appeared to the summons, and he lost his money. The Chief Clerk here read over the testimony given on a former examination by Mr. J. E. D. Rodgers, the medical analyst, respecting the medicine supplied by the prisoners to their unfortunate patients.—"The three bottles produced were delivered to me in a parcel, sealed up. I have examined the lead-coloured liquid in one of the small bottles. It contains a small quantity of sulphate of zinc, and a quantity of compound spirit of lavender, and a little iron deposit, as if some iron oxide had been put in. The medicine is not of the slightest use in deafness, neither the ingredients nor the proportions. The large bottle contains a small quantity of sulphate of lead, deposited, and zinc in solution—no doubt the result of a mixture of sulphate of zinc and acetate of lead, mixed with water; and it is not at all useful in curing deafness. The small bottle contains either rancid olive oil, or rape oil, and a little oil of elder, with a little soap, apparently made by the addition of an alkali. That mixture would not cure deafness. I should not like to put it into my ear. It would irritate it." Evidence was given of the fact of the prisoner's assuming the name of Dr. Locock; after which both were fully committed for trial. At the termination of the case, Mr. Norton complimented Mr. Jones, the prosecutor, for his persevering conduct in bringing the prisoners to justice, and told him the public were very much indebted to him for taking up such gross imposture.

Prize Essay on Small-Pox and Vaccination. The Medical Society of Geneva offers, for the year 1860, a prize of 1,000 *francs* (£40), and an *accessit* of 500 *francs* (£20), to the authors of the best two unpublished works on questions relating to small-pox, varioloid, varicella, vaccination, and revaccination. The competitors are desired to attend particularly to the following points:—1. Inquire, by a comparison of the principal epidemics of small-pox which have prevailed in Europe during the nineteenth century, whether this disease has a tendency to increase in frequency, and what are the forms under which it is presented in the vaccinated; 2. Determine whether revaccinated subjects are completely and definitely protected from small-pox; if the contrary be the case, point out the degree and the duration of the protection; 3. Sum up, in practical conclusions, the data furnished in the answers to the preceding questions. The essays, written in French, German, English, Italian, or Latin, must be addressed, post free, before June 1st, 1860, to the Secretary of the Society. The name of each author must be inclosed in a sealed envelope attached to the memoir. The Society reserves the right of publishing at its own expense, in French, the whole or part of the prize essays. If none of the essays are judged worthy of the prize, or of the *accessit*, the question will be again brought forward for competition.

Disgraceful Conduct of the Military Authorities. A dispute has arisen between the military authorities and the board of guardians at Chatham, relative to the manner in which lunatic soldiers who have become inmates of the lunatic asylum, Fort Pitt, are discharged from that establishment as paupers, and allowed to become chargeable to the parish in which Fort Pitt Hospital is situated. For some time past, the military authorities have been in the constant habit of getting rid of those insane soldiers who are incurable and without friends, by removing them from the hospital, and turning them into the streets of Chatham, the parish authorities having previously received intimation of the place and hour at which they would be released from military control, in order that, under the existing statutes, they might make arrangements for apprehending the lunatics so discharged, and removing them to the workhouse, where they, of course, become chargeable to the Board of Guardians. In consequence of repeated instances of the kind having recently occurred, several remonstrances have been addressed by the guardians to the military authorities, but without at all checking the practices complained of. Under these circumstances, the Board of Guardians have had the matter brought before the authorities connected with the War Department, who have taken the opinion of the law officers of the Crown on the subject, the result of which has been that the law officers give their opinion that under the existing Acts, the military authorities are fully justified in the course they have adopted. As the maintenance of so large a number of lunatic military paupers entails a considerable expense on the union, steps are about to be taken to bring the subject before Parliament, with a view to remedying the evil.

POOR-LAW MEDICAL REFORM.

The following letter has been addressed to the Poor-Law Board by Mr. Griffin:—

"12, Royal Terrace, Weymouth, July 1st, 1859.

"My Lords and Gentlemen,—I beg most respectfully to call your attention to the complaints of the Poor-Law Medical Officers, with the hope that you will immediately take their case into your serious consideration. A full account of their grievances will be found in the accompanying pamphlets; and in No. 3, pages 30 and 32, is the following statement of the Right Hon. T. Sotheron-Estcourt, the then President of your honourable Board:—'Looking at the question practically, I think we have made some progress. Last May there was almost a doubt as to whether there was a grievance; *but now the existence of the grievance is admitted.* What I hope to do is, in the course of the present session to prepare a Bill (if we can arrive at a solution of the difficulty); lay it on the table of the House .... it may then be printed and circulated in the shape of a Bill towards the end of the session; and, if it is duly considered during the recess, there will next session be no difficulty in carrying it. .... The matter ought not to remain in its present state; and if I continue in office, I shall use the best means in my power to put the question on a better footing, and to make such arrangements as will be satisfactory both to you and the public.'

"The above quotation will enable your honourable Board to understand the position of the question whilst in the hands of your predecessors; and as the Army and Navy Medical Departments have been placed upon a more equitable footing by order of Her Majesty's Government, I earnestly hope that your medical officers, upwards of 3,000 in number, and who have annually the treatment of more than a million and a quarter of the sick poor of England and Wales, will have their grievances removed, and their services so requited that they may be enabled to do their duty to the poor without feeling that, as is the case in too many instances at present, the paltry pittance accorded to them by the guardians* does not pay for the cost of suitable medicines, omitting all consideration of the value of the time and talents devoted to a service which is public, and therefore ought to be remunerated in an equitable manner.

"In the accompanying pamphlets will be found almost all that can be stated on the subject; but should your honourable Board desire to make further inquiries of your medical officers, and will name a day for a deputation to wait upon you, I will call a meeting for that purpose; or at any time I will attend personally to answer queries, or to assist in preparing measures for a reasonable adjustment of the question. Once again I pray your honourable Board will take up our cause without delay, and carry out the promises made by your honourable predecessors when in office; and that you will carefully remodel a system which is cruel in the extreme to very many of your officers, and, I greatly fear, is also injurious to the welfare of the sick poor.

"I have the honour to be, my Lords and Gentlemen,

"Your obedient servant,

"Richard Griffin.

"Poor-law Board."

The following letter from the Right Hon. T. Sotheron-Estcourt, on quitting the office of President of the Poor-law Board, explains the intentions of your immediate predecessors:—

"4th March, 1859.

"Dear Sir,—I assure you that it is a matter of regret to me that I should be transplanted to a new office from one where I had gradually become exceedingly interested in the management, and where I was engaged in watching the progress of certain proposed improvements, and hoped to have been permitted to bring them to maturity. Amongst those, I need not tell you, the scheme for an alteration of the method of medical relief holds a chief place; and I am anxious to lose no time in informing you, and through you the gentlemen with whom you are associated in this matter, that my successor, Lord March, expresses to me a wish to identify himself with me in the course which I have hitherto followed in this business; that it will not be necessary to reproduce before him the papers and documents, or to restate the arguments which you

* "Seventy-nine medical officers receive less than one shilling per patient they attend, and eight hundred and six less than three shillings per case, though the duration of illness averages twenty-two days."

have already furnished to me, and that he will, at as early a period as other business will allow, attentively consider the bearings of the question, with a view to a practical measure.

"I am, dear Sir, yours very truly,

"T. Sotheron Estcourt.

"R. Griffin, Esq., Weymouth."

Military Surgery under Difficulties. A military physician, who was taken prisoner by the French at Magenta, has addressed an extremely interesting letter to a colleague in Turin. The writer of the letter, with several of his fellow physicians, remained at Magenta after the retreat of the Austrian army, in order to tend the wounded. As a measure of precaution, a white flag was hoisted over the house which served as an infirmary, but still it was attacked by the Zouaves. Several of the patients were shot dead; and Dr. Forst, a regimental physician, was wounded while attending to a wounded Frenchman. The confusion which ensued was fearful. "Some poor wretches sought shelter in the cellar and garret, some attempted to kill themselves by knocking their heads violently against the wall, and others jumped out of the windows. I ran to one of the windows, and called out to the assailants that the house was full of wounded and helpless men. Their arms were clamorously demanded, and when they were surrendered, order was restored." The physician, who is now at Milan, says that the allies have an enormous number of wounded. He works from morning till night in the hospital of St. Ambrogio; but he has not received one farthing for his trouble, although he has lost both baggage and money. "I possess," says he, "the clothes which I have on my back and my sabre, but nothing else."

TO CORRESPONDENTS.

An Associate, Blackburn. Graduates of any British University have a legal right to the title of Doctor of Medicine. It is very doubtful whether Licentiates of Colleges of Physicians possess a similar right.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Mr. J. Z. Laurence; The Secretary of the Royal Medical Benevolent College; Dr. Hyde Salter; Dr. Lockhart Robertson; An Associate; Mr. R. Griffin; A Doctor of Medicine of the University of Edinburgh; Mr. James Dulvey; Mr. J. Wright Baker; Mr. T. Holmes; Dr. W. O. Markham; Dr. J. Watson; Mr. Peter Martin; Mr. W. Sankey (Dover); Mr. Redfern Davies; Mr. Heckstall Smith; Dr. P. H. Williams; Mr. A. T. H. Waters; Dr. T. M. Rooke; Mr. T. M. Stone; Dr. Barham; Dr. Herapath; and Mr. G. Hornby.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Chloroform in Labour. By F. R. Macdonald, M.D.Edin. Edinburgh: Sutherland & Knox. 1859.
2. On Cancer. By Maurice H. Collis, M.B. Dublin. 1859.
3. Description of a Simple Instrument for Inflating the Lungs of Infants born in an Asphyxiated State: with Remarks. By J. G. Wilson, M.D. Glasgow. 1859.
4. An Inquiry into the Curability of Consumption, the Prevention, and the Progress of Improvement in the Treatment. By *James Turnbull, M.D. Third Edition. London: Churchill. 1859.
5. A Memoir on the Treatment of the Epidemic Cholera, read before the Members of the French Academy of Sciences: with their Report thereon. By Joseph Ayre, M.D. London: Churchill. 1859.

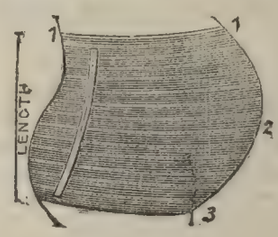
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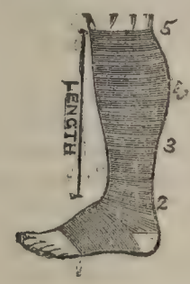
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BRITISH MEDICAL JOURNAL:

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

I. FRACTURE OF THE FOREARM FROM MUSCULAR FORCE.

Under the care of G. M. HUMPHRY, M.D.

A HEALTHY and moderately strong man, aged 36, came to the hospital May 25th, 1859, stating that ten weeks previously, when he was shovelling earth with a spade, the spade caught against a root in the ground, and the jar broke his forearm. It was treated as a fracture, with splints, etc., by a surgeon. The radius was broken a little below its tubercle, and the ulna about an inch and a half from its lower end; and the position in which they had united was not very good, there being a marked projection of each bone at the situation of the fracture, on the palmar aspect of the forearm. There was, in addition, as a consequence of the fracture, paralysis of the extensores ossis metacarpi and primi internodii pollicis: the cause of this was not very clear.

REMARKS. Many examples of fracture of the humerus from muscular action have been recorded, but very few of the other long bones: indeed, we do not know of any, except two cases in which the femur was broken during a violent spasm (See Humphry on *The Human Skeleton*, p. 8). In the present case, each bone gave way at the narrowest part of the shaft; which accords with the observation (*Ibid.* p. 484) that, in adults at least, the narrowest part of a bone is also the weakest part.

II. FRACTURE OF THE PELVIS ON HORSEBACK.

Under the care of G. M. HUMPHRY, M.D.

A healthy man, aged 56, on June 26th, 1859, was riding a horse without its saddle; the horse became unruly, and threw the man up and down several times with considerable violence, hurting him a great deal. When the horse became quiet, the man contrived to get off gently, and, alighting upon his left foot, was able to stand for a second or two, then fell, and could not get up again. He is certain that the injury was received when he was on the horse's back, and not in the alighting. A surgeon, who saw him soon after the accident, drew his water with a catheter, and sent him to the hospital. He suffered a great deal of pain about the left side of the pelvis, and in the upper part of the left thigh. The perinæum was swollen and dark from ecchymosis; the scrotum also swollen; and the extravasated blood extended over the pubes as high as the level of the iliac spines. The left os innominatum was distinctly moveable upon the rest of the pelvis, being separated from the sacrum, and broken through a little on the left of the pubes.

After admission, he voided urine of natural colour. For a time he was much annoyed by the movements of the detached bone, and the crepitus consequent thereupon; and obtained some relief from a broad belt round the pelvis. He had no other unfavourable symptom, and is now able to move about with the aid of crutches.

ST. MARY'S HOSPITAL.

PARTIAL AMPUTATION OF THE HAND.

Under the care of A. URE, Esq.

JOHN FARRELL, aged 14½ years, was admitted under Mr. Ure into St. Mary's Hospital, on July 9th, 1856. While standing alongside of a wood-moulding machine, his right hand inadvertently got entangled between the two crimp wheels, which were then in rapid motion. When the hand was extricated, the whole of the fingers, as far back as the posterior part of the metacarpal bones, were completely crushed, and large flaps of torn integument hanging loose, exposing both muscular and tendinous structures.

Mr. Ure saw him soon after the accident, and performed amputation at the carpo-metacarpal articulation, preserving the thumb, and forming the flap from the ulnar side of the palm of the hand; a few vessels were tied. The edges of the wound were retained in apposition by means of sutures, and a pledget of moistened lint, with a roller lightly applied, completed the dressing. The patient was ordered simple diet, with a pint of beef-tea, and an opiate draught; also, three ounces of brandy.

July 10th. He passed a tolerable night; the stump looked as well as could be expected; the tongue was clean and moist.

July 11th. The integument covering the stump had assumed a dusky hue, and from between the flaps there was a slight oozing of dark bloody fluid. The pulse was 100, the tongue clean, and the appetite fair. He was ordered a senna draught, and effervescing saline mixture.

July 12th. Has slept well, and taken his food with appetite; the pulse was 130, the tongue was white and clammy; there was considerable thirst; the bowels were open; the integument on the back of the stump was sloughing; bread poultices had been applied since yesterday, and were a source of great comfort.

July 13th. The sloughing continued, but there was a well defined limitary line; there was a slight discharge on the poultices.

July 17th. The sloughs have all separated; and the wound was suppurating. The general health was good. He was now allowed, instead of the brandy, half a pint of porter and two ounces of white wine daily.

July 21st. The wound was commencing to granulate on the surface. A dilute solution of the liquor sodæ chlorinatæ was prescribed to replace the poultice.

August 4th. The wound was cicatrising steadily. The general health of the patient was good, and he was able to walk about the ward. For the preceding seven days, the remainder of the hand and the forearm had been placed on a splint, in order to counteract retraction of the thumb.

August 7th. A small abscess had formed underneath the wrist, which was punctured this morning. In other respects, the patient was proceeding favourably.

August 10th. The wound was healing rapidly, the surface of the granulations being daily pencilled over with nitrate of silver. The patient had so far gained strength, that he was able to walk in the garden attached to the hospital.

August 14th. All was going on satisfactorily; the splint was continued because the patient derived comfort from it.

August 18th. The hand was nearly healed.

September 1st. The stump was nearly cicatrised; to be dressed with resinous cerate.

September 5th. He was discharged cured, and able to move the thumb.

Mr. Ure believes that, by adapting eventually to the ulnar side of the stump a simple apparatus so constructed as to furnish an opponent to the thumb, a useful limb will thus be preserved to the patient. At all events, in a case of such severe mutilation as the above, it was a point of great importance to save the thumb.

UNIVERSITY COLLEGE HOSPITAL.

HERNIA AND UNDESCENDED TESTICLE.

Under the care of J. E. Erichsen, Esq.

The following case is interesting in respect of diagnosis, and on account of the unusual condition of the parts. We would refer our readers to an interesting Clinical Lecture on this subject by Mr. Erichsen, in the *Lancet* for July 9th.

Joseph B., aged 18, residing at Sutton, Bedfordshire, was admitted on March 11th, under the care of Mr. Erichsen. It appeared that he was at plough on the previous morning, having been quite well the night before. When he got up, he felt pain in the belly, but was quite positive that there was no tumour. The pain continued, and he thought something was giving way. The bowels then acted. He returned home, and lay on his back, with his feet elevated; and it was while in that position, according to his own account, that he felt a lump come down in the right groin. He then felt sick, and vomited. A medical man was sent for. Taxis was applied on two occasions that day, and medicine given. He passed a restless night, with frequent vomiting, and pain radiating from the tumour over the abdomen. Next day he was sent up to the hospital, where he arrived in the afternoon. It appeared that, in May of last year, he had had a tumour in the same situation, which was reduced easily after it had been down three or four hours. He was advised to wear a truss, but neglected the advice. He was a strong healthy-looking young man; but the father states that the testicles have never been perceived either in the scrotum or inguinal canal.

On examination, a hard oval tumour, of the size of a goose's egg, was found in the right inguinal region, covered with natural skin, somewhat tender to the touch, tense, but yielding slightly on pressure, irreducible, devoid of impulse on coughing, very distinctly circumscribed, especially at the upper part, which was near the external abdominal ring. It was entirely above Poupart's ligament, but did not extend lower than the pubes. No scrotum could be said to exist, and no trace of either testicle could be found. The patient complained much of pain and distension of the abdomen, which was tympanitic. He had frequent eructations. He did not even pass flatus *per anum*.

He was placed in a hot bath for three-quarters of an hour, with the effect of making the swelling apparently softer, but larger. The tumour being irreducible, Mr. Erichsen ordered eighteen leeches and a mercurial and colocynth purge.

Next day, the patient had had no sleep, was somewhat feverish; had vomited twice a greenish fluid; the bowels had not acted; and he had passed no flatus. There was slight hiccough. The pulse was smaller and weaker, and there was more pain and tympanitis in the abdomen. Injections and a draught containing Epsom salts were given during the day; but as no fæculent matter came away, and the abdominal tenderness had increased, and the hiccough and vomiting become more troublesome, Mr. Erichsen determined, in consultation with his colleagues, to cut down upon the tumour. This was done at 4½ P.M. A hernial sac, containing intestine, was soon exposed. The finger was now passed into the external abdominal ring, which was found to be tense, and its margin was slit. Still the hernia could not be returned. The inguinal canal was then laid open on a director as far as the internal ring, but the hernia was still irreducible. The sac was now opened, and a quantity of reddish fluid evacuated. The gut was a piece of small intestine, about three inches in length, of a deep purple colour, with a few slight patches of lymph here and there. It was very tightly constricted at the internal abdominal ring; and it required a good deal of care to divide the stricture without injuring the gut. During this proceeding, the testis of this side was found just behind the gut. It was smaller than natural, and slightly congested. After dividing the stricture completely, the gut was with some difficulty pushed back into the abdomen, but was immediately dragged down again by the testis. That body was therefore returned first into the abdomen, the intestine replaced, and the wound closed. He was ordered a full dose of laudanum, and was put on calomel and opium. He never rallied satisfactorily from the operation. The abdominal tenderness and tympanitis continued; he suffered from retention of urine; the pulse failed rapidly; and he died next morning.

Only the parts concerned in the hernia were examined. The intestines were distended with air, and a good deal of gas escaped from the cavity of the peritoneum. The portion of intestine which had been strangulated was a slight distance from the wound, and was evidently beginning to recover itself: it was of a deep brownish red colour, and smeared with flakes of yellowish white lymph. The place of constriction was still indicated by a furrow, beyond which the intestine was injected for a short distance. There was no inflammation of the parietal peritoneum; nor, as far as could be judged, was there any abnormal amount of fluid in the peritoneal cavity. A small aperture, evidently quite recent, and produced either after or immediately before death, existed in that portion of the gut which was most deeply congested. The right testicle was close to the opening in the peritoneum; it was of the size of an olive, and congested. The left testicle was completely within the abdomen, having not quite reached the internal ring. It was of the size of half a walnut.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

CLINICAL OBSERVATIONS.

In the practice of Haynes Walton, Esq.

I. ENTROPIUM, WITH CONTRACTED EXTERNAL COMMISSURES.

The method that Mr. Walton has introduced for treating entropium by removing the ciliary portion of the orbicularis palpebrarum, together with the skin covering it, by a careful dissection, is that always adopted at this institution. But as there are several complications in this affection, so there must be modifications of the plan or additions to it. Many an excellent operation, and many a good system of treatment, fall into disuse or are censured, or only partly adopted, simply because expected to be of universal application, and are found to fail in particular instances.

The subject of these remarks was a young man, who almost from childhood had strumous ophthalmia. There was severe entropium of both eyelids, complicated with contractions of the external commissures from the cicatrisation consequent on severe chronic ophthalmia tarsi. The palpebral fissure was hence remarkably shortened; and the outer cilia of the upper eyelid, corresponding to the part of the eyelid that had become adherent to its fellow, were doubled in tightly and rested against the eyeball. It was evident, therefore, that however successful the effect of the ordinary operation might be on the greater part of the entropium, here it must be ineffectual in part, and could not at all unfold the outer portion and turn out the cilia. A secondary proceeding was necessary.

Mr. Walton first operated for the entropium in general. He removed the ciliary portion of the orbicularis muscle, with the skin covering it, in each eye, and applied sutures. The next visit of the patient shewed that all the free parts of each lid were beneficially acted on; but there was yet much irritation from the entropium at the corners. A week afterwards, the result was completed by dividing the skin at the angles, dissecting it up, and removing all the inverted cilia with their bulbs. Thus the single operation, superior and effectual as it is in the cases fitted for it, was here but partially successful, and hence gave but little relief, and required a material addition.

II. AFTER-TREATMENT OF THE EXTRACTION OF CATARACT.

The old method of bandaging the eyes is never practised in this hospital, and the modern one of plastering the eyelids adopted instead. The object is to keep the eyelids motionless and closed, in order that the edges of the wound in the cornea may be kept in accurate adaptation by the gentle pressure of the eyelids. If a patient can keep his eyes shut, no appliance is needed; but few can do this. As the bandages are ordinarily applied, they are useless. To make them potent as bandages, would demand a degree of pressure that must be injurious. Very much annoyance is often produced from the cloth being stuck to the cheek by the aqueous humour when it trickles away; and the night's rest is broken in consequence. A couple of straps of court plaster, the eighth of an inch wide, accomplish all that is desired. Mr. Walton generally allows them to remain for a week; but if any unpleasantness is complained of, such as stiffness or hardness, they are removed after the third or fourth day. To this plan, which is wholly unobjectionable, Mr. Walton attaches much value; and he is convinced that the highest attainable results from the operation of extraction cannot be obtained without it. He always

keeps the eyelids closed till the aqueous humour no longer escapes from the corneal wound; that is, till the cornea is quite healed. At the end of the week, when the patient has opened the eye, Mr. Walton does not raise the lid himself, but desires the patient to open the eye naturally, which he considers far preferable; he again closes it, if requisite, with court plaster for some days. There can be no doubt of the prudence of this. Many an instance of prolapse of the iris, with all the irritation and ulterior consequences, has been produced by the use of the eye before there has been proper reunion. Young operators are often sadly puzzled to account for the secondary imperfection of prolapse of the iris, after they have had such promising results when the eye was looked at a few days after the operation. This is the solution: the eye is used far too soon, and by the action of its own muscles, the prolapse is occasioned.

The great proof of cicatrisation of the cornea is the fulness of the anterior chamber. So long as the iris is pressed forwards, and there is not the natural accumulation of aqueous fluid, the eye should be kept closed. A very little attention will enable the practitioner to decide this point.

When the iris is wounded in the operation of extraction, prolapse is very apt to occur under any condition: hence, Mr. Walton lays it down as a rule, that much pains should be taken to prevent the accident. He considers it far better on every occasion to finish the operation with the secondary knife rather than to complete it with the cataract knife, when by so doing the iris is at all injured. The late Mr. Alexander, than whom there never was a better operator, always made the section of the cornea with two knives. As soon as he had effected the counter-puncture with Wenzel's knife, he withdrew it, and completed the section with the secondary knife.

Original Communications.

SOME OF THE PRINCIPAL EVENTS IN THE CLINICAL HISTORY OF ASTHMA.

By HYDE SALTER, M.D., F.R.S., Fellow of the Royal College of Physicians, and Assistant-Physician to Charing Cross Hospital.

Having elsewhere (*Medico-Chirurgical Review*, July 1859) described the phenomena of the asthmatic paroxysm, I purpose in the present paper to direct attention to those general features of asthma that characterise it as a whole—those different events that develope themselves in the course of the disease, and whose variations and combinations impart the distinctive features and individuality to each case. Such general features of the disease arise from the relations of the paroxysms to each other, their relations to the subject of them in respect to age, sex, etc., the modifications they undergo, and certain of the effects they produce, and may be called, in opposition to the phenomena of the *paroxysm*, the phenomena of the *intervals*, or, perhaps more correctly, the phenomena of the *disease*.

Of these events in the clinical history of asthma, the principal are the following:—

1. Periodicity; 2. Habitude; 3. Change of Type; 4. Tendency; 5. Capriciousness; 6. Physiognomy; 7. Time of life of first access; 8. Influence of Sex; 9. Hereditariness.

I.—Periodicity.

Asthma is one of the few diseases that can be strictly pronounced periodic. It is not merely paroxysmal, it is periodic: the paroxysms occur at regular and definite periods. And this periodicity may be said to be typically characteristic of the disease; it is the most pronounced in those cases that are in other respects the most uncomplicated and best marked specimens of it. But although the absence of periodicity in a given case deprives the disease of one of its best marked features, it is by no means constant; in some cases it is but slightly marked—the periods vary a good deal; and in some it is entirely lost. In others, however, the regularity is most curious; as the period characteristic of the particular case recurs, the attack is predicted with the greatest certainty, and never fails to appear at the right time—never misses, never anticipates, never postpones. In the length of the intervals, although in each case it is constant and characteristic, there is the greatest variety—from a day to a year. Many of these intervals appear to be arbitrary, and one cannot make out at all why they should be, as it were, chosen: many of them, however, are natural—the measures of certain cycles, the period of recurrence of certain conditions, either in the external world or within the body, so that their agency in determining the frequency of the paroxysms is easily intelligible, inasmuch as they measure the interval from one occurrence of the exciting cause, or the condition of susceptibility, to another. Such periods are a day, a week, a month, a year; and these are all of them very common measures of the asthmatic interval. For example, diurnal asthma is very common. A patient comes to you and tells you, that every morning precisely at the same hour, say four o'clock, a dry wheezing difficulty of breathing wakes him, and obliges him to sit up in bed, or leave his bed altogether, and go through, in short, all the sufferings of a regular asthmatic attack. Such a case came under my observation only yesterday. A poor woman, aged 52 (Mary Baker, Case —), who had never had asthma before, came to me at the hospital, and told me that for the last five months she has been awoke every morning between four and five o'clock with severe dry wheezing dyspnœa, obliging her to sit up for about an hour, or get out of bed, labouring for her breath with great distress. In about an hour, the urgency of the dyspnœa abates, the wheezing gets moister, a slight expectoration comes to her relief, and she is able to lie back and get a little imperfect sleep: it is not, however, till she has been up about an hour—that is, about eight o'clock—that the difficulty of breathing entirely leaves her. When I saw her, in the middle of the day, she was breathing as well as I was; and so she continues all day. She goes to bed quite well, lies down as well as ever, and sleeps undisturbed till four or five the next morning, when she is awoke as before.

Now this diurnal period is very common where asthma is associated with chronic bronchitis, heart disease, etc. Indeed, it is *the* period of impure asthma, of asthma grafted on organic disease of the heart or lungs; and wherever I meet this invariable morning recurrence, I always suspect it is not simple asthma, and look out for some permanent heart or lung mischief. And one can easily understand why this should be so. The condition of sleep, and the recumbent posture, bring a diurnal aggravation of the permanently existing conditions, giving rise to the bronchial spasm; and the time of the night at which the asthma comes on, and the patient is awaked, depends upon the length of time required for this diurnal aggravation to produce such an amount of asthmatic contraction of the bronchial tubes, as to render the continuance of sleep impossible. If the organic cause of the asthma exists to any considerable extent, the patient will be sure to have the asthma every night; for the organic condition is *constant*, and it will be impossible for the patient to assume the horizontal position and the condition of sleep long without this aggravation of conditions giving rise to asthma. The impeded circulation through the lungs, in heart disease, or the inflamed and irritable state of the bronchial mucous membrane, in chronic bronchitis, is not adequate, while the patient is awake and erect, to the production of bronchial spasm; but sleep and recumbency soon render them so, partly by aggravating them, partly by exalting reflex susceptibility in the way I have more fully explained elsewhere. (*Medico-Chirurgical Review*, July 1858).

Once in the twenty-four hours he lies down and sleeps, and, therefore, once in the twenty-four hours he has an attack of asthma. But were it not for the organic disease, (say heart-disease) the mere sleep and horizontal position would not produce that embarrassment and arrears of the respiratory function which induce the asthmatic spasm.

I would say then, wherever the asthmatic period is diurnal, look out for organic disease. But this does not always hold good. The nightly recurrence of asthma does not necessarily imply that it has an organic basis. In the woman I was mentioning just now there was not a trace of organic disease. The respiratory sounds were perfectly natural; there was no prolongation of expiration, the breathing was very deliberate, with plenty of surplus time; the post-expiratory rest was long; the heart was quite normal. I have seen another such case this very morning (case of Mary Anne Frost, Case —).

Where the asthma is dependent upon the state of the digestion, the diurnal period is very common. The patient will have an attack every afternoon after dinner, lasting for two or

three hours, till digestion is over. This is so very common that I shall not cite cases of it. As a rule we may say that, where the period is diurnal, the attack depends on some daily-recurring exciting cause. But even this is not universally true, for I have known cases where the attack recurred daily under such varying circumstances, and at times so free from any discoverable exciting cause, that the reason of its daily rhythm appeared to be unaccountable. In these cases we must seek another explanation of the diurnal period, to which I shall refer presently.

Once a week is a very common interval, at the same hour of the same day, as the week comes round, and at no other time. I remember one very remarkable instance of this in an asthmatic boy, who for years had an attack every Monday morning. On every other morning in the week he awoke well; but as surely as Monday morning returned, so surely did his asthma appear. A suspicion arose on the part of his parents that he was malingering. His lessons on Monday morning were different from those on other days, and they thought he might be shamming, or at any rate making the most of his complaint in order to escape school. It was not till this had been going on for a long time that the real cause became evident:—on Sunday evening he took supper, on other evenings not, and the Monday morning's asthma was caused by the Sunday evening's supper. On taking supper on other occasions it was found that asthma invariably followed, and this cleared up the Monday morning's mystery. He left the suppers off, and the regular Monday morning's asthma vanished. It is probable that in most asthmas with the weekly period, the interval is due to the recurrence of the same exciting cause in some part of that seven day's circle in which life, in all Christian countries, moves.

The fortnightly interval, which is by no means a rare one, is probably due to the same cause; the weekly rhythm determining the period, but the interval proper to the case being longer than once a week. I have such a case under my care at the present time, in a young asthmatic who for some years past has had an attack regularly once a fortnight, and, as in the preceding case, it is always on the Monday morning. He cannot, however, attribute it to eating supper on Sunday night, for he never does so; but he can and does assign it to something peculiarly characterising Sunday, and believes that it is caused by the unusual amount of exercise that he takes on that day.

The monthly interval, as far as I have observed, is due to the menstrual period. I have never seen or heard of any case of it, well and regularly marked, except in women, and in cases of what appeared to be clearly hysterical asthma. But of hysterical asthma, it is, as might be expected, the characteristic interval; and I should always, in a monthly asthma in a woman, look out for a uterine cause.

Asthma occurring once a year is almost always winter asthma, and almost always a complication of asthma with bronchitis—muscular spasm engrafted on inflammation of the mucous membrane of the air passages. These cases, as I shall show elsewhere, are not really cases of asthma at all; that is, not primary and idiopathic asthma. Asthma they must be; wherever there is paroxysmal constriction of the air passages, there is asthma; but the asthma is not the substantive disease, it is a mere appendage to the bronchitis. Such cases are always well from spring to autumn, and their winter asthma is not one attack, but an irregular succession of attacks, varying as the bronchitis. There is, however, one kind of annual asthma that is not a winter asthma, but a summer asthma; and that is, that curious disease called *hay-fever* or *hay-asthma*. This begins and ends with the hay season, and varies in the time of year according as the hay season is early or late. As long as the grass is in flower it persists, with that it ceases. Its visits are therefore restricted to about a month or six weeks in the early summer. It is not constant throughout this time as one attack, but comes and goes with those other symptoms of irritation of the respiratory mucous membrane, of which it is a part. The neighbourhood of hay, bright, hot, dusty sunshine, a full meal, laughter, etc., suffice, at any time during the hay season, to bring it on. It often affects a sort of diurnal rhythm, being generally worse at night. While this condition lasts, the asthma is often so severe as to deprive the sufferer of sleep for nights together, and he leaves his bed in the morning palid, blear-eyed, and worn out. When the hay season is over every symptom vanishes, and for ten or eleven months the patient may calculate on a perfect immunity from even the slightest asthmatic sensation.

I find there is a third form of annually-recurring asthma besides these two, the winter and the hay asthma, it is asthma whose severe attacks are confined to the hot weather of the late summer and early autumn. It is not at all uncommon for asthma to be so much worse at this time of the year—about August, and a little before or after—that it may be almost said to be confined to this period; the manifestations of the asthmatic tendency at other times of the year being so slight as hardly to attract any attention. I possess the notes of several cases in which this autumnal recurrence of the disease was well marked. Why asthma should be worse in hot weather I think would be difficult to explain; of the fact there is no question. Even in cases that exist all the year round it will frequently be found to be worse in sultry July weather than at any other time, and more especially if the weather is thundery as well as hot. I have the notes of as many, I should think, as six cases in which the connection between thunder and asthma was well marked.

The intervals, however, which many cases of regular periodic asthma choose, are, though constant, quite arbitrary, as, for instance, ten days, a fortnight, three months.

There is one curious circumstance about asthma that clearly shows that its periodicity is inherent—part of the disease. It is, that each attack seems to impart, for a time, an immunity from a repetition of it. For some time after an attack, the time varying according to the interval characteristic of that particular case, the patient may expose himself to the ordinary exciting causes of the paroxysms without the slightest fear of inducing one. As this period draws to a close, exposure to the provocatives of the attacks is attended with more and more risk; and when it has transpired the slightest imprudence is certain to bring on a fit. Indeed, so great does the asthmatic tendency after a while become, that no amount of care will succeed in warding it off.

For example, suppose that the exciting cause of the attacks is food, unwholesome in character, or taken late in the day, and suppose that the interval is monthly. For a week or two after the attack, the patient may take supper with impunity; towards the end of the month he does so at great risk; when the month is up he does so with the certainty of bringing on his disease; but he may keep it at bay for some days by extraordinary care in his diet. Beyond that time, however, the most scrupulous care will not avail to postpone the paroxysm. This curious feature, in which asthma so much resembles epilepsy, suggests to one's mind the idea that each attack is a sort of clearing shower; that in the intervals between the attacks an unknown something—that particular condition of nervous system in which the peculiarity of the asthmatic consists—accumulates, and that each paroxysm is the discharge of this accumulated condition. At any rate, this is the sort of idea that the phenomena suggests to one's mind, and I am not sure, a mere analogy as it appears, that it does not come nearer to the true expression of the pathology of the truly periodic non-organic cases than any other illustration or explanation that could be offered.

But we must not run away with the idea that an exact periodicity is by any means a constant feature of asthma. In the majority of cases, if you ask asthmatics how often their attacks occur, they will mention some definite period, although their specification may not be precise, or may be accompanied with the qualification that it varies a little—*about* every ten days or a fortnight, or *about* every two months. In those cases in which the occurrence of an attack depends upon the occurrence of some unknown exciting cause, the degree of regularity will, of course, depend upon the regularity of the recurrence of that cause, which is often a mere approximative regularity; and it so happens that many of the provocatives of asthma are quite arbitrary in the period of their recurrence; as, for instance, a debauch, a late dinner, a fog, and may, some of them, be varied at will. In these cases, of course all exact periodicity would be lost; the cause being irregular, so will be the attacks; and in those cases where the cause is entirely under the control of the individual, as, for instance, where it depends on the kind of food or time of taking it, the attack may be brought on at any time and as often as the asthmatic wills; or, by rigid abstention from the exciting cause, the period may be indefinitely prolonged. I have known, for example, the same asthmatic bring on an attack twice a week because he dined late and unwholesomely twice in that time, and keep off an attack for many months by simply abstaining from this one exciting cause. Of course, if he had dined late and largely once a week, or once a month, his asthma would have been periodic, with those respective intervals.

There are, however, a large number of cases of pure, uncomplicated, spasmodic asthma, in which, without any recognised

exciting cause of irregular recurrence, all trace of periodicity is lost. The patient does not know when to expect his attack. He may have one in a twelvemonth, he may have one to-morrow, he may have four in a month, he may go years without one; it may never occur at two intervals alike, and when it does occur he is perfectly at a loss to say why it should choose that particular period. The time of its recurrence and its frequency are alike inexplicable. He may be living in perfect health and daily dread.

To express summarily, then, what appear to be the facts with regard to the periodicity of asthma, we may say—

1. That asthma is typically periodic.
2. That, though there is a period for each case, there is no particular period for the disease in general.
3. That the periodicity of asthma is of two kinds, *intrinsic* and *extrinsic*, the latter a spurious periodicity, dependent on the periodic recurrence of the exciting cause; the former, the true essential periodicity, independent of all external circumstances.
4. That periodicity, though a common, is not a universal feature of asthma.

DIPHTHERIA.

By Robert S. Cross, Esq., Petersfield.

I beg to submit the annexed remarks, with the idea of fulfilling one great purpose of our Association—the recording of individual observation, with a view to building up experience deduced from facts.

Throughout these last eighteen months, this town and neighbourhood have been visited by throat-disease in various forms; considerably above a hundred cases, of a diphtheritic character, having occurred under my observation, varying in character from the mild form, in which small spots of white easily detached lymph or exudation membrane, on more or less enlarged and inflamed tonsils, was the type; little or no constitutional disturbance being present; to the most severe kind, suddenly ushered in by severe symptoms of exhaustive febrile action; the tonsils, uvula, and whole of the parts at the back of the mouth as low down as could be seen, were coated with a dirty white, or brown grey, firmly adhering membrane; life being destroyed in a few days, sometimes by extension to parts necessary for respiration, but as often by apparently a state of exhaustion of the system being induced, in which death occurred sometimes very unexpectedly.

Two cases (in one family, of six children, the oldest eleven years, and all of whom, with the exception of the infant, had the disease) were sufficiently remarkable to deserve a separate notice. In two boys, aged respectively eight and nine, the throat symptoms were very severe from the first. About the fifth day, healing set in; so rapidly, that, by the end of the seventh, a sloughing ulcer, which had embraced the whole of the parts at the back of the mouth within the reach of observation, were quite well. One day only of apparently perfect convalescence intervened; and vomiting set in, with pain and tenderness over the epigastrium, extending particularly to the hepatic region. There were constipation; total loss of appetite; prostration; rapid emaciation; thirst; and, in one case, there was intense pain in the head for the last forty-eight hours. One boy died at the end of three weeks of such condition; the other, at the end of ten days.

A very careful *post mortem* examination of the last case was made. The tonsils appeared gone; *i.e.*, their site was occupied by some loose irregular granulations, which had the character of remaining, the interstitial structure being absent. There was no extension of the disease into either œsophagus, or larynx and trachea. The lungs were healthy. The liver was enlarged and pale. The stomach contained about half a pint of greenish viscid fluid. The mucous membrane, particularly at the edges of the rugæ, which were very prominent, was of a deep chocolate, almost mahogany colour; the colour was not distributed in patches, although there were degrees of depth of shading, varying from this to deep rose colour and red, but pervading the whole, and extending a long way—I should say, throughout the whole of the small intestines, most intensely in the duodenum. The mucous membrane was softened and thickened, and presented at the two orifices an appearance of a separation, as though it might readily be detached.

The disease in question has occurred in all situations and among all classes. The mortality has been about ten per cent. of the whole. This ratio, I should remark, includes as well those cases in which application has been made too late to offer any reasonable chance of doing good, as it does those in which everything has been done from the very first moment of attack. As to contagion, I have been unable clearly to trace this cause in more than one case; as in those families where two, three, or more children were the subjects of the disease, the cases have occurred at such intervals as to preclude the idea of such being the exciting cause; and, moreover, often only one has had it, even where the discovery was made too late for any attempt at isolation. One adult has died; and one who had it, had been nursing a child with angina, she herself having been the subject of scarlet fever since adolescence. Albumen has been sometimes present in the urine; sometimes not. I should say, that on the average the subjects of the malady had not been remarkable for their apparent vigour of constitution, but rather the least robust and healthy of the community.

The treatment has consisted of sulphate of zinc or ipecacuanha emetics, with a mild calomel purge, followed by mineral acids, with bark or quinine; sometimes citric acid, chlorate of potass, tincture of sesquichloride of iron, etc.; with applications of nitrate of silver, solid and in solution (five grains to one drachm); solution of chlorinated soda, hydrochloric acid, etc., diligently applied by sponges, and gargles of like character: externally, an embrocation of compound camphor liniment, soap liniment, and laudanum. Leeches were applied in one case, followed by a blister, which caused a most unhealthy sloughing sore, which undoubtedly accelerated the end. And here I may mention one unfavourable symptom always attendant on the severer forms; *i.e.*, a filling up from ear to ear under the chin, with a hard, tense, brawny kind of shining swelling, corresponding to a similar infiltration of all the internal parts.

The diet has consisted of beef-tea and nutritious bland nutriment, with wine, according to its apparent necessity. On the first and second day, if given, wine appeared to aggravate the constitutional irritation already severe; and in like manner, about the third day, when the exudation membrane was beginning to separate, allowing the escape of a highly offensive discharge. Caustic or any pungent application to the throat seemed to do harm from the same cause.

DIPHTHERIA.

By George Bottomley, Esq., Croydon.

Many valuable records of cases have appeared almost weekly in the medical periodicals for months past, mostly differing from each other as to the nature of the epidemic, as well as to the mode of treatment. It would, therefore, be highly desirable that some better defined pathological character of the disease should be agreed upon by the medical profession, and also a general plan of treatment laid down, as in all other diseases.

It appears that, at present, we cannot do more than give our individual opinions, founded upon practical experience.

In the first place, it may be remarked that the disease assumes very nearly the same train of symptoms in all places.

From what has been written upon the subject, it appears that some believe it to be a new disease; others, that it is accompanied with scarlet fever. It therefore becomes our duty, if possible, to find out which view is correct.

In discussing the nature of this disease, its pathological character should be settled; but, having had but one fatal case in my own practice, my experience from *post mortem* examinations will not do much. I can, therefore, only offer my opinion from the cases I have had under treatment.

It appears to me that at the commencement of the attack there is but slight congestion of the mucous membrane of the pharynx, accompanied with slight constitutional disturbance; but, in a few hours, the membrane puts on a livid appearance, and runs rapidly into the gangrenous state: and that the false membrane is a deposit of layers of lymph in the early stage of the disease, which soon loses its vitality, and acts as an extraneous body, thereby preventing the parts from performing their natural functions. Accompanying this change, great depression of the vital powers of the system takes place.

Now whence arises the rapid and fatal change in a few hours? Is it not from meteorological causes? for it is certain that locality has but little to do with it. It has been as severe in high and dry situations as in low and damp; in isolated

dwellings, and in crowded cities; in clean and well drained places, and the reverse. Therefore, ought we not to look to the atmosphere as producing those rapid changes, acting upon the blood, occasioning the gangrenous condition of the throat, accompanied with an extremely low and depressing type of fever, from which the patient rapidly sinks into a state of extreme and fatal exhaustion? It therefore appears consistent with pathology to administer a most powerful antiseptic remedy, to act promptly both locally and constitutionally. After taking the above view of the disease named by Bretonneau *diphtherite*, I beg to submit to my medical brethren the plan of treatment which, I am happy to say, I have found very successful.

I had under my care several severe cases in the autumn of 1857, and again in the autumn of 1858. Those in 1857 occurred in the town and neighbourhood of Croydon, and those in 1858 in a new building, an asylum for the reception of children whose parents died young: consequently, their offspring were not constitutionally the best fitted to resist so formidable a disease.

The treatment I adopted in all the cases under my care was as follows—for *children*:—

℞ Solutionis chlorinii ʒss; syrupi simplici ʒss; aquæ destillatæ ad ʒvj. M. Fiat gargarisma sæpe utendum.

℞ Solutionis chlorinii gtt. iv; syrupi aurantii ʒj; aquæ destillatæ ad ʒss. M. Fiat haustus 2ndâ quâque horâ sumendus.

The dose was increased according to age. Calomel was given in doses of one grain and upwards, according to age. The diet, too, consisted of concentrated jellies, strong beef-tea, wine, etc.

The same mode of treatment was adopted in adult cases; except that, instead of calomel, I gave the hydrargyrum cum cretâ.

For many years I have ordered the chlorine solution in malignant scarlet fever accompanied with a diphtheritic state of the throat, with marked success. In the *Cyclopædia of Practical Medicine*, published in the year 1835, Dr. Tweedie states that, in an epidemic sore-throat which made its appearance in Tours in 1818, and to which Bretonneau gave the name of *diphtherite*, hydrochloric acid was found most efficacious.

The orphan asylum to which I have before alluded is a new building erected on the top of a hill, open to the south-west; the rooms spacious and lofty; every attention paid to ventilation. It stands alone, in a most healthy situation; and the children, before admission, undergo a medical examination; so that, at the time of admission, they are perfectly healthy. So that does away with the supposition of its being confined to ill-drained, low, and swampy situations, and densely populated, poor localities. In the months of July and August, 1858, there were fifty cases in the above asylum, of the most malignant form. They were all placed under the treatment before named. After the third day, quinine was added to the chlorine solution. Many were covered with the scarlet eruption; eighteen had a severe form of measles; and some few were free from eruption; but all had the diphtheritic throat, and but one case out of the fifty proved fatal—a child four years old. The disease made its way through the various tissues of the throat and neck, and broke externally, giving vent to a most offensive discharge, the patient sinking from exhaustion, not being able to take sufficient stimulant and nourishment.

DIPHTHERIA.

By J. C. S. Jennings, Esq., Malmesbury.

There are a few points in the summary of cases published in the British Medical Journal of June 25th, to which I wish to advert, while completing a tabulated report of cases of diphtheria attended by me for the last two years, although I can, in truth, add but little as regards its treatment to the outline which I gave in the Journal of March 27th, 1858.

Presence of Contagion. Of this I have had such clear proof ever since the first outbreak of diphtheria in the parish of Shipton Moyne, that I have had no hesitation in declaring its contagious character: in fact, in the first case which came under my care in that parish, the disease was clearly contracted by nursing and attendance on an adult who rapidly sank under it. Moreover, two of his brothers-in-law, residing a mile distant, contracted the disease either from a casual visit, or by attending the funeral.

Scarlatina. At the first outbreak of the disease, no cases of the above had appeared in the neighbourhood; nor were there any until the second outbreak, during the month of January of this year, when a few cases of diphtheria occurred; but scarlatina maligna ran through several families. In those cases, however, in which the rash was well developed, and not suppressed, there was little or no throat-affection; and *vice versâ:* and when the tonsils *were* affected, there was not the peculiar leathery exudation of diphtheria.

Treatment. The plan I have invariably adopted, regardless of sex, age, or incubation of disease, has been to give an active emetic of antimonial wine, from half an ounce to an ounce, according to age; to freely cauterise the throat with solid nitrate of silver; to have a mustard poultice applied from ear to ear; the feet and legs plunged in a hot bath; and the patient confined to bed. After the emetic action has ceased, from three to five grains of calomel with five of compound extract of colocynth were given (or, for a child, two grains of calomel with two grains of compound antimonial powder); and, four hours afterwards, the following mixture:—

℞ Quinæ disulph. ʒss; potassæ chloratis ʒj; acidi hydrochlorici diluti ʒss; aquæ ʒviij. M. Fiat mistura cujus sumatur pars sexta 4tis horis.

A gargle of chlorine solution was directed to be used frequently, prepared by impregnating water as much as can be borne with the protoxide of chlorine, generated from two parts of chlorate of potass, one of hydrochloric acid and one of water, and the fauces to be sponged out frequently with the same. The emetic I have rarely repeated more than once; but when the inflammatory stage has been severe, the fauces tense and shining, and the throat œdematous, spirit of nitrous ether and liquor of acetate of ammonia, or nitrate of potass, has been added to the mixture.

The diet has been at first farinaceous, and afterwards consisting of strong broths and jellies. Stimulants have been very rarely administered, and then only as sherry whey, alternately with the quinine, which I have trusted to as the sheet-anchor. For infants, quinine may be given in jelly, washed down with a mixture of tincture of sesquichloride of iron.

Upon this plan all my cases have been successfully treated, with the exception of one fatal case in a stout young man, where much valuable time had been allowed to elapse; the mushroom-like exudation having extended over the soft palate, completely blocking up the fauces and chink of the glottis; besides which, the emetic was not rightly administered, or failed to produce effect; neither was the purgative given as ordered; and the patient died from apnœa, suffocation being produced from spasm of the glottis when turning to lie down in bed.

Too much stress cannot be laid upon tartar emetic, quinine in large doses, and the avoidance or guarded use of alcoholic stimulants.

WOUND OF THE LIVER: PROFUSE HÆMORRHAGE: RECOVERY.

By Albert G. Walter, Esq., Pittsburgh, Pennsylvania.

John Kohrssen, roofer, aged 47, of Pittsburgh, of bilious constitution, large frame, and strong muscular development, was brought to my hospital late on the evening of January 17th, 1858, having been stabbed by his wife in the scrobiculus cordis with a broad-bladed knife, entering the abdomen obliquely upwards about four inches. Withdrawing it himself, he walked some distance while bleeding profusely, and fell down exhausted upon the pavement. A surgeon summoned found a vertical wound, of an inch in length, close to the right side of the ensiform process, from which venous blood, in a rapid, continuous, and large stream, was issuing. On introducing his finger into the cut, a deep rent was discovered in the concave surface of the small lobe of the liver. This profuse flow of blood was arrested by compression through the abdominal walls upon the aorta.

Arrived at the hospital, the patient was cold, very pale, with respiration not accelerated, and slow and hardly perceptible pulse, yet restless, outward bleeding having ceased. He suffered great pain in the wound, increased by swallowing, moving, and deep inspiration; with paroxysms of cramps in the abdomen, shooting from the scrobiculus cordis to both angles of the scapula, and returning every quarter of an hour, during which the skin around the wound would swell out to the size of a pigeon's egg, as in ventral hernia. The wound was left open; the body was inclined towards the right side, to facilitate the outward flow of blood; ice in bladders was applied to the abdo-

men; opium in one-grain doses given hourly; and the greatest quietude enjoined, with abstinence from drink as much as possible. He slept some during the night, though frequently roused by the paroxysms of pain. Next day, the pulse was slow and very small; the skin cool; thirst great; with vomituritions and frequent attacks of pain, which were relieved by relays of leeches around the wound, and the continuance of one-grain doses of opium every half-hour or hour. Motion of the body and deep inspiration could now be performed without pain; the pulse began to rise, the thirst to decrease, and the abdominal tenderness to subside.

On the evening of the third day, however, violent colicky pains of the hypochondria, extending to the groins and shoulder-blades, with eructation of wind and tumescence of the scrobiculus, set in, recurring in paroxysms, which were subdued by ten grains of calomel, followed by castor oil with turpentine as a laxative, bringing away large quantities of dark, greenish, and very offensive stools. Tumescence and tenderness of the liver, with effacing of the intercostal spaces, flatulence, dry hot skin, great thirst, dry tongue, icterus, bitter taste, now appeared: pulse and respiration remained unaccelerated. By free and repeated leeching of the region of the liver, with the internal use of calomel and henbane, carried to moderate ptyalism, and an occasional laxative, the inflammation of the liver gradually subsided. The wound, though not interfered with, closed by first intention; no more bleeding having taken place. Hepatitis was next followed by parotitis of the right side, which yielded to leeching and warm emollient applications; when inflammation of the inguinal glands of the left groin made its appearance, but without consequences. In three weeks the patient left his bed, and two weeks later the hospital, restored to health, yet liable to ventral hernia, unless restrained by the wearing of a truss.

Remarks. The successful termination of the above injury, endangering the life of the patient by profuse bleeding, peritonitis, and hepatitis, is due to the great power of opium in preventing and arresting peritoneal inflammation. Under its benign and powerful influence, traumatic injuries of the abdominal cavity and its organs, which would otherwise mostly prove fatal, are borne with remarkable impunity. There is no remedy as safe and true a handmaid to the surgeon as opium; there is none whose aid to him is as valuable.

It was considered proper not to close the abdominal wound, but to encourage the outward flow of blood by position of the body, before arresting the bleeding by pressure upon the abdominal aorta. By closing it, accumulation of blood in the abdominal cavity would have taken place to a great extent, to be followed by consequences which might have been serious.

Opium did not prevent hepatic inflammation, the result of the direct injury of the liver; but it timely checked peritonitis —a far greater enemy to the surgeon than the former.

The appearance of parotitis of the right and bubo of the left side does not seem to bear any relation to the injury of the peritoneum and liver, but may be considered the effect of ptyalism, induced for the relief of the hepatic inflammation.

Transactions of Branches.

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

DIPHTHERIA.

By Thomas Heckstall Smith, Esq., St. Mary Cray, Kent.

[*Read May 20th*, 1859.]

I purpose in this paper to give a few practical remarks, the result of my own observation of cases, as to the treatment and apparent nature of diphtheria. The time allotted at this meeting will not admit of more full investigation of the subject, either as to its history or the opinions of others.

In the year 1857, I had in my practice three cases of diphtheria, each a mile or two miles distant from the other. They were sporadic cases: no others occurred. All were in the better ranks of life. One was a governess in the family of a clergyman; one was the wife of another clergyman; the third was a gentleman of rank well known in the county. They presented three distinct characters of the disease.

Case I was that of a delicate young lady, aged 23, subject to relaxed sore-throat. There were many patches, somewhat elevated, on each tonsil, as if greyish peas had been split and pressed into the part; the surrounding parts having a blush only of red. There had been no rigors; the pulse was quiet, very feeble; the countenance and skin were anæmic.

Case II. A healthy lady, aged 30, of somewhat full habit, but who once had erysipelas, presented the membrane formed on both tonsils, the velum, part of the tongue and cheek, of a deep ash colour. On removing a portion of the membrane, which was loose, from the tonsil, the parts under were found to be nearly of chocolate colour—so intense was the congestion. The breath was fœtid; there had been slight rigors; the pulse was now quiet, easily compressed.

Case III was that of a healthy man, aged 53, with some tendency to gout. In this case, both tonsils were partially covered with patches, but with acute tonsillitis, one tonsil ending in quinsy and suppurating.

These cases present a fair type of three of the forms in which the disease has shewn itself as an epidemic in my district during the latter half of the year 1858, up to this date (May 1859). Up to this time, I have had under my care upwards of eighty well marked cases; excluding many others, to which I shall presently allude, of a less distinctly marked character. These cases have occurred at all ages, extending from two weeks to fifty-five years; not beyond that age, except in one case. They have occurred in all ranks of life, but in a very much larger proportion amongst the middle and upper ranks than amongst the poor.

The exemption of the pauper class is remarkable. I have medical charge of a large district, and also of the union house. Out of three hundred and fifty recorded cases of illness in the out door poor, only eighteen were diphtheria; in the union house there were only two cases.

The cases have been quite unconnected with scarlet fever; of that I speak confidently.

Some cases of erysipelas have occurred during the epidemic of diphtheria; many of urticaria; an unusual number of eczema; several severe and unusual cases of pompholyx, or pemphigus; many of pleuropneumonia, of an asthenic type; very many of neuralgia, of an intermittent type; and more cases of ague than I have seen in the district before at any time during a period of thirty years.

The furunculoid epidemic, with whitlows, thecal abscess, and necrosed bone, which had gone on during the three years previously to the advent of diphtheria, almost entirely disappeared when the latter epidemic commenced.

I have already described three forms in which the disease presents itself, viz., simple ash-coloured diphtheria membrane in patches, with very slight congestion of the surrounding parts, and without fœtor. Secondly, a deeper colour, and more widely spread membranous exudation, with fœtid breath, and intense engorgement of dark hue. Thirdly, the membrane with much tonsillitis, in a few cases resulting in quinsy. But there has been a fourth and more formidable state of things to contend with, namely, an extension of the membrane in either of the above forms, to the larynx and trachea, the symptoms of which I need not describe. In the three cases of 1857, and in the earlier of this epidemic, there was no appearance of ulceration. If the membrane was peeled off, the part under presented a clean patch of smooth surface, distinguishable from the surrounding parts, but in no degree abraded. But lately, there has been more tonsillitis, and frequently superficial ulceration, in several cases in the last few weeks, excavating more deeply into the tonsil; the membrane being still distinctly marked. During this period, east winds have prevailed, and more feverish constitutional disturbances have been observed.

With reference to the more general symptoms, the prominent feature is depression of the vital powers. The pulse is not always quick, but when so, is that of an irritable circulation. More frequently the pulse is slow, waving, and very compressible; the skin readily cools down (as when a hand is exposed out of bed), is moist and soft, almost clammy to the feel. Where fever has been observed, it is of a remittent or intermittent type.

Some cases have been ushered in with slight diarrhœa, with discharge of blood. The nose, and sometimes the passage of the ears, become involved; and, in the former case, epistaxis has occurred, not readily arrested. In some cases, blebs of serum have arisen, especially on the fingers; and, in some cases, urticaria has come on as convalescence approached. Debility remains in a marked degree, even in milder cases, after the local symptoms have disappeared, and I know that fatal cases of syncope have occurred, even when convalescence

was supposed to be advanced; but I have not seen this in my practice.

I have mentioned above that there have been several cases of pompholyx. In two of these cases, the first symptoms were those of diphtheria. The first was a very marked case, of which the following is a sketch:—

The daughter of a gentleman's gardener, residing in the garden, and in a healthy situation, aged 16, had hitherto been healthy, had menstruated, and was employed in her father's house. I found the membrane formed over the tonsils, fauces, pharynx, and part of one cheek. The next day the nose was implicated, when violent epistaxis came on; which was with great difficulty arrested. Two days afterwards, the gums began to bleed; then she vomited blood. On the fifth day, pompholyx blotches appeared on different parts of the body, at first filled with serum, but soon others appeared, filled with dark blood. These latter rapidly increased in number, so that the whole body, with exception of the face, became, so to speak, covered with them. There was hæmoptysis; blood was discharged with the stools, and the urine was albuminous. This case, after a very hard struggle between life and death, recovered.

The treatment, with the local treatment of diphtheria, to be hereafter described, consisted of bark, ammonia, vegetable acids, abundance of wine, beef tea, etc.; but chiefly, gallic acid, in full doses. Lastly, the sesquichloride of iron, which seemed to have the most marked effect of any remedy. The recumbent position was most strictly enforced for a long time, as she could not move without evident danger of fatal syncope.

The other case of diphtheria combined with pompholyx, was that of a woman, aged 64, never very strong, and not, perhaps, fully fed; but who had never had any previous illness. She resided in a healthy locality; but the cottage drain was offensive. When I visited her she consulted me for a large bleb on one leg, two inches by one inch and a half, oval, filled with grumous serum; on discharging which a slough formed, and a very ugly sore was the result. Just before this healed, another formed on the other leg, of about the same size, and on a similar spot. The urine was not albuminous. I observed, on my first visit, some thickness of the voice, and examined the throat, of which she did not complain. I found a membrane nearly covering one tonsil. She ultimately recovered; the principles that guided the treatment being the same as in the last case.

With reference to the urine in diphtheria, it is often very abundant, having the character of hysterical urine. I have not examined in all cases for albumen; when I have done so I have found it but in few. The lymphatic glands under the jaw, the small glands down the neck, and even the surrounding cellular tissue, are in some cases affected; but chiefly in strumous subjects. In one case, now under my care, extensive abscesses formed in the cellular tissue.*

With regard to the localities in which diphtheria shows itself, it has not, in my experience, selected the malarious spots; but when it has done so the cases are more urgent. In many years practice in one locality those spots become known, and it happens that I have paid much attention to that subject in this locality. At each of its epidemic visits, cholera has selected those spots. As I have elsewhere observed, some years since, "Where fever had been, there came cholera," but not so diphtheria. It has not altogether *avoided* those spots; but has not by any means *chosen* them.

At first, I was disposed to doubt if it was communicable; but I have evidence to satisfy me that it is contagious to a limited degree.

Have we seen this disease before? and what is its nature? In answer to the first question, I can say confidently that during a period of upwards of thirty years practice, I had seen no case of diphtheria until 1857. I had read Bretonneau's earlier papers, many years since, and should have recognised the disease had it presented itself. Of its nature it is less easy to speak. It is evidently, I think, a blood disease, and not merely a local one. But what is the nature of that abnormal condition has yet to be explained, or rather, I fear, has yet to be discovered

In observing the progress of this epidemic, I have been instinctively led to reflect on the altered type of disease in general. I have myself no doubt of that alteration in the type of disease, observed since the year 1832, in England. From that date there has been a departure from the old sthenic type, and this has been more pronounced the last few years, until at length a genuine sthenic form of illness is almost, if not quite, unknown amongst us. We have instead, low types of inflammation, low forms of cutaneous diseases, low types of fever, having more and more a tendency to the remittent form; and a very marked increase, in localities where it was before almost unknown, and where no known local causes have arisen to occasion it, of intermittent fever. What was before a mere chill, a slight cold, thrown off with the first reaction, becomes now an attack of ague.

We have abundant evidence of this depression of vital power in the general symptoms of diphtheria. We have also a low type of local inflammation in unison with the general type; but why it should just now seize the throat as its local seat instead of showing itself as boils, carbuncles, whitlows, thecal abscess, necrosed bone, and in kindred forms, I do not know. But this I may venture to say, if I attack the malady with the local appliances, and the general treatment I should employ for erysipelas, the cases recover.

Treatment. The principles that have guided my treatment of this disease, are: *first*, to arrest the local inflammation by exciting another of a different character; *second*, to employ elimination according to the individual case; *third*, in all cases to sustain vigorously the vital powers.

To accomplish the first indication, I prefer the employment of a strong solution of the nitrate of silver. Having first cleared the fauces, etc., as far as practicable by gentle means, I paint every affected part, and *beyond* it, with the solution, of the strength of fifteen grains to a drachm. In mild cases I have frequently tried one of milder strength, say five grains; but I am satisfied that in all cases an efficient application of the full strength is the best. It is perfectly safe, and has at once a marked effect. It is more efficiently applied by a full-sized camel-hair pencil than a sponge. Severe cases must be seen again in twelve hours, and the application repeated should the so-called membrane spread. Later in the treatment, a weaker solution may be used, or Bretonneau's application, one part of hydrochloric acid to three of honey. And later still, when the membrane has disappeared, but much fullness and puffiness of the parts continue, a gargle, containing the sesquichloride of iron, or tannic acid. Where, as in my second case, there is much fœtor, the chlorate of potass is applicable. And where, as in my third case, there is more tonsillitis, we may, with advantage, employ inhalation of steam, or warm milk gargle. After the membrane is removed, and the tendency to diphtheritic deposit supposed to be arrested, the throat must be carefully watched; for until the endemic condition of the system is conquered, we may have a relapse of diphtheria.

I commence the treatment of almost every case with a purge, varying with the state of the tongue, pulse, etc.; but by far the most frequently, calomel and rhubarb, carefully avoiding salines. In some cases, with loaded tongue and suffused countenances, I have given, with the greatest advantage, emetics. Indeed, I am now so satisfied of their value, that I shall, for the future, employ them more frequently, especially where the congestion is marked, or there is unusual tonsillitis. The further general treatment is of *great importance*, namely, that directed to sustain the vital powers and remove anæmia.

I need not dwell upon the necessity of wine, beef tea, etc. In the severe cases these are most urgently required, and must be liberally supplied. In the more trifling cases, if well marked, convalescence will be delayed, and danger of relapse continue, if these, or their equivalents, are not employed.

Of all the medicines that may present themselves for our choice, there is one far superior, in my experience, to all others; and upon which, I indeed, chiefly rely: tincture of sesquichloride of iron. I have tried others that were obvious; but none sustain the vital powers, steady the pulse, lessen its frequency, and give potency to it; none remove the soft clam of the skin, steady the action of the kidney, and remove the anæmic pallor of the face, as does this. My confidence in its employment, and also in the use of the nitrate of silver, is fortified by their effects in erysipelas, in which they are almost specific. Cases will occur in which this treatment must be deferred, or modified, as where the tonsillitis is severe. In those cases, with the appropriate local treatment, I have first used the decoction of cinchona, with liquor of acetate of ammonia, or the latter with ammonia; but we afterwards come to the steel.

Such is a brief outline, and time admits of no more, of the treatment of cases in which croup has not supervened. How are we to meet this formidable extension of the disease? Shall

* Since this paper was read, a young lady, at that time suffering from a second attack of diphtheria of a severe character with great depression of vital powers, complained suddenly of almost total loss of sight. On testing the eyes with glasses, I found the visual power partly restored. Under tonics, good living, and sea air, she is recovering the sight.

we, in any cases, resort to tracheotomy? I think not. Success, in reported cases, has not justified it; and we cannot tell how far the membranous deposit has extended. I have had urgent cases of this description, and, happily, have hitherto treated them with success. My sheet-anchor is emetics, repeated, and very active ones, always of ipecacuan and sulphate of zinc, never of antimony.

Did time admit, I would detail these cases, but they presented no peculiarity except the urgency of the symptoms. In one child, three years of age, I gave seven emetics before the symptoms were fully relieved. Portions of the membrane were detached and thrown off in the act of vomiting. I gave wine and ammonia in the intervals. In this case I gave also repeated small doses of calomel, because Bretonneau recommends it; and the case being of extreme urgency, I would not neglect one of such authority.

In the more severe cases of diphtheria, I cannot too impressively recommend strict horizontal position. I have seen more than one case in which fatal syncope was to be apprehended if this had been neglected.

During the prevalence of diphtheria very many persons have suffered from relaxed and congested throats, without the formation of the membrane; and in many of these cases the general condition has been allied to diphtheria.

I now conclude with a reference to the rate of mortality of diphtheria in my hands. I have been actively assisted by my son and Mr. W. Hunt in the vigilant watching of the cases, and we have to record two deaths; one, an infant two weeks old, and one of eight weeks; in neither of which did we secure *post mortem* examinations.

CASE OF NEURALGIA.

By Adam Martin, M.D., Rochester.

[*Read May 20th*, 1859.]

I was requested to attend Master C. on July 24th, 1854. He was 10 years of age, tall, active, and a well formed boy, the son of healthy parents, residing in an open and dry situation. The skin was cool; the pulse quiet; the tongue was loaded with brown slime; his appetite was capricious; he had no thirst. The bowels were rather confined; the stools were black and very offensive. He was seized, while at school, some weeks previously, with pain in the bowels, which soon passed off, but had returned more or less frequently every day since, and had become gradually more severe, and longer in its attacks. The abdomen felt soft, and bore pressure without uneasiness when the pain was absent; but the least touch was intolerable; and all the surface of the body was preternaturally sensitive when the pain was present. When the attack began to come on, he appeared frightened, and threw himself on the ground, writhing to and fro in great agony; the pulse became very rapid, and the face covered with profuse perspiration. The pain seemed to begin in the cæliac plexus of nerves, and to shoot into all the abdominal viscera, and to the region of the heart.

I placed him under a course of active purgatives, consisting of calomel and the compound senna mixture, with a view to rectify the very unhealthy state of the digestive functions. He persevered in this plan until September 1st, without deriving any benefit. I now prescribed a dose of castor oil and spirit of turpentine every alternate day, for several times, with a view to test whether or not he had worms; but none were discovered, nor did he feel relieved.

I ordered his diet to consist entirely of milk, farinaceous food, with mutton and beef-tea; and prescribed a pill of blue pill and colocynth every night, with a dose of trisnitrate of bismuth and infusion of quassia twice a day. He pursued this plan until the beginning of October, without deriving the least benefit from it. He consulted an eminent physician in London, who suggested that the disease might perhaps arise from the poison of lead, and recommended the change of air, and five grains of the sulphate of alum to be taken three times a day, etc. He went into the country, and commenced taking the above remedy; after which the pain became more severe and more frequent in its attacks every day, and was at last attended with such loud and distressing moanings and screaming that the person with whom he lodged requested he might be removed home, which was done on October 12th.

He now looked pale and exhausted, and very distressed, and in every respect worse; tongue very loaded with slime; stools excessively offensive.

I now considered this interesting and intractable case as one of pure neuralgia in its nature; and, therefore, notwithstanding the unhealthy condition of the tongue and bowels, I prescribed eight grains of the carbonate of iron to be taken three times a day, with an occasional aperient. This plan of treatment was persevered in from October 13th until November 8th, when the pains ceased, and never returned.

EAST YORK AND NORTH LINCOLN BRANCH.

CASE OF AMPUTATION OF THE THIGH: WITH REMARKS ON EXCISION OF THE KNEE-JOINT AS A SUBSTITUTE FOR THAT OPERATION.

By Kelburne King, M.D., F.R.C.S.E., Surgeon to the Hull General Infirmary.

[*Read May 26th*, 1859.]

George Spight, aged 11, was admitted on March 31st, 1859, into the Infirmary here, in consequence of disease of the right knee-joint, regarding which the following history was received.

Sixteen months before, he fell and injured the shin-bone. Severe pain and swelling followed; and, eight months afterwards, abscesses formed both above and below the knee, which were opened, and had since continued to discharge matter. The joint had from that time been the seat of severe pain, had been becoming more and more powerless, and of late the lad had been entirely confined to bed.

On examination, great thickening was found in the joint, and in the parts immediately above and below. This thickening extended over the whole of the affected thigh. All power of active motion was gone, and passive motion was attended with severe pain. The joint, when kept in a state of perfect rest, was tolerably easy; and the lad slept well at nights. There were several openings both above and below the joint, which communicated with its interior. Pressure of the articular surfaces caused acute pain; and there was a preternatural mobility of the bones composing the joint. Rest and fomentations were enjoined for a few days; but, the pain appearing to increase, amputation of the thigh was performed at the usual place by the double flap (antero-posterior) operation.

On examining the amputated limb, all the tissues of the joint were found in an advanced stage of disease. The cartilages were ulcerated and destroyed; the bones were carious, and their articular surfaces ulcerated. The shaft of the bone was swollen, and the meditullium was infiltrated with purulent matter quite up to the point where amputation was performed. Immense abscesses, communicating with the interior of the joint, occupied the whole of the lower portion of the thigh. From the date of the operation, no bad symptom has ever shown itself, and the boy is now convalescent.

Twenty years ago, there would have been no excuse for bringing so ordinary a case before your notice; but many questions, formerly supposed to be set at rest, have been again mooted of late years; and among them, the excision of the knee-joint, proposed by Henry Park, tried and abandoned by other surgeons since his time, has been again prominently brought forward, and its performance urged on the profession as a substitute for amputation of the thigh. We are told by one writer that, "comparing the results of excision of the knee-joint with those of amputation, for disease, the per centage of successful cases is certainly in favour of the former operation. When, in addition, the numerous advantages obtained to the patient are duly weighed, few surgeons will presume to deny the vast superiority of the former proceeding over the latter." (Mr. P. C. Price, in *Medical Times and Gazette*, April 23rd, 1859, p. 415.) Another writer (Mr. Humphry of Cambridge), after detailing thirteen cases (with only one death, which occurred in his own practice), says: "The operation of excision of the knee-joint appears, from the narrative of these cases, not to be attended with much danger to life;" and in another place he says: "I think patients who have recovered from excision of the knee must be very thankful that they have not undergone amputation." (*On Excision of the Knee*, pp. 18 and 19.)

There is thus a rivalry set up between the two operations; and it might, at first sight, be expected that excision of the knee should supersede amputation of the thigh for diseases of that articulation, as excision of the elbow has superseded amputation of the arm in almost all cases of disease of the elbow-joint. That this happy result has not been obtained, in my opinion, is evident from the narrative with which I have preceded these remarks; and I propose briefly to examine the data supplied by the two writers already referred to, for the purpose

of inquiring into the results furnished by experience during the eight years that have passed since excision of the knee has been reintroduced, and showing that the two operations are hardly applicable to the same set of cases. I shall thus endeavour to prove that the boy Spight was not a proper subject for excision, and that amputation held out for him the best hopes of preserving his life.

Both Mr. Price and Mr. Humphry ask for a careful selection of cases. Mr. Price speaks of "a careful selection of cases suitable to the performance of the operation as being a point of the highest importance." (*Medical Times*, No. ccccLx, p. 416.) And Mr. Humphry says: "The success of such an operation must be very greatly dependent upon the judicious selection of cases for it" (*Op. cit.*, p. 19); and again: "The results are likely to be satisfactory in proportion as the disease for which it is performed is slight, and not in an acute form" (*Ib.*, p. 19).

This alone is enough to exclude this operation from the field of rivalry with amputation; for that proceeding is not adopted now for disease of the articulation until it is evident that the constitution is about to sink under the local disease. There is, consequently, no room for selection; nor does amputation admit of comparison with an operation which may be performed for comparatively "slight" disease. In connexion with this subject, I may notice that Mr. Price has collected 160 cases of excision performed in Great Britain and Ireland since 1850, and that the age of the oldest patient was 47; so that hitherto it has only been tried upon the young and middle aged—a circumstance of itself calculated to diminish the rate of mortality. But not even in selected cases has excision proved so safe and satisfactory as we might expect from the general statements before quoted. Mr. Price says: "It may prove either completely or partially unsuccessful. When completely unsuccessful, it is followed by death or amputation of the limb" (*Medical Times and Gazette*, April 16th, 1859, p. 386). Now, of the 160 cases he has collected, we find that it proved directly fatal in 31 instances, and that amputation had to be resorted to in other 18 cases, of which only 1 died. (The small average of deaths after secondary amputation is remarkable; and, in these days of large deductions from limited statistics, it is only wonderful that no one has been found to propose that, in all cases, excision ought to precede amputation.) We thus have 49 cases out of the 160—about 1 to 3·26—which, according to Mr. Price, were completely unsuccessful.

With regard to absolute mortality, the number of deaths was 32 out of the whole 160, or exactly 1 in 5—a result which tallies exactly with that obtained by Mr. Butcher in half the number of cases. Is this mortality greatly in favour of an operation performed on selected cases, young or middle aged, as compared with the mortality following amputation of the thigh, where there can be no such selection or limitation? Mr. Price quotes from Mr. Teale's recent memoir on *Amputation*, that "in 169 amputations of the thigh for disease in the London hospitals during three years—1854 to 1857—there occurred 38 deaths, or 1 death in 4½ cases; and in 139 amputations of the thigh for disease in provincial hospitals during the same period, there resulted 33 deaths, or about 1 death in every 4 cases" (*Medical Times and Gazette*, April 23rd, p. 415). He also quotes from Mr. Bryant, whose "statistics are drawn entirely from Guy's Hospital"—that "1 case in 5·5 was about the proportion of fatal terminations in pathological amputations. For chronic disease of the articulation, amputation was more favourable, the mortality standing at about 1 in every 7 cases." (*Ibid.*, p. 416).

Now, upon Mr. Price's own showing, and remembering the careful selection so often enjoined, it does not seem to me that there is anything very encouraging in these statistics. At the very outside, he can only claim in one set of cases a superiority of 1 per cent.; while he is obliged to admit in another set of cases, certainly as formidable as those subjected to the operation he recommends, an inferiority to the extent of 2 per cent. One point seems to be particularly deserving of notice, and that is the comparatively small number of deaths from pyæmia after excision. Of the 32 fatal cases, only 8, or 1 in 4, died of this complaint, so deadly in amputation through the shaft of the femur.

I have no statistics before me bearing precisely on this point; but I find from a quotation by Mr. Price from Mr. Bryant's excellent paper on "The Causes of Death after Amputations", that 43 per cent. of the fatal cases of amputation of the upper and lower extremities arose from this cause—nearly double the proportion of those occurring after excision. This is a circumstance (I may be permitted to observe) which strengthens the argument I endeavour to enforce, and on which I dwelt strongly when recommending amputation of the leg to be performed below or above rather than through the medullary cavities of the bone.

But, before leaving the view of this subject presented by Mr. Price, let me direct attention to the following sentence:—"Excision of this joint has oftentimes been followed with merely partial success; for, though the disease or deformity may have been removed, the patient has found his limb more or less useless as a means of progression" (*Medical Times and Gazette*, April 23rd, 1859, p. 416). The conclusion forced upon my mind by a careful examination of Mr. Price's paper is, that he is not entitled to say that excision of the knee-joint is "vastly superior" to amputation of the thigh as a remedy for cases in which "persistence in milder means would have been not only futile, but highly injudicious and unsurgical". On the contrary, we cannot but remark that, in the *first* place, the operation of excision demands a careful selection of cases; in the *second*, it presents a mortality about as great as the operation which is represented as so inferior; in the *third*, it entails in many instances the resort finally to the very measure which it is said to supersede; and, in addition to those instances of admitted "complete failure", it is acknowledged to be followed by only partial success in cases numerous enough to be classed by Mr. Price under the vague term "oftentimes". Still it may be said that the residue had a useful limb left by excision, which they would not after amputation, thereby giving to the selected cases a clear gain.

To follow up this point, we must have more particular information than can be expected from papers of the comprehensive nature of those published by Mr. Price; and I would, therefore, call attention to a most successful series of cases of excision of the knee-joint, published by Mr. Humphry of Cambridge. He has republished from the *Medico-Chirurgical Transactions* a pamphlet containing an account of thirteen cases of this excision, with only one death; and as these cases are included among those quoted by Mr. Price, an examination into their nature is not only relevant to the subject, but will assist in forming an idea of the class of cases to which this procedure is considered appropriate.

Of Mr. Humphry's first case, it is said that "the disease of the knee had passed away". The second case was one of ununited and widely separated fracture of the patella. Of the third case, we are told that "all acute symptoms had long passed away, and there was no swelling or pain". It is said of Case XII, "S. D., aged 21, a healthy person, with firm swelling of the left knee extending over the lower fourth of the femur and the upper two inches of the tibia; movements of the joint limited, and pressure upon the patella caused pain." These cases, it will, I think, be at once admitted, were not sufficiently severe for amputation to be thought of. In comparing the two operations, then, they must be left out of view. One (No. 8), a case of acute inflammation of the joint, died, leaving us eight cases. Of these, four had to suffer secondary amputation, and four made good recoveries, or were in process of doing so, after periods of convalescence varying from three to eight months. Here, however, two important inquiries suggest themselves. Would the first four cases have required to suffer amputation at all events? and would the last four have demanded the same extreme measure, but for the less severe operation by which the leg and foot were spared?

I cannot detain you by going into the merits of all these cases; but I shall content myself with quoting the symptoms and pathological appearances of one of each of these two sets of cases.

Of Case X, we are told that "B. B., aged 35, a healthy man, but of irritable temperament, was admitted in May 1859, on account of swelling of the right knee, with some crepitus perceptible during movement. The joint was stiff, weak, and ached; but the disease was not severe." So much for the symptoms. On May 15th, 1857, excision was performed. "The synovial membrane was thickened and firm. White growths, many of them polypose, covered its interior, and hung into the joint; some of them were of large size. The cartilages were generally thinner than natural; in some places they were quite removed, and in others they were perforated by small smooth circular ulcers. The bones were healthy." This case did not go on well; and on August 29th, amputation was performed. The man ultimately recovered. Would these symptoms have been considered sufficient to demand, or these pathological appearances to justify, having recourse in the first instance to amputation? I think there can only be one answer to that question.

Again, take the case (No. IX) of M. K., aged 25, "a moderately healthy man, with firm swelling of the right knee. The joint was nearly straight, and admitted of but little movement during which the bones could now and then be felt to grate upon one another. The integuments natural; the thigh rather wasted. Not much pain, but inability to bear any weight upon the limb." Excision was performed on May 15th, 1857. "The articular surfaces were to a considerable extent devoid of cartilage, and rough; and a piece of loose bone was lodged in a cavity larger than a nutshell in the inner part of the head of the tibia." The case did well. In September he went home. On March 6th, he could walk firmly, though the sinuses were not quite closed (p. 13). Would amputation have been performed for symptoms so little severe as those recorded in this case? Would the pathological appearances (even with the piece of loose bone) have sanctioned it? I think not. Therefore, not only has excision been performed in cases which were not sufficiently severe to demand amputation, but the consequences of its employment have necessitated amputation in cases which might not otherwise have required it.

Before quitting Mr. Humphry, I would wish to do justice to the moderate and philosophical deductions which he draws from his cases. In synovial degeneration of the knee-joint, he thinks the results of excision "are not likely to be favourable". In cases where the number and locality of the sinuses, and the enlargement of the articular ends, "render it probable that ulceration has extended far into the osseous structure", he does not recommend it. Now, these are the very cases for which nine-tenths of the amputations of the thigh for diseased knee-joint are performed. Mr. Humphry considers that excision may be performed with the best chances of success in cases where, the disease having passed away, the joint is left "crippled, contracted, and useless"; in certain exceptional cases, as unreduced dislocation, etc. Mr. Humphry also recommends it (and his opinion is well worthy of careful attention) "in some cases of wound into the knee-joint", where he would advise its immediate performance, without waiting for the onset of inflammation, which "is so often destructive to the limb or the life of the patient". But there is another class of cases for which Mr. Humphry recommends it, and for which it is of the greatest practical importance to determine its utility; viz., cases in which synovial degeneration or ulceration of the bones and cartilages has existed for some time, but has not arrived at the last stage. The question here is not between excision and amputation, but whether these cases are to be treated by rest, pressure, wine, and tonics, until they are cured, on the one hand, or demand amputation, on the other; or whether we ought to interfere at an earlier period, to excise the joint. Mr. Humphry's impression is, "that a really serviceable joint is very rarely preserved when the duration, the severity, and the starting character of the pain, the wasting of the limb, and the inability of the patient to lift the heel from the bed, indicate that the cartilages have been ulcerated, and more or less detached from the bone"; and he thinks that, "in the greater number of such instances, excision should be practised". To this ground, then, does the question narrow itself; and, no doubt, different views will continue to be taken, and different modes of practice adopted, until experience has decided the point. I must say that, in spite of my reluctance to differ from so sound a surgeon as Mr. Humphry, I do think that many joints recover, and become exceedingly useful, after disease has progressed further than he speaks of in the passage quoted above; and that there is evidence even from the cases he publishes that excision may lead to amputation in cases where, had the first operation not been performed, the second might never have been required. My object, however, at present, is not so much to enter into these speculations, as to endeavour to clear the ground as to the class of cases in which excision is recommended by its moderate and consistent advocates.

If they can show that in crippled and deformed joints, and in certain cases of injuries, its performance is unattended with danger, its utility so far will be readily admitted; but in those cases where disease is still progressing, but not sufficiently pronounced to warrant amputation, greater caution is required. Limbs may have been saved by a timely recourse to excision, which would have otherwise demanded amputation; but others have been lost through excision and amputation, which, but for the former operation, might have gone on to a cure. Nor do I see that any distinct rule can at present be laid down: much must be left to the judgment of the surgeon in each individual case. It must be remembered that the powers of nature have often been found sufficient, even at the last moment, to effect a cure: nor must we too readily, even at the wish of our patients, subject them to an operation which (according to Mr. Price's very careful and extensive statistics) completely fails in 1 case to every 3¼ for diseases which, with greater time and patience, might lead to a successful natural issue.

To return to the boy Spight, it is clear that his was not a case in which excision was likely to be successful. Not only was the whole apparatus of the joint involved in disease, but the shaft of the bone was swollen, and its medullary cavity was the seat of strumous deposit. Large abscesses of the soft parts were found throughout the whole of the lower part of the thigh; and his could not be called "a selected case".

I hope, therefore, that in performing amputation in place of excision, I have shown myself to have been actuated by no indisposition to adopt modern improvements, whether original or resuscitations of the past; and I trust I have convinced you (as, after careful consideration, I have fully satisfied myself) that, whatever may be thought of the advantages which excision is represented as presenting in certain cases, there is, in such cases as Spight's, where the disease is so extensive, and the constitution so ready to give way, no remedy short of amputation of the thigh.

British Medical Journal.

SATURDAY, JULY 16TH, 1859.

WHO WILL SIGN CERTIFICATES OF LUNACY?

The trial Fletcher *versus* Fletcher, in the Court of Queen's Bench last week, will afford another argument for those gentlemen who labour so indefatigably, and at the same time so insidiously, to destroy private lunatic asylums in this country. It has long been the opinion of a few extreme partisans on this question, that it is quite possible—nay, that it is an every-day occurrence—to deprive sane people of their liberty, by immuring them in private asylums. This opinion has been as resolutely denied by those who take a higher view of the medical character, and believe that certificates against a sane man could not by possibility be obtained. The case of Mr. Ruck, lately before the public, in the opinion of the opponents of private asylums, strongly tended to confirm their views; and we fear the case Fletcher *versus* Fletcher will, in their opinion, be "confirmation clear as Holy Writ". The jury have declared that Mr. Fletcher, the plaintiff in this case, was perfectly sane when he was carried away to Dr. Wood's asylum; and the judge, Lord Chief Justice Cockburn, went out of his way to tell the jury that there could be no question of the sanity of Mr. Fletcher, and therefore of the illegality of the detention. The *Dispatch* heads an article upon the subject, "False Imprisonment in a Lunatic Asylum"; and all the cheap papers throughout the country are open-mouthed in denouncing once more the iniquity of confining a man in a mad-house on the mere certificate of a couple of surgeons.

Since judge and jury have pronounced Mr. Fletcher to be perfectly sane, of course we do not feel justified in saying anything to the contrary. We may observe, however, that that gentleman's antecedents were certainly calculated to lead to the suspicion that he was not capable of taking care of himself. Be that as it may, however, what we wish to draw attention to is the very difficult position in which a medical man may sometimes find himself placed—and especially since the issue of this trial—relative to the advisability

of signing a certificate of lunacy. It is continually occurring to gentlemen practising in lunacy, to have presented to their notice patients suffering under an exalted state of the passions and sentiments, which, to all intents and purposes, unfits them for the proper discharge of their duties towards themselves or society. Yet there will be no positive hallucination of any kind; the ordinary feelings, appetites, and tastes, are simply exaggerated; and that is all that can be said about them. There can be little doubt that the possession of such a state of mind is calculated to do very much harm to its possessor and to his friends; nay, in all cases that we have ever observed, it has led to very great misery, and but too often to the complete ruin of the individual and those belonging to him.

In the mind of no well informed medical man there could be any difficulty as to the advisability of preventing such a person from running a career, the end of which is an abyss; and the signing a certificate, which would subject his will to that of more healthy ones, would be as much justified, in our opinion, as would the application of leeches to an inflamed surface. We have seen enough of late, however, to satisfy us that a medical man so acting, would do so at his peril. Lunatics find it easy, sailing with the stream, to bring their actions, and in no such case would such a certificate stand before the cunning of counsel. If the patient, by his reckless expenditure of money, had ruined his family, it would be urged that it was common for youth to be prodigal; if, in an outbreak of passion, he had assaulted those nearest and dearest to him, the hot blood of youth should again be taken into account. If he was in the habit of rousing up his whole household at three o'clock in the morning, it would be urged in his defence, that some persons liked early rising. If he habitually magnified every transaction of his life, why some persons were naturally boastful. Every one practising in lunacy must be familiar with cases in which patients have shown the grossest absurdities in a dozen such points as those mentioned; yet, before a jury, these may all be made to appear quite harmless traits of character, to be met with every day in the undoubtedly sane. The jury would, we believe, invariably give their judgment adversely to the medical man signing a certificate in such a case, and he would necessarily suffer grievous injury in consequence.

We believe that hundreds of insane persons of the most mischievous character—most mischievous, because their unsoundness of mind runs on sound tracks, and is therefore less likely to be guarded against—will, in consequence of the known tendencies of juries in such cases to "cast the mad doctors," be allowed to run their lamentable course, and to spread misery and anguish around them.

Such is the moral we draw from the course lately taken in trials of this nature; and we ask if it is fair or just that alienist physicians should have to perform their duty with fear and trembling, not knowing but that the best judgment they may be able to bring to a very intricate case may end in their complete ruin, both pecuniary and professional? Lord Shaftesbury has taken the part of the Alleged Lunatics' Friends Society but too well; and he should now exert some portion of his philanthropy for the much abused and mistrusted alienist physician.

THE WEEK.

The *Medical Register* for this year has just appeared, in the form of a crown quarto volume of 335 pages; it is published at the price of seven shillings and sixpence. As preliminary matter are prefixed a statement of the Fees for Registration, a List of the General Council of Medical Education and Registration; some Explanatory Remarks by the Registrar, Dr. Hawkins; a copy of the Medical Act and of its Amendment Act; and a Table of Abbreviations. The names are arranged in alphabetical order in four columns; the first of which contains the date of registration, the second the name, the third the residence, and the fourth the qualification of the registered person. There is but one list for practitioners in the several divisions of the United Kingdom. As nearly as we can calculate, the number of names on the register amounts to nearly fifteen thousand.

On Friday week, John Nicholl Watters and Claude Edwards were tried at the Central Criminal Court, on the charge of obtaining money by false pretences, and of conspiring to defraud certain persons. The nature of the evidence brought against them is already known to our readers. They were at once found guilty, and sentenced each to eighteen months imprisonment. It was stated that Watters had, above twenty years ago, been charged with arson, and had suffered six months imprisonment for making a false return to a surgeon's certificate.

The trial of Thomas Smethurst, for the murder of Isabella Bankes by poison, commenced on Thursday week, but was suspended on the following day in consequence of the sudden illness of one of the jurors, and is not likely to be resumed for several weeks. It would be improper in us at present to make any comments on the case; and we now mention it merely with the object of earnestly requesting our readers to withhold their judgment as to the guilt or innocence of the accused until the whole of the evidence has been laid before the public. Under any circumstances presenting general characters of a similar nature, we should counsel this suspension of opinion; but on the present occasion we find additional reason for it, in two circumstances which have struck us in reading the history of the partial trial in connexion with the evidence given at the examination of Smethurst before the Richmond magistrates and at the coroner's inquest. In the first place, it will be remembered that, at the preliminary examination of the accused, Dr. Taylor stated that, in a bottle which had been in the possession of the prisoner, he had found a solution containing seven grains of chlorate of potash and one grain of arsenic in each ounce of water. But Mr. Serjeant Ballantine, in his opening address for the prosecution, refers (evidently speaking of the same bottle) to "a pure white mixture, which was composed of chlorate of potash and water. It was", he said, "a pleasant saline draught, and would relieve the symptoms in the throat that would be caused by arsenic." Now, the question unavoidably arises, What has become of the arsenic which was stated to exist in the mixture? Another important fact, which came out in the cross-examination of Dr. Julius at the Central Criminal Court, is that the deceased was in an early stage of pregnancy. The question which arises therefrom is—May it

not be possible on this ground to account for the vomiting, and even for the diarrhœa and the dysenteric symptoms? The experience of many of our associates will doubtless have shown them with what severity and danger the disturbances of the digestive canal in pregnant females are sometimes attended. On the other hand, the detection of arsenic by Dr. Taylor in one of the evacuations, and other circumstances pointing to the presence of an irritant poison, remain to be accounted for. It is, then, evidently impossible at present to arrive at any just conclusion regarding the merits of the case; and we therefore once again beg that no conclusions may be derived from that portion of the evidence which has been published.

The annual celebration of "Founder's Day" at the Royal Medical Benevolent College took place on Thursday, July 7th, when the prizes were distributed to the pupils of the school by the Lord Bishop of Bath and Wells, in the presence of a number of persons connected with the College, together with parents and friends of the pupils. The boys, after receiving prizes, were addressed in words of good advice by his lordship; and, after some votes of thanks, the proceedings terminated with a dinner, at which about one hundred and fifty sat down. The entire operations of the day were of the most satisfactory nature.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.

President-Elect—James R. W. Vose, M.D., Liverpool.

The Meetings of the Association will take place at the Medical Institution, Mount Pleasant.

The following is an outline of the proceedings. A more complete programme will be issued at Liverpool.

Wednesday, *July 27th.*

11.30 a.m. Meeting of Committee on Medical Legislation in the Committee Room.

1 p.m. Meeting of Committee of Council in the same Room.

2.30 p.m. Meeting of General Council of the Association in the small Theatre.

7 p.m. First General Meeting of the Association in the large Theatre. The retiring President will make a few remarks. The new President will deliver an Address. The Report of Council will be presented, and other business transacted.

Thursday, *July 28th.*

8.30 a.m. Public Breakfast at the Adelphi Hotel. Tickets 2*s.* 6*d.* each.

10 a.m. Meeting of the Members of the new Council in the small Theatre.

11 a.m. Second General Meeting of Members. The Address in Medicine will be delivered by Dr. E. Waters of Chester. Cases and Papers will be read.

The meeting will adjourn at 1, and reassemble at 2 p.m.

2 p.m. The Report of the Benevolent Fund will be received. Cases and Papers will be read. The meeting will adjourn at 5.

8.30 p.m. *Soirée* at the Royal Institution, Colquitt Street. The Royal Institution, the Gallery of Arts, containing a fine collection of paintings, and the Museum of applied Sciences will be thrown open. During the evening some interesting electrical phenomena will be illustrated by J. Baker Edwards, Ph.D.

Friday, *July 29th.*

11 a.m. Third General Meeting of Members. The Address in Physiology will be delivered by A. T. H. Waters, Esq., of Liverpool. Papers and Cases will be read.

3.30 p.m. A Steamer will leave the North Landing Stage to convey the Members along the Docks, and round the Line of Battle Ships stationed in the river, to return at Five p.m.

6 p.m. Dinner. Tickets a Guinea each.

Gentlemen intending to be present at the Dinner, are requested to send notice to the Honorary Secretary of the Committee, A. T. H. Waters, Esq., 27 *Hope Street, Liverpool, on or before Friday next, the 22nd instant. This arrangement is absolutely necessary, as local circumstances render it impossible for the Committee to provide accommodation for more than a given number. Numerous applications for tickets have already been received*

Members are requested to enter, on arrival, their names and addresses in the Reception Room in the Medical Institution, Mount Pleasant, where all the meetings will take place, and where cards will be supplied which will secure admission to all the proceedings, and contain such information as may be useful to those who are strangers to the town.

Members who wish for previous information may communicate with the Honorary Secretary, as above.

It is particularly requested that all Members who propose to read Papers will communicate with the General Secretary without delay. Arrangements will be made for the Sectional Reading of Papers, if a sufficient number be promised to render such a plan desirable.

Among the principal Hotels are:—the Adelphi, Ranelagh Place; the Waterloo, Ranelagh Street; the Angel, Dale Street; the Feathers, Clayton Square; the George, Dale Street; the Grecian, Dale Street; the Neptune, Clayton Square; the Queen's, Lime Street; the Royal, Moorfields; the Stork, Queen's Square; the Union, Parker Street; the Victoria, St. John's Lane; the Wellington, Dale Street.

The Reception Committee have made arrangements for securing the admission of members attending the meeting to the various places of interest in the town.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 30th, 1859.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [Annual Meeting.]	32a, George Street, Hanover Square.	Tuesday, July 19th, 8 p.m.
North Wales. [Annual Meeting.]	Royal Hotel, Rhyl.	Tues., July 19th, 1 p.m.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

ALTERATION OF LAWS.

The following alteration in the wording of Law 25 will be proposed at the annual meeting:—

Instead of "any twenty members may unite," etc., read "any number of members may unite; but that no Branch consisting of less than twenty members shall have the privilege of sending a representative to the Council."

Philip H. Williams, M.D., *General Secretary.*

Worcester, July 1859.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

MIDLAND BRANCH: ANNUAL MEETING.

The annual meeting of the Midland Branch took place at Derby, in the Board-Room of the Infirmary, on Thursday, June 23rd, when the following members were present:—J. Whitaker Johnson, Esq., President, in the Chair; J. W. Baker, Esq. (Derby); A. Cooper, Esq. (Leicester); G. A. Cope, Esq. (Etwall); S. H. Evans, Esq. (Derby); S. W. Fearn, Esq. (Derby); J. T. Featherstone, Esq. (Butterley); H. F. Gisborne, Esq. (Derby); H. Goode, M.B. and L.M. (Derby); C. Harwood, M.D. (Derby); J. Heygate, M.D., F.R.S. (Derby); J. Hitchman, M.D. (Mickleover); W. Hollis, Esq. (Alvaston); J. Jones, Esq., (Derby); T. Macaulay, Esq. (Leicester); E. Morris, M.D. (Spalding); G. B. Norman, Esq. (Ilkeston); T. Paget, Esq. (Leicester); G. Shaw, M.D. (Leicester); H. W. Watson, M.D. (Derby); and W. Webb, M.D. (Wirksworth).

The ex-President of the Branch, Dr. Morris, having vacated the chair, his successor, J. W. Johnson, Esq., read an address alluding to the general steps of progress in medicine and surgery; after which, a report of the Local Council was presented and read by Dr. Morris, from which it appears that this Branch still continues in a flourishing state, though there are many practitioners whom it does not include in its ranks.

ANNUAL MEETING IN 1860: ELECTION OF OFFICERS.

The next annual meeting was fixed to take place at Nottingham, and G. Eaton Stanger, Esq., was proposed as President-elect for the ensuing year.

The Local Secretaries for the different counties composing the Branch were re-appointed; and the members of the General Council were re-elected.

PAPERS AND COMMUNICATIONS.

Several interesting and instructive papers were read; and cases showing the results of operations were exhibited.

1. On Retention of Urine: Puncture of Bladder, and Perinæal Section. By Thomas Paget, Esq. [This paper was published in the Journal for July 2nd.]

2. Case of Pneumothorax with Paracentesis. By S. H. Evans, Esq. [This paper has been received for publication.]

3. Wound of the Cornea, Sclerotic, and Iris; from which an Iron Screw was subsequently extracted. By J. W. Baker, Esq. [This paper has been received for publication.]

4. Two Cases, illustrative of Syme's Amputation at the Ankle-Joint, were exhibited by T. Macaulay, Esq.

5. A case in which Removal of the Left Upper Maxillary Bone had been performed, was exhibited by S. W. Fearn, Esq.

All of these papers and cases excited a good deal of animated discussion among the members and their friends who were present; and, after the usual votes of thanks, an adjournment took place to the Royal Hotel, to take part in the customary social dinner, which terminated the proceedings.

YORKSHIRE BRANCH: ANNUAL MEETING.

The Annual Meeting of the Yorkshire Branch was held in the Museum of the Yorkshire Philosophical Society, at York, on Thursday, June 30th; the Lord Mayor (W. D. Husband, Esq.), President, in the Chair. There were also present: J. Allen, Esq. (York); James Beaumont, Esq. (Wetherby); C. Chadwick, M.D. (Leeds); B. Dodsworth, Esq. (York); J. P. Garlick, Esq. (Leeds); H. Hare, Esq. (Cawood); R. Hey, Esq. (York); F. Hey, Esq. (Leeds); R. S. Hanbury, M.D. (2nd West York Militia); T. Hornby, Esq. (Pocklington); H. Jackson, Esq. (Sheffield); G. Kennion, M.D. (Harrogate); H. Keyworth, Esq. (York); Wm. Matterson, Esq. (York); J. Ness, Esq. (Helmsley); S. W. North, Esq. (York); James Paley, Esq. (York); T. C. Paley, Esq. (York); T. Simpson, M.D. (York); W. E. Swaine, M.D. (York); G. Shann, M.D. (York); T. P. Teale, Esq. (Leeds); C. Williams, M.D. (York); J. Watmough, M.D. (Pocklington); J. Wightman, Esq. (York).

The retiring President, J. P. Garlick, Esq., after a short address, resigned the chair to the President-elect, W. D. Husband, Esq., who addressed the meeting, and then called upon the Secretary to read the Report of Council.

REPORT OF COUNCIL.

"Your Council have great pleasure in meeting their fellow-members of the Yorkshire Branch of the British Medical Association at this their annual meeting; and they would, in the first place, most sincerely congratulate them on the question of medical reform being for a time settled, and express a hope that the time so necessarily spent in discussing that important, though somewhat tedious subject, may now be devoted more pleasantly to a free interchange of opinion on some of the difficult problems of medicine and surgery; that thus a greater scientific value may be imparted to these meetings, a greater intellectual treat enjoyed by our members, our noble science further developed and advanced, and our fellow-creatures in like proportion benefited.

"Your Council, in alluding to the new Medical Act, would express its approval of the most important feature of it, viz., the registration of the qualified members of our profession. They would here recall your attention to the special general meeting which they felt it their duty to convene in January last, for the purpose of considering if any, and what, means could be taken to secure efficient registration. At that meeting, as you are aware, certain resolutions were passed, which were forwarded by your Secretary to every qualified practitioner residing within the district of our Branch, and his co-operation earnestly solicited. In reply, your Secretary was furnished with the names of many persons practising illegally, and who were likely to apply to be registered. These names were regularly forwarded to the Registrar, with a request that, in case such persons should apply to be placed on the register, he would adopt every precaution to obviate fraud, and to prevent their obtaining their certificates falsely.

"Your Council deeply regret to find that one individual in this district, who possesses no legal qualification, has been placed on the register, notwithstanding a communication from your Secretary to the Registrar, informing him that such an individual was likely to make application to be placed on the register, and that he had no legal right.

"The following note, received from the Registrar, states (much to the surprise of your Council) that this extraordinary proceeding was ordered by the Medical Council.

"'Medical Registration Office, June 28th, 1859.

"'Sir,—I have seen your letter to Sir B. Brodie, and beg to assure you that, by desire of the Council, I wrote both to the Poor-law Board and to the Guardians, and learned from both that Mr. Richard Organ had a Poor-law medical appointment. This seemed to leave to the Council no option but to order him to be registered. "'I am, sir, yours faithfully,

"'Francis Hawkins.'

"Your Council feel it their duty to call your especial attention to the reasons assigned by the Medical Council for ordering his name to be placed on the register; as, if the principle be permitted, that an unqualified man is to be allowed to register merely because he holds a Poor-law medical appointment, and has been strongly recommended by the Guardians, all protection to the qualified medical practitioner will be virtually destroyed, and the intention of a published register of the profession entirely frustrated.

"Your Council hope that some expression of opinion will be forwarded to the Central Council of the Association from this meeting; and that some steps shall be taken to alter the provisions of the Act, if it shall be found to sanction the registration of unqualified persons, as in the case submitted to you.

"Your Council have only, in conclusion, to express a hope that these reunions may long continue to bring together the medical practitioners of Yorkshire, and thus promote not only the scientific interests of medicine, but also the cultivation of those professional friendships which tend so much to alleviate the labours of professional life."

After the reading of the Report, the President and other members expressed their astonishment at the order of the Medical Council, and protested against such extraordinary proceedings as the note from the Registrar seemed to reveal.

Mr. T. P. Teale (a member of the Medical Council) explained that, according to the reading of the new Medical Act by a high legal authority, the Council could be compelled by mandamus to order the registration of all persons holding *public appointments;* and that, however unwilling the Medical Council might be, they had evidently no alternative but to carry out the law as it stood.

Dr. Chadwick and several other of the members present contended that the Medical Council ought not to have been satisfied with any such interpretation of the Act, but, in case of a mandamus, to have tried the question fairly before the Court of Queen's Bench.

After much discussion, Mr. S. Hey proposed, Dr. Kennion seconded, and it was resolved—

"That the Council of this Branch be requested to obtain more complete information respecting the reasons which have induced the Medical Council to order the registration of Mr. R.

Organ, and to take such steps as may then seem to the Council best suited to obtain redress."

BRANCH COUNCIL FOR 1859-60.

Mr. J. Paley proposed, Mr. S. Hey seconded, and it was resolved—

"That the following gentlemen form the Branch Council for the ensuing year:—The President; T. Simpson, M.D.; W. E. Swaine, M.D.; G. Shann, M.D.; C. Williams, M.D.; James Allen, Esq.; B. Dodsworth, Esq.; R. Hey, Esq.; and Wm. Matterson, Esq. (York); C. Chadwick, M.D.; J. P. Garlick, Esq.; W. Hey, Esq.; T. Nunneley, Esq.; S. Smith, Esq.; and T. P. Teale, Esq. (Leeds); F. Branson, M.D.; H. Jackson, Esq.; W. Jackson, Esq.; and G. Reedal, Esq. (Sheffield); J. Ness, Esq. (Helmsley); H. Y. Whitehead, M.D. (Crayke); and Dr. Sandwith (Beverley)."

REPRESENTATIVES IN THE GENERAL COUNCIL.

The following were elected:—W. D. Husband, Esq. (York); C. Chadwick, M.D.; J. P. Garlick, Esq; W. Hey, Esq.; and T. Nunneley, Esq. (Leeds); W. Jackson, Esq.; and G. Reedal, Esq. (Sheffield); and H. Y. Whytehead, M.D. (Crayke).

PLACE OF MEETING FOR NEXT YEAR.

Mr. H. Jackson proposed, and it was resolved—

"That the next place of meeting be Sheffield; and that Wm. Farrell, Esq., be the President-elect."

Dr. Kennion hoped that the Branch would hold its annual meeting at Harrogate in 1861, and directed the attention of the members to the desirableness of changing the place of meeting from time to time.

VOTE OF THANKS.

Mr. Teale proposed a vote of thanks to the retiring President, J. P. Garlick, Esq.

The President proposed that the Secretary be re-elected.

COMMUNICATION.

Mr. S. Hey then showed a very interesting specimen of bone to the meeting, and made some valuable observations on Spontaneous Fracture from Osteoporosis.

After a vote of thanks to Mr. Hey, the meeting broke up.

The members and their friends afterwards dined together at the Royal Station Hotel.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 14th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

AN INQUIRY INTO THE NATURE OF THOSE CASES OF STRANGULATED OBLIQUE INGUINAL HERNIA, TERMED "REDUCTION EN BLOC OU EN MASSE". WITH SPECIAL RELATION TO THE ANATOMY OF THE ACTUAL LESION, AND PRACTICAL DEDUCTIONS DERIVED FROM AN EXAMINATION OF THE CASES.

BY JOHN BIRKETT, ESQ.

The term *réduction en bloc ou en masse*, had been given by writers on hernia to those cases in which the hernial protrusion, together with its investing sac, has been pushed into the abdomen by the efforts made to reduce it. The principle was first enunciated by Le Dran, and since then it has been generally accepted as occasionally occurring in all forms of hernia. The object of this inquiry was to ascertain—

1. The applicability of the term to inguino-scrotal hernia exclusively; 2. The actual nature of the lesion; 3. The herniæ in which it most commonly occurs; and, 4. The practical inferences deducible from the cases on record.

The cases published by various surgeons were divisible into two classes:—1. Those in which the patient died without the strangulated bowel being relieved; 2. Those in which the constriction around the bowel was removed.

A brief history of some of the cases was given, to show the advance made in the science of the anatomy of the hernial sac, the causes of the impediment to the reduction of the hernia, and the way in which this accident was discovered. The lesion described in these cases was of three kinds:—1. When the hernia was pushed out of sight, and was found after death between the peritoneum and the abdominal walls; 2. When the hernia was found after death in a pouch within the abdominal walls; 3. When the orifice of the hernial sac had been torn off.

From the facts recorded by the various writers, the following conclusions were deduced;—

1. Although the hernial sac is *displaced*, it is not detached from its scrotal envelopes.

2. The practicability of opening the hernial sac in the inguinal canal is good evidence that it was not pushed into the abdomen.

3. The difficulty in bringing out the sac containing the hernia from the abdomen, when it is said to be therein, is evidence that its connexions must be more firm in that region than would result from the mere pushing there.

4. The situation of the hernia has been pointed out in some cases, although the exact nature of the lesion has not been fully described.

5. The details of the cases are not in accordance with the presumed or accepted conditions of the accident.

6. The evidence of the practicability of the patient, or a surgeon, reducing into the abdomen a *scrotal hernia*, together *with the sac* still strangulating its contents, is, at the present moment, equivocal.

7. And, therefore, the term *réduction en bloc ou en masse* is not so applicable to these cases of oblique inguino-scrotal hernia as to other species.

The author's explanation of the mechanism of the injury was next detailed, with the assistance of diagrams, and a few definitions of the parts immediately concerned were given. The mechanism of the lesion seems, first, to consist of a dilatation of the neck of the hernial sac by the force employed to reduce the hernia, which is prevented passing into the peritoneal cavity by the contracted orifice of the sac; secondly, of the laceration of the dilated neck of the sac, which permits the escape of its contents into the loose connective tissue betweeen the peritoneum and internal abdominal fascia. Explanations were next offered of the manner in which the intra-abdominal pouch might sometimes be formed; although, from the extreme rareness of the occurrence, the fact of this slow development was very questionable.

The third part was devoted to an analysis of the cases recorded by numerous writers, and which the author reduced to the form of tables. These tables accompanied the paper. The following facts were especially considered:—

1. The age of the patient when the accident happened. It may occur at any age between ten and thirty; but it has been most frequent between thirty and forty years of age. 2. The age of the patient at the time the hernia was developed. In a large proportion the hernia was developed before thirty years of age. 3. The variety of inguinal hernia. All were *oblique* inguinal, a very large majority being in the scrotum. Those cases of hernia in which the protrusion passed into the vaginal process of the peritoneum constituted a majority. The importance of this circumstance was demonstrated, and an anatomical comparison was instituted between these cases and those inguinal herniæ of slow and gradual formation. 4. The site of the testis varied in several cases; this was an important fact to remember. 5. The protruded viscus was either reducible intestine only, or intestine with irreducible omentum; but, in the majority of the cases, reducible intestine, and that generally ileum, formed the hernia. 6. It appeared that this complication had occurred in cases of quite recent hernia, as well as in those of long standing. 7. The local means by which the hernia was pushed from the scrotum were employed in some cases by the sufferer; in others, by the surgeon; and in some, whilst the patient was under those influences which are employed to diminish muscular tonicity, especially chloroform. 8. In the majority of the cases there had been a local indication that the hernia was not returned into the peritoneal cavity. In all, constitutional symptoms had clearly demonstrated the fact.

In the fourth part, the practical deductions from the foregoing facts and observations were stated. They referred, first, to the diagnostication of the case; and, secondly, to its treatment. The diagnostication might be formed from the age of the patient; the age at which the hernia was developed; the variety of the hernia; its descent into the vaginal process of the peritoneum; the site of the testis; the viscera constituting the hernia; a disposition to the recurrence of the hernia after it is supposed to be reduced; the disappearance of the hernia after the application of the taxis, accompanied by persistent constitutional indications of strangulated intestine; and local indications more or less distinctly marked. The treatment consisted in immediately exploring the inguinal canal in every case in which the slightest suspicion of this accident existed; in freely exposing the internal abdominal ring; and, whilst

returning the protrusion into the peritoneal cavity, in taking great care that a part of it did not glide through the laceration in the sac outside the peritoneum. Preparations and drawings were exhibited.

Mr. Wade remarked that the great difficulty in cases of internal strangulation was the diagnosis. Although, when hernia was present, there might be less difficulty than without such complication; yet, even then, the diagnosis was not always very easy. He mentioned a case which had occurred to him some length of time ago, an abstract of which had been read before this Society. The patient was an old man, seventy-five years of age, who had been the subject of double inguinal hernia for thirty years, which had been kept up by a double truss. The only symptom of internal strangulation, in that case, was stercoraceous vomiting. There was no tenderness on pressure in any part of the abdominal region, nor could anything like a deep-seated tumour be detected in the neighbourhood of either of the inguinal rings. The morning before he (Mr. Wade) saw the patient, the latter, when getting out of bed, had felt a slight momentary darting pain in the right groin, since which time his bowels had not acted. As the patient, on the following day, was much prostrated, and there had been no action of his bowels, he opened freely the abdominal ring on the right side, by a free division of the tendon of the external oblique muscle. The sac was then opened, and a small knuckle of intestine, red from congestion, was observed. The neck of the sac, much thickened, which formed the obstruction, just within reach of the finger, tightly embracing the intestine, was divided by a probe-pointed bistoury. The bowels acted on the following day, and the man slowly, but completely, recovered. It will be seen that the principal difficulty in this case was in discovering on which side the strangulation existed.

Mr. Arnott, about two years ago, had a case of *réduction en masse* under his care, and it appeared to him to be similar to that which Mr. Birkett had represented as an imaginary case. He was summoned by another surgeon to a patient of his, suffering from strangulated hernia; but when he arrived it was reported to him that a short time previously reduction had been effected. There was certainly now no tumour in the left inguinal region, nor in the scrotum; but on putting his hand on the abdomen, a little above Poupart's ligament, he felt a sensation of thickening, which induced him to believe that there was something peculiar in the case, and he accordingly requested that, if the symptoms continued, he should be sent for again. In the course of five or six hours, he received a message that the symptoms were getting worse. The history of the case was this: The patient, a man of forty, at the age of five had a hernia in the right side, for which he wore a truss; and, at the age of sixteen, another appeared on the left side, for which he never wore a truss. This occasionally came down, and he was in the habit of putting it up. During the previous night it came down and he was unable to replace it. His medical attendant was sent for, and attempted to reduce it; but failed. The symptoms of strangulated hernia continuing, an attempt was again made, and apparently succeeded; for, as has been stated, on the left side there was now nothing in the scrotum, nor in the inguinal canal; and only a certain feeling of induration, or resistance, in the abdomen, corresponding to the internal abdominal ring. This led him (Mr. Arnott) to operate. On exposing the external abdominal ring, nothing was found in it but the cord; but on passing his finger into the inguinal canal, he felt, at some distance, something that seemed to strike against it. Clearing away a little cellular substance, he thought he might get hold of this by the forceps, and pull it down; but he failed. He then slit up the tendon of the external oblique through its whole extent, where it forms the anterior parietes of the canal, and even then it was with some difficulty that he could get at and open the sac, which was extremely tense, and from which an unusually large quantity of serum was evacuated. On passing the finger into the sac, the seat of stricture was so deep that he could scarcely reach it, and he requested Mr. Shaw, (who, with Mr. Sibley, assisted him) to lay hold of its edges with the forceps, and try to pull it down; but without success. By drawing, however, on the strangulated loop of bowel, the sac became partially inverted, like the finger of a glove, and the strictured part was brought into view. This was divided upon a director, and the intestine returned into the peritoneal cavity. The hernia, in this case, presented the circumstances which the author of this paper had supposed to be imaginary; the sac of the reduced hernia occupying the situation represented in the diagram, No. 2 (between the internal spermatic fascia and peritoneum); not that he meant to say that the large quantity of fluid had been pushed up bodily; but that the hernia, having been reduced when it was smaller, had enlarged from the secretion of serum continuing and accumulating in the sac. The patient recovered. He (Mr. Arnott) was persuaded that if in every instance of *réduction en masse* it was expected that a portion of the sac would be found in the external ring, such expectation would not be realized. The subject required still farther investigation.

Mr. Hulke had lately seen the *post mortem* examination of a case, the exact counterpart of that which Mr. Birkett considered to be an imaginary one; where the hernia appeared to be reduced; but was, in reality, situated between the fascia transversalis and the peritoneum.

Mr. Moore had seen two cases in which, after the hernia had been reduced, the sac was exceedingly tense. He did not recollect whether there was any prolongation of the sac down to the scrotum; but if, as Mr. Birkett supposed, the sac contained fluid, he could not see how it should be perfectly empty in the scrotum, and so tight within the abdominal muscles. It would be impossible that there should be an indication of a sac before the operation in the scrotum, if it were so tense as he found it in the two cases in question.

Mr. Birkett, in reply, said that, in the case mentioned by Mr. Arnott, he believed that gentleman himself was not quite certain whether it was a case of scrotal hernia. He (Mr. Birkett) was led to a consideration of the subject, from the fact of one of the students of the hospital asking him to explain the circumstances attending *réduction en bloc*. In endeavouring to give the explanation, the student asked, "Do you mean to say that you can detach the whole of the hernial sac from the scrotum, and press it through the inguinal canal within the abdominal walls?" That certainly rather staggered him, and he proceeded to examine the cases on record. He found that in many, the surgeons described the opening of the hernial sac in the scrotum, or in the inguinal canal, after having stated that it was pressed back into the abdomen, so that it was clear there was some discrepancy between the fact and the general statement of the case. Then there were one or two cases on record, in which the hernia was, no doubt, inguinal; and was pushed within the internal abdominal walls; but they were not cases of scrotal hernia. He then examined the precise nature of the cases in which the accident happened, and found that it occurred in by far the majority of those cases which offered the greatest amount of difficulty to the reduction of the hernial sac out of the scrotum into the abdomen. Most of the cases to be found in the paper were of the form known as congenital, or of hernia into the vaginal process of the peritoneum, in which, if the hernial sac had been returned into the abdomen, the testicle and all must have been pressed back. He believed Mr. Arnott's case to be one of hernia into the vaginal process of the peritoneum; and supposing it to have descended into the scrotum, of which Mr. Arnott was not certain, it would be difficult to detach the hernial sac from its scrotal connection, and push it through the abdominal ring into the abdomen. He had, in the paper, entered at length into the subject of diagnosis, and had drawn especial attention to the fact of not depending upon the total want of all local indication of hernia; for in the large majority of cases recorded, there were marked indications of its existence; more or less fulness in the inguinal canal, thickening about the internal abdominal ring, pain on pressure, and the like.

Editor's Letter Box.

MEDICO-ETHICAL SECTIONS IN THE BRANCHES.

Letter from Richard Flint, Esq.

Sir,—Your sensible and judicious remarks in two recent numbers of the Journal, on the union of local medical societies with the branches, must have forcibly convinced your readers of the desirableness of such a connection. Besides the consideration of expense, the plan avoids those intrinsic weaknesses of most local or town associations—local jealousies and rivalries, and saves materially that first treasure to a medical man—his time: for we all know that where the claims of medical practice are nearly incessant, the leisure for many meetings is difficult to obtain. It is evident also, that such amalgamations would increase the amount and lead to more condensation of valuable matter. I wish our own profession, as well as other sections of the community, felt more of the

necessity and value of condensation in what is said and written.

My present purpose, however, is to revive the attention of the association to the importance of every branch having its "medico-ethical section." This recommendation was coeval with the formation of the first "ethical committee" by the Provincial Medical and Surgical Association at Worcester. But the attention and energies of the body were then, and have since been so absorbed by the "Medical Bill," that this, with other important subjects, has been left in abeyance. The coming annual meeting appears the time to recognise and revive it. The value of such a measure, I consider, would be incalculable. According to your excellent proposal, all the local medico-ethical societies would merge into the district branches; and, after so doing, the sections would include members from every locality in each branch—the number not to be too limited. By this constitution, the opinions and judgment of the body would not be liable to be influenced by local or party prejudices; and all decisions and arbitrations would be more impartial. On any question, when necessary, one section could communicate with or ask counsel from another; and thus uniformity in medical usage and practice would be approximated. This would likewise gain much to the profession. As an instance, among many, where an ethical section would have been of great value, I believe I can state that in a recent award by a local Medico-ethical Society, whose decisions have often been marked by a just judgment, an error was committed which had its source in local and partial views; and it is probable that if the question at issue had been before an ethical section of a Branch the judgment would have been reversed. Besides the value of these sections to their own districts and localities, a very large advantage would be gained by the assistance they would render to the Medico-ethical Committee of the Association in the construction of the "code," which, it is to be hoped, will not result in a mere "code of etiquette;" but really in one of medical ethics.

Leaving the subject to be introduced at the proper time in Liverpool, I am, etc., Richard Flint.

Stockport, July 12th, 1859.

THE READINGS OF PAPERS AT THE ANNUAL MEETING.

Letter from P. H. Williams, M.D., General Secretary.

Sir,—In reply to the inquiry of Dr. Edward Smith, as to the time at which Papers and Cases will be read at the approaching meeting, I can only say that each contributor will have an opportunity of being heard according to the date of the intimation he has forwarded to the General Secretary.

It will be seen in the programme that Cases and Papers will be read on Thursday morning, after the Address in Medicine; also on Thursday afternoon, when the Report of the Benevolent Fund has been presented; and again on Friday morning, after the Address in Physiology.

Up to this date, the following members have favoured me with notices of communications—viz., Mr. Henry Thompson (London); Dr. Hibbert Taylor (Liverpool); Dr. Thomas Skinner (Liverpool); Dr. Nevins (Liverpool); Dr. Mitchell (Liverpool); and Mr. Whytehead Morris (Gildersome).

It is obviously impossible for me to inform Dr. Smith what length of time each paper will occupy, or how long any discussions upon them may continue. I can assure him that every thing that is practicable will be done to consult his convenience in every particular.

It is the wish of the Committee of Management in Liverpool that a sectional division of subjects should be established; and I am authorised to state that if members will kindly promise contributions on medical, surgical, obstetric, and physiological science, the Committee will do every thing in their power to facilitate the success of the arrangement.

I am, etc., Philip H. Williams, M.D., *Gen. Sec.*

Worcester, July, 1859.

RESULTS OF OVARIOTOMY.

Sir,—I am particularly sorry that I should have made a mistake as to the result in the five cases of ovariotomy by Mr. Brown, published in your columns. I wrote from memory, and do not think it worth while to defend myself from Mr. Brown's charge of making a "wilful misstatement". I am simply desirous to obtain information on a point of great scientific and practical interest, just now warmly debated; and I endeavoured to ascertain as accurately as possible what are the real results of ovariotomy. Mr. Brown's twelve cases, published in his book and in your Journal, give (subject to his correction) seven deaths and five recoveries. He alludes to other cases in his last paper; and I simply ask for references to the journals where those other cases appear, or request that Mr. Brown will simply state in how many cases he has performed ovariotomy, and in how many of these recovery has ensued. Surely this is not a question to make any surgeon angry, or lead him to put off his answer until "the autumn".

I am, etc., F.R.C.S.

London, July 11th, 1859.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, July 7th, 1859.

ADULTERATION OF FOOD, etc., BILL.

Mr. Scholefield, in moving the second reading of this Bill, said that its main provisions were to authorise governing bodies of the different districts of the country to appoint analysts; and to impose a penalty upon persons selling adulterated food.

Mr. Hardy objected that the Bill would lead to a system of informing and spying, and treated the people of this country too much like children. Persons who bought adulterated food, had already a remedy by action or indictment. He asked the House to pause before they sanctioned such provisions as were contained in the second clause of this Bill, which empowered the town councils of every municipal borough to appoint one or more persons possessing competent medical, chemical, and microscopical knowledge, as analysts of all articles of food and drink, and which would lead to continual controversies between the analysts so appointed and all the other chemists in every town. He thought, however, that the fifth clause was almost calculated to cause as much amusement as the House derived from the Bill introduced some time ago for the prevention of cruelty to animals, for that clause provided that—

"It shall be lawful for the Privy Council from time to time to cause such analyses to be made, and to make such rules and instructions as the said Privy Council may think fit for regulating the use of any material or ingredient distinct from the natural composition of any article of food or drink with which it may be mixed."

Under this clause there might be an interference with every kitchen, and with the domestic regulations of every household, and rules and instructions might be issued as to the ingredients which any man should use in mixing his grog. He moved that the Bill be read a second time that day three months.

Mr. Cowper said the Bill was intended to prevent frauds that could only be detected by persons possessing a certain amount of scientific knowledge. He thought that, considering the great amount of evil which was daily inflicted upon persons who unwittingly bought articles of food unfit for consumption, some legislative remedy was absolutely necessary.

Lord R. Cecil referred to the case of the Bradford poisonings. Would the honourable member for Leominster (Mr. Hardy) contend that Parliament ought not to interfere to protect the poor man from having arsenic supplied to him in his lozenges? This was a case in which the poor man could not protect himself; and he conceived that it was the duty of that House to interfere for his protection.

Mr. Walter thought the practice of the adulteration of food in this country was an universal evil and a national disgrace. There was, indeed, no country in Europe in which the system was carried to such an extent with impunity. In France, chiefly owing to the stringency of the law on this subject, bread and all the common articles of food, could be bought in a state of much greater purity than in this country. The only article of food to be bought unadulterated in a grocer's shop was, he believed, an egg, and that was simply because there were no means of introducing into it deleterious ingredients. If inspectors of weights and measures were employed to protect the poor from being cheated in respect of quantity, why should not some means be taken to afford them protection in respect of quality?

Mr. Brady said that the system of adulteration was carried on to an enormous extent, and there was scarcely an article of food used at the table of any poor man in this country which was not adulterated. He thought, therefore, that legislative

interference on the subject was absolutely necessary. The details of the measure might not be perfect; but they could be considered and altered where it was deemed requisite in committee. He hoped that, out of consideration for the poor of this country, who were daily and hourly not only robbed, but poisoned by tradesmen, the House would not refuse to assent to the second reading of the Bill.

Mr. E. James said this measure certainly was one to which no honest tradesman could object. Its principle was perfectly correct, and it would confer great benefit on the poorer classes. He could scarcely think the honourable member for Leominster was serious in contending that the poor man had already the power of stopping frauds of this description.

Mr. Crawford objected to the means of carrying out the principle of the Bill.

Sir G. C. Lewis said that his chief objection to the Bill was the extreme vagueness and generality of its provisions, and the great impossibility there would be, if it were carried in its present form, of laying down any strict rules of interpretation. The first branch of the first clauses, laid down that any person who should sell, or expose for sale, any article of food or drink with which, to the knowledge of such person, any ingredient or material calculated to injure the health of persons had been "mixed," should be liable to the penalties of the Act. There was a school of physicians, and others, who held that alcohol was noxious to the health, and therefore the mixing of alcohol with any article of drink would, according to this school, fall under the provisions of the Act. The second part of the clause subjected to the penalties of the Act any person selling as pure and unadulterated any article of food or drink which to the knowledge of such person was adulterated and not pure. Any person mixing chicory with coffee would be liable to the penalties of the Act under this clause, and no doubt many magistrates would put that interpretation upon it. The case of unwholesome meat, however, was not touched by the clause. The machinery by which the Bill was to be worked—such as the appointment of analysts—the reference to the Privy Council—would lead to very heavy charges, and would be sure to give rise to great objections.

Mr. Deedes and Mr. Griffith supported, and Mr. Barrow opposed, the second reading.

The House divided, and the numbers were:—

For the second reading	227
Against it	103
Majority	—124

PUBLIC HEALTH BILL.

This Bill was read a second time.

Friday, July 8th.

MEDICAL CHARITIES (IRELAND) AMENDMENT ACT.

Mr. Dawson asked the Chief Secretary for Ireland whether it was the intention of the Government to introduce a Medical Charities Amendment Act during the present Session; and, if so, when such a measure would be laid upon the table of the House?

Mr. Cardwell said the question was brought under the notice of the House not long ago, and was not susceptible of a satisfactory settlement during the present Session of Parliament.

PUBLIC HEALTH BILL.

This Bill passed through Committee.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

* In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Dill. On July 12th, at Hawthorn Villa, Chorlton Road, Manchester, the wife of *John Dill, M.D., of a son.

Fyffe. On July 7th, at 48, Gloucester Place, Portman Square, the wife of W. Johnstone Fyffe, M.D., Surgeon 5th Dragoon Guards, of a daughter.

Macnamara. On July 8th, at Uxbridge, the wife of *G. H. Macnamara, Esq., Surgeon, of a son.

Williams. On July 11th, the wife of Walter D. Williams, M.D., of Hackney and Reigate, of a son.

MARRIAGES.

Cheves—Hutchison. Cheves, Alexander, M.D., of Millbrook, Devon, to Eliza Susan, eldest daughter of John Hutchison, Esq., of Mongruy, Aberdeenshire, at Erith, Kent, on July 12th.

Collis—Dorin. Collis, William, Esq., Assistant-Surgeon 98th Regiment, to Margaret Agnes, widow of the late Captain H. A. Dorin, 27th Regiment Bengal Native Infantry, at St. James's, Paddington, on July 7th.

Hart—Phipps. *Hart, Gratian C. B., Esq., Surgeon, of Chesterfield, to Mary Anne, eldest daughter of the late Filmer Phipps, Esq., of River, near Dover, at Colchester, on July 5th.

Harvey—Wolseley. Harvey, Edward Robinson, M.B., to Helen Henrietta, daughter of Henry Wolseley, Esq., of Hillingdon, at Hendon, on July 2nd.

Kemp—Howkins. *Kemp, Charles Godfrey, Esq., Surgeon-Dentist, Leicester, to Sara, youngest daughter of Thomas Howkins, Esq., Spaldwick, Huntingdonshire, on July 14th.

Moss—Putley. Moss, William Chapman, M.D., Resident Superintendent of Longwood House Lunatic Asylum, near Bristol, to Sarah, only daughter of Isaac Putley, Esq., of 44, High Street, Southwark, at St. Saviour's, Southwark, on July 6th.

Murchison—Bickersteth. Murchison, Charles, M.D., to Clara, daughter of the late *Robert Bickersteth, Esq., Surgeon, of Liverpool, at Casterton, near Kirkby Lonsdale, on July 7th.

DEATHS.

Dix. On July 9th, at Long Buckby, Northamptonshire, aged 59, Eliza Worth, wife of William Dix, Esq., Surgeon.

Thompson. On July 4th, at Shrewsbury, aged 66, Amy, wife of *Edward Thompson, Esq., Surgeon, Albrighton.

Winterbottom, Thomas, M.D., at Westoe, South Shields, aged 93, on July 8th.

PASS LISTS.

University of Dublin. Degrees conferred on Wednesday, July 6th:—

Doctors of Medicine.

Bennett, Edward H.	McDowel, Benjamin G.
Cusack, James William	Smith, Robert William

Bachelors of Medicine.

Baxter, Patrick C.	De Landre, George B.
Bennett, Edward H.	Kidd, Leonard
Campbell, John	Nicholson, Gilbert de P.

HEALTH OF LONDON:—WEEK ENDING JULY 9TH, 1859.

[*From the Registrar-General's Report.*]

The London returns of mortality for the last three weeks exhibit a rapid increase. In the week ending July 2nd, the deaths were 1024; last week they rose to 1226, and exceeded the average (corrected for increase of population) of corresponding weeks in ten previous years by 128. Diarrhœa, which numbered 6 cases in the first week of June, rose to 132 in the first week of July. Nine of these occurred in the sub-district of St. John, Westminster. It should be observed, however, that the complaint was as fatal at the same early period of the year in 1857 and 1858. Besides the 132 deaths of last week, there were 11 from summer cholera, all, except two, amongst children. Small-pox was fatal in 24 cases, scarlatina in 38, diphtheria in 9. A widow died at the age of 95 years; and a man, formerly a private in the Scots Greys, died in the Westminster Workhouse on the 2nd instant, whose age is stated to have been 104 years. Two children died from the heat of the sun.

Last week the births of 833 boys and 785 girls, in all 1618 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1433.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·071 in. The mean daily reading of the barometer was above 30 in. on every day after Sunday. The instrument rose from 29·94 in. on Sunday to

30·20 in. on Tuesday, being the lowest and highest readings in the week. The mean temperature of the week was 67·4°, which is 5·8° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week. The thermometer in the shade rose to 84·5° on Wednesday, and on the same day it rose in the sun to 108°, both being the highest in the week. The lowest temperature was 52·9° on Tuesday. The mean daily range was 25·4°. The mean temperature of the water of the Thames was 68·1°, which is 0·7° higher than that of the air. On four days the wind blew from the south-west. Rain fell on Sunday to the amount of 0·20 in.

In the thirteen weeks that ended Saturday, July 2nd, the mortality of London was comparatively low; it was at the rate of 20 per 1000 living, annually. In three out of the four corresponding quarters of the years 1855-58, the deaths ranged from fourteen thousand to fifteen thousand; in the quarter that has now terminated, they were 13,724. The mean temperature of last quarter was 54.1°, which is nearly as high as that of the same quarter in 1858, and is higher than that of any corresponding period in the three preceding years. Deaths arising from diseases of the respiratory organs (exclusive of phthisis) were decidedly low last quarter, for they numbered 1974, while they were not less than 2217 in any of the four corresponding quarters; and in 1855, when the temperature was low, they rose to 2552. Phthisis carried off nearly two thousand persons in the quarter; this number is high, and exceeds the aggregate mortality of other pulmonary complaints, which apparently are mitigated by causes that are not effectual in retarding the course of that most fatal disease in the list. The deaths produced by the zymotic class of diseases were 3135; whereas in the same quarter of 1858, they were 3604; for though small-pox and scarlatina have increased, measles, whooping-cough, and diarrhœa, have shown a decrease. Small-pox was fatal chiefly in the East districts, where the deaths from it rose to 96. The district of Bethnal Green in that division suffered most; there were also many deaths from this disease in Hoxton and Haggerstone. Of 173 cases in which diphtheria had a fatal issue, 159 occurred to young persons, 6 in the period of life 20-40 years, 4 at 40-60 years, and 4 at a more advanced age. The deaths from rheumatism and rheumatic fever were 109, which is considerably more than in corresponding quarters. Those from syphilitic disease also exhibit an excess. In the two spring quarters of 1858-59, both seasons of high temperature, disease of the kidneys was registered as the cause of death more frequently than in three former springs.

TREAT TO HOSPITAL NURSES. The managers of Guy's Hospital have this year, for the first time, set on foot an experiment of considerateness for the toil of their servants, which we hope to see followed by other hospitals. On Friday, the entire staff of day-nurses, forty in number, were given a holiday, and treated to a pic-nic at Hampton Court. Two commodious *chars-à-banc* conveyed the nurses to their destination, where they betook themselves to the usual amusements of the palace, and seemed heartily to enjoy themselves. The pic-nic is to be repeated for the staff of night-nurses at Guy's; and the "sisters" of the hospital wards are next week, we hear, to have a day at the Crystal Palace. (*Standard.*)

STATUE OF MORGAGNI. A subscription has been opened at Naples for the purpose of erecting a statue of Morgagni.

STATUE OF DR. JENNER. A statue of Dr. Jenner, by Eugene Paul, has just been cast in bronze, and set up temporarily opposite the river front of the Louvre.

TO CORRESPONDENTS.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, MR. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—MR. PROPERT; MR. T. HOLMES; MR. J. C. S. JENNINGS; MR. T. H. SMITH; MR. HAYNES WALTON; DR. G. M. HUMPHRY; DR. WALKER; MR. I. B. BROWN; DR. G. E. PAGET; DR. BARHAM; MR. J. V. SOLOMON; MR. RICHARD GRIFFIN; DR. C. HANDFIELD JONES; MR. A. T. H. WATERS; MR. JAS. REID; DR. P. H. WILLIAMS; MR. R. FLINT; DR. CHEVALLIER; DR. RANKING; DR. KIRKMAN; DR. DURRANT; DR. JOHN DILL; MR. W. DIX; MR. C. G. KEMP; MR. C. H. EVANS; DR. JAMES RUSSELL; DR. HENRY GOODE; DR. KELBURNE KING; DR. HYDE SALTER; MR. SQUIRE; DR. ADAM MARTIN; MR. T. M. STONE; and MR. RHODES.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Retrospect of Medicine. Edited by W. Braithwaite. Vol. 39, January—June 1859. London: Simpkin, Marshall, and Co. Edinburgh: Oliver and Boyd. Dublin: Hodges and Smith. pp. 454. 1859.

ADVERTISEMENTS.

Now ready.

The Medical Register, published pursuant to an Act passed in the XXI and XXII Victoria, Cap. XC, to regulate the Qualifications of Practitioners in Medicine and Surgery. It may be obtained, upon application by letter or otherwise, at the Office of the General Council of Medical Education and Registration of the United Kingdom, 32, Soho Square, London, W. Price 7s. 6d., or post free 8s.

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BRITISH MEDICAL ASSOCIATION.

The TWENTY-SEVENTH ANNUAL MEETING of the BRITISH MEDICAL ASSOCIATION will be holden in LIVERPOOL, on Wednesday, Thursday, and Friday, the 27th, 28th, and 29th days of July.

President—W. P. ALISON, M.D., F.R.S.E., Edinburgh.

President-Elect—JAMES R. W. VOSE, M.D., Liverpool.

The Meetings of the Association will take place at the Medical Institution, Mount Pleasant.
The following is an outline of the proceedings. A more complete programme will be issued at Liverpool.

WEDNESDAY, JULY 27th.

11.30 A.M. Meeting of Committee on Medical Legislation in the Committee Room.
1 P.M. Meeting of Committee of Council in the same Room.
2.30 „ Meeting of General Council of the Association in the small theatre.
7 „ First General Meeting of the Association in the large theatre. The retiring President will make a few remarks. The new President will deliver an Address. The Report of Council will be presented, and other business transacted.

THURSDAY, JULY 28th.

8.30 A.M. Public Breakfast at the Adelphi. Tickets 2s. 6d. each.
10 „ Meeting of the Members of the New Council in the small Theatre.
11 „ Second General Meeting of Members. The Address in Medicine will be delivered by E. WATERS, M.D., of Chester. Papers and Cases will be read. The Meeting will adjourn at One and re-assemble at Two. The Report of the Benevolent Fund will be received, and Papers and Cases will be read. The Meeting will adjourn at Five.
8.30 P.M. *Soirée* at the Royal Institution, Colquitt Street. The Royal Institution, the Gallery of Arts, containing a fine collection of paintings, and the Museum of applied Sciences will be thrown open. During the evening some interesting electrical phenomena will be illustrated by J. BAKER EDWARDS, Ph.D.

FRIDAY, JULY 29th.

11 A.M. Third General Meeting of Members. The Address in Physiology will be delivered by A. T. H. WATERS, Esq., of Liverpool. Papers and Cases will be read.
3.30 P.M. A Steamer will leave the North Landing Stage to convey the Members along the Docks, and round the line of battle ships stationed in the river, to return at Five P.M.
6 P.M. Dinner. Tickets One Guinea each.

Gentlemen intending to be present at the Dinner, are requested to send notice to the Honorary Secretary of the Committee, A. T. H. WATERS, Esq., 27 *Hope Street, Liverpool, on or before Friday next, the 22nd instant. This arrangement is absolutely necessary, as local circumstances render it impossible for the Committee to provide accommodation for more than a given number. Numerous applications for tickets have already been received.*

Members are requested to enter, on arrival, their names and addresses in the Reception Room in the Medical Institution, Mount Pleasant; where all the Meetings will take place, and where cards will be supplied which will secure admission to all the Proceedings, and contain such information as may be useful to those who are strangers to the town.

Members who wish for previous information may communicate with the Honorary Secretary, as above.

It is particularly requested that all Members who propose to read papers will communicate with the General Secretary without delay. Arrangements will be made for the sectional reading of Papers, if a sufficient number be promised to render such a plan desirable.

Among the principal Hotels are—the Adelphi, Ranelagh Place; the Waterloo, Ranelagh Street; the Angel, Dale Street; the Feathers, Clayton Square; the George, Dale Street; the Grecian, Dale Street; the Neptune, Clayton Square; the Queen's, Lime Street; the Royal, Moorfields; the Stork, Queen's Square; the Union, Parker Street; the Victoria, St. John's Lane; the Wellington, Dale Street.

The Reception Committee have made arrangements for securing the admission of members attending the meeting to the various places of interest in the town.

Worcester, June 30th, 1859. PHILIP H. WILLIAMS, M.D, *General Secretary.*

WATER BEDS.—EDMISTON & SON, 5, CHARING CROSS, (late 69, STRAND), beg to call the particular attention of the Managers of Hospitals and Dispensaries, and the Medical Profession generally, to the price and quality of their Hot or Cold Water Beds.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXXIV.] LONDON: SATURDAY, JULY 23, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

TWO CASES OF SEVERE CHOREA: ONE OF UNUSUAL INTENSITY.

Under the care of JAMES RUSSELL, M.D.

CASE I. (Clinical Clerk—Mr. CHAS. WALLS.) E. K., aged 19, single, a tinplate-worker, was admitted on May 13th. She admits an illness of only a fortnight's duration, although it is plain that she has suffered from her present complaint for a longer period; but she appears to have taken little notice of it. Her walking powers have been impaired for a fortnight, and she has been altogether much worse during the last three days. She has worked hard, and has lived badly, being an orphan and friendless, and depending on her small earnings for maintenance. She has been losing flesh lately, but is uncertain for what length of time. Her menstruation was suspended last Easter, in consequence, as she states, of her getting her feet wet, and it has not returned: it was quite regular previously, and was not attended with much pain. She has had some œdema of the feet the last few days. She has not had a fright, and does not admit the existence of any mental disturbance, excepting that she "spent silly" some money sent to her by her brother to support her during a voyage to join him in America. In the course of the case, however, the nurse reported that the girl had been visited by a young man, "a cousin"; and that she was much excited afterwards. She has passed joints of tapeworm. Her mother died of consumption: she does not know the cause of her father's death. No member of her family has been affected with chorea.

Present Condition. She is thin, pallid, and cachectic. She has constant choreatic movements affecting her entire body and limbs, and an effort of any kind occasions much aggravation of their violence; they affect all parts of her frame alike. Her grasp is tolerably firm, but is not maintained: there is no exaltation of excito-motor excitability. She speaks with difficulty, and with evident preparation; and her articulation is so imperfect that it is difficult to obtain any particulars of her history; indeed, much of the foregoing account was recorded at a later period of the case. Deglutition is natural; she protrudes her tongue easily. The bowels are confined; the abdomen is not tumid. Sleep is imperfect. It was impossible to perform auscultation satisfactorily, on account of the constant movement of her trunk.

Sumat statim pilulæ colocynth. comp. ℈ss.

Sumat omni nocte morphiæ hydrochloratis gr. ¼.

May 14th. The movements have increased in severity; the night has been passed without sleep. She now lies still, but is much agitated when spoken to, and is distressed by want of control over her limbs. Urine free.

Sumat ter die quinæ disulphatis gra. iij; ferri sulphatis gra. ij.

Repetatur morphia.

She was ordered to have two glasses of wine.

May 15th. She slept for six hours in the night, but is now very much agitated. She is sitting up, her trunk in constant motion, and is much distressed by her condition. She cannot keep her tongue protruded. She complains of nausea, and vomited a clear fluid during the visit; has no appetite, but takes food when required. Bowels still confined; tongue clean. The sounds of the heart are faint, but clear.

Sumat 3tis horis pilulæ colocynth. et hyoscyami ℈ss.

Her back was ordered to be well sluiced.

May 16th. She continued in continual motion up to n[illegible] night. The constancy and violence of the movements ind[illegible] the resident physician, Dr. Maxwell, to administer repeat[illegible] of Battley's solution, with the effect of giving at [illegible] quiet sleep. Her trunk and upper extremities are i[illegible] cessant motion; but nevertheless she contrives to feed [illegible] with bread and milk made tolerably dry. She has taken food well. The pulse is very feeble, but cannot be counted. Her bowels have been opened freely by a turpentine enema: no worms were found in the evacuation.

Sumat misturam quinæ, etc., 3tis horis.

Sumat 6tis horis liquoris opii sedat. ♏xij; spiritûs ætheris sulphur. comp. ℥j; spiritûs ammoniæ fœtidi ♏xv; misturæ camphoræ ℥j.

She was ordered to have five glasses of wine.

May 17th. She was quieter through yesterday, but she vomited her food. She refused the wine. The cervical region was ordered to be rubbed with tartar emetic ointment. The mixture was continued. Wine, milk, and beef-tea, were given, as she could take them.

May 18th. The movements have been incessant, and she has slept little. Attempts to perform any act cause agitation involving almost every muscle of her trunk and limbs; and she dashes herself down from the sitting posture with such precipitation as to risk injuring herself. Her tongue is snatched back after having been protruded; her articulation is nearly unintelligible; deglutition is performed with difficulty; and last night she bit a piece out of the medicine-glass in the violence of her effort to seize its contents. No eruption has been produced by the ointment. Vomiting has been frequent.

Sumat 2ndis horis quinæ disulphatis et ferri sulphatis ãã gra. ii in formâ pilulæ.

Adhibeantur tincturæ opii ♏xx in enemate pro re natâ.

Ice was applied to the spine. She was directed to be placed in a ward alone.

Vespere. Three opiate enemata have been given, but the ice could not be applied satisfactorily. Her whole frame is in constant motion, tossing, twisting, and striking against the bed; and some delirium appears to be present. Dr. Russell and Dr. Maxwell administered chloroform. After a drachm had been inhaled, the patient became quite quiet, and seemed asleep; but, immediately on the withdrawal of the inhaler, she was as violent as ever. Half the quantity was repeated, with a like result; her pulse rose in volume, stood for some minutes at 100, then remained steadily at 80. The chloroform was followed by vomiting.

May 19th. She has slept for four hours, after four doses of opium, two grains in each. This morning an enema of turpentine and assafœtida was administered. She complains of incessant thirst and hunger, and has taken gruel, milk, and port wine. There is some eruption from the ointment. Her movements are unceasing, though less violent: she frequently cries out. Her heart acts tumultuously and violently; her pupils are small.

Vespere. She has been in a state of mania, the mental excitement aggravating the violence of the movements. She has vomited three or four times. Some joints of tapeworm having been seen in her stool, Dr. Maxwell directed a turpentine enema; but no more joints were expelled. She is at present somewhat maniacal, looking wild and distressed, and crying out to the bystanders incoherently. Much irritation has been produced by the ointment, which is to be omitted. She was ordered to continue the quinine and iron hourly.

Sumat statim terebinthinæ ℥ss; olei ricini ℥ij.

The draught was vomited immediately. A shower-bath, administered at her own request, aggravated the movements.

At 8 P.M., Dr. Maxwell again placed her under the influence

of chloroform for an hour and a quarter. She was rapidly laid asleep; but, on removal of the inhaler, the violent movements returned speedily. Dr. Maxwell then gave her a glass and a half of brandy, and she slept till midnight, when she awoke so violently maniacal that one person could not restrain her. Thus she continued for three-quarters of an hour, when half a glass of brandy and two grains of opium again laid her asleep, from which state she afterwards awoke maniacal, though less violently so.

May 20th. At 6 A.M. the opium was repeated. She passed stools yesterday free from worms. She has taken abundance of milk, and has only vomited twice. At this morning's visit, the movements seem to have almost subsided; she is sitting in a chair nearly quiet. She looks worn, but not wild, and articulates more distinctly. Pulse 116, very feeble; tongue clean.

Vespere. The calm of this morning has proved but transitory; the violent movements are renewed, and repeated vomiting of a thick green fluid has taken place. She is, however, perfectly rational. She has great difficulty in feeding, and cannot take her milk from a feeder, as she is unable to maintain suction, and depends upon the movement of inspiration for drawing in the fluid. Copious affusion of cold water, to the extent of two buckets full, was practised over her spine, as efficiently as her state of constant movement admitted.

Sumat 2ndis horis terebinthinæ ʒss; zinci sulphatis gra. iij.

May 21st. The night has brought no amendment notwithstanding three doses of morphine. This morning, chloroform was again administered by Dr. Maxwell for an hour and a half. She fell rapidly under its influence; but, as before, the beneficial effect subsided as soon as inhalation was suspended.

Sumat 3tis horis tincturæ filicis maris ætheræ ɱxl.

She was ordered to contiue the zinc.

Vespere. About noon she became sleepy, and has since been sleeping soundly, awaking, at intervals of twenty minutes, in violent motion, but speedily subsiding again to sleep.

Sumat statim calomel. gra. iij; jalapæ gra. x.

May 22nd. Natural sleep continued through the night. Yesterday afternoon, a dose of jalap was given; but no evacuation was obtained. She is now awake and tolerably quiet. Her limbs are covered with bruises, and her chest with scratches. At her request, she was assisted to lie with her head at the foot of the bed: she performed the change of position in a single evolution; desiring a bystander to hold her hands, she reared herself on her knees, and in one rapid twist, in the course of which the face of the assistant was seriously imperilled, and her own head nearly came into violent collision with the bedpost, she flung herself down. She is quite rational. She took a good deal of wine yesterday.

Sumat statim tincturæ filicis maris ʒj.

Sumat 4tis horis decocti aloës ʒj; magnesiæ sulphatis ʒss; tincturæ rhei comp. ʒj.

May 23rd. After other purgatives besides the one prescribed, three stools were obtained without any worms. She passed a quiet day, and slept through the night. The choreatic movements are now only exhibited when she is directed to perform any act, as to protrude her tongue. She has been very thirsty and has drank largely of milk. She complains of great weakness and of pain from her bruises, especially from one on the inside of the right thigh, which is hard and inflamed.

An effervescing mixture, containing carbonate of ammonia, was ordered.

It is unnecessary to lengthen these details by copying the daily reports of the patient's progress towards convalescence. Her general health mended quickly; her appetite returned; and the nutrition of her body improved. For two nights after the last report her sleep was very much disturbed, and by day she was much depressed, and lay moaning and talking to herself. The irregular movements have not yet entirely subsided, and are easily reexcited by agitation, and once to a considerable extent by a temporary indisposition.

She continued for some days unable to protrude her tongue, and she could not maintain her grasp. Her manner too was foolish. She laughed in an unmeaning manner, and seemed like one whose mental power was feeble. This remains with her. Whether it is natural to her, or the result of her illness, we had no means of learning.

Extensive but superficial inflammation of the subcutaneous cellular tissue of the right thigh took place, followed by suppuration; and by the formation of two small abscesses in the ham; but she soon recovered from these local affections.

Case II. (Clinical Clerk—Mr. T. H. Bartleet.) M. A. R., aged 5, was admitted on February 18th, 1859. She had convulsions when she was a year old, which were attributed to teething, but she has not had any illness since that time. She was quite well until January 23rd, when she was first noticed to twitch her arms and hands; all her limbs became gradually involved, and articulation and deglutition difficult. Her appetite continued good; her bowels were regular. No cause for her illness can be assigned. She has never had rheumatism; her father has had rheumatic fever; there is no history of heart disease in her family, nor has any other member suffered from chorea.

Present State. She is a lively cheerful looking little girl, with light auburn hair and light complexion, well made, but pale and thin, and her muscles are flabby. She lies quite quiet unless noticed, when she throws her arms about, jerks her head, and lolls her tongue out of her mouth. She cannot speak, and drinks with much effort, throwing some of the liquid back; deglutition is attended with irregular action of the constrictors of the pharynx. She is unable to stand, and any attempt to move her brings on violent general agitation. Her pupils are remarkably dilated. She lies apparently at her ease, noticing things passing about her.

Sumat ter die zinci sulphatis gra. ij.

She was ordered to have two glasses of wine, meat, beef-tea, and milk.

February 19th. She has passed a good night; she is now lying on her back; at frequent short intervals her limbs are thrown into violent agitation; her back is slightly arched, and her shoulders are drawn up; her tongue is lolled out, and a sucking noise is made by her cheeks and lips. She cannot articulate even a monosyllable. When she is raised, her lower limbs are found to be utterly powerless, and her body twists like an eel. The sounds of the heart are perfectly normal. Her spine is healthy.

She was ordered to take the mixture every three hours, and two teaspoonsful of cod-liver oil three times in the day.

February 20th. There is much less agitation. She lies still, and scarcely utters a word through the day; in performing deglutition, the muscles of her tongue are thrown into irregular action, and a sucking action of her lips is set up; she protrudes her tongue with an effort, which throws both her arms into violent agitation. Micturition is natural; her bowels are open; she takes food well. Pulse 104, very feeble. The pupils are widely dilated.

February 22nd. She is quite intelligent, and smiles when noticed. She lies still, occasionally tossing an arm or jerking her neck, but without any controul over her muscles; and in attempting to perform any movement, the limb set in action is whirled about, and her body is much agitated. She cannot protrude her tongue; but when told to do so, she opens her mouth, and puts up her hand, as though she would pull it out.

Sumat zinci sulphatis gra. vi ter die.

February 24th. She makes fruitless endeavours to talk, and can just protrude her tongue with violent general contortions. She has no power whatever to maintain her body erect. Her pupils are still widely dilated. Pulse 92, very feeble.

Sumat 4tis horis quinæ disulphatis gr. i; ferri sulph. gra. ij.

Three glasses of wine were ordered.

February 26th. She can utter the word "better", and her pupils are less dilated.

March 1st. She can speak a few words and protrude her tongue more steadily. She sleeps a great deal; and since she has been in the hospital her nights have generally been quiet. When desired to grasp any object, her arm is jerked in all directions except the right one, the fingers are alternately flexed and extended and work about, scratching the hand she tries to seize, but not retaining hold for an instant. Her back was ordered to be sluiced with cold water.

March 5th. She has more power to support herself, but is powerless to raise her body from the recumbent posture; and, when desired to lift up her legs, she merely straddles them widely apart. She articulates a few monosyllables, but the effort to do so produces much agitation of her body. Her pupils are still widely dilated. She is intelligent, cheerful, and happy.

Sumat bis die strychniæ gr. 1-32.

March 10th. She can rear herself into the sitting posture, though with an effort, which sets her muscles generally into considerable action. Her general health is very much improved. She was ordered to be sluiced night and morning.

March 12th. The strychnine was omitted.

Sumat ter die olei morrhuæ ℥ij.
Sumat ter die ferri phosphatis gra. v.

March 20th. She talks very well; her grasp is much more steady, and she can clap her hands; but she is still quite unable to support herself on her feet. When she is raised by the nurse, her feet are rigidly extended, so that her toes alone touch the ground, and her body falls over the nurse's arm, as if without life; she can, however, clasp her arms round the nurse's neck, which hitherto she has not been able to accomplish.

March 31st. For some days she has been able to controul her upper extremities, to hold out her arm without moving it, and she nurses her doll. When placed erect, she can stand for a few seconds, one arm only being held, her whole frame becoming rigid by the effort, but not being jerked.

April 3rd. She makes an attempt at walking with the support of the nurse, throwing each leg in turn clumsily forward, and crossing one leg over the other; her awkward performance affords her much amusement.

℞ Strychniæ gr. ½; alcohol ℥ij; syrupi ℥ij; aquæ ℥vi; Sumat ℥ss ter die.

March 16th. She walked the length of the ward to-day without help.

May 3rd. She walks quite steadily.

Remarks. These two cases of severe chorea afford a very interesting contrast. Both presented, in a very marked manner, that absence of all control over the voluntary movements, and that loss of the power to direct the motor impulse to any particular part of the body which characterise the disease. Whenever any effort was made to set in action some one set of muscles, the motor excitement diffused itself over every part of the voluntary muscular system. This phenomenon was especially striking in the child, from the contrast between the usual state of perfect quiescence and the general muscular agitation which was produced when any motor impulse was transmitted from the brain.

But whilst, in the former of the two cases, the ordinary voluntary movements were exaggerated to such a pitch of violence as to verge upon a state of clonic spasm, in the second the muscular system was so much enfeebled as to approach a state of paralysis. The violent contortions, involving every muscle, in the one, were in striking contrast with the quietude of the other; with the perfect extinction of the power of utterance which she displayed, and the lifeless manner in which her limbs sank under her, and her body swayed over the nurse's arm. But notwithstanding the violence of the movements in the former case, the muscular action was entirely wanting in the character of true convulsion; there was none of the rigid and powerful contraction which marks that state, and the contractions, though so violent and incessant, were painless. Perhaps, if one might draw an analogy from electrical science, the difference may be described as between exalted tension of the nervous force in convulsion, and increased quantity in the case under consideration.

Dr. Russell thought the former case remarkable, not only for its severity, but also for recovery to have taken place after so long continuance of urgent symptoms (ten or eleven days). He had had an opportunity of watching three similar cases, all of them in girls between fourteen and sixteen years of age; one only recovered, and in her the severe symptoms lasted only three days. In the other two, both fatal—in one of which the muscular action assumed a true convulsive character—the duration of urgent symptoms was eleven days. One of these cases was further remarkable from the circumstance that the attack of chorea, which was clearly traceable to a terrible fright six months before, set in almost with the suddenness and violence of a fit of epilepsy, a disease which is sometimes produced in the same manner. As in our patient, mania was present in both the fatal cases, but in a higher degree.

The manner in which the disease lost its violent character in sleep was very remarkable. In the morning no amendment appeared to have been effected. At noon the patient fell asleep, and, after a sleep of eighteen or twenty hours, awoke, free from all serious symptoms. The very partial benefit procured by repeated full opiates was very striking, nor did the influence of chloroform extend beyond the time of its being inhaled, although during that period the benefit it conferred was so marked; unless, indeed, the third inhalation was instrumental in procuring the final and curative sleep which followed its employment in four or five hours.

ST. GEORGE'S HOSPITAL.

BURN BY THE RAYS OF THE SUN.

Under the care of E. Cutler, Esq.

A little boy, aged 10, was admitted into this hospital on July 12th, severely scorched by the intense heat of the sun on that day. It appeared that he had been bathing, and, not having a towel, had amused himself by coming out of the water occasionally to bask in the sun, and then plunging in again. He had done this twice without feeling the worse for it; but the third time he went into the water, he felt a stinging, burning sensation, over the whole of his body, which soon amounted to intense pain.

On being admitted, there was found what the French call "a burn of the first degree", or a scorched state of the integument over the whole of the back from the shoulders to the buttocks; and on the left shoulder a large bulla beneath the cuticle. The pain was great, and there was much tenderness to the touch.

He was treated by the application of rags, wetted with Goulard water, over the whole of the scorched parts; and when last seen (July 15th), was rapidly recovering, the redness beginning to fade, and the parts becoming less tender. There were no constitutional symptoms, and there can be little doubt of his speedy recovery.

Remarks. The rarity of this accident, especially in this country, has been our motive for recording this case. It is probable that the skin was further irritated by being plunged into cold water immediately after having been exposed to the unusual heat of the sun. It is an accident which we never had the opportunity of seeing before; but Dupuytren, in his treatise on Burns, in the *Leçons Orales*, mentions the solar heat as being occasionally the cause of severe burns, especially in tropical countries. "Many cases", he says, "are reported of persons who, having fallen asleep in the open air, have had various parts of the body burnt by the heat of the sun. In these cases, violent inflammation occurred, promptly followed by gangrene; and they died on the fourth or fifth day." He does not, however, give any reference to the cases which he has in mind.

Original Communications.

IMPERFORATE HYMEN: FATAL RESULT AFTER ITS DIVISION.

By Thomas Paget, Esq., Leicester.

Professor Simpson's excellent lectures upon this subject, published in the *Medical Times and Gazette* of March 19th and 26th, omit to notice the facts that after division of the occluding membrane, even under the brightest prospect, death has ensued; and that dissection has shown that it resulted from the escape of treacly fluid into the peritoneal cavity through an opening in the Fallopian or ovarian sac.

The omission may have arisen from a judicious wish of the Professor to avoid overloading an elementary lecture, or it may have had its foundation in a want of perfect reliance upon the only recorded case of the kind, that of De Haen, noticed in Samuel Cooper's *Surgical Dictionary*, and by Jones and Sieveking.

As the latter of the two causes is a not improbable one of silence on the point; and as one of the only two of these rare cases for operation that have fallen to my lot was followed by the above named result, so distressing to the operator and horrifying to the patient's friends, it seems my duty to add my mite of credit to the narrative of De Haen, by asking you to give from my notes the following report of the cases.

Case I. 1852. Miss M. W., in her eighteenth year, of fully developed figure and well nourished, but rather pallid, as are her family in general, had had no catamenial discharges, though for the last year or more she had suffered a monthly illness, with such pains as led Mrs. W. to expect a flow. Of late the abdomen had shewn enlargement, which suggested the suspicion that an occluded vagina was the cause of the patient's troubles. On examination the abdomen was found enlarged

by fluid at its lower part, while the upper yielded the usual sound on percussion. The enlargement bulged slightly in each iliac region, and fluctuation was felt as high as the umbilicus. The slightest separation of the labia vulvæ discovered a red tumour, also fluctuating. It was formed of a membrane, an extension, in fact, of the hymen along each side of the vagina to the meatus urinarius, which was considerably elongated by stretching; the membrane being pushed by fluid behind it into a convex form, so as almost to protrude between the labia. The vagina was effectually occluded.

October 14th. Previously to division of the membrane, the catheter was used, and about two tablespoonfuls of urine were withdrawn. A small trocar being then introduced with some difficulty, owing to the thickness and toughness of the membrane, a very dark fluid of syrupy consistence issued; and, the trocar being withdrawn, a common curved bistory pierced the membrane at its posterior part. Its point was made to pass out near to the meatus urinarius, and the intervening length, one inch and a half to two inches, was divided at one stroke. The membrane, at least a line thick, and elastic, gave a snapping sound at the moment of its division, and three or four pints of the fluid gushed in a broad stream across the wash-hand basin, and beyond the bed. A broad strip of lint was inserted through the lips of the wound, a short distance into the vagina.

October 16th. She was free from all complaint. The patient wondered that she was still to keep her bed. A good deal of the dark fluid issued on moving. A very slight tenderness was felt on pressing at the left iliac region, not more than might be well accounted for by the change to collapse of the peritoneum and other parts, lately so much distended.

October 17th. The tenderness was gone. Some castor oil, taken yesterday, not having acted, she took this morning a pill of calomel and colocynth, followed by small doses of an aperient mixture every two hours; and, these failing, had an enema in the evening. After free action of the bowels, I was sent for at night, and found her under the symptoms of violent peritonitis.

October 19th. Leeches, fomentation, blister, and opium, had failed to relieve my patient; and she died this afternoon, about forty hours after the onset of peritonitis.

The after treatment of the operation had been the injection of tepid water, and the introduction of a tent of compressed sponge.

October 21st. *Post mortem* examination, made about forty-eight hours after death, with the assistance of my friend Mr. Macaulay, whose are the following notes:—

Externally, the body was well developed, the abdomen was slightly distended. Internally, on laying open the abdominal cavity, the peritoneum was found inflamed and thickened. Large patches of fibrine, the result of recent inflammation, were adherent to the convolutions of the bowels. On turning down the lower flaps of the abdominal parietes, a quantity of dark fluid, the same as that discharged from the vagina, gushed out from the pelvic cavity. This fluid was removed in considerable quantity, probably a pint and a half. After clearing it away, the uterus was found much enlarged, flattened, and firm, of about three times the size of a virgin organ. The Fallopian tubes and ovaries, on both sides, were enormously enlarged, capable of holding about a pint of fluid each. Both of these ovarian tumours had ulcerated openings with ragged edges, through which the contained fluid had passed into the abdominal cavity. The peritoneal surface of the bowels was generally in a state of inflammation, especially those portions in and near the pelvis. The vagina was carefully examined. The incision made for the discharge of the fluid was found sufficiently large to admit the finger into the passage, which appeared lax from recent distension. The finger also passed easily into the cavity of the womb, the cervix being undistinguishable, apparently obliterated by long continued distension by the retained fluid.

Case II. 1859. E., also in her eighteenth year, fully developed, well nourished, even florid, had had monthly ailment without discharge, and gradual increase of size. A thick, fleshy septum extended, as in the last case, from the internal commissure of the vagina to the meatus urinarius. It fluctuated with fluid behind it, and elongated the meatus. The only differences between the two cases were, first, that in the present one retention of urine had required Mr. Denton, to whom I am indebted for introduction to the case, to use the catheter on several occasions, probably when recent effusion had increased the elongation of the urethral aperture; and secondly, that here the abdominal enlargement did not extend to its left side, which was free from fulness, flaccid, and resonant on percussion. Perhaps the not very rare congenital defect of absence of an ovary obtained in this case.

January 9th. After introducing the catheter, a free opening was made exactly in the same way as in the last case, and nearly three pints of the same kind of fluid, with flakes of mucus, gushed forth. Lint was inserted as before.

January 10th. On separating the labia, a small quantity of blood-red discharge escaped, and a coagulum about the size of a horse-bean.

January 16th. For the last three days there had been highly purulent discharge; about an ounce was shewn as having passed yesterday, and two drachms this morning.

February 2nd. The discharge was now only sero-purulent, and catamenia were reported as having been present for a day.

March 18th. Her sister called to report full catamenia, finished about a week ago.

May 23rd. She was in good health; the catamenia were normal. A ring of the fleshy membrane remained. It was firm, but readily admitted the finger, and seemed dilatable enough not to interfere with future function of the vaginal tube.

Remarks. From these cases we derive fact and speculation bearing importantly upon the organs involved. Upon their physiology; for the distended state of the ovaries as well as Fallopian tubes, points to and confirms the catamenial function of the former. Upon their practical surgery; for the possibility of laceration or ulceration occurring, even after the removal of distension, must ever be kept in view when proposing to operate, and tempted to expect a happy result.

The pathology also of unsuccessful cases is illustrated; for the occurrence of peritonitis, named by Dr. Simpson, Jones, and Sieveking, and others, receives its explanation; while speculation is still afloat to explain in what way the openings in the ovario-Fallopian bag are effected, whether by ulceration or laceration. In the present case, a distinction between the ovary and tube was not made out, and the openings certainly had the appearance of being "ulcerated;" but the "ragged edges" scarcely certified the fact; and the non-appearance of blood cannot, perhaps, be held conclusive against the possibility of laceration. That either ulceration or laceration should occur after removal of the tension seems a mystery; yet the suddenness and violence of the peritonitis and death, as well as the appearances on dissection, proclaim the mystery to be a fact. In a successful case of this operation, narrated by Dr. Upshur, of Norfolk, U. S., and reported in Ranking's *Abstract*, vol. xviii, p. 222, it is stated that the flow of fluid was accompanied by "regular uterine contractions, which continued for twelve hours;" but the exit for the fluid being free, it is difficult to conceive that these contractions are the means of bursting or ulceration in parts more internal.

A case of this operation is given in the *Provincial Medical Journal* of December 10th, 1845. It occurred in the practice of Mr. Derington of this town, and is reported by Dr. Barclay. It was successful, and the only bearing it has upon the present paper is somewhat to contradict the rarity of the malformation. This, however, is admitted by all who have written upon the subject, and is established, one is entitled to say, by the fact that Rokitansky gives but a mere intimation of its existence, and that Fergusson's judicious and full treatise on *Operative Surgery* names not the means of its removal.

I have to hope that no one will confound occlusion by this hypertrophied hymen with the more common union of the labia themselves by a mere webbing of cuticle, frequently seen in newly born infants and young girls, which I have only once found to remain so late as seventeen; and which is removable by tearing with a probe, without the loss of even a drop of blood.

ON UNUNITED FRACTURE.

By W. J. Moore, Esq., H.M. Indian Medical Service, Bombay Establishment; formerly Senior Resident Surgeon at the Queen's Hospital, Birmingham.

[*Concluded from page* 520.]

The continued use of long acupuncture needles, is, I think, a method of greater efficacy than any of those yet named.

M. Rayer pointed out that, when he excited irritation in the fibro-cartilage of the ear of a rabbit, the part was first softened, a yellow matter was next deposited in its texture, and finally, true ossification produced. M. Cruveilhier, likewise, observed different portions of periosteum, ligament, or cartilage, pass into ossiform state under the influence of stimulus. Miller, therefore, applied this knowledge, and the principle of subcutaneous sec-

tion to the treatment of false joints; he proposed that a strong needle, having been passed obliquely down to the part, should have its edges (cutting) freely moved about in all directions, so as to destroy the bond of union and investment of the ends of the bones.

I have not found it necessary to have the needles made with cutting edges, and I have also to state they require to be introduced many days in succession. During the whole period the limb must be kept immovable in some kind of apparatus, which, without exercising undue pressure, is well adapted for the purpose required. The needles should vary in length according to the limb, be round in shape, and as thin as is compatible with strength. They should be introduced daily from several points to the seat of fracture, and in performing this operation a rotatory movement should be employed. They should be moved slightly on the ends of the bones, and it has seemed in some cases to facilitate the cure by causing a mild galvanic current to pass through the limb, *viâ* the needles, for a considerable time daily. The introduction of the needles is not attended with much pain, and from their small calibre they will not be likely to injure arteries or nerves. By this means the connecting matter of the false joint is brought into a state of vascular excitement; the proper condition for the formation of bone. A very slight amount of pain, or throbbing, is greatly felt about the time union commences.

This procedure, combined with appropriate constitutional treatment, will, I think, be found adapted for the cure of most cases of recent non-union; but it must be continued sufficiently long, and the parts be kept firmly *in situ* during the whole period.

M. Lenoir (*Mémoires de la Société de Chirurgie de Paris*, 1851), of Paris, has also used acupuncture needles for the cure of ununited fracture successfully; but he introduced five between the bones, and left them some days, until they produced inflammatory action.

Dr. Brainard (*Chicago Medical Journal*, January 1859) has lately reported, in the *Chicago Medical Journal*, fourteen cases of cure by the use of a kind of needle; but his method differs very essentially from the one described above. He thus describes his proceedure:—"My practice is, at present, to commence the treatment by two or three perforations of bone, through a single opening of the skin, using an instrument of small size, and repeating the operation every ten days or two weeks." "In cases of non-union of the tibia, radius, or ulna, when the ends are in contact and the movement slight, I use a perforator no more than two or three *millimètres* in breadth; in other cases, an instrument an inch and over in breadth."

Lest I should be thought to have given this paper an unnecessary length, I shall quote the opinion of two eminent surgeons on these cases. The one writes:—"I cannot say there is great encouragement for the performance of any operation for ununited fracture, and I think a comparison of the results of numerous cases will confirm this opinion." The other says: "There is indeed so much doubt as to the result of any known treatment for the cure of false joints, that the surgeon gives ready attention to any proposal which shall hold out a prospect of a satisfactory result."

I shall now proceed to detail briefly the cases to which I have referred.

Case I. S.B., a young woman of 32, came under my care in May 1850, as an out-patient of the Queen's Hospital, having an ununited fracture of the left radius and ulna, rather below the junction of the upper and middle thirds. The accident producing the injury happened some four months previously, and the arm had been treated by an ignorant bone-setter, at that time resident in the mining districts of South Staffordshire. The broken ends were found quite movable on each other, so as to rival the wrist-joint in extent of motion. The limb was free from pain, but quite useless for any kind of even slight employment. Rubbing the ends together was first tried, followed by a careful adjustment and retention by splints; but at the end of three weeks no appreciable difference existed. The needles were then introduced (three in number) daily for nearly three weeks, the limb being kept motionless in gutta percha moulding. At the end of that period, there was evident consolidation commencing. The use of the needles was continued every other day for upwards of another week, and at the end of two months after first using them, I was enabled to place the arm in soap plaster, and allow her to commence using the hand. The consolidation in this case eventually became perfect.

Case II. E.J., rather a scrofulous looking lad, about 15 years old, was brought to the Queen's Hospital, July 1850, for the purpose of having his arm examined. I found an ununited fracture about the centre of the radius. It appeared he received an injury some months before, which had been considered a sprain, and his parents now sought advice for what they thought weakness of the arm. The needles were used in this case every, or every other, day for nearly a month, and I had the satisfaction, in double that time, of allowing him to use his arm, perfectly united. I should add, that he took cod-liver oil during the latter part of the treatment.

Case III. J. P., a strong looking labouring man, came under my treatment for fracture of the metacarpal bone of the middle finger. The usual plan of a ball of lint in the palm was adopted; but on the seventh day, under the influence of liquor, the hand was used in a pugilistic encounter. He then had an attack of *delirium e potu*, and when I again saw him no union had taken place. It was again bandaged up and allowed to remain at rest some weeks; but as the desired result was not obtained I introduced the needles, and succeeded in effecting a perfect cure.

Case IV. M. W., a woman about 50, had the misfortune to break her humerus, and, without any assignable cause, the bone refused to unite. In this condition, she applied at the hospital in March 1851; and, as I had reason to know the arm had been well treated by retentive apparatus, I proceeded to introduce the needles. In three weeks the parts began to consolidate; but she met with another accident about this time which delayed the process. Eventually, by perseverance with the needles, aided by galvanism, for some twenty days longer, she regained the full use of the arm.

Case V. During the early part of 1852, I had a man under care who could not raise the arm, owing to a long ligamentous union, consequent on fractured acromion. I carefully introduced the needles from time to time, until, apparently, ossific union resulted, the parts being kept bandaged during the period. After the treatment, the man could raise his arm nearly as well as that of the opposite side.

Case VI. J. P., a coloured man, was in the accident ward of the Queen's Hospital during the spring and summer of 1851. He was admitted with a fractured thigh, which I reduced, using the straight splint and perinæal band. Chiefly owing to the man's restlessness and impatience of restraint, it was some time longer than the average before union began to take place. When this did commence, the dresser who had charge of the case, by some unlucky accident, allowed the leg to fall on the bed, and fractured the thigh apart. Much difficulty was again experienced in procuring union, which, however, was at last brought about by the use of the needles, which I introduced daily for some weeks.

While progressing in this satisfactory manner he imprudently took undue advantage of his condition, and essayed to walk round the ward. As might be expected, the newly ossified part again gave way, and from this time (partly owing, perhaps, to the man's health having suffered from so long a residence in hospital; but chiefly from his restlessness and continued experimentalising) all endeavours failed in procuring union. He was treated with seton, and, eventually, Mr. Knowles amputated the thigh.

Case VII. In July 1856, being in medical charge of the *Punjaub*, a large steam frigate belonging to the Indian Navy, I. E., able seaman, came under my care for an ununited fracture of the forearm. The patient was a strong, healthy, young man, of 23, and met with his injury while steering ship in a gale off the Cape of Good Hope. No surgeon being on board, the nature of the injury remained undetected; and after a very short period of rest the master of the vessel, under the idea the man was skulking, forced him to return to duty. He rested his arm as much as possible, and having a quarter-master's rating, was enabled to do this, to a considerable extent, during the remainder of the voyage. When, four months afterwards, he came under my care, I found there was want of union of both radius and ulna; but the mobility of the fragments of the latter bone was much greater than the former. Rubbing the ends of the bones together, and careful application of splints, was first tried; but these means not succeeding, I used the needles. Dr. W. Williams, of the Bombay Medical Service, was kind enough to aid me in the treatment of this case, and we had the satisfaction of making his arm, as he expressed it, "stronger than ever it was." The fact that he regained full power over the limb, I had frequent opportunities of observing, having seen him pulling the oar and working the gun tackle with great zeal during the Persian war, which happened immediately afterwards.

THE FORMATION OF CLOTS IN THE VENOUS SYSTEM DURING LIFE.

(A THESIS FOR A MEDICAL ACT IN THE UNIVERSITY OF CAMBRIDGE.)

By GEORGE MURRAY HUMPHRY, M.D., F.R.S.,
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I.—Formation of Clots in the Veins.

The obstruction of the veins, by clots forming in their interior, has, of late years, been the subject of investigation by several pathologists, who have pointed out clearly the conditions under which it most frequently occurs, and the changes which take place in consequence. Still, doubts appear to exist respecting the causes of the phenomenon, and the starting point of the mischief; and, though the affection is one of very frequent occurrence, and may usually be diagnosed with facility, it certainly has not attracted the attention of practical men so much as it deserves. Very commonly it is suffered to pass unnoticed during life; and, after death, the vessels concerned are seldom examined to a sufficient extent, and with sufficient care to enable the observer to form a correct opinion upon the matter.

Case I. My own attention was first particularly directed to this disease in 1843, by its occurrence in a member of our own profession, a tall, thin, delicate person, who, when just beginning to recover from an attack of pleurisy on the right side, by which he had been much prostrated, experienced an uneasiness and stiffness in the left groin and side of the pelvis. For a day or two he did not pay much attention to the symptom, thinking he had probably strained himself by lying in some awkward position, though there was no ground for such an idea. Soon, however, the uneasiness extended down the thigh into the ham, in the direction of the great vessels, and was accompanied by tenderness in the same situation, with swelling on the inner side of the thigh, and enlargement of the superficial veins. It was consequently inferred that there was some affection of the femoral and popliteal veins; and this was rendered quite clear by the extension of the disease to the posterior tibial and the lesser saphena veins; the latter of which formed a firm tender cord under the skin. The whole limb also became œdematous. A few leeches were placed over the femoral vein; but it was remarked that very little blood flowed from their bites. Poultices and fomentations were applied to the limb. Gradually the affection subsided, and the limb was restored to its natural condition. When the patient had so far recovered from these attacks as to be able to sit in a chair, he used to wheel himself about the room by means of the right leg, and in this way may have strained the part in some slight degree. At any rate, he began to perceive sensations in the right ham, which excited suspicions of the commencement of an affection in it, corresponding with that which had just subsided in the opposite extremity. These suspicions were very soon verified by the implication of the lesser saphena vein, and by the gradual extension of the uneasiness and tenderness up the thigh, in the course of the femoral vein, as far as the junction of the saphena major. There was also swelling of the limb. A few leeches were applied; but again very little blood flowed from the bites, in spite of diligent fomentation. The symptoms gradually subsided; and the patient quite recovered. Some œdema of the limbs remained for several months. This entirely disappeared in course of time; the superficial veins resumed their former dimensions; and there was every reason to suppose that the current was reestablished through the deep veins. It is worthy of remark that the same patient exhibited symptoms of similar disturbance in the popliteal and femoral veins after each of two subsequent illnesses; viz.: after an attack of typhoid fever in 1846, and of pleurisy on the left side in 1851, On the latter occasion, the upper part of the posterior tibial vein and the lesser saphena in the left limb, were involved, as well as the popliteal and femoral. The symptoms were slighter and of shorter duration than in the first attack, and were not followed by any evidences of permanent obstruction to the circulation, or impairment of the limbs.

The following cases occurred soon afterwards.

Case II. A man, aged 30, not much emaciated, died of phthisis with bronchitis and much prostration. Œdema of the right leg and thigh, with mottled blue and white patches on the skin, like those resulting from ecchymosis, had existed for some days; but had not attracted much attention. The external and internal iliac veins, and part of the common iliac, as well as the femoral, profunda, and saphena major, were distended with coagula, of a dark colour, irregularly intermixed with lighter fibrinous portions, which gave them a mottled aspect. Near the junction of the saphena, the clot was of more uniform colour, presenting the appearance of reddish, soft, dirty lymph, or fibrine, and was adherent to the inner coat of the vein. The latter had lost its polish, was rather soft, and admitted of being peeled off from the outer tunics of the vessel. The cellular tissue immediately surrounding the vein was, especially near the saphena, infiltrated with serum and lymph. The clot terminated abruptly in a thick rounded end, about an inch below the junction of the left common iliac vein.

Case III. A pale anæmic girl, aged 19, was in the hospital on account of excessive debility, and was being dressed by her friends for the purpose of removing her, without regard to the warning which had been given of the danger of such a proceeding, when she fell, fainting, and quickly died. She had been observed, during her stay in the hospital, to lie with the right arm hanging out of bed, and with her head inclined towards the right shoulder; not because she was in pain, but she preferred that position, and could not tell why. In the last few days the arm had swollen. We found the internal organs bloodless, but healthy, with the exception of slight emphysema of the lung. The right innominate, subclavian, and internal jugular veins, were obstructed and distended by a large clot, which, in the innominate vein, was of light or buff colour, scarcely tinged with red, and firm. It was adherent to the coats of the vessel, though easily separated from them; and the internal surface of the vein had lost its polish. In the jugular vein, the interior of the clot was softened to about the consistence of cream, and looked like a mixture of blood and pus. This semifluid portion of the clot was, on all sides, surrounded, and separated from the coats of the vein by a layer of firmer coagulum, which stretched, but was only very loosely adherent to, the vein. The coats of the several veins were natural; but the tissue on their exterior was indurated and infiltrated by serum and lymph,

Case IV. In a man, aged 45, who died of phthisis, the right upper extremity having, for some days, been œdematous, and the superficial veins of the arm and shoulder distended, we found the subclavian vein, near its junction with the internal jugular, blocked up by a tough brown clot, which was adherent to the interior of the vein. The latter presented no unnatural appearance, except a loss of polish. There was some induration of the tissues on the exterior of the vein. The rest of the subclavian vein, the axillary and the internal jugular, were distended with dark clots; but were in other respects natural. The internal jugular was free. There were large, dark, soft clots in the heart; also evidences of recent pleurisy on the right side; and numerous tubercles, and recently formed cavities, in the lungs.

I have met with many similar cases; but it is needless to detail them, because they presented no great differences from those just given, and from others which are to be found in various writings since the time of Morgagni. In some, the deep veins of the calf only were implicated; their condition being evidenced by swelling of the limb, with uneasiness and tenderness in the course of the posterior tibial vessels, and an enlarged, firm, and tender state of the saphena minor. This has occurred lately in two cases, in which I had laid open the tunica vaginalis testis, for the purpose of inducing suppurative inflammation in that membrane. Both the patients were young subjects; one of them was in a debilitated state. In both of them the affection was on the side opposite to that on which the operation had been performed, and subsided spontaneously.

In all the cases that I have seen, with the exception of one of the two just mentioned, the patients have been in a feeble state, most of them having been previously reduced by some other disease. The most frequent causes of the accompanying debility, were: some chronic disease, such as phthisis, or a discharging abscess; old age; low fever; or an acute inflammatory affection, more particularly of the serous membranes or of the lungs. In no instance has the condition of the veins appeared to be the cause of death, either directly or indirectly; though in many cases the patients died of the diseases which preceded that condition, and the state of the blood which was induced appeared in some to accelerate the fatal result. It is, moreover, a very important fact that in no case, which has occurred within my observation or reading, has this affection been productive of any of those alarming and much to be dreaded symptoms, which attend occasionally upon traumatic

inflammation of the veins, and occur under other circumstances, and which are supposed to depend upon the admixture of purulent, or other morbid fluids, with the circulating blood. In some instances, as in that first related, the affection is attended with uneasiness, or pain, in the early stages. More commonly, it comes on insidiously and does not attract attention till the swelling of the limb is observed, when some tenderness in the course of the vein may generally be found. Not unfrequently, we are called upon to treat an œdematous state of one of the lower extremities, which commenced during an attack of fever, or some other illness, and which may be traced to an obstruction of the vein that had escaped notice. In several cases the first suspicion of any obstruction to the circulation has been excited by the observation, after death, that one of the limbs was swollen; this has led to an examination of the veins, and to the discovery in them of clots, which must have existed many days.

The circumstances under which the disease occurs, and the fact that it often affects several parts of the circulatory system at the same time, or consecutively, in the same person, are quite in accordance with the supposition that it depends, primarily, not upon a morbid condition of the vessels; but upon a preternatural tendency to coagulation in the fibrine; and this view derives confirmation from several of the following phenomena, which may be observed in the origin and progress of the malady.

Thus, the obstruction most frequently commences in the parts of the venous system which are most favourable to the coagulation of the blood; viz., in the great veins, particularly those of the lower extremities, where the current is more feeble than in other regions. The points of selection in the lower limbs are: first, at or near the junction of two large veins, as the external and internal iliacs, the superficial and deep femorals, the anterior and posterior tibials; the projecting angles between the confluent trunks, furnishing favourable spots for the settling of the blood: secondly, in the neighbourhood of the valves. These present loose, free edges, to which the fibrine may readily adhere; and they also have the effect of shutting off from the circulating current the small quantity of blood which lies above them, included in the retiring angle, between the upper surfaces of the valves and the adjacent wall of the vein. The blood so situated must be almost at rest when the circulation is feeble and the limbs are kept quiet, because the valves will be then only partially opened, and, being at rest, it has a favourable opportunity to coagulate and become the nucleus of a larger clot. That this is no imaginary cause is proved by a case in which I found small dry clots lying above—that is, under shelter of—the valves of the femoral vein; the remainder of the vein being free from clots, or nearly so. However, the veins just above the valves often present slight bulgings, or dilatations. Their walls are here a little thicker than at other parts, and they exhibit a faintly reticulated appearance upon the internal surface.*

It is to be remarked, that the valves are more numerous in the lower limbs than in the upper, and in the deep veins than in the superficial.† They are also often placed in the main veins near the points of junction of large branches; so that a number of causes combine to facilitate the coagulation of the blood in these situations.

Thirdly, the formation of the clot often begins in the popliteal vein. This has relation, not merely to the fact that the trunks of the anterior and posterior tibial veins, and the saphena minor are here united, but also to the fact that the internal surface of the popliteal vein is often remarkably uneven, presenting quite a reticulated appearance from the interlacement of opaque strengthening bands which form projections in the interior.

In the upper part of the body, the clots form most frequently at, or near, the junction of the jugular and subclavian veins, where there are always large valves, and in the cerebral sinuses.‡ In the latter the peculiar construction of their walls prevents much variation in their calibre (see my *Treatise on Human Skeleton*, p. 200), so that there must be considerable variations in the rate at which the blood traverses them; and they present, at the points of junction of the branches, many and marked projecting angles favourable to the settling of the fibrine.

The clots form not unfrequently in the venous plexuses around the prostate,* and in the hæmorrhoidal veins.

It appears that, as a general rule, the formation of the clot commences on the outside, that is near to the coats of the vein, where the current must be somewhat slower than in the axis of the tube; and the first stage in the process is the settling of a patch or layer of fibrine upon the inner surface of the vein. This is increased by the addition of successive layers upon the interior, whereby the channel for the blood is diminished. Soon the tube is completely obstructed; this result being commonly accelerated, more or less, by the clotting of the blood, in addition to the settling of the fibrine. The two processes,—fibrinous deposit and blood-clotting,—which differ, probably, only in the circumstance that the greater rapidity of the latter causes the entanglement of the red globules with the fibrine, go on somewhat irregularly, whence the mottled appearance of the coagula; but, as a general rule, the clots are firmer and more fibrinous near the exterior, softer and darker in the middle. In a young woman, who died of fever, with peritonitis, excited by approaching perforation of the ilium, we were led to examine the veins by observing some œdema about the left ankle, and found the external and internal iliacs, at and near their junction, on both sides, occupied by coagula, which, on the left side, extended down below the popliteal vein, and, on the right, terminated in an ordinary clot at Poupart's ligaments. Sections of these clots showed them to consist of laminated fibrinous tubes, moderately firm, and enclosing central cylinders of dark soft blood. The thickness of the fibrinous tubes varied. In some places, more particularly near the junction of the iliacs, where we judged the affection had commenced, it was so great as to leave little space for the dark central portion of the clot. In other parts, the fibrinous layer was thin; and in one place it was separated from the internal surface of the vein by a layer of soft dark clotted blood, resembling an ordinary recently formed coagulum in consistence and appearance. This was probably formed from blood, which had insinuated itself between the clot and the vessel, and had coagulated shortly before, or possibly after, death. A transverse section of one of these clots showed very clearly the central dark soft coagulum surrounded by a circle, or tube, of laminated fibrine, which again was enclosed by a more recent dark external layer.

The exterior of the clot is usually smooth, sometimes having quite a polished appearance, except at the points where it has become adherent to the sides of the vein. These adhesions are not usually very extensive; they are most commonly found where the clot began to form, and vary in their firmness with the period of their duration. The smooth character of the external surface of the clot is important, inasmuch as it rather militates against the view so much advocated by Virchow and some other pathologists, that portions of the clot are very liable to be detached, and to be carried along in the blood-current, till they cause obstruction and give rise to secondary coagula in distant vessels.†

[*To be continued.*]

* In a man, aged 76, who died of senile gangrene, I found a reddish brown clot, which was evidently of many days standing, closely adherent to the valves of the femoral vein, near the junction of the profunda. The rest of the veins, in both lower extremities, were healthy, and contained no peculiar clots.

† I have found the distances at which the valves are placed in the superficial veins of the lower limbs to be about equal to those at which they are placed in the deep veins of the upper limbs.

‡ They were found by Virchow, *Froriep's Notizen*, xxxvii, 30, in the cerebral sinuses, in 6 cases out of 18.

* In a man, aged 67, who died with sloughing of the nates, after fracture of the thigh, I found several short thick firm clots, with stunted branches, in the veins near the prostate. They were smooth, quite unadherent, and tumbled out from the divided vessels. A section of each showed a central cavity containing red fluid, surrounded by a wall composed of tough, laminated, reddish or mottled fibrine. The fluid exhibited red corpuscles and a great number of pale nucleated cells.

† Mr. Hewett, *Medico-Chirurgical Transactions*, xxviii, 74, found the clot in one case "enveloped in a perfectly distinct, transparent, smooth, polished membrane, presenting the appearances of serous tissue, with arborescent vessels in its structure."

THE INHALATION OF CHLOROFORM IS ALWAYS ATTENDED WITH DANGER.

(ABSTRACT OF THESIS FOR AN ACT KEPT IN THE UNIVERSITY OF CAMBRIDGE FOR THE DEGREE OF M.D., JUNE 17TH, 1859.)

By R. Martin, M.L., Assistant-Physician to St. Bartholomew's Hospital, and Warden of the College.

The danger in the administration of chloroform arises, *first*, from the fact that it is impossible to produce its sufficient effect upon those parts of the nervous system which minister to sensation and volition, so as entirely to suspend their functions, without producing some effect upon the centres which minister to the organic functions; and there must always be a

risk that the amount of that effect may be incompatible with life. That an influence is exerted upon the medulla oblongata, is proved by the paralysis of the muscles supplied by the facial nerve, and by the suspension of the functions of the glosso-pharyngeal and the motor part of the pneumogastric; and we cannot but suppose that the influence will sometimes reach the nerves connecting the same centre with the respiratory and circulatory organs. Analogy renders it probable that the sympathetic system is not exempt from the influence of the vapour; and the impaired action of the iris may be regarded as an evidence in favour of the supposition. *Secondly*. The danger arises from the idiosyncrasy of the patient rendering the organs of animal life, and the nervous centres which preside over them, peculiarly susceptible to the influence of the vapour. That such peculiar susceptibilities exist with regard to chloroform, is only reasonable to infer from our observation of the varying effects of other agencies upon different individuals; and, at present, we are unable to predicate with any certainty respecting them. *Thirdly*. Our knowledge of the subject of diffusion of gases does not enable us to regulate with precision the amount of chloroform inhaled.

Death may result from the immediate action of the blood, which is surcharged with the vapour, upon the muscular tissue or ganglia of the heart; this has been proved by experiments upon animals: secondly, from its effect upon the great nervous centres which minister to the organic functions: thirdly, from a cause not hitherto especially pointed out—viz., the impression made by the vapour upon the branches of the sympathetic and the vagus ramifying on the lining membrane of the air-passages, and communicated by them to the nerves of the heart; just as a blow upon the epigastrium, or severe shocks to the nervous centres, cause sudden cessation of the heart's action.

When death has occurred suddenly during the administration of chloroform, it has, in several instances, taken place just after a fresh supply of the fluid has been added to the inhaler or the cloth. This was noted in one of the most recent cases; and the patient had also just screamed. By the effort of screaming, the air and blood had been expressed from the cavity of the chest; and then, a fresh supply of chloroform being used, and a large quantity of vapour inhaled, the fatal result ensued. When death has occurred more slowly, or after a more or less protracted interval, there has been commonly some predisposing cause; the patient being greatly reduced by some previous disease, and the important organs being, consequently, unable to withstand the depressing influence of the chloroform; or there was an enfeebled or morbid condition of the respiratory or circulatory organs. Hæmorrhage during the operation, by causing an accelerated absorption of chloroform, or by causing an absorption of extravascular fluids in the lungs and other parts which had become charged with chloroform, might increase the danger. Moreover, the "shock" of the operation must not be forgotten. Since the introduction of chloroform, we have heard little mention of this; but we must not suppose that it results entirely from pain, and that, when pain is prevented, "shock" is annulled. Doubtless, the division and damage of the tissues caused by an operation must still produce their effects upon the system; and that effect is more likely to be pernicious when the powers of the great organs are depressed by the influence of chloroform.

Having stated his conviction that a certain amount of danger does, and probably always will, attend upon the administration of chloroform, the author was anxious to guard against the supposition that he is averse to its use. When first introduced, it was advocated by many as being entirely devoid of danger; and much prejudice was excited against those who looked more doubtfully upon it. Experience soon proved that the complete assurance of its innocency was unfounded. From time to time fatal cases had been recorded; and the result had been a reactionary feeling in the mind of many persons, leading them to express the opinion that so dangerous an agent ought not to be employed. With that view he by no means agreed. He merely wished to express the reasons which induced him to think that, even in the most careful hands, it was attended with some danger; but he does not consider the danger sufficient to counterbalance the great benefits derived from it. Though no complete security could be found, the best guarantee of safety was to be obtained by such cautious administration of the chloroform as may prevent the air and the blood in the lungs from being surcharged with the vapour, and by a jealous watching of the patient while he is being subjected to its influence.

Transactions of Branches.

READING BRANCH.

PRESIDENT'S ADDRESS.

By John McIntyre, M.D., Odiham.

[*Delivered July 13th*, 1859.]

Gentlemen,—I thank you very much for the honour you have done me in choosing me as your President for the coming year. To discharge the duties of the office may not be considered, under ordinary circumstances, a very arduous task; but to me they are beset with difficulties, that I am little likely satisfactorily to overcome. Had I been the immediate successor of less distinguished individuals than those who have preceded me in office, I might have had less hesitation in addressing you, and a less sense of the responsibility that, at your bidding, I have perhaps incautiously assumed. Not on my own account, however, has this been most warmly felt, but lest the honour of the office, and the good name of the Association, should in any way be tarnished through the feeble administration of your new President. To hand down to my successor the good name with which the Association has in this chair been introduced to me, is my high ambition; the difficulty of accomplishing it, my present burthen. Yet I lean to the hope that I need not be discouraged, knowing as I do, that I have to deal with a liberal and enlightened membership, whose hearts are in their right places, and who, however great they may be, will, I trust, wash away my many imperfections in the flood of their attachment to the general weal.

But with all this, Gentlemen, my course is not clear. The grave question presents itself, What am I to say?

A more gifted spirit might lead you to lands of enchantment, or withdraw the veil that now hides them from your view. Physic, seated on her throne, arrayed in her richest drapery, with satellites around, and a teeming population, brimful of gratitude, and rejoicing in the blessings she is ever and anon from the treasury of her abundance dispensing amongst them, might there be descried; an air of beauty, of contentment, and of peace, be discovered resting sweetly o'er the scene, whilst the clash of interests, and the strife of tongues to which in this little world we are so much accustomed, might there be unknown; but such scenes, Gentlemen, are far beyond the flight of my pinion, if there my fancy or my judgment led.

The tenor of my life has been to deal with facts, not fancies—to clip imagination's wings, and cherish stern realities; to view the world as it is, the men and women in it simply actors; to try to solve the problem, how they act their parts, singly, or in company. To-day, my part seems this, to ask how fares it with you all? and what the prospects of our company? A company? Yes, and noble too, and knit together for no selfish end—but that, indeed, on which Heaven's God may smile—the cultivation and advancement of science, and the fostering of those cherished virtues that elevate and adorn our race.

True it is, that in some communities where the spirit and enterprise of the profession had before established societies for like purposes, the influence of the Association will scarcely be perceived. Amongst ourselves even, with our venerated "Pathological," in which such objects are most happily accomplished, its need was undiscerned. But in other circles, it is far otherwise; where its Branch meetings have afforded the only opportunity of drawing together individuals earnest in the pursuit of science; and who, without them, would have ever been estranged. We may, therefore, justly view its establishment as a boon to the profession,—the more so, when we see in it an organisation pervading in increasing measure the length and breadth of our community, and capable of wielding such an influence as even a political administration could feel.

I need scarcely remind you that since our last meeting new laws have issued for our government,—by some thought good, by more indifferent, but all say, in the right direction. Bills in full of our demands we gladly always hail, but not forthcoming, we willingly accept a small instalment. With *that* we have obtained, our company had much and long to do. It laboured long indeed, and very hard. Its throes came fast and were severe; and oft the words pronounced from influential lips fell cheeringly and gladly on its ears, "We are sure it soon will pass." As oft occurs, however, at an early stage of all hard births, the demon of miscalculation entered. Minds, masculine indeed they were, and strongly centred on the progress of the case, descried at length that something unforeseen

lay in the way of their success, and disproportion in the bill was found to be the grave obstruction. The yielding structures did their best, but no advance was made. The outlet of the Commons House, but newly built, was hard and stubborn; yet still, though changed it was, the cheering note was sounded in their ears, "We hope it soon will pass." Such cheer, however, lay in hope; for soon was heard in softened voice the gradually declining tone, "We fear it cannot pass." In testimony of such wisdom, the Bill stood still; till soon, with open mouth, the truth came out, "We are sure it cannot pass." Our body *done*, gave up the task, and wisely threw itself on extraneous aid. The forceps of invested rights were close at hand, were soon and skilfully applied, and the baby-Bill was born. Contused, distorted and curtailed, it but escaped with life; yet, presenting some family features, was not ignored.

I shall not detain you with a narrative, however condensed, of what we originally strove for. Such you all know. Suffice it to say, that what is now conveyed to us may be summed up in this:—that, if returns be true, we shall now know who are, and who are not, legally qualified to practise; that there are those practising medicine and surgery—no news, indeed—who hold no legal qualification, whilst the General Council repudiates the onus of their prosecution. The Bill gives the Council no control over aberrant legally qualified members of the profession, but leaves every one to follow the bent of his own inclination—native physic, or any of its pseudo-forms—such, in fact, as he may deem most conducive to quieting his conscience, or bursting his purse strings; it gives so-called pure physicians power to recover their fees in a court of law, if, like the London College, they will not repudiate so degrading an item; and it gives so-called general practitioners power to gain recompense for professional attendance without its hitherto degrading adjunct physic.

With such a Bill we must at present be content. If aught more is to be gained by legal intervention, which some vainly fancy, let us view the present Bill, not as a conclusive measure—not as a bench from whence judgment and no appeal can be given—but as a platform on which to rest, to renew our strength, and trim our wings for a further and a higher flight. Viewing it in this light, we shall not be idle in urging those whose ear or influence we can command to push on in the legislature the tide in our behalf; but we must never forget that the true battle field of our advancement must be contested by ourselves, not in the senate house indeed, but in every day life; and unless, shoulder to shoulder, we press on to victory, we cannot, we dare not, throw the ignominy of defeat upon the powers that be.

Our resources for the conflict are not new. They are now, as of old, independent of all Registration, or so-called Reform Bills. To gain the citadel of our desires, we must wield the weapons of our own armoury. We must be content, and justly too, to tread the good old paths, hallowed alike by reason and experience, to sit at Nature's feet, to watch her journeyings in the path of health, her wayward wanderings midst the mazes of disease; with watchful care to *note* her acts—to know and feel that one such act, before unseen, carefully and faithfully recorded, is worth one's life; and to ever feel that, without a strenuous pioneering effort in likely regions of discovery, we, as single actors, leave our part undone. Without such knowledge of diseased and healthy states, we never could, or ought, to hold our present place in social life, far less uplift it. On such a base, with therapeutic aid, our strongest bulwarks must be ever reared.

But points there are, and high ones too, to be secured by other means than so-called medical. The common bonds of life tie all alike. Though rolling in the sphere assigned to us, we never cease to form part and parcel of the general system—influenced by the same great laws, and governed by the same *Great King*. If keeping His great laws conduce to human weal, to strictly do so we must ever aim.

> "The good old rule, the simple plan,
> That they should take who have the power,
> And they should keep who can",

must be at once and for ever laid aside. We must lean forward on a better and a purer faith. We must "do unto others as we would that others should do unto us." We must show, yet more clearly, that we are living to work, not working to live only. Living to work! Witness the simple truth that we are shorter lived than other professions; and why? Our anxious hourly watchings over scenes of sorrow or of suffering; our struggle ever on to do the most and best for all; our loss of Nature's sweet restorer, and other comforts for decaying frames;—these, with brains strained tight to fit for fighting life's rough battle—these, and such like efforts, tend but to the grave. Yet, though short in stretch our lives, intense in effort. Hence long

> "We live in deeds, not years; in thoughts, not breaths;
> In feelings, not in figures on a dial:
> We should count time by heart-throbs. He most lives
> Who thinks most, breathes the noblest, acts the best."

Neither can this form matter of wonder, when we think for a moment of the intricacies of the framework with which we have to do. View it as to structure or to function! Why, the most finished productions of human effort, whether of body or of mind, sink into utter insignificance when contrasted with it. The Hand, whose meanest work outvies them all, is there. There, *even in its ruins*, the impress of Omnipotence can be traced; and, on earth, it can even constitute the dwelling-place of its Creator's Spirit.

No release, gentlemen, from the trammels that are presumed to have hitherto encumbered us can be hoped for or obtained, till by ourselves the greatness and the glory of our mission be perceived. When so, viewing this life as a scene of sorrow and of suffering, we shall warmly push on to alleviate its distress. We shall view ourselves as competitors in the race of charity, far more than in that of worldly advancement; as vieing who shall most minister to our race's ills, or point, it may be, a departing spirit to a place of rest.

Sad indeed is the truth, and not to be winked at, that by some amongst us such thoughts are ignored. Truth departs, if ever it had place, and error reigns; or truth and error *appear* to combine. The iron and the clay, however, will never coalesce; and sooner or later the deception will unfold. Neither does this apply to moral or religious, more than to scientific truth. Born and nurtured in the true faith of so-called allopathy, let us cling closely to its precepts and its practices. Yet, it is not enough that we "hold fast that which is good"; our aim must be, also, to combat and extinguish error. One's fingers tingle when he sees the amount of it afloat around him, and he longs for the power to erase it all from the page of his experience; but how much more so, when he finds it flourishing through the fostering influences of truth's pretended friends. Yes, gentlemen, there are those, alas! whose brotherhood we cannot deny, who, whilst basking in the sunshine of courtly favour, and fanned by the perfumed breezes of Belgravia, so far forget their allegiance as to wink at the practices of the enemies of truth; who cease not to pander to the ever-craving, never-satiated, appetite of fortune's pampered sons—whose cry for ever is, as those of old, something, not true, but new: not that which, strong in honesty, boldly marches to the relief of suffering, but that which tickles fancy, kills the moment, though absurd and unsubstantial as the baseless fabric of an idiot's dream.

Gentlemen, let the teachings of experience in such things not pass away unimproved. Let us learn, if not already, that to us individually is confided the guardianship of the high interests of our profession; and let us strive, each in his own little world, and, it may be, his own little way, *so* to present truth, that in its naked simplicity it will be received by the thinking, and so to adorn it by our lives and conversation, that it will be accepted by the feebler and less judging amongst us. Doing so, we may well rest assured that our profession will attain all that in the Councils of Heaven has been assigned to it. It will prove itself to be, as it was, and ever should be, the twin child of Christianity; and to its successful cultivators and practitioners—to those who have viewed it as a stream of Heaven's mercy, and have humbly trusted to the Spirit of Wisdom to guide them in its use—to them will it be given to know that they have not been mistaken; that, in doing their duty to their patients and their profession, they have done it unto Him who dictates all duty, who sympathises with all suffering, and lords it over all professions.

SOUTH-MIDLAND BRANCH.

CASE OF STRANGULATED INGUINAL HERNIA.

By Blackall Marsack, Esq., Olney.

[*Read May 30th*, 1859.]

Strangulated hernia is at all times of interest to the surgeon; and though an operation is not often required, the day is not far distant when it will be still less needed. I look forward to the time when the recruit who presents himself for admission into Her Majesty's service will no longer be rejected on account of his rupture, but will be sent to some institution where he will undergo an operation for the permanent cure of his infirmity; so that, if this be successful, he may be accepted.

The case which I am about to read is one which has occurred in my practice since the beginning of this year, and which, by the able assistance of my friend Mr. William Daniell (the son of our worthy ex-President), I was fortunate in bringing to a successful issue.

George Andrews, a thatcher, of Clifton Reynes, aged 65, was first ruptured three years ago; but until the week before Christmas last, the hernia was so slight and caused so little inconvenience, that he did not wear any truss. At that time, whilst he was stocking-up a hedge row, it suddenly descended into his scrotum, giving great pain, which was not relieved until he returned home and replaced the bowel. A truss was worn afterwards; but it does not appear to have been of much use, for, in the evening of January 31st, the rupture again descended, and he was unable to reduce it. He, however, did not send for assistance until the following evening (Feb. 1st), when I found him suffering from all the symptoms of severe strangulation—intense pain, constant vomiting of a dark coloured fluid, quick respiration, anxious countenance, etc.

On examination, I found a large scrotal hernia on the left side, very tense, and apparently all intestine, filled with hard fæces. I employed the taxis in the usual way for about a quarter of an hour, without making the least impression. I then gave it up for the night, and ordered cold applications to be applied until morning, telling him that an operation would be necessary if the rupture could not then be returned.

Mr. W. Daniell came over to assist me in the morning; and, both of us being agreed that an operation was imperative, I proceeded in the usual way by making a longitudinal incision over the tumour. The stricture was at the internal ring, and unusually tight, so that it was difficult to pass even the nail of my forefinger under it; and I found it impossible to introduce the beak of the ordinary blunt pointed bistoury without the aid of a small director. After division of the stricture, the whole mass returned readily into the abdomen. The sac was not opened, as I considered the strangulation had barely had time to produce mortification, and there would be a better chance of recovery. During the operation, and after making the first incision, it was necessary to tie a small artery, which I mention on account of the unusually long period the ligature remained firmly attached, and the irritation it appeared to set set up. I brought the wound together with two sutures, and applied a pad and bandage, and gave forty minims of tincture of opium.

February 3rd. The patient has passed a good night, but feels feverish and thirsty this morning. Pulse 78, regular and soft. The bowels have not been relieved. There is no pain on pressure over the abdomen, but slight tympanitis. The wound is apparently uniting by the first intention. I gave an injection of thin gruel and castor oil, also a saline mixture every four hours.

February 4th. He has passed a very restless night, and complains of pain over the wound. Pulse 80; tongue moist; skin cool. The bowels have not yet been relieved since the operation. The wound and the surface of the scrotum look red and swollen. I removed the sutures; and the centre of the wound discharged a small quantity of pus, most probably produced by the irritation of the ligature on the artery. I gave another dose of castor oil, and applied lint dipped into warm water over the scrotum.

February 5th. He has passed a restless night, owing to the castor oil having operated several times, causing griping pain at each motion. Pulse 70, soft; tongue moist and furred, white. He has no tympanitis; but slight pain on pressure over the abdomen. The wound has opened, but looks healthy. The ligature is firmly attached. I ordered him to have strong beef-tea every four hours.

February 6th. He has passed a good night. The bowels are not open. He complains of occasional pains in the abdomen, but these are not increased by pressure. The ligature is still firm.

February 7th. The bowels were much purged during the night, causing great pain. Pulse weak, 70. He has no particular pain on pressure over the abdomen. The discharge from the wound is dark and offensive. The ligature still refuses to come away. He was ordered to have beer, beef-tea, and eggs.

February 8th. He has had a restless night owing to pain in his right elbow and right hand: he says that he is subject to rheumatism. At present, there is slight redness of the elbow-joint, and a red tender spot on the metacarpal joint of the forefinger. He looks better in his general appearance, and is quite free from pain in the abdomen. Pulse 66; tongue moist. The wound is discharging healthy pus; the ligature is still firm. I ordered him to have poppy-head fomentations applied to the elbow and hand, and to take beer and meat daily.

February 10th. He is in every way progressing favourably. The wound is nearly closed; the swelling and pain of the elbow and hand are nearly gone. The ligature still refuses to be pulled away.

February 12th. He sleeps, eats, and drinks well. The ligature could resist no longer. I fixed a pad on with strapping and bandage, and ordered him to get up.

From this date he kept on improving; and on March 6th, he walked down to my house, and I fitted him with one of Salmon and Ody's trusses. He went regularly to work immediately, and has found no inconvenience since.

Remarks. I believe this case would have been quite well in five days from the operation, had it not been for the ligature on the artery; and I regretted afterwards that I had not attempted to stop the hæmorrhage by pinching or torsion. That there was great susceptibility of irritation in this case, was shewn by the erysipelatous blush on the scrotum produced by the two sutures.

CASES OF ASCITES, APPARENTLY ARISING FROM CHRONIC PERITONITIS.

By William Paley, M.D.Lond, Peterborough.

[*Read May* 30, 1859.]

In bringing before you the following cases of ascites, apparently arising from chronic peritonitis, I can scarcely hope to be able to throw any very new light on the subject: my wish is to call your attention, first, to the frequency with which these cases occur in my own immediate neighbourhood; and, secondly, to mention a plan of treatment which I have found from experience to be very successful.

The cases which I shall mention, thirty-six in number, have all occurred in my practice as Physician to the Peterborough Dispensary during the last thirteen years, with the exception of four, which were seen as private patients. It is fair to state, that in the list of cases given, none are admitted in which the presence of fluid in the abdomen was not most distinctly evident. I have purposely omitted some others, where I believe the disease existed in an early stage, but where the presence of fluid was not so certain.

In forming my own opinions in these cases, I consider the following essential symptoms. Fluctuation; more or less enlargement of the abdomen, with dulness on percussion; pain, or at least a sense of uneasiness, in the abdomen; considerable disturbance of the general health; emaciation; hectic fever, with usually great quickness of pulse; generally diarrhœa; and, lastly, the absence of any other cause of dropsy, as disease of the liver, heart, or kidneys. With these few preliminary remarks, I will proceed at once to analyse the cases.

Sex. Fourteen were males, and twenty-two females.

Age. One was between 1 and 2; two between 2 and 5; four between 5 and 10; eleven between 10 and 15; five between 15 and 20; ten between 20 and 30; the remaining three between 30 and 60. It may fairly be inferred from these data, that children and young persons, more especially girls, are most liable to its attack.

Complications. In four cases there was distinct stethoscopic evidence of tubercles in the lungs. In five cases pleuritic effusion was either present at the same time, preceded, or followed the effusion into the peritoneum. In one case there was lumbar abscess; in another, strumous disease of the elbow-joint; in one, a middle aged adult, there was suspicion of a non-malignant tumour in the abdomen. The strumous diathesis appears strongly marked in most of these complications.

Duration of the disease from commencement to termination. Not known, eight cases; four from six weeks to two months; four from two to three months; two from three to four months; four from four to six months; eight from six to nine months; six from twelve to eighteen months. It is essentially a chronic disease; two-thirds of the cases had lasted six months.

Results. Twenty-two cases were cured; four much relieved; one not relieved; four ceased to attend; five died.

In one case only was an examination permitted after death. A considerable quantity of sero-purulent fluid was poured out into the peritoneal cavity, which was formed into several separate compartments by bands of adhesions. The peritoneal surface of many of the viscera was studded with tubercles. The liver was granular. In another case ulceration took

place spontaneously near the umbilicus, and a large quantity of purulent fluid continued to flow through the opening for many weeks, till at last the patient sank from exhaustion. With so few facts to rely on, I would wish to speak with the greatest diffidence as to the morbid anatomy of these cases; but I have a strong conviction on my own mind, that in a great majority of them tubercles would be found more or less developed in the peritoneum, giving rise by their presence to subacute inflammation and consequent effusion of serum.

Treatment. In the earlier cases, I tried diuretics, purgatives, and counter irritants without much effect; then I used the iodides, principally the syrup of iodide of iron, and friction over the abdomen, with ointment of iodide of mercury, both, I am bound to say, with good effect; still the absorption of the fluid went on very slowly; a long course of treatment was required before it could be effected, and the patient's strength was very apt to give way in the meantime. At last I tried cod-liver oil, and found it so successful, that for the last eight years it has always formed the basis of my treatment. I generally give at the same time the syrup of iodide of iron, if there is no diarrhœa, and use friction over the abdomen with the iodide of mercury ointment. I lay great stress also upon keeping my patients as much as possible in the open air, giving a nourishing but unstimulating diet, carefully avoiding either invaliding them or reducing their strength by too active remedies. If there is diarrhœa or very much pain in the abdomen, I give small opiates, either with or without astringents, as the bowels may require. In two cases only, from the great distention of the abdomen, was the operation of tapping thought desirable; in one, a child, it gave no permanent relief, the body filling again in a few days: it was not therefore repeated. In the other case, that of a man, in which I suspected an abdominal tumour, it was performed four times, and seemed materially to assist the cure, the quantity of fluid diminishing after each operation.

In conclusion, and lest any one should be disappointed in not being able to effect a cure so rapidly as he could wish in similar cases, I will just mention the length of treatment required in the cases given; one, one week (died); four from two to three weeks; two from three to four weeks; two from four to five weeks; two from five to six weeks; four from six weeks to two months; eight from two to three months; four from three to four months; three from four to six months; three from six to nine months; two from nine to twelve months; one eighteen months.

FORCED ALIMENTATION.

By P. R. Nesbitt, M.D., Northampton.

[*Read May 30th*, 1859.]

Amongst the varied phenomena of insanity, nothing is more common than the indisposition to take food. Without professing to have any novelty to offer for the relief of this difficult, troublesome, and dangerous symptom, certain broad lines may be laid down with the view of combating it. Sometimes it arises from a simple act of volition—a vow hastily made, and unrepented of. This is witnessed especially in those who have morbid and perverted ideas on the subject of religion. Because the Saviour of Mankind was able to fast forty days and forty nights in the wilderness, an inference is drawn amongst the moody and melancholy that they can do the same. With a strong will they bind themselves to a resolution to abstinence, and would perish from sheer inanition. At other times, it seems to depend on physical derangement, involving some one or more of the vital organs. The accurate discrimination of the causes of this abnormal surrender of judgment is of the last importance to the psychological physician. "Quid causa ratio, et quod sit causæ genus atque cibi suma questio nossi vilent omnes," is an axiom no less applicable to this than it is to "other ills to which our flesh is heir".

It would be a great mistake to suppose that the symptoms of insanity present any uniformity in their character. Their name is legion, and as chamelion-like in their manifestations as are the temperaments, dispositions, and feelings of men. No one can travel from Dan to Beersheba, and say it is all barren, except those who have their lesson to learn.

To define insanity, however, is not, if it were possible, the object of this paper: its scope is limited to the single proposition of meting out relief to the sufferer who, whether voluntarily or otherwise, persists in combating the laws of nature. It will be at once conceded that such a person is a most fitting subject of medical care, and cannot be, except in very rare cases, deemed a proper inhabitant of his own dwelling. It is an unmistakable feature demanding removal from home, and the sooner the step is taken the better. If that atmosphere, as a general rule, is unsuited to recovery, it becomes specially obnoxious when the disease is thus marked. Alienation, estrangement, and indifference, are its most constant concomitants; and hence the very offices of natural life are baffled and counteracted. Such cases are hence fairly supposed to fall within the domain of him who practises and devotes himself to this department of our art.

From the preceding observations, it will readily be understood that, after a suitable home is provided, suitable treatment must be its accompaniment. That treatment, for convenience of arrangement, may appropriately be considered under the following heads:—

1. By the temptation of a variety of food.
2. By seclusion in a room whilst the different viands are placed within reach.
3. By feeding as a young child is fed.
4. By forced alimentation.

All these different methods are successively brought into play, and the last only is had recourse to when all the others have failed.

It is by no means an uncommon occurrence for a person to abstain at his own home, and to fall into the habits of the ranks when placed with strangers and in new surroundings. It may be that the influence of example is contagious, or it may be that his senses are no longer oppressed by the presence of the loathed and suspected inmates of his own dwelling. The idea of food being drugged will often prevent a patient using it; but sometimes a little tact is all and sufficient. A lady now under my care refused her wine on this ground, and she suffered by its want. It was daily presented, and as daily rejected. I at once tasted the poisoned article, and, sipping it very methodically, soon arrived at the bottom of the glass. The next day, and at the same hour, I repeated my visit; but the glass was already empty. She had no notion of my drinking *her* wine. The little experiment was entirely successful, and she has ever since taken it as any other Christian would. Persons, under an exaggerated and false notion of their importance, will sometimes think that they have a mission to perform—a mission from on High. A gentleman now under my care, in the early part of his residence conceived that he had a commission to break windows. Before the putty was dry, the glass was out; the practice thus becoming a perfect nuisance. His manœuvres were always sly and impulsive. He seemed surprised at a doubt being expressed relating to his commission. He acted in obedience to it; but on my intimation that, if he possessed such, I had a *higher* authority, which I could produce if he questioned my veracity; and that was a commission to prevent him. He looked amazed; but, contenting himself with the assurance, innocently replied that, if that was really the case, he of course should break no more windows—a promise which he has literally kept for years. These are simple illustrations of the mode in which difficulties are sometimes met in the treatment of the insane.

But it sometimes happens that the patient will refuse food whilst in the presence of others, and that he will eat by stealth whilst unobserved. Seclusion, with tempting food before him, will thus carry the day. Those too feeble to help themselves will oftentimes open their mouths when the hand of another relieves them of the burden of conveyance.

Should, however, all these plans fail, the last and only one then presents itself: the patient must be forced; life must be sustained. There are many persons now abroad in the world who owe their lives to forced alimentation, and who without it would unquestionably be numbered with those that were. This process I have known to be necessary not merely for weeks, but months, continually. The patient submits to it after a time with perfect *sang froid*, regarding it with feelings akin to those engendered by the operations of the barber. As a celebrated politician was wont to say, in dealing with a great proposition, there are three courses open: so it is with forced alimentation; it may be effected—

1. Through the nasal passages.
2. By the mouth.
3. By the anus.

The advantages by the first mode are so obvious to every one acquainted with the practice of this department, that it is not too much to say that it has thrown the other two into the shade. The simplicity of the apparatus, the facility in its introduction, at once commend it. I produce it, for the benefit

of those who may never have had an opportunity of seeing it—a metallic vessel, in figure and character resembling a funnel, to the small end of which is fastened a flexible tube, which, on being passed through the posterior nares and œsophagus, conveys, by the simple force of gravitation, whatever liquid is placed in the vessel, generally from half to three-quarters of a pint. The patient may resist; but resistance is so easily overcome, that the operation may be pronounced perfectly safe and efficacious.

The second mode, by the mouth, through the agency of the stomach-pump, is surrounded with difficulties that, though once or twice overcome, cannot long be persevered in. There is, in the first place, the forcible opening of the mouth, the insertion and fixing a gag, and the chance of the patient being injured by long efforts of resistance; to say nothing of salivation. The stomach-pump and other discomforts may therefore be now considered as antiquated instruments in forced alimentation.

Of the third mode, by the anus, it is only to be thought of when there is any abnormal condition in the throat or passages leading to the œsophagus, forbidding the introduction of an instrument. It holds, unquestionably, the lowest place in the scale; and, though life may be somewhat prolonged, the powers of the absorbents are comparatively too feeble for the adequate sustentation of the system.

Thus all the arguments are in favour of the instrument on the table, and the feeding through the nares.

It remains, however, to be observed, that a demonstration or the sighting of the apparatus will often produce the happiest results; and that food will be voluntarily taken by the patient when the alternative of his not doing so is fairly placed before him.

The feeding apparatus of twenty years ago, first used at the Glasgow Asylum, supplied a then existing want; but it was valvular in its construction, and, requiring the aliment to be injected through the nares, consumed time, and was speedily corroded *by* time. The modern invention is so simple that the surprise is that it should not have anticipated every other. But it must be remembered that the most splendid triumphs and applications of art and science have been achieved by the genius of successive minds; and that the aphorism of Hippocrates, *Ars longa, vita brevis*, is as forcible and true in our day as it was in his.

Reviews and Notices.

On the Organs of Vision; their Anatomy and Physiology. By Thomas Nunneley, F.R.C.S.E., Lecturer on Surgery in the Leeds School of Medicine, etc. pp. 373. London: Churchill. 1858.

If it were incumbent on all reviewers of good books that each reviewer should himself be the author of a good book, we guess that the reviewing class would dwindle into very small shrubs, and that reviews would be shorter, fairer, and sharper. The book before us—a good book in every sense—has been bowled at by so many skittling gentry for their amusement, that we, taking it up with the marks of long suffering imprinted on its outer surface, scarce knew what to do with it at first glance. After a while, the externals put aside, we ventured to go rather more deeply into the substance than is common; and now, by due examination, we have come to the conclusion that any wanton skittler who may presume to bowl at the book again, should think himself fortunate that, by a providential arrangement, he is prevented from bowling at his own *caput capitis*.

Mr. Nunneley brings to his task all the energy, knowledge, and independence that characterised the authorship of books in days of sounder literature than these—the weak, profuse, and degenerate. His industry is steadfast; his argument courteous and philosophical. There is, further (and this is a great point), no attempt in any page to invite the reader from the pure science to the one man; the beckoning finger and turtle-dove coo by which physical sinners are invited to visit some one great body-cobbler are suppressed. Who reads, reads for the book, not for the author.

So much has been written of late years regarding the organs of vision, that to write again on this subject with force and originality, were indeed a difficult, and in some senses an useless task. There was only, in fact, one direction which an author could take if earnestness were his intention. He could bring all the materials, previously spread broadcast over miles of print, into one volume; and, by skilful and laboured application, complete a work which should bring into the possession of all his working and over-worked brethren the sum total of what is known in one of the most interesting departments of natural science. This has been Mr. Nunneley's object, and he has carried it out right well; aided by skilful artistic hands, he has produced the best and most comprehensive treatise on vision extant in the English language.

The Anatomy of the Human Eye is given with perspicuity and minuteness. A chapter on Light and such of its laws as are immediately applicable to vision, gives a concise and easy outline of the subject it suggests. The chapter on the Comparative Anatomy of the Eye recalls the mind roughly to the musical and poetic, but less scientific, strains of St. Pierre on his insect world. A short chapter on the Eyes of Fossil Animals concludes with a passage which cannot be omitted.

"The large scorpion had eyes as those now living have; it must have had similar habits, and have seen in the same manner as those of our day; therefore the atmosphere in that ancient world could not have materially differed from its present actual condition. We know how greatly a fog or mist now obscures the light; it must have been so then, and hence the inevitable inference, that the atmosphere was for the most part clear and transparent. The sun must have shone in radiance, and not have struggled in dim twilight to disperse a dense mass of thick watery vapour. That light was the same then as now, these remains render certain. We have seen that there are but two modes in which an apparatus can be formed, by which the image of an object can be obtained, and also that both of these methods are taken advantage of in the construction of the eyes of living creatures.

"The revelations of geology have shown that the same arrangements have prevailed in congenerous creatures *ab initio*. If the instruments have always been the same, the laws of the medium through which sight is obtained must also have been so, since the instrument is, and always must have been, formed in accordance with these laws. Such reasoning would open a most interesting and important chapter in the world's history, but it would lead us too far from our immediate inquiry." (Pp. 298-99.)

But the part which to us is most interesting is the Physiology of Vision. Here several points are brought forward and discussed with much commonsense ability. On the subject of the Adjustment of the Eye for the perception of objects at varying distances, Mr. Nunneley, after giving a concise account of the opinions advanced by his predecessors, sums up the question in the succeeding five propositions.

"1. The first change, then, in adapting the organ to overcome the aberration of parallax is in the condition of the iris. When a near object is looked at the pupil contracts; in regarding a distant one it dilates. This is an involuntary action.

"2. In very near vision the crystalline lens is probably slightly pulled or projected forwards; in distant it is allowed to recede towards the retina.

"3. It is not impossible, though by no means proved, that the state of the lens alters, becoming more spherical or flatter according to the nearness or distance of the object looked at.

"4. The cornea becomes altered in its shape; the radius of its base being larger or smaller in distant or near vision; hence the cornea becomes more convex, and its refractive power increased, when near objects are seen, and flatter and less refractive when distant things are looked at.

"5. The axis of the eye from before to behind becomes sensibly elongated or shortened, according to the distance of the object." (P. 312.)

We might enlarge to any extent on the subjects brought forward in this department of the treatise. The pages on Erect Vision from an inverted image are full in detail; and if the author, like many others before him, has given no satis-

factory solution of the problem, he has given a fair and learned summary of the known facts.

Altogether, we recommend "Nunneley on Vision" as a work suited alike to professed students, practitioners, and science-amateurs all the world over.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, JULY 23rd, 1859.

THE MAIN DRAINAGE OF LONDON.

The works now going on in London in connection with the scheme for removing the whole drainage of its extensive area, should be viewed with deep interest by all medical men versed in sanitary science. Within the last twenty years, a most complete revolution has taken place with respect to the drainage of our houses and streets—a revolution which has brought about in some instances even a worse state of things than before existed, and has necessitated a fresh revolution of a still more marked character. But twenty years ago, every house in London and other large towns had its own domestic drain, located very often below the kitchen floor, and in all cases lying self-contained within the premises. The result of this arrangement, which had existed from the foundation of the city, was not, however, fully felt until the introduction of the water-closet at once doubled the liquid contents of the cesspools, and afforded that amount of moisture which was required as a vehicle to carry the offensive matter to the olfactory nerves. Bramah's water-closets, in fact, wafted a hidden incense to our noses, and made us acquainted for the first time with the fact that our houses were little better than inverted bell-glasses, so constructed as to receive without possibility of escape the noxious vapours reposing manufactured on the premises.

Then came the bright idea of eradicating cesspools, and connecting the closets with the street sewers, constructed originally for the purpose of carrying off into the river the rain-shed of the metropolitan area. Inasmuch as by this plan we removed noxious matters from our bell-glasses,—*i.e.*, houses,—this was a great revolution: and the health of London for a time was largely benefited by its introduction. The system, however, no sooner became very general, than the evil displayed itself in another direction. Year by year the river became more foul: every cesspool evacuated into the Thames was a fresh pollution to it, until at length the old river-god fairly began to murmur, and to compel those traversing his bosom to hold their noses. For several years, the whole aspect of one of the largest streams in Europe has been getting more and more disgusting. In 1857, it was so bad, that Faraday alarmed the public by proving that a piece of white paper, thrown from the deck of a steamer, was invisible the moment it sank beneath the water. Last year, its dye deepened, and some of the river-steamers were forced to give up running. This year, matters are still worse, and the organic ingredients now to be found in it are nearly double of what they were last year. Day by day, twenty-five thousand sewers sluggishly convey their contents (upwards of two hundred thousand gallons of filth, containing three hundred tons of organic matter) into our great river: and, on occasions of great storms, this quantity is enormously augmented.

To this condition we have been reduced by the first revolution in our sewer system; and, of course, it has necessitated revolution number two, which proposes to carry the whole drainage of the metropolis by great intercepting sewers out to sea. We have spoken our minds so often with respect to the extravagance of the scheme, with its gigantic tunnels, that will be little better than elongated cesspools, instead of the more economical pipedrains which never fail, and we have denounced so loudly the absurdity of destroying the great earth-fertilising refuse of three millions of people, that we need not here reiterate our convictions.

It seems to us, however, that what is going on in London should prove a warning to our great provincial towns. Many of these are just in the position in which London was ten years ago. They have begun to drain directly into their rivers, in many cases non tidal. Let us notice, for instance, Bristol and Bath. Through these large cities the river Avon once ran pure; but now it is fast becoming a source of disease to the inhabitants upon its banks. Bristol, by the returns of the Registrar General, is one of the unhealthiest places in the kingdom; and this insalubrity can be ascribed to nothing but the foul emanations from its river; for Clifton, situated on the hill, is exceedingly healthy.

The system of draining into running streams has penetrated even into small towns and villages; and many a brook that, until within these last few years, ran as clear as it did at the creation, is now reduced to the condition of a stinking cesspool, poisonous to the houses on its banks—and all through the folly of some Local Board of Health in draining into its channel. Not long since, the vast Lunatic Asylum at Colney Hatch adopted the new plan of getting rid of its filth. The refuse of twelve hundred persons was cast into the insufficient stream upon which it is situated; and, in consequence, a low form of fever began to appear in the cottages on the stream miles below, whose inmates had been unconsciously drinking the diluted sewerage of the asylum. The course taken by the authorities was at once simple and effectual. The drains were cut off from the running stream, and by the aid of steam their currents were pumped into a high level cistern, from which they were allowed to flow over the large areas of kitchen-garden ground belonging to the establishment; the result being a vast saving of vegetable produce, and a total disappearance of fever from the banks of the stream, which was once more pure.

The example of this establishment will, we hope, be followed by all small towns and villages wishing to reform their drainage. Cesspools in the open are, we believe, innoxious; at all events, they are far less detrimental to the public health than the pollution of the contents of the running streams of the country; which, it will be remembered, often supply the drinking water of the people upon their banks. We trust, therefore, that

any attempt on the part of Local Boards of Health to further poison the healthy brooks and pellucid streams, will be strenuously resisted by all persons who have even a smattering of sanitary science.

THE WEEK.

Our readers will recollect the trial of James Atkinson at the York assizes last year, for the murder of Mary Jane Scaife, and his subsequent acquittal on the plea of insanity, on the evidence principally of Dr. Forbes Winslow of London, and Dr. Caleb Williams of York. These physicians were exposed to severe criticism for the testimony they gave in behalf of the prisoner. It was alleged at the time that Dr. Winslow and the other medical witnesses had by their evidence misled the jury, and had thus produced a miscarriage of justice by mistaking a case of *feigned* for one of *real* imbecility. The following statement, which we copy from the *Daily News*, respecting Atkinson's present mental state, fully confirms, in our opinion, the justice of his acquittal, and the soundness of Dr. Winslow's estimate as to his insanity when he examined him in York previously to the trial. Since his acquittal, Atkinson has, says the *Daily News*, "remained at the Castle, and has lately been very violent, attacking indiscriminately the governor, officers, and prisoners who happened to be near him. Within the last week he inflicted some severe injuries upon a man who is confined along with him. They had had some words, when Atkinson struck the other prisoner most unmercifully, and inflicted some bruises upon him. There is no doubt the affair would have ended much more seriously if one of the prison officials had not interfered and separated the parties. In all probability, these passionate outbreaks will cause Atkinson's removal to another place of security." The anticipations of the *Daily News* are now found correct: and Atkinson has been, in consequence of his violent conduct, transferred to a lunatic asylum in London. Surely results like these should make the non-medical critic a little more cautious in going counter to the opinions expressed by medical men of great experience and of admitted sagacity.

If we may credit the following extract from a report made a few days ago on the Sanitary State of London, by Dr. Letheby, the state of our river is gaining even an European notoriety.

"The foul condition of the river continues to increase, and is exciting attention both here and on the Continent. I have received a number of communications relating to the subject, and to the measures which are thought necessary for abating the evil. Some of these are before you; but as I have no authority to entertain them, or to examine their merits, I would recommend that they be forwarded to the Metropolitan Board of Works. One of these communications is from M. Bourbée, Professor of Geology, at Paris. It has reached me through the Lord Mayor. Another is from M. Goethaler, of Antwerp; and there are several which have been directed to this commission. M. Bourbée is of opinion that the whole of the present mischief is due to the quality of the soil through which the river flows; and he recommends that the whole of the infected bed of the river should be covered with hydraulic lime and pebbles. He thinks that the efficacy of the concrete thus formed will depend, not merely on its producing a solid channel for the flow of the river, but also on the causticity of the lime, which will destroy the putrid organisms; and therefore he suggests that the whole course of the river should be concreted at one time. He is, he says, aware of the magnitude of the undertaking, and he trusts to English wealth and English skill for accomplishing it. The other schemes are of less pretensions, and you may, perhaps, be of opinion that they should be forwarded to the Metropolitan Board, who are now inquiring into the matter. I wish, however, to make this remark, that the state of the river is fast becoming worse and worse. The organic impurities are increasing from day to day, and are now just four times as abundant as they were on June 11th."

The King and Queen's College of Physicians in Ireland has followed the example of the other Colleges of Physicians, in instituting a "year of grace." Here are the regulations for the admission of Licentiates in Medicine and in Midwifery, to be in force until the 1st May, 1860.

"1. Licentiates or Members or Fellows of one of the Royal Colleges of Surgeons in Great Britain and Ireland, and persons holding the Surgical Diploma of Trinity College, Dublin (as well as Graduates in Medicine of a University, or Members of a Royal College of Physicians of the United Kingdom), shall be admissible to examination, without any other qualification or certificate being required. 2. Graduates in Medicine of any University in Great Britain and Ireland, Licentiates of either of the Royal Colleges of Physicians of London or Edinburgh, Licentiates, Members or Fellows of any Royal College of Surgeons in the United Kingdom, and persons holding the Surgical Diploma of Trinity College, Dublin, shall be required to undergo the second day's examination only—viz., in acute diseases, chronic diseases, materia medica, and midwifery. 3. The fee for the admission of Licentiates into the College shall be £10 10s. exclusive of the stamp duty. 4. Any Fellow or Licentiate of this College may, on the production of such qualifications as the College shall consider satisfactory, and on payment of the sum of £2 2s., obtain the Diploma in Midwifery, without further examination.

"William Edward Steele, M.D.,
"*Fellow and Registrar.*

"College Hall, June 1859.

The Irish College, it will be observed, does not propose to admit applicants without examination; but this examination, in a large proportion of cases, is to consist of part only of that which is expected from ordinary candidates for the diploma of the College.

While we never fail to denounce the conduct of those Life Assurance companies that will not pay the fees of medical referees, we have always pleasure in recording instances in which the proper process has been adopted—whether by newly formed companies, or by the turning of veteran sinners into the right path. To-day we are gratified in being able to mention the Norwich Union Life Assurance Society in terms of commendation. In their last report, dated June 29th, occurs the following sentence:

"The Directors further report to the members that, after due deliberation, they have decided in all cases of application for insurance, where medical advice is required by the office, to pay a fee to the private medical referee whose opinion may be thought necessary for its protection."

Our associate, Dr. Ranking of Norwich, is, we observe, one of the Committee of Directors of the Society: and, although we cannot speak positively as to the fact, yet we have no doubt that he, led by his well known zeal for the just treatment of his professional brethren, has been mainly instrumental in bringing the Directors to consent to the resolution to which reference has been made.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-Seventh Annual Meeting of the British Medical Association will be holden in Liverpool, on Wednesday, Thursday, and Friday, the 27th, 28th and 29th days of July.

President—W. P. Alison, M.D., F.R.S.E., Edinburgh.
President-Elect—James R. W. Vose, M.D., Liverpool.

The Meetings of the Association will take place at the Medical Institution, Mount Pleasant.

The following is an outline of the proceedings. A more complete programme will be issued at Liverpool.

Wednesday, *July 27th.*

11.30 A.M. Meeting of Committee on Medical Legislation in the Committee Room.

1 P.M. Meeting of Committee of Council in the same Room.

2.30 P.M. Meeting of General Council of the Association in the small Theatre.

7 P.M. First General Meeting of the Association in the large Theatre. The retiring President will make a few remarks. The new President will deliver an Address. The Report of Council will be presented, and other business transacted.

Thursday, *July 28th.*

8.30 A.M. Public Breakfast at the Adelphi Hotel. Tickets 2*s.* 6*d.* each.

10 A.M. Meeting of the Members of the new Council in the small Theatre.

11 A.M. Second General Meeting of Members. The Address in Medicine will be delivered by Dr. E. Waters of Chester. Cases and Papers will be read.

The meeting will adjourn at 1, and reassemble at 2 P.M.

2 P.M. The Report of the Benevolent Fund will be received. Cases and Papers will be read. The meeting will adjourn at 5.

8.30 P.M. *Soirée* at the Royal Institution, Colquitt Street. The Royal Institution, the Gallery of Arts, containing a fine collection of paintings, and the Museum of applied Sciences will be thrown open. During the evening some interesting electrical phenomena will be illustrated by J. Baker Edwards, Ph.D.

Friday, *July 29th.*

11 A.M. Third General Meeting of Members. The Address in Physiology will be delivered by A. T. H. Waters, Esq., of Liverpool. Papers and Cases will be read.

3.30 P.M. A Steamer will leave the North Landing Stage to convey the Members along the Docks, and round the Line of Battle Ships stationed in the river, to return at Five P.M.

6 P.M. Dinner. Tickets a Guinea each.

Gentlemen intending to be present at the Dinner, and who have not applied for Tickets, are requested to do so as early as posssible. Application should be made to the Honorary Secretary of the Committee, A. T. H. Waters, Esq., 27, *Hope Street, Liverpool.*

Members are requested to enter, on arrival, their names and addresses in the Reception Room in the Medical Institution, Mount Pleasant, where all the meetings will take place, and where cards will be supplied which will secure admission to all the proceedings, and contain such information as may be useful to those who are strangers to the town.

Members who wish for previous information may communicate with the Honorary Secretary, as above.

It is particularly requested that all Members who propose to read Papers will communicate with the General Secretary without delay. Arrangements will be made for the Sectional Reading of Papers, if a sufficient number be promised to render such a plan desirable.

Among the principal Hotels are:—the Adelphi, Ranelagh Place; the Waterloo, Ranelagh Street; the Angel, Dale Street; the Feathers, Clayton Square; the George, Dale Street; the Grecian, Dale Street; the Neptune, Clayton Square; the Queen's, Lime Street; the Royal, Moorfields; the Stork, Queen's Square; the Union, Parker Street; the Victoria, St. John's Lane.

The Reception Committee have made arrangements for securing the admission of members attending the meeting to the various places of interest in the town.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 30th, 1859.

ALTERATION OF LAWS.

The following alteration in the wording of Law 25 will be proposed at the annual meeting:—

Instead of "any twenty members may unite," etc., read "any number of members may unite; but that no Branch consisting of less than twenty members shall have the privilege of sending a representative to the Council."

Philip H. Williams, M.D., *General Secretary.*

Worcester, July 1859.

CAMBRIDGE BRANCH: ANNUAL MEETING.

The annual meeting of the Cambridge Branch of the Association was held at Bishop Stortford, on Tuesday, July 5th: Henry Cribb, Esq., in the Chair. There were also present:—W. H. Aldersey, Esq. (Buntingford); F. D. Beck, Esq. (Sawbridgeworth); J. Brickwell, Esq. (Sawbridgeworth); J. Carter, Esq. (Cambridge); J. Cheesman, Esq. (Huntingdon); J. Davies, M.D. (Hertford); C. Drage, M.D. (Hatfield); W. Few, Esq. (Ramsey); M. Foster, Esq. (Huntingdon); G. L. Girling, Esq. (St. Ives); C. F. Hodson, Esq. (Bishop's Stortford); J. Hooper, M.D. (Hoddesdon); G. M. Humphry, M.D. (Cambridge); D. McNab, Esq. (Epping); F. Moore, Esq. (Hadham); L. Newton, Esq. (Alconbury); T. Odell, Esq. (Hertford); G. E. Paget, M.D. (Cambridge); G. M. Phillips, Esq. (Whitwell); B. Pinchard, Esq. (Cottenham); R. G. Powell, Esq. (Buntingford); E. W. Richard, Esq. (Great Bardfield); R. T. Scarr, Esq. (Bishop's Stortford); — Scott, Esq. (Cambridge); F. M. Smith, Esq. (Hadham); G. A. Starling, M.D. (Bishop's Stortford); H. Stear, Esq. (Saffron Walden); W. Ward, M.D. (Huntingdon); H. S. Webb, Esq. (Welwyn); — Welch, Esq. (Saffron Walden); and J. Whitsed, M.D. (Wisbeach).

Brief addresses were made by Dr. Whitsed, the retiring President, and by the President.

CASES AND COMMUNICATIONS.

1. *Hæmorrhage after Labour.* Mr. D. McNab read a case in which hæmorrhage occurred and proved fatal, although the uterus was firmly and completely contracted.

Mr. Foster related two cases in which hæmorrhage occurred when the uterus was firmly contracted. A large dose of laudanum in one case, and chloroform in the other, was followed by a cessation of the bleeding.

Mr. Hodson related a case illustrating the fact that the upper part of the uterus may be contracted while the lower part may be uncontracted, and be the source of hæmorrhage.

Other gentlemen agreed with Mr. Hodson, that when hæmorrhage occurred, it was probable that some part of the uterus remained uncontracted.

Dr. Ward had found that when oozing of blood continued some days after labour, there were usually clots or some remnants of membranes in the uterus, and upon the removal of these the bleeding ceased.

2. *Hay Asthma*, it was agreed, depends upon an enervated and susceptible state of the patient, and of the Schneiderian and bronchial mucous membranes in particular; a condition often existing in several members of the same family. The attacks, which sometimes resemble those of regular asthma, are clearly brought on by the effluvia from hay or other substances. In the case of an eminent physician, they occurred almost exclusively in the wards of a hospital.

Dr. Paget mentioned the case of a gentleman in whom they were brought on by effluvia emanating from horses; and so sensitive was the patient, that at times he could not bear the presence of persons who had just been on horseback.

Both Dr. Paget and Dr. Whitsed had found strychnia of service, as well as quinine and iron.

Mr. Phillips had been himself a sufferer from the affection for twenty years, and had been unable to obtain any benefit from medicines.

3. *Metallic Sutures.* Cases were given by Mr. Tubbs illustrative of the advantages of metallic sutures.

Dr. Humphry had found that though, under ordinary circumstances, they excited little irritation, yet when there was tension they cut their way out quicker than the thread or silk sutures.

4. *In-growing Toe-nail.* Dr. Humphry always treated this troublesome affection, when it was severe, by introducing a piece of bent thin silver plate under the edge of the nail, and securing it there by plaster and bandage. He had never failed to effect a speedy cure by this means.

5. *Tracheotomy in Syphilitic Laryngitis.* Dr. Smith related a case of unusual severity, in which a cure was quickly effected by the operation.

6. *Allarton's Operation for Stone.* Dr. Ward showed a calculus weighing eleven drachms, which he had removed by this procedure from a lad, aged 9, who had made a quick recovery. He thought favourably of the operation, and proposed to try it on other patients.

7. *The Function of the Urachus.* Mr. Moore read an interesting paper on this subject.

THE JOURNAL.

The following resolution, proposed by Dr. Ward and seconded by Dr. Paget, was passed—

"That in the opinion of this meeting, the British Medical Journal in its present state is inadequate to meet the requirements of the Association, inasmuch as there is a great deficiency of original and useful matter, and the space is too much occupied with births, deaths, pass lists, reports of meetings, and things of small importance."

Both the proposer and seconder, and others who spoke, admitted that the fault was in part with the members of the Association, because they do not bestir themselves to supply a greater amount of good, scientific, and practical contributions. Nevertheless, they could not but think that more of these would be forthcoming if greater efforts were made to obtain them, and if comparatively unimportant matters were more condensed or excluded.

ANNUAL MEETING IN 1860.

The next meeting is to be at Cambridge, under the presidency of Dr. Paget.

EAST ANGLIAN BRANCH: ANNUAL MEETING.

The Annual Meeting of the East Anglian Branch was held at Lowestoft, on Friday, July 8th: John Kirkman, M.D., President, in the Chair. There were also present: B. Chevallier, M.D. (Ipswich); T. W. Crosse, Esq. (Norwich); W. E. Crowfoot, Esq. (Beccles); C. M. Durrant, M.D. (Ipswich); R. V. Gorham, Esq. (Yoxford); H. Gramshaw, Esq. (Laxfield); R. Martin, Esq. (Holbrook); D. Meadows, Esq. (Lowestoft); S. Payne, Esq. (Norwich); J. B. Pitt, M.D. (Norwich); B. F. Symmons, Esq. (Bures); R. Wake, Esq. (Southwold); J. Williams, M.D. (Southwold); and as visitors: J. Bedingfield, M.D. (Needham Market); S. S. Brame, Esq. (Lowestoft); W. H. Clubbe, Esq. (Lowestoft).

The President delivered an address, which will be published in the Journal.

It was moved by Mr. Martin, seconded by Mr. Crowfoot, and carried unanimously—

"That the thanks of the meeting be given to Dr. Durrant, for his services throughout the year."

ANNUAL MEETING IN 1860: ELECTION OF OFFICERS.

It was moved by Mr. Crosse, seconded by Mr. Gorham, and carried unanimously—

"That the annual meeting be held next year at Newmarket; and that Richard Faircloth, Esq., be President-elect."

Drs. Kirkman and Durrant, and Messrs. Cadge and Waylen, were re-elected to represent this Branch in the General Council. Mr. T. W. Crosse was elected a member of the Local Council.

RESOLUTIONS: HOSPITAL REPORTS IN THE JOURNAL, ETC.

The following resolutions were also carried:—

1. "That a request be made to the medical staffs of the several county hospitals in this Branch to allow their house-surgeons to report in the Journal any cases of interest that may come under their notice; and that, as some acknowledgment of their services, a copy of the Journal be supplied to them."

2. "That the members of the East Anglian Branch be requested to subscribe individually 5*s.* towards the liquidation of the debt referred to by Mr. Terry of Northampton."

NEW MEMBERS.

Mr. Brame of Lowestoft, Dr. Goodwin of Bury St. Edmunds, and Mr. Hale of Aldeburgh, were elected members of the Branch.

PAPERS AND COMMUNICATIONS.

The following papers, giving rise to much interesting discussion, were read.

1. The Use of Elaterium in Chronic Ascites: and 2. The Treatment of Boils. By C. M. Durrant, M.D.

3. Case of Ulceration of the Duodenum, causing Death by Erosion of the Pyloric Artery. By W. Ranking, M.D.

4. Case of Congenital Hernia. By T. W. Crosse, Esq.

[These papers have been received for publication in the Journal.]

5. A Case of doubtful Arthritis was also detailed by Mr. Gorham.

6. Many of the members gave the results of their experience in Diphtheria, which was generally thought to be gradually assuming a milder form both in Norfolk and Suffolk.

At half-past five, the members and their friends dined together at the Royal Hotel.

READING BRANCH: ANNUAL MEETING.

The Annual Meeting of the Reading Branch was held in the Council Chamber, Reading, on Wednesday, July 13th: John McIntyre, M.D., President, in the Chair. There were also present: C. M. Burnett, M.D. (Alton); F. A. Bulley, Esq. (Reading); C. Cowan, M.D. (Reading); H. Cooper, Esq. (Reading); F. G. Harcourt, Esq. (Binfield); I. Harrinson, Esq. (Reading); R. M. Inman, Esq. (Reading); T. W. Jeston, Esq. (Henley); G. May, Esq. (Reading); G. May, jun., Esq. (Reading; W. W. Moxhay, Esq. (Reading); A. J. Moore, Esq. (Reading); — Ord, Esq. (Reading); G. Pound, Esq. (Odiham); J. Taylor, Esq. (Wargrave); R. T. Woodhouse, M.D. (Reading); H. Waldron, Esq. (Theele); T. L. Walford, Esq. (Reading); J. W. Workman, Esq. (Reading); E. Wells, M.D. (Reading); W. B. Young, Esq. (Reading).

The President (Dr. McIntyre) delivered an address, which is published at p. 584.

OFFICERS AND COUNCIL.

The following officers and Council were elected:—*President-elect:* R. T. Woodhouse, M.D. *Representative in the General Council:* W. B. Young, Esq. *Council of the Branch:* G. D. Brown, Esq.; W. B. Young, Esq.; E. Wells, M.D.; R. T. Woodhouse, M.D.; J. W. Workman, Esq. *Honorary Secretary:* G. May, jun., Esq.

THE RESIGNATION OF SIR CHARLES HASTINGS.

Dr. Cowan proposed—

"That the representative be desired to express the unanimous wish of this Branch that Sir C. Hastings be requested to accept the reappointment to the offices of President and Treasurer of the Association."

This was seconded by Mr. May, and carried unanimously.

COMMUNICATION.

Mr. Harcourt then read the Retrospective Address of the Reading Pathological Society. In accordance with the wish of the meeting, this paper will be published in the Journal.

The members and their friends afterwards dined together at the George Hotel.

SHROPSHIRE BRANCH: AMALGAMATION WITH THE SALOPIAN MEDICO-ETHICAL SOCIETY.

A meeting of the Shropshire Branch of the British Medical Association was held at Shrewsbury, on July 15th, to receive the Report of the Committee which was appointed at the last meeting of the Branch to confer with the Council of the Salopian Medico-Ethical Society concerning the amalgamation of the respective societies. The President of the Branch was in the Chair. The following Report was read.

REPORT.

"In accordance with resolution No. 3 passed at the last meeting of the Shropshire Branch of the British Medical Association, we, the undersigned, having been appointed on behalf of the Branch to confer with Messrs. Arrowsmith, Styrap, and Fenton, who were appointed on behalf of the Salopian Medico-Ethical Society, to examine the rules of the Ethical Society, with the view of amalgamating the two societies,—beg to report that, having carefully read over the rules of the Ethical Society, and suggested such alterations as we thought advisable (which were readily adopted by the gentlemen who represented the Ethical Society), we most cordially approve of the amended rules, and fully concur in the propriety of the amalgamation, and also in the adoption of the Ethical rules by this Branch.

"Henry Johnson, *Chairman.*
"Francis Whitwell.
"J. R. Humphreys."

It was proposed by Mr. Cartwright, seconded by Mr. Stephens, and resolved—

"That the Report of the Committee be accepted, and the amalgamation of this Branch with the Salopian Medico-Ethical Society be now effected; and that the rules of the Ethical Society, as amended by the Committee, be adopted by this Branch."

The following resolution was then proposed by Mr. Arrowsmith, seconded by Mr. Fenton, and adopted:—

"All existing members who are unwilling to join the Ethical Branch shall have the same privileges which they now enjoy as members of the British Medical Association; but that all future members who may be admitted be required to join the amalgamated society, and conform to its rules."

Reports of Societies.

ROYAL SOCIETY.

May 26th, 1859.

Sir B. Brodie, Bart., President, in the Chair.

ON THE STRUCTURE OF THE ULTIMATE AIR-TUBES, AND THE DISTRIBUTION OF THE BLOOD-VESSELS OF THE HUMAN LUNGS. BY A. T. H. WATERS, ESQ., LECTURER ON ANATOMY AND PHYSIOLOGY, LIVERPOOL.

The bronchial tubes terminate in a dilatation, into which open a number of cavities, to which various names have been given, but which Mr. Waters proposes to call air-sacs. The air-sacs connected with a terminal bronchial twig, with their vessels, etc., constitute a *lobulette*. The lobulette consists of six to twelve air-sacs: the latter are somewhat elongated cavities, lying side by side in the lobulette, and separated from each other by thin walls; in shape they are polygonal, from mutual pressure of their parietes. They all communicate with the dilated extremity of the bronchial tube, which forms the common mouth or centre of all the sacs. They have no lateral orifices of communication with each other. They often divide, or give off other sacs. The air-sacs of one lobulette do not communicate with those of another.

The walls of the air-sacs are covered by a number of small, shallow, cup-like depressions, separated from each other by partial septa. These depressions or alveoli are very numerous; their number varies in different air-cells from eight to twenty.

The lobulettes are supported externally by the pleura, but within the lung in part by the bronchial tubes and blood-vessels.

The membrane forming the walls of the air-sacs, in a lung inflated and dried, is very transparent; it constitutes, by its projection towards the centre of the sacs, the septa of the alveoli.

Each lobulette is distinct and separate from those which surround it. The separation may be sometimes seen in the inflated infant's lung; but the observation of the fœtal lung affords the best proof of it.

The author alluded to investigations he had made on the lungs of fœtuses, which confirmed the view he had taken of the arrangement of the ultimate pulmonary tissue, and of the separation between the lobulettes.

The air-sacs are fully formed before birth, and each lobulette is seen as a little red body attached to an air-tube. By a partial or complete inflation of the fœtal lung, the arrangement of the air-sacs may be distinctly made out.

The bronchial tubes at their termination have a special character. A number of alveoli, like those of the air-sacs, are found in their walls. They are best seen in the lungs of some of the lower animals, as the cat. The author has found them in the infant, in the last divisions of the bronchial tubes and their dilated extremity; in the adult, only in the dilated extremity. They seem to become obliterated with advancing age. Their existence was first pointed out by Rossignol.

The Blood-Vessels of the Lungs. The pulmonary plexus is situated in the walls of the air-sacs. When formed, it maintains a tolerably uniform diameter throughout. The spaces between the vessels, in an injected and inflated preparation, are somewhat larger than the vessels themselves. The branches of the pulmonary artery do not anastomose till they reach the termination of the bronchial tubes; they anastomose freely in the air-sacs. The author believes that the vessels of one lobulette do not anastomose with those of another; that, consequently, in the adjoining walls of two lobulettes, two layers of capillaries lie side by side; and therefore, in such situations, the blood is *not* fully exposed to the air on both sides. The radicles of the pulmonary veins issue from the periphery of the lobulettes; and, forming larger vessels, run in the interlobular spaces to the root of the lung.

After briefly alluding to the general opinion of the distribution, etc., of the bronchial vessels, the author described the results of his own injections.

Injection of the pulmonary artery, so as to fill the plexus, but not the veins, does not inject the vessels of the bronchial tubes; but if the veins are filled, the bronchial tubes become partially injected. Injection of the pulmonary veins, whether the plexus be well filled or not, always injects the bronchial tubes. Injection of a bronchial artery, when fairly within the lung, produces injection of the bronchial tubes; and the fluid returns by the pulmonary veins. It is difficult, in man, to fill the vessels of the extreme bronchial tubes through the bronchial artery.

The Bronchial Veins. The author has never been able to find the so-called deep bronchial veins as *venæ comites* of the arteries. The only veins he has found have been one or two small ones, usually one, at the root of the lung, which, on being injected, were found to terminate in the structures about the root, and not to accompany the arteries within the lung.

From careful injection and repeated examination of a large number of specimens, both of man and the lower animals, the author draws the following conclusions of the distribution and termination of the bronchial vessels.

I. The bronchial arteries are distributed to the bronchi, bronchial glands, etc., bronchial tubes (both their mucous membrane and deeper parts), the blood-vessels and areolar tissue of the lungs: and they terminate—1. Those about the root of the lung, in the bronchial veins; 2. Those within the lung, in the pulmonary veins.

II. The bronchial arteries do not establish any communication with the pulmonary arteries.

The author concluded by alluding to the views of previous observers.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 28th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

OBSERVATIONS ON THE MEDICAL ADMINISTRATION OF OZONISED OIL. BY THEOPHILUS THOMPSON, M.D., F.R.S.

Dr. Thompson, after some general remarks on the properties of ozone, described the results obtained by its administration in association with oils; the oils being ozonised by exposure for a considerable time to the direct rays of the sun, after previous saturation with oxygen gas, according to the process adopted by Mr. Dugald Campbell. The cases of fourteen consumptive patients, to whom the ozonised oils were given, were detailed; and the principal facts noted were also appended in a tabular form. The conclusion to which these experiments point, was that the administration of ozonised oils had a remarkable tendency to reduce the frequency of the pulse. Of the fourteen patients whose cases were detailed, in two no such effect was observed; and in the larger proportion the effect was very considerable, and must be attributed to the ozone rather than to the oil, since it was repeatedly manifested in patients who had taken cod-liver and other oils without any reduction, or even with an acceleration, of the pulse; and further, the effect on the pulse was nearly as distinct when the ozone was associated with the oil of the cocoa-nut, or of the sunflower, as with that of the cod-liver. The administration of sunflower oil without ozone had not appeared to the author to manifest any important remedial power. The reduction of pulse was usually observed in two or three days, and often continued progressive. A reduction of twenty beats was observed in certain cases to occur respectively in two, three, four, and six days. In other instances a reduction was noted of twenty-four pulsations in fourteen days, thirty-four in thirteen, thirty-six in twenty-two, forty in eleven. In one patient the pulse fell as low as sixty—probably considerably below the natural standard; but in most of the favourable instances the reduction stopped when that standard was obtained.

The apparent effect of the remedy was one which, prior to experiment, the author would not have anticipated. No other obvious result was noticed, excepting a general improvement in the patient's condition. In some of the patients, the use of simple and of ozonised oils was alternated. In one case the alternation was made three times, and the result was, in each

interchange of treatment, so direct and remarkable as to make that particular example equivalent in force to three experiments.

In addition to the patients under his own observation, the author referred to four instances noted by Dr. Scott Alison, who obligingly pursued the investigation during Dr. Thompson's absence from the hospital. In these four cases, the disease was in the third stage. In two, a remarkable reduction in the rapidity of the pulse, amounting to about twenty beats, occurred under the use of the ozonised oil, while the improvement induced could not be referred to any other cause. Dr. Alison remarked, "I attach some value to this observation; for I prescribed the oil totally divested of all prejudice in its favour, and I have always been reluctant on imperfect grounds to refer results to the operation of medicines. If ozonised oil can reduce the rapidity of the circulation—a feature of great prominence in phthisis—this remedy possesses a most valuable property, rendered still more valuable by its contributing at the same time to improve the general health."

The author had used ozonised oil of turpentine with marked and prompt advantage in some cases of hæmoptysis, but had not sufficiently repeated the experiment to feel entitled to express an opinion as to its remedial superiority over ordinary turpentine. Should more extended observation establish for ozonised oil the property indicated by these experiments, it would prove a valuable addition to our list of remedies, especially in consumption (a disease peculiarly characterised by hurried action); but not, perhaps, exclusively in this disorder, since there were other morbid conditions, in the treatment of which it was very important to lower the pulse without reducing constitutional strength.

CASE OF PARALYSIS AS TO VOLUNTARY MOTOR POWER OF ONE HALF OF THE BODY, ATTENDED BY CONTRACTILE HYPERÆSTHESIA ON THE CORRESPONDING SIDE OF THE FACE, AS THE RESULT OF COMPRESSION OF CERTAIN LATERAL PARTS OF THE BRAIN FROM AN INTRACRANIAL ANEURISM; WITH OBSERVATIONS UPON "INDUCED" PARALYSIS.

BY JOHN W. OGLE, M.D.

In this communication, after prefatory allusions to the general subject of the production of motor paralysis from injury or disease of the corresponding side of the brain, in contradistinction to a crossed paralysis from an affection of the opposite side of the brain, Dr. Ogle related a case of aneurism of the left anterior cerebellar artery, so placed as directly to press upon the anterior surface of the middle crus cerebelli on the left side, and implicating, although to a very slight degree, the superficial part of the neighbouring pons Varolii, etc. The apparent root of the fifth cranial nerve, on the same side, was also pressed upon by the aneurism; and the seventh nerve, in its forward course towards its exit from the cranium, was greatly pressed upon. The other cranial nerves, excepting the optic nerves, were unaffected.

The specimen was removed from the body of a middle-aged woman, who had been an epileptic, and had lost her sight for five years. She also suffered from partial loss of muscular power on the left side of the body, and contractile hyperæsthesia of the skin on the left side of the face and head; and impairment of the senses of smell, taste, and hearing on the left side.

The chief point of interest in the case was the existence of paralysis, more or less incomplete, of the muscles of the limbs on the side of the body corresponding with the cerebral pressure; but, besides affording an illustration of the existence of such an anomalous form of hemiplegia, the case was exceedingly interesting as being an instance in evidence of the statement, lately established by Dr. Brown-Séquard, that when pressure is made on the anterior surface of one of the crura cerebelli, without materially injuring neighbouring structures, the paralysis produced (if any be caused) will be almost invariably of the muscles on the *corresponding* side of the body.

Dr. Ogle pointed out the coincidence in this case between the interference with the sensibility of the skin, the power of the moving muscles of the jaw, and the sense of taste, on the one hand, and the pressure upon the fifth cranial nerve on the other; and again, between the deafness and facial paralysis, and the injury to the seventh pair of nerves.

The author considered the probable causation of the paralysis existing on the same side of the body as the cerebral lesion—a form which Brown-Séquard looks upon as being owing, not to any absence of action, but to some kind of irritation, or "excess of action," reflected, as he states, to some central or conducting part of the nervous system from the particular part primarily affected. Dr. Ogle, whilst recognising this method of explanation, ventured to suggest the term "induced" paralysis, as being one more clearly conveying the meaning intended to be given by the word, and as being less likely to be misunderstood than the expression "sympathetic," or "reflected," paralysis, which Dr. Brown-Séquard had applied to this form of paralysis.

Editor's Letter Box.

EXTERNAL USE OF MUCUNA PRURIENS AS AN EXCITANT.

LETTER FROM J. RHODES, ESQ.

SIR,—I beg to request the insertion of a few brief remarks on the external use of mucuna pruriens.

Having often been disappointed in rousing patients when comatose, in apoplexy, etc., by ordinary external stimuli, I have on a few occasions applied the mucuna pruriens on the chest, arms, and legs, in cases where hope of returning consciousness existed. In one or two minutes after its application, the legs and arms have begun to start, and the patient has violently attempted to rub his chest, etc., with his hands; and in a few minutes consciousness has returned. It might be useful in comatose states from chloroform or narcotics in general, and in drowning. I sprinkle it upon the part myself, gently rub it in, and repeat it when necessary. When it has acted sufficiently after the patient is roused, a little olive oil is applied if its action is too severe.

I shall be glad to see any reported cases of success by this means. I am, etc., J. RHODES.

Glossop, July 7th, 1859.

MEDICAL EVIDENCE IN COURTS OF JUSTICE, ETC.

SIR,—Clause XXXVI of the Medical Act enacts that "no unregistered person shall hold certain appointments, etc.; and clause XXXVII states that "no certificate shall be valid, unless the person signing the same be registered under the above Act."

As no allusion is made in the Act to any qualification necessary for a person before his evidence should be received in a court of justice, or coroner's court, is it to be inferred or tolerated that any *pretender* may be put in a witness box, and his evidence, for or against a prisoner, be taken by the judge and jury as *medical evidence?*

Such was allowed at the quarter sessions held in Anglesey, in April 1858, when a *bonesetter* was examined *after* a duly qualified practitioner, in order, in this case, to increase the amount of injuries alleged to have been inflicted by the defendant upon the plaintiff by a brutal assault.

Was such evidence legal then? Will it be so under the Medical Act? As assizes, etc., are now being held, it would be desirable that this point should be understood.

I am, etc., CHIRURGUS.

July 1859.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Friday, July 15th, 1859.

THE INDIAN MEDALS: ARMY MEDICAL OFFICERS.

Captain L. VERNON asked the Secretary of State for War whether he would recommend that the clause No. 12 of the Commissariat Warrant be extended to the Medical Officers' Army Warrant, whereby a medical officer after twenty years' meritorious service, if pronounced by a medical board as permanently unfit for service, either mentally or physically, may be allowed to be placed on the permanent retired list. He also wished to ask the Secretary for War when the medals would be issued which it was understood would be granted for the achievements of the army in India.

Mr. S. HERBERT replied that, as to the medals, as soon as it was decided for what operations they should be granted, instructions were sent out to Lord Clyde to furnish lists, which had not yet been received. With regard to the commissariat and medical officers, he believed that both services had been

treated according to a just appreciation of their services, and he was not prepared to say that the particular rewards given to one should be extended to the other.

Tuesday, July 19th.

PUBLIC HEALTH BILL.

Mr. Lowe moved the third reading of the Public Health Bill. When the Central Board of Health was abolished, he observed, the compulsory powers possessed by that Board, which could not be given to the local Boards, were vested in the Privy Council by an Act which had been continued from year to year, and would expire in a few days. The Bill proposed to make this Act perpetual, with certain modifications, not conferring upon the Privy Council any general compulsory powers. He explained at some length the scheme and main provisions of the measure.

After a long debate, the House divided upon an amendment moved by Mr. Ayrton, that the order for the third reading be discharged, which was negatived by 101 to 95, and the Bill was read a third time.

THE RIVER THAMES.

Sir G. C. Lewis, in moving for leave to bring in a Bill to extend the powers of the Conservators of the River Thames, said the object was one which would be approved by the House,—viz., to assist in the purification of the River Thames. [*Cheers.*] He was afraid, however, it would be of a very limited extent. The Conservators had represented to him that certain of their powers were deficient with respect to preventing the conveyance of impurities into the river, and he proposed to bring in a short Bill to supply that defect. [*Hear, hear.*]

The motion was agreed to.

MEDICAL ACTS.

Mr. Whiteside obtained leave to bring in a Bill to amend the Medical Acts, 21st and 22nd Victoria, cap. 9, and 22nd Victoria, cap. 21.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Ball. On July 12th, at Heckfield, Hants, the wife of *Richard Dechamp Ball, Esq., Surgeon, of a daughter.

Bisshopp. On July 15th, at 1, Lawn Place, South Lambeth, the wife of J. Bisshopp, Esq., Surgeon, of a son.

Crisp. On July 16th, at 2, Charlotte Row, Walworth Road, the wife of F. A. Crisp, Esq., Surgeon, of a daughter.

Guthrie. On July 13th, at 13, Pall Mall East, the wife of C. G. Guthrie, Esq., of a child, stillborn.

Martin. On July 9th, at Alderbury, Oxfordshire, the wife of Henry V. Martin, Esq., Surgeon, of a son.

Muriel. On July 17th, at Norwich, the wife of C. E. Muriel, Esq., Surgeon, of a son.

MARRIAGES.

Bradford—Felton. Bradford, W. Jocelyn, Esq., M.B., to Isabella, daughter of John Felton, Esq., of Dublin, on July 16th.

Cowan—Pritchard. *Cowan, Michael W., M.D., R.N., to Emma Louisa, youngest daughter of the late Commander John W. Pritchard, R.N., at Southsea, on July 14th.

Garrard—Norton. Garrard, Frederick Blackall, Esq., to Eliza Shelton, second surviving daughter of Robert Norton, M.D., of Bayswater, on July 13th.

James—Norton. James, the Rev. Theodore William, B.A., curate of St. Mary Magdalene, Lincoln, to Emily, eldest surviving daughter of Robert Norton, M.D., of Bayswater, on July 13th.

Kinsey—Peile. Kinsey, R. B. Esq., garrison surgeon at Fort William, Calcutta, to Ann, youngest daughter of Solomon Peile, Esq., of Clarendon Gardens, Maida Hill, at Allahabad, on May 30th.

Protheroe—Beynon. Protheroe, Edward Schaw, Esq., Surgeon Royal Artillery, to Ellen Augusta Cecilia, daughter of J. T. Beynon, Esq., of Trewern, Pembrokeshire, at Llandewy, on July 2nd.

Rawes—Wapshare. Rawes, William Wilson, Esq., Surgeon of the Madras Cavalry, to Emma Fanny, eldest daughter of Major Wapshare, 10th Madras Native Infantry, at Madras, on April 28th.

Swain—Ward. Swain, William Paul, Esq., surgeon, of Devonport, to Harriett Eliza Cleeve, youngest daughter of the late John Ward, Esq., of Exeter, on July 14th.

DEATHS.

Carr. On July 15th, at Lee, Blackheath, aged 15 months, the infant daughter of William Carr, Esq., Surgeon.

Davey, Robert, Esq., Surgeon, formerly of Keppel Street, Russell Square, at Nice, on July 9th.

Evans. On July 11th, aged 71, Mary, widow of Lewis Evans, Esq., Surgeon, of Finsbury.

*Harmer, Alfred, Esq., Surgeon, at Wrentham, Suffolk, aged 45, on July 5th.

Mantell, George, M.D., late of Faringdon, Berks, at Bath, aged 69, on July 12th.

Sinclair, Jeffery A., Esq., late Member of the Medical Board, Bombay, at York Street, Portman Square, on July 16th.

Woolley. On July 13th, at Backden, Huntingdonshire, aged 71, Charlotte, wife of George Woolley, M.D., late of Brompton, Middlesex.

APPOINTMENTS.

Arnott, J. M., Esq., F.R.S., elected President of the Royal College of Surgeons of England.

Hawkins, Cæsar H., Esq., F.R.S., elected Vice-President of the Royal College of Surgeons of England.

Hilton, John, Esq., F.R.S., Surgeon to Guy's Hospital, elected Professor of Surgery to the Royal College of Surgeons, in the room of P. G. Hewett, Esq., resigned.

Savory, William Scovell, M.B., F.R.S., elected Professor of Comparative Anatomy and Physiology in the Royal College of Surgeons, in the room of G. Busk, Esq., resigned.

South, John F., Esq., elected Vice-President of the Royal College of Surgeons of England.

PASS LISTS.

Royal College of Physicians. Licentiate admitted under the recent temporary bye-laws, at the Comitia Majora, held on Friday, July 15th:—

Down, John Langdon Haydon, M.D., Earlswood, Reigate

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, July 15th, 1859:—

Adams, Matthew Algernon, Margate
Agar, Frederick, Royal Navy
Annandale, Thomas, Newcastle-on-Tyne
Arminson, John, Preston, Lancashire
Barrett, Alfred Edward, Eton, Bucks
Barrow, Edward Sharson, Demerara
Bracey, Charles James, Birmingham
Catt, Alfred, Brighton
Davies, John Sides, Oswestry
Davis, George Henry, London
French, John Gay, Ballygar, co. Galway
Glasier, George William, Lincoln
Harris, William John, Worthing
Hodgson, James Birkett, Preston
Holman, Thomas, East Hothley, Sussex
Lovegrove, Charles, Maidenhead
Menzies, James Irvine, Upper Stamford Street
Reed, Samuel Cartwright, Hemel Hempstead
Steele, James, Lancaster
Stothard, John Matthew, Dublin
Tayler, Herbert, Tywardreath, Cornwall
Withers, Frederick John, Tetbury, Gloucester

Monday, July 18th:—

Bamfield, Samuel, Falmouth, Cornwall
Barnes, William Edgar Grose, Newbury, Berkshire
Blenkinsop, William Henry, East Indies
Bolt, Robert Andrew, Looe, Cornwall
Charlton, Egbert, Tunbridge
Cocks, Benjamin, Tamworth
Cooper, George Frederick, Caversham, Reading
Davey, Edward Myhill, Sawston, Cambridgeshire
Fox, Charles Henry, Brislington, Somerset
Fuller, William Francis, Bridgewater, Somerset
Hammond, Charles, Southampton

HIDE, John, Brighton
HILL, John Daniel, Brentford
ISTANCE, Richard, Carmarthen
McGOWAN, Samuel Alexander, Belfast
MEAD, Henry Thomas Harvey, Canterbury
MOORE, David, Royal Navy
PEMBREY, Thomas, Overton, Flintshire
ROWBOTHAM, William, Woolwich
SALMON, William Thomas, Canada West
SMITH, Seth, West Deeping, Lincolnshire
THOMPSON, Abraham, Gosforth, Cumberland
WEBSTER, Frederick Richard, St. Albans

Tuesday, July 19th, 1859:—
ANDREW, Augustus Littlewood, Manchester
BELINFANTE, Simon, Holland
BULLOCK, Thomas William, Stow in the Wold
COLBECK, Thomas William, Hornton Street, Kensington
FENNELL, Charles, Bromley, Kent
FOSTER, John, Leeds
GAUSSEN, James Robert, Dublin
GREEN, Thomas Sheldon, Ashby de la Zouch
HARDEN, Charles, Bristol
HOCKING, Thomas Edward Giddy, Penzance
JERRY, William, Thornton Wensleydale
JESSOP, Thomas Richard, Brighouse, Yorks
KEYNSEY, Josiah Frederick, Dublin
MANN, David, near Worsley, Leeds
O'FLAHERTY, Thomas Alexander, Lisburn, co. Antrim
PARKES, Thomas, Woolwich Common
POWER, John Livingstone, Dublin
ROBERTS, Arthur, Montpelier Square, Knightsbridge
SAMSON, Arthur Ernest, R. W. Ophthalmic Hospital
SEWELL, Joseph James, Halstead, Essex
SHINE, William Lamb, Bandon, co. Cork
STANFIELD, William, Ashton-under-Lyne
WARBURTON, Alfred, Frodsham, Cheshire

APOTHECARIES' HALL. Members admitted on Thursday, July 7th, 1859:—
MAYOR, Thomas Orlando, Bristol
SMIRTHWAITE, George, Hargreaves Street, Burnley
WATERS, John, 20, Great Russell Street

Thursday, July 14th:—
LEE, John, Ashbourne, Derbyshire
MANN, David, New Wortley, Leeds
MARTIN, Timothy Henry, Merthyr Tydvil
MORETON, Thomas, Martonhall, Cheshire
TROTTER, Charles Hardy, Coleford, Gloucestershire

TESTIMONIAL TO JOHN SUTTON, ESQ. The members of the West Kent Medical Book Society, at their recent annual meeting, presented Mr. Sutton with a handsome library clock, as a mark of their esteem, on the fiftieth anniversary of his treasureship.

TO CORRESPONDENTS.

THE MEDICAL REGISTER. Mr. Robert Martin Craven, of Albion Street, Hull, informs us that, not finding his name in the *Medical Register*, he has made inquiry as to the cause, and has been informed that a local registrar had reported the death of a Robert Martin Craven, at *Scarborough*. We agree with our correspondent in thinking that in all such cases of deaths reported by registrars under Section XLV of the Medical Act, care should be taken to compare the dates of the diplomas and age of the individual registered with those of him who is reported as dead.

Communications have been received from:—MR. J. R. HUMPHREYS; MR. F. G. HARCOURT; MR. CLENDON; DR. BEALE; MR. C. LEONARD; MR. WATERS; MR. MARSACK; MR. D. K. JONES; DR. RUSSELL; MR. J. REID; DR. W. GARSTANG; DR. J. G. DAVEY; MR. GRIFFIN; MR. T. PAGET; DR. BARKER; MR. S. H. EVANS; MR. W. COPNEY; DR. McINTYRE; MR. G. MAY, JUN.; MR. R. M. CRAVEN; MR. T. HOLMES; DR. SALTER; DR. PALEY; DR. RICHARDSON; DR. E. A. PARKES; and DR. G. M. HUMPHRY.

ADVERTISEMENTS.

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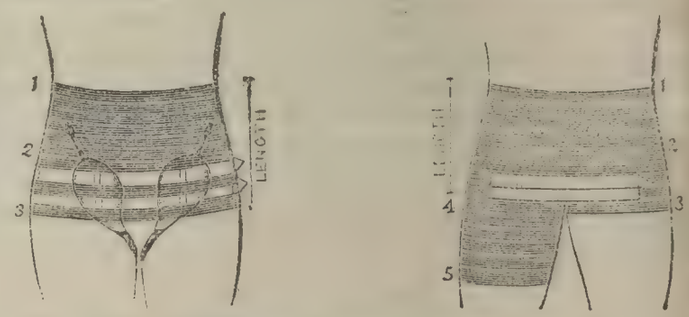
Diphtheria, Fevers, Hooping Cough, etc., etc. We beg to caution the profession against imitations of this invaluable medicine, for so many years prescribed as "Pulvis Jacobi Ver.", but to which it is now necessary to add the name "**Newbery's**", to secure prescribers against the *substitution* of articles advertised as James' Powder, *but which have nothing in character, dose, or effect*, with the original article, which has been prepared at 45, St. Paul's Churchyard continuously since its introduction in 1746.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXXV.] LONDON: SATURDAY, JULY 30, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

HULL GENERAL INFIRMARY.

LACERATED WOUND OF THE HAND: FRACTURE OF PHALANGES: TETANUS: DEATH THE THIRD DAY AFTER, AND TEN DAYS FROM RECEIPT OF INJURY.

Under the care of W. J. LUNN, M.D.

[*Reported by* C. J. EVANS, ESQ., *House-Surgeon.*]

THOMAS HUNT, aged 15, a rather delicate-looking lad, came to the Infirmary on August 26th, 1858, having met with an injury to his left hand in the machinery of an oil-mill. His hand was caught in the wheels when he was in the act of oiling them. There was a lacerated wound on each side of the back of the hand, between the second and third, and between the fourth and fifth, metacarpal bones. There were two corresponding wounds on the palm, that on the ulnar side communicating with the dorsal one through the hand; the transverse ligament between the heads of the fourth and fifth metacarpal bones being severed. A fourth wound existed at the root of the middle finger, partially exposing the flexor tendons; and there was also a wound of the index finger. The second phalanx of the middle finger was broken. Water-dressing was applied; but, although urged to do so, the boy would not remain in the house.

August 28th. He presented himself to-day, with the intention of remaining in, and was placed under the care of Dr. Lunn. The wound was looking pretty healthy. The water-dressing was continued.

August 31st. The middle finger looks rather as if it were about to mortify.

September 2nd. Mortification has advanced; so the finger, with the head of the metacarpal bone, was removed. The first phalanx was afterwards found to be partially fractured. He complains to day (eighth from injury) of stiffness about the jaws, and a difficulty in opening his mouth. The pupils are much dilated; his expression is anxious. The pulse is frequent, small, and feeble; the tongue coated. The bowels have not acted this morning, but were freely open yesterday. The fingers of the injured hand are contracted upon the palm. The patient was put by himself, in a quiet and dark ward.

Statim sumat calomelanos gr. x, et post horas quatuor pulveris opii gr. j.

6 P.M. No action of the bowels has taken place. An enema of castor oil and turpentine was ordered to be used immediately, and a draught containing half a drachm of laudanum to be given at night. Three ounces of wine were ordered.

September 3rd. He slept a little during the night, but the symptoms of tetanus are more marked this morning. There has been no action of the bowels, and no urine has been passed. The pupils are less dilated, but motionless. There is more rigidity of the facial muscles, with complete *risus sardonicus*. The abdomen is as hard as a board, and the back is somewhat arched. The opiate draught and turpentine enema were repeated.

2 P.M. There is still no action of the bowels. Touching the injured hand produces immediate spasm. There is distinct opisthotonos; the right upper and the lower extremities are not affected. A catheter was introduced, and a pint of clear, high coloured urine, of strong violet odour, was withdrawn. The injection was repeated with O'Beirn's tube passed high up the intestine, and some croton oil was placed on the tongue. Chloroform was administered at intervals, and a poultice was applied to the hand.

8 P.M. He has had one copious watery stool, containing scybala. He has bitten his tongue severely. A soft pill, containing a drop of croton oil, was put into his mouth; and the inhalation of chloroform was continued.

September 4th, 2 A.M. The enema was repeated, and urine was drawn off. The spasms have been less severe through the night, but have occurred every ten or fifteen minutes. His face is pallid and bedewed with perspiration. He can open his mouth a little more. He has taken three croton-oil pills in all, and has had six or eight copious loose evacuations, of dark green colour, like pea-soup. Wine and beef-tea have been frequently given, but he now refuses to take them; the least attempt to swallow producing immediate spasm. There is some tendency to priapism. Enemata of strong beef-tea were ordered to be injected. Two grains of calomel were ordered to be flown into his mouth through a quill every two hours. The poultice was removed from the hand; and lint was applied, previously soaked in a solution of extract of belladonna (ʒss to the pint). The wounds look sloughy. He asks for the chloroform to be given; and its inhalation is continued almost without intermission.

4 P.M. A marked change for the worse has come on. There is extreme pallor of face; the pulse is rapid, and very small and feeble. There is occasional spasm, but not very severe. A strip of lint, eight inches long, spread with a thick layer of extract of belladonna, was applied to the spine. He got worse, and died at nine in the evening. No autopsy could be obtained.

REMARKS. The histories, treatment, and results of the different cases of tetanus which have been reported, would seem to show that in apparently similar cases, with similar treatment, similar results are rarely obtained. One case recovers on one plan, and a second on a different plan; a severe case occasionally recovering under comparatively simple treatment, and *vice versâ;* more cases terminating unfavourably. The administration of chloroform, though it does not diminish the severity of the spasm, certainly mitigates the acuteness of the pain, and has a very soothing effect upon the patient.

Original Communications.

ILLUSTRATIONS OF THE USE OF THE OPHTHALMOSCOPE.

By WILLIAM MARTIN, F.R.C.S., late Professor of Ophthalmic Surgery in the Calcutta Medical College.

IT has for some time seemed to me desirable to collect together some of the most precise data that we have as yet been able to find recorded regarding the actual appearances, under the ophthalmoscope, of the characters distinctive of the various ophthalmic affections, the results of which are recognisable by the aid of this instrument. Notwithstanding the appearance from time to time of various valuable works on the subject, some of them elegantly illustrated, such as Jäger's Plates, with the annexed descriptions, etc.; others with elaborate descriptions of morbid appearances, as the last edition of Desmarres' *Treatise on Diseases of the Eye*, etc.,—the student will have felt, as I have myself, the great difficulty of making an accurate diagnosis of the efficient causes of the loss of sight, and concomitant ophthalmic affections, by the method of examination with the ophthalmoscope. No doubt very great exercise with this instrument is required before its proper use can be mastered. It is probably as difficult, if not more so, to attain an accurate insight into the information that may be gained

by its use, as regards internal diseases of the eye, as it is for the neophyte to attain an accurate knowledge of diagnosis of diseases of the chest by the aid of the stethoscope. In addition, we must remark that the knowledge of its use may be said to be, if not in its infancy, in a state far removed from what we may hope will be the case when we have had time and opportunity for greater experience. It is still difficult to attain an accurate diagnosis of the several diseases of the posterior parts of the eye; to define accurately choroiditis, retinitis, etc.; to determine the actual causes of the innumerable conditions which we must still be content to call amaurosis, amblyopia, glaucoma, etc.

We may hope to be able to enlarge our knowledge by the opportunities now offered to all engaged in the study of ophthalmic surgery at the various special eye hospitals. Having enjoyed the benefits of the ophthalmoscopical department, as well as of the splendid collection of drawings and museum now in progress of formation at the London Ophthalmic Hospital at Moorfields, I have thought that a collection of some of the facts positively known on the subject might be useful in supplying a want that I have experienced in my own case in the study of the ophthalmoscope. The great desideratum at present is the accumulation of real facts; that is, the exact appearances indicative of the diseases of the several component parts of the eye. In the course of time, with the aid of a more exact knowledge of the minute anatomy, physiology, and pathology of the eye, such as we may hope to attain, but by no means so likely as by the collections now forming at the Moorfields Hospital and elsewhere, the facts which have been elicited by the observation and comparison of numerous inquirers will receive their due value; and we may expect as much success in the diagnosis and treatment of diseases of the eye by the use of the ophthalmoscope, as has been attained, since the time of Laennec, in the diagnosis and treatment of diseases of the chest by the use of the stethoscope, in combination with increased knowledge of general physiology and pathology.

In addition to the works of Desmarres and Jäger, above mentioned, the student and practitioner in ophthalmic surgery, who may not have varied opportunities of extending and comparing his acquisitions on this subject, as well as the kindred one of the anatomy and physiology of the eye, will find much useful information in Mr. Hogg's little work on the *Ophthalmoscope*, and in the several numbers of the London *Ophthalmic Hospital Reports*, which contain ophthalmoscopical illustrations, the researches of Hulke, Bader, etc. But, above all, his acquisitions would be increased by some time spent in the ophthalmoscopical department of that hospital, and in examining the collection of drawings and the museum now being formed, principally by the zeal and industry of the medical officers of that institution, and under charge of Dr. Bader, the curator, whose valuable services in improving our knowledge of this branch of science are bearing fruits in the admirable catalogue now in course of preparation, and cannot be too highly appreciated.

Crystalline Lens.

The information we are enabled to get with regard to diseases of the eye by the aid of the ophthalmoscope is not by any means confined to the fundus of the globe. We can ascertain the state, morbid or healthy, of all the parts which lie posteriorly to the cornea; and its use is particularly applicable with reference to the state of the crystalline lens and its capsule, and especially to the degree of transparency of these parts. Thus we are able to distinguish true from spurious *cataract* in any spots which there may be on the capsule, etc. Appearances, which on an ordinary examination we should be inclined to attribute to cataract, are often proved by a careful ophthalmoscopical examination to be due to disease, probably irremediable, of the posterior tunics of the eye. As regards cataract, we detect, in cases in which the disease has advanced to the slightest degree of impairment of vision, a certain amount of obscuration or interruption of the quantity of light which would otherwise pass to the fundus of the eye. The obscuration may be partial or entire, according to the amount of opacity. We also find, even in incipient cases, particularly near the margin, opaque striæ, and occasionally over the surface spots; in more advanced cases, the appearance of opaque septa, showing fibrous alterations of the lens; and between these opaque striæ or septa are generally seen pretty transparent intervals. We find also frequently, after synechia posterior, patches of pigment which have become detached from the uvea, lying upon the anterior surface of the capsule; so that by this means we are enabled to detect with certainty alterations constituting cataract, which would not be always ascertainable by means of a magnifying lens, or by the catoptric test. We also detect in the lens the presence of *cholesterine*, and the different *foreign bodies* which it may contain, as animalcules, etc.; the peculiar change of the lens which corresponds with the arcus senilis of the cornea (Desmarres); also any form of *dislocation of the lens*, entire or partial; and it is not necessary that there should be any loss of transparency in the part in order that we may detect it.

Vitreous Humour.

In inflammation of this part, which almost always accompanies that of the deep seated tissues of the eye, we find a general obscurity of the part, and often a quantity of flocculent shreds, whitish, often in constant movement. In this state the natural bright pink colour of the fundus is not reflected, but gives place to a dull yellowish-white appearance, and the optic papilla* and macula lutea are more or less obscured. Then we may have purulent and other deposits. In *synchysis* of the vitreous body, we find the flocculent shreds move very rapidly to the lowest place.

In the changes of the humour which accompany a *syphilitic condition* we constantly find flocculi—in reality white, but from the blaze of light present during the examination, appearing black—constantly moving in all directions with the movements of the head. Others have a white or grey appearance. These are to be seen also as a result of iritis and other internal inflammations. They are not generally to be seen by the patients themselves.

There is also a condition of the vitreous humour which is described by Desmarres as *jumenteux*. He states that it is often present in inflammation of the deeper textures. There is a general turbidity, with numerous dark points in motion.

It is to be remarked that the impossibility of lighting up the fundus in cases where the lens and capsule are clear is not always to be attributed to disease of the vitreous body. There may be disease of the hyaloid membrane, or there may be infiltration from extravasated blood, or from what has been described as flakes of exudation. Sometimes, without any very apparent cause, as of the states of disorganisation before alluded to, all the light seems to become absorbed, so that there is no reflection of light whatever from the fundus.

Extravasations of blood, when found in the vitreous humour, may be from the retina or choroid. We generally see the clot low down, behind the lens, and it may be of a bright red colour. If it be from a retinal vessel we may be able to trace its origin by finding a black spot on the track of one of the vessels at the fundus, after time enough has elapsed for some clearing to take place; but if from a choroid vessel, we find deep seated ecchymosis, without a spot on a retinal vessel.

Various *floating bodies* are observable throughout the vitreous humour. These may have a motion corresponding with the ordinary movements of the eye; that is, as the patient moves his eye upwards they will be seen to move downwards, and *vice versâ*; or they may move in the same direction as the globe. This would depend upon the comparative densities of the bodies and the vitreous body; if lighter than the vitreous they will be carried along with it. This is the case with the floating particles which we so often see in disease arising from a syphilitic condition. The more dense bodies, as some forms of muscæ volitantes, etc., are seen, after motion, to sink to the bottom of the humour. These may or may not be perceptible to the patient.

We may also find the various kinds of *parasitic animalcules* (cysticercus, etc.); and it would appear that none of the internal parts of the globe are free from being infested with these objects. They are found even in the retina.

We may also find many *foreign bodies*, pieces of iron, stone, which may be projected to that extent. These may become fixed to the sides or may float through the substance of the humour. In either case we shall find them often surrounded by a membraniform exudation.

Cases exemplifying all these are related by Anagnostakis Ruete, Gräfe, and other authors.

[*To be continued.*]

* Optic nerve entrance would probably be a more correct designation, as there is in reality no prominence at this part; but as the term optic papilla has been generally accepted, I shall continue to use it in this memoir, for the sake of convenience.

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF CARDIAC DISEASES.

By W. O. Markham, M.D., F.R.C.P., Physician to St. Mary's Hospital, London.

Introductory Remarks.

The study of pathological anatomy—that is to say, the study of the diseased conditions of the different organs and parts of the body as presented to us by the knife of the anatomist after death—is necessarily one of the stepping-stones over which we must pass to arrive at a perfect understanding of diseased processes. But the physician soon learns that a knowledge of the nature of diseases is not to be obtained by the mere study of the structural changes of the body. Diseases, as he knows them, are not simple but complicated processes, involving a chain, and often a long chain, of actions, which run the one into the other; and of these actions, the pathological anatomist seizes only those links which come last or late in the series. Such structural changes, then, do not represent the essence, the *primum mobile*, of diseases; they are simply the consequences ensuing from the action of causes, which operated in the body anteriorly to them. Thus, the ulcerated intestinal glands of typhoid fever; the tubercular deposits of phthisis; the ecchymoses of purpura; the pustules of small-pox; the arthritis and pericarditis of rheumatic fever—these are not the *essential* diseases which, as physician, he is called upon to treat. They are neither more nor less than the consequences of certain antecedent actions, whose nature has hitherto eluded our grasp.

Pathology, then, in its true and philosophic sense, is something far beyond a mere knowledge of pathological anatomy. Diseases must be contemplated in their living manifestations; in the derangement of functions which they occasion during life; as well as in structural alterations of the body observed after death. There is a physiology of disease as well as of health—a pathological physiology; and a knowledge of the disordered actions of organs is as essential to the pathologist as is a knowledge of their natural actions to the physiologist. There are many diseases, indeed, of whose pathology we know nothing, beyond what we learn of them through certain disturbances of function manifested during life. What has the most scrupulous investigation made after death yet taught us of the pathology of tetanus, of hydrophobia, or of epilepsy? All that we know of the pathology of these and of many other diseases is derived entirely from the observation of those striking disorders of functions which characterise such diseases during life. Thus pathology comprises a knowledge of disordered functions, as well as of dead anatomical facts.

It is even more than this. By a process of legitimate reasoning, it takes cognisance of disease lying dormant in the body, and which has not yet manifested itself, either through disorder of function, or through change of structure. Hereditary diseases are of this sort. Here there exists an invisible taint, so to speak, inherent in the body; and from the moment when the germ commenced its first evolutions in the womb. The period of the incubation of disease, again, is a pathological period in the life of the individual affected with it. Though neither disorder of function, nor structural change indicate the existence of disease, still, reason surely tells us that disease is there in the body, quietly working, gradually unfolding, and coming to maturity and complete development.

A clear recognition of these facts gives us a key to a right estimate of the uses of pathological anatomy, to the physician as *a curer of diseases*. We are all now-a-days so keenly engaged in the observing and recording of material facts that we are apt to forget how limited is the information which pathological anatomy can give us of the nature of diseases; and of how limited service it is to the physician (in a positive sense) as a guide to him in the practical application of his remedies in their cure. The physiologist might regard the microscopic qualities of a nerve-tube, of a muscular fibrilla, or of a gland cell for a century, and yet could never, from their visible qualities, gather the smallest inkling of the functions they subserve in the animal economy. And just so the pathologist. He may make himself thoroughly master of all the chemical and physical properties of tubercle, and of the different anatomical changes, occasioned by its presence in the body; but what does all this mere *anatomical* knowledge avail him, as a key to the essence of the disease, or as indicative of the curative agencies requisite to combat it? What do all those typical specimens of arthritic and of endocardial and pericardial inflammations, in their different stages, displayed in our museum, teach us of the real nature of the disease, and of the peculiar remedies requisite in the cure of acute rheumatism? In the dead-house we learn what parts are injured by the disease, and how they are injured; but the dead-house does not teach us the nature of the disease which effects those injuries, and therefore does not explain to us the value and uses of our remedial agents. Our therapeutical knowledge, at present, rests almost wholly upon what we observe of the effects of remedies upon the living body.*

But if pathology has enabled us to make but small advances towards a *positive* cure of diseases; it has, in one sense, advanced the progress of our art admirably. It is something, at all events, that the mists and prejudices, which have heretofore obscured the face of medicine, should have been cleared away. We have begun to learn (and the lesson is being more widely spread every day) the bounds and limits of our powers as curers of diseases—to learn what we can, and what we cannot do. We cease to arrogate to ourselves those kind offices, which nature, not our art, performs. Our forefathers thought, through their remedies, that they had a power over, and could control, and remedy disease after a fashion, which we know is impossible. No blame, indeed, to them; for they had not the means of knowledge which has led us to these better things. Instead of *jugulating* inflammatory diseases—of evacuating morbific principles at the mouth of a vein—we have learnt to guide the patient gently to his cure, through the inevitable *via mala* of diseased processes. If we have gained nothing more than the being rid of the vicious theories which have hitherto directed—and, of course, viciously directed—the hand of the practitioner to his work, we have gained immensely. Error was an essential and necessary associate of the practice of former days; but it is not so now. Our errors are voluntary errors, for which we are responsible. We can mark where positive knowledge ends, and can estimate at their proper value the theories and practices which we follow out in the cure of diseases. The line between that which is demonstrated, and that which is hypothetical, is clearly and well defined. And it is just this very knowledge of its fallibility—this philosophic estimate of its actual powers over disease—which distinguishes rational medicine from barren empiricism.

Pathology, thus considered, points out two special objects for the attention of the physician in this treatment of diseases. These are: the local injuries effected by the disease, the obstructions to the performance of the functions of parts, and the agent itself which occasions those injuries. It is the business of his art to administer, if so it may be, to both these evils, which are essentially different in their nature; though in past days too often confounded together.

Now, as regards the last of them—the essential cause of disease—it is manifest that until pathology enables us to define its actual nature in any given case, our treatment of it must be empirical.

In such case, experience alone can guide us. We give a remedy, chronicle a result, and thence deduce a line of treatment. Now, men have appealed to their experience in all ages of medicine, and still appeal to their experience, as the test of the propriety of their practice; and hence it becomes of importance that these experiences, which, as we find, daily lead observers to diametrically opposite conclusions, should themselves be subjected to some touchstone. The father of medicine was himself forced to denounce the fallacies of experience —*experientia fallax*; and it may be truly asserted that there is no more grievous obstruction to the true progress of rational therapeutics than the confident trust which, as individuals, we place in the results of our own personal observation. We are all too apt to forget that the facts about which experience is exercised in medicine are most difficult of right appreciation. Surely it is very illogical to accept as proven, facts concerning which the opinions of equally experienced observers are widely

* I could, and so could any one, if it were worth the while, give abundant proofs of the false practices in therapeutics which have from time to time, during these late years, been engendered by this too narrowed observation of diseases. The remedy has, in such cases, been suggested by and directed to the anatomical or chemical changes met with in the body. The cause provoking those changes being forgotten.

different. That which alone can give to a particular fact in the treatment of disease the stamp of genuine value, is the wide and uncontradicted assertion of its truth by competent observers.

A true experience in medicine, I would define as the result which is arrived at through the observation of numerous fitting observers; who, after due investigation, arrive each at a like conclusion—the conclusion not being contradicted by the observation of other equally capable observers. Whenever serious discordance of opinion exists concerning the influence of a remedy over disease, wisdom would lead us to infer that its actual influence in such case has yet to be demonstrated.

The pathology, then, of modern days, however little it may have helped us to a knowledge of the nature of the essential and original provoker of diseases, has been of immense service in directing us rightly and logically to their treatment. It does not tell us how or why tubercle is deposited in the organs of the body; but it does teach us how to ward off and provide for the local injuries inflicted on the organs by its presence. When we would learn how to counteract the depositing of the tubercle, then we must turn to the lessons of experimental therapeutics. And it is from the results of experience alone that we can, in any case, arrive at a knowledge of the treatment of disease, so long as pathology is unable to disclose to us its nature. I need not here refer to the extraordinary changes which have passed into the treatment of diseases in consequence of the recognition of these sort of facts. No class of diseases illustrates this fact more remarkably than the diseases which I am about to speak of here.

We no longer look upon endocarditis, or pericarditis, simply as local, so-called, idiopathic inflammations; for we now know them to be the expression of some general disordered condition of the body; and we recognise the fact that the successful treatment of these diseases implies the application of a remedy which shall, so to say, neutralise the agent which produces the disordered condition. We do not now regard the local inflammation as the sole element to be provided against in treatment; and consequently have discovered that those prime agents, bleeding and mercury, which were once thought to be intensely efficacious in cardiac inflammations, are actually baneful when used as then recommended.

The physical diagnosis of diseases is founded on pathological anatomy. It, in fact, premises a knowledge of the pathological states of the different parts of the body, such as they are displayed to us by the anatomist. In the case of the heart, our knowledge of its diseased conditions, so far as they are explained to us by physical diagnosis, is derived—from alterations in the natural character of its sounds; from the presence of sounds, which are heard over the heart coincidentally with its movements, and where none such exist in health; from alterations in the natural extent of the precordial dulness, as ascertained by percussion; and from changed conditions—changes in extent, position, and force—of the healthy impulse of the heart. It is unnecessary to dwell upon the advantages which medicine has gained through the discovery of the diagnosis of internal diseases. The study has naturally become an essential part of the physician's education. But it has been thought, and with reason, that the study may be too minutely prosecuted; and that, relying thereon, the practitioner sometimes pretends to a greater accuracy in diagnosis than the nature of the subject admits of. And, also, that through over estimation of the value of the physical signs, he is apt to fall into the error, when applying his remedies, of unduly subordinating the general symptoms to the local signs. In practice, indeed, we may safely put aside all fine drawn discriminations in the physical diagnosis of cardiac diseases; and may rest well assured that great skill in the practice of the art is not requisite in order that the observer may be enabled to arrive at a sufficient knowledge of the affection of the heart. That degree of acute observation, which pretends so nicely to discriminate, during life, all the minute differences of diseased structure, the exact position and relations of them, such as pathology discovers them after death, is certainly not necessary to guide the practitioner to their treatment. Few people, indeed, possess those physical qualities—that nicety of tact, that fine sense of hearing—which are necessary to serve the observer in such minute differences as the subject may offer. I have seen enough of stethoscopy to satisfy me that over refining in its practice is oftener fraught with mischief than with good for the patient; and apt to lead the observer into erroneous conclusions and practices.

Experience has satisfied me that when the auscultatory signs, in any given case, are such as not to present, to any ordinarily skilled person, clear and distinct indications of deviations from health, they are worth nothing as indications for treatment. It surely, indeed, would be wiser to abandon the stethoscope altogether, than to submit to the conclusion that only one man in a thousand is able to use it effectually.

I have thus endeavoured to state, shortly, the uses of a knowledge of pathology to the physician; and how intimately connected with the treatment and diagnosis of diseases is a correct knowledge of their pathology. I shall, in the next paper, proceed to detail the pathological anatomy of pericarditis.

EXCERPTS FROM DAILY PRACTICE.

By T. Herbert Barker, M.D., F.R.C.S., Bedford.

Under the above head I intend, from time to time, to forward to the British Medical Journal such cases, occurring under my own observation, as may seem to merit a record in the literature of medicine. I do not assume to compete, in this record, with the histories of hospital practice already conducted in the Journal. But, as Rush very properly remarked in his eulogy on Cullen, "There are mites in science as well as in charity, and the ultimate results of each are often alike important and beneficial." This quotation is a sufficient apology for me, if apology be needed.

The following case, which caused me much anxiety at the time of its occurrence, I give on the present occasion, as being of considerable interest in the passing time.

I.—Case of Severe Vomiting and Dysenteric Diarrhœa, in the Early Months of Pregnancy: Abortion, Followed by Recovery.

Mrs. C., aged 42, the wife of a respectable tradesman in this town, became for the first time pregnant in the end of May 1857. Immediately after conception she was attacked with the vomiting of pregnancy, which continued with unceasing violence until the time I was first consulted, August 15th. She had already received various medicines, such as magnesia, carbonate of soda, and Gregory's powder; but without any effect in arresting the vomiting; and she was considerably reduced, partly from the vomiting, and partly from the inability to retain food. A few days before I was consulted the symptoms were aggravated by the supervention of diarrhœa.

When I saw her I found the following symptoms: she was suffering from extreme thirst, emaciation, and exhaustion, and was confined entirely to bed. The vomiting was intolerable. Whatever was taken was returned, sometimes with bilious fluid and mucus, while in the intervals between food there was a persistent loathing and nausea. The vomited matters gave an acid reaction with litmus. She was purged seven or eight times each day, and the matters ejected by the bowels contained no true feculent matter, but mucus, tinged with blood. Accompanying this there was painful tenesmus. The tongue was creamy in the centre, with red tip and edge; the pulse small, quick, and feeble. The whole symptoms, in fine, indicated an acute dysenteric attack, coupled with the vomiting.

Detecting the pregnancy, and believing that all the phenomena of disease had their origin in sympathetic irritation commencing in the uterus, I prescribed, first, an effervescing mixture, with an excess of alkali, to each dose of which were added three minims of the diluted hydrocyanic acid of the *London Pharmacopœia*. This gave no relief. After trying this for a day or so, I prescribed a mixture containing, in each dose, the trisnitrate of bismuth, five grains; diluted hydrocyanic acid, three minims; and five minims of the solution of hydrochlorate of morphia, in water. This mixture, continued every four hours for four days, produced no alleviation in the symptoms. I therefore moved a point in practice, paying more decided attention to the dysenteric symptoms, which had become more urgent. By this time not only was mucus, tinged with blood, still excreted by the bowel, but false membrane, resembling diphtheritic exudation, began to be thrown off in considerable quantity. I now prescribed chalk mixture, with ten minim doses of laudanum, three times daily; and a pill night and morning, containing two grains and a half each of Dover's powder and hydrargyrum cum cretâ. This treatment, with the addition of catechu to the mixture, suppositories of opium, and enemata of starch and laudanum, was continued until the last day of

August, but with no relief. The case now became of serious import, owing to the extreme exhaustion necessarily induced. On the last day of September my anxiety was somewhat relieved by the discovery of symptoms of threatened abortion. These symptoms continued; and, fortunately for the life of the mother, a fœtus was thrown off on September 1st. Immediately afterwards, the more ungent symptoms, namely, the vomiting and dysentery, began to subside, but were replaced for a few days by retention of urine, for the relief of which the catheter had to be used at stated intervals.

By slow degrees the patient recovered. She has since been pregnant, and has given birth to a fullgrown child.

Remarks. It is obvious that in this case the main point of practice lay in a correct diagnosis. Vomiting, in pregnancy, though a common symptom, and one which has been attended by even fatal results, as recorded in the experience of Drs. Montgomery, Marshall Hall, Haighton, Davis, Johnson, Burns, Churchill, Clay, and many other writers, is not often complicated with dysentery. But that it may be thus complicated is certain from the above case: and this complication the older writers on midwifery have recognised and pointed out with much more of precision than our modern authors. Had I not diagnosed in this case the existence of the pregnant condition, I should have been bewildered by the symptoms, their intractable character under every reasonable variety of treatment, and their cause.

The second point to be considered is whether, under the circumstances, I ought to have endeavoured to produce abortion. This question must be discussed candidly.

It is quite clear that the natural process of abortion did, in this case, save the woman's life; and this fact would, *a priori*, be in favour of such operation. I am, however, still undecided whether the operation is justifiable.

In 1852 a discussion took place in the Academy of Sciences, in Paris, regarding the propriety of inducing abortion in cases where the vomiting of pregnancy threatened the life of the mother; and opinions were then very fairly divided on the question. It seems, indeed, that in many cases where abortion is produced, death takes place as if from the shock of the operation, or from continuance of the symptoms; while in cases where abortion occurs naturally, the fatal result is more commonly prevented. It remains, therefore, an open question whether, in cases such as I have described, we ought to run the risk of operation, or whether we should await, even till death, the possibility of a relief of the symptoms by an action of the uterus itself to expel its contents.

The last point to be noticed relates to the medicinal and diatetic measures which should be employed. It is common sense itself that so long as the irritable cause remains, ordinary medicinal remedies can be of no avail. One common remedy, I mean opium, may give temporary relief; but this is given at the risk of producing a preliminary excitement and subsequent exhaustion. When organic obstruction in the heart produces dropsy, what can the best of us do? I need not enforce the parallel. Indeed, I know of no remedy in the whole Pharmacopœia that can be considered effective so long as the uterine irritation remains. A variety of styptic remedies might of course be tried. They would in my opinion either have no effect, or increase the mischief.

Dr. Clay, whose name has but to be mentioned to ensure authoritative respect, suggests that in the vomiting of pregnancy, particularly in the form occurring during the latter months, the patient should be laid in the recumbent position, with the hips raised; that concentrated food should be given in small quantities, at long intervals; and that if the os and cervix uteri were tender to the touch, a few leeches should be applied. This treatment has been attended with remarkable efficacy in some of his cases, and should another case such as I have described happen in my practice, I should unquestionably carry out a treatment at once so rational, simple, and safe.

In my next excerpt I shall give the particulars of a case similar to the above, in which death took place fourteen days after abortion, from the continuance of intractable diarrhœa.

Royal Society. Of fifteen new Fellows of this Society elected on June 9th, the following six are members of the medical profession:—Henry J. Carter, Esq., Surgeon Indian Army, Bombay; William Bird Herapath, M.D., F.R.S.E., Bristol; George Murray Humphry, M.D., Cambridge; John Dennis Macdonald, Esq., Assistant-Surgeon Royal Navy; William Odling, M.B., Kennington Road, London; Thomas Watson, M.D., F.R.C.P., Henrietta Street, Cavendish Square.

THE FORMATION OF CLOTS IN THE VENOUS SYSTEM DURING LIFE.

(A thesis for a medical act in the university of cambridge.)

By GEORGE MURRAY HUMPHRY, M.D., F.R.S., Surgeon to Addenbrooke's Hospital; Lecturer on Surgery and Anatomy.

I.—Formation of Clots in the Veins.

[*Continued from page* 583.]

The extension of the clot in the direction of the heart is usually limited by the junction of some large vein which is sufficient to maintain the current in the main trunk. Often the clot does not reach quite so far as this. Thus, when the clot commences at the junction of the iliacs, on one side, it commonly extends about half way up the common iliac; and, in a case of cancer of the uterus, in which the iliacs, on both sides, were obstructed, the clot extended up the vena cava nearly as high as the renal veins. Sometimes the clot reaches further, and terminates in a round or conical end on the *cardiac* side of the point of junction of some large trunk. In the peripheral direction, it is prolonged to a variable extent into the tributary branches, but does not usually reach the small veins: indeed, the latter are very rarely obstructed, either primarily or secondarily, in this affection.

The clot not only fills and chokes up the vessel, so as to prevent the passage of blood through it, but also distends or stretches it; and this distension, together with a certain amount of irritation resulting from the presence of a solid body in its interior, soon produces an effect upon the walls of the vein, the results of which are exhibited chiefly, or almost exclusively, on the *exterior* of the vessel. Thus we soon find that there is inflammation of the investing cellular tissue, causing an effusion of serum, lymph, or pus; whereas, in the *interior*, there is commonly little change beyond a removal of the epithelium from the lining membrane, and more or less intimate adhesion of the clot to it. There may be also an increase of redness at some parts, which is evidently due to staining by the contiguous blood, inasmuch as it is commonly proportionate to the colour of the contained clot, being deepest where the clot is darkest, and less marked, or quite absent, where the clot is composed chiefly of fibrine. I have never seen lymph or pus, or any inflammatory product, formed from the interior of a vein. This proves that the inner coats of veins are by no means easily excited to inflammation, and is quite in accordance with the results of experiments made upon the veins of animals by Lee,* Mackenzie,* and Virchow (*Handbuch der Specielle Pathologie und Therapie*, I, 161). It accords also with the general results of my experience, which by no means indicate a liability to inflammation in the inner coats of veins. I have, in many instances, applied a ligature to the chief vein of a limb after amputation, without any ill result in a single case; and I have never seen any mischief caused by the ligature of a varicose vein or a hæmorrhoidal tumour, though I have employed that method of treatment very often. It is not improbable that where unfavourable symptoms have ensued in cases of this kind, they have been caused, not so much by inflammation of the vein itself, as by suppuration in the surrounding cellular tissue.

When examining a vein which is plugged by a tough and adhering coagulum, one can scarcely be persuaded that the circulation could ever have been re-established through it, if the patient had survived; yet there can be no doubt that this does take place, and that a vessel may, in process of time, resume its functions, and be restored nearly, if not entirely, to its natural condition, after its channel has been completely, or to a considerable extent, blocked up by a clot. The perfect restoration of the limbs in Case I, and in several other instances, assured me of this; and it is in accordance with the great difficulty which I have experienced in effecting the permanent obliteration of varicose veins by temporary ligatures, or by other means which had for their object the formation of

* *Medico-Chirurgical Transactions*, xxxv and xxxvi. Dr. Mackenzie infers, from the results of numerous experiments on the venous system, that the origin of *obstructive* phlebitis is to be sought for in a vitiated state of the blood, that this causes an irritation of the lining membrane of the veins at various points, which, in turn, leads to coagulation of the blood. I do not, however, discover sufficient evidence of this irritation of the lining membrane of the veins, and think there are many reasons against admitting that it is a necessary, or even the ordinary, intermediate link between the vitiated and the coagulated condition of the blood.

coagula in the vessels. It appears that the blood is almost sure to revert to its natural channel, in process of time, unless the vein be completely destroyed.* The dissection in the following case illustrated the condition to which the clots became reduced. A man, aged 63, died, of erysipelas and pleuro-pneumonia, ten days after resection of one ramus of the lower jaw, performed on account of extensive necrosis and suppuration, which had continued for several months, and had reduced him to a very low state. His health had long been bad; but he did not mention that he had suffered any particular affection of the lower limbs. I was led to examine the veins in consequence of the condition of the pulmonary arteries, presently to be described. In dissecting out the femoral and popliteal vein of the left side, I remarked that the investing layer of cellular tissue, usually so delicate, was more coarse, tough, and closely adherent, than natural. With this exception, there was nothing to attract attention on the exterior of the vessels, or in the structure of their walls. In the interior were numerous delicate, but tough, white bands or strings, extending across or along the vessels; some were adherent in their whole length, and others only at their ends; also small firm lumps of pale yellow, or gravel, or golden colour, smooth on the surface, and more or less adherent to the inside of the vein. In some places there were merely yellowish stains in the lining membrane of the vein. The nature of these stains would have been scarcely recognisable, had they not been in most instances continuous with the threads or some other evident remains of the clots. These veins contained also coagula, which appeared to have been formed recently, probably after death. The popliteal and lower part of the femoral vein, on the right side, presented appearances similar to those on the left. The upper part of the femoral vein was occupied by a firm, dry, mottled clot; and the profunda was tightly plugged by a continuation of the same, of white colour. Above the junction of the profunda, the vein was distended by a clot of comparatively recent formation, which, in the centre, was semifluid and of dirty cream colour. This soft part contained red corpuscles, and larger pale cells having indistinct nuclei.

It is no uncommon thing for the middle part of the clot to be, as in this instance, softened and converted into a dirty pultaceous or creamy substance, in which corpuscles are found, varying in size and shape, less regularly formed than pus-cells, and having less distinct nuclei. These are intermixed with oil-globules and red corpuscles, which may be natural in appearance, or more or less misshapen and granulated, and in various stages of dissolution. The changes which the blood thus undergoes are, as it would appear from the experiments of Mr. Gulliver (*Medico-Chirurgical Transactions*, xxii, 138), similar to those which take place when it is subjected to concoction after its removal from the body. They seem most frequently to occur when the clot has been quickly formed.

In all the cases that I have seen, except one, the soft central part of the clot was walled in by the firmer exterior portion, so that there was no opportunity for any of the *débris* to enter the circulating current.

We come next to inquire what are the conditions of the blood which predispose it thus to coagulate in the veins during life. It has been already remarked, that the clots are most liable to form in persons who are in an enfeebled and cachectic state. Now, in this state, it is well known that the fibrine of the blood exceeds its normal proportions; and it appears that its tendency to coagulation is increased by there being also in the blood an excess of water, which dilutes the saline or ammoniacal elements, and thereby renders them less able to hold the fibrine in solution. Nevertheless, persons often remain in cachectic and anæmic states for a great length of time; and they may, in addition, suffer several and prolonged attacks of syncope, without any coagulation of the blood taking place. Indeed, the cases in which the latter occurs are quite the exception; and we therefore search for some other cause to explain the phenomenon in these exceptional instances. It is most frequent when the cachexia has been induced by some inflammatory affection; and we know that the effect of inflammation, more particularly when it attacks the serous membranes, is to increase the amount and the coagulability of the fibrine. The parturient state, which, especially in the early period of lactation, is productive of a similar effect upon the blood, is also marked by a great tendency to clotting of the blood in the venous system. The researches of Dr. Richardson (*The Cause of the Coagulation of the Blood:* 1858) continued with great assiduity and care through a long period, give strong reason for his view that the fibrine is held in solution by the presence of ammonia; and that its tendency to coagulate in the body is increased, and its coagulation out of the body is accelerated, by a diminution of the volatile alkali of the blood; and it is quite probable that, in the cases which we are discussing, an insufficient quantity of this solvent medium is one of the proximate causes leading to the clotting of the blood in the vessels.* There may be, in addition, some alteration in those relations of the corpuscles to one another and to the walls of the vessels, which, though not well understood, have an important influence in facilitating the circulation of the blood.† Certainly there seems no good reason to attribute the affection to an introduction of pus or other morbid fluid into the circulating current.

The diagnosis of the disease is easy. Œdema of the limb is often the first symptom. This may be attended with, or preceded by, uneasiness in the course of the affected vessels; and there is enlargement of the superficial veins, with, perhaps, induration of some of them. When the femoral vein is affected, the inner side of the thigh is sometimes swollen in a marked manner. The integuments usually remain white; occasionally they are inflamed in patches, or in a more diffused manner; and occasionally they are mottled by purplish spots, like petechial spots, or like those resulting from ecchymosis. Mortification rarely or never results from this cause alone (Virchow, *Handbuch der Speciellen Pathologie und Therapie*, i, 171).

I have already said that the affection is rarely attended with any serious consequences. It does not commonly seem much to aggravate the patient's condition, or to diminish his chance of recovery: indeed, I have sometimes observed an amelioration in the general condition of the patient to be coincident with the swelling of a limb which indicated an obstruction in the great vein; as though the general mass of the blood had become thereby relieved of a certain quantity of its redundant fibrine, and was consequently better fitted to minister to the healthy nutrition of the body. If the obstruction of a vein occur during the course of an inflammatory disease, it generally takes place when the disease is subsiding: it may, therefore, be regarded as an attendant on recovery, though it is an evidence of a low or cachectic state of system. I may again remark, that it seems to have no relation to the malady called "pyæmia"; and though necropsies prove that it is sometimes associated with the formation of clots in the pulmonary arteries, I have not in any case had clinical evidence of its being followed by that formidable affection.

Nevertheless, it is a dispiriting, tedious malady; it retards the restoration of the patient, keeps him confined to his bed, and causes much annoyance and apprehension. The liability to its occurrence is to be borne in mind as a reason against having recourse to depletion or purgation, or other measures which may exhaust the patient, or draw away the saline and watery ingredients of the blood, in the latter stages of an inflammatory or febrile affection. I have given ammonia in some cases in which I thought there might be a predisposition to the formation of clots; and, where the general condition of the patient is likely to be benefited by the use of such a medicine, we should not ignore the evidences which have been afforded of its influence in retarding coagulation of the fibrine. If given in a pure form, it is probable that some of it will enter the blood; and that it will operate in the living vessels, more or less, in the same manner as it is found to do when mixed with blood which has been removed from the body. When the blood has begun to clot in the veins of a limb, I do not think that much good results from any particular local treatment. The affection runs a certain course, and, if the disease upon

* Hence in the treatment of varix, where it seems desirable to resort to operative procedure, my practice is to pass a needle or silver wire beneath the vein, and to allow the metal to find its way out by ulceration through the vessel and the superjacent skin.

* The researches of Scherer and Lehmann (*Physiological Chemistry*, i, 97) show that the blood sometimes exhibits an acid reaction in the puerperal state; the acid present is supposed to be the lactic. This may be associated with the fact that I have often observed the skin to be remarkably dry in cases in which the blood coagulated in the vessels during life. An incipient decomposition of the blood is regarded by Zimmermann to be one of the chief causes of its coagulation.

† The commencement of the clots must, doubtless, be attributed to influences affecting the fibrine, rather than the corpuscles, because at the parts where they are first formed they are usually composed almost entirely of fibrine. Nevertheless, it is most probable that changes in one of the constituents of the blood are attended with corresponding alterations in the others; and the analogy drawn from what is observed in inflammation and in pregnancy, suggests that an increase in the coagulating tendency of the fibrine is accompanied by an increase in the adhesive qualities of the corpuscles, which would materially contribute to the formation of clots, and which may, indeed, sometimes be the immediately originating cause of them.

which it is an attendant do not prove fatal, will gradually subside spontaneously; and the veins usually become clear again. Considering the nature and cause of the malady, we should be unwilling to resort to the use of leeches. Nevertheless, I have known decided relief follow their application when the pain and inflammation around the vein was considerable. Fomentations are sometimes attended with comfort.

Of the instances which I have seen, the greater number have been in males.* Nevertheless, it appears to be the same condition of the veins which in women, after delivery, usually constitutes the disease known by the name of "phlegmasia dolens". The cause of the disease, and the results disclosed by dissection, appear to correspond very closely, whether it be developed after parturition, or in the course of an illness; and the name "phlegmasia dolens in the male" has, accordingly, been applied to it by Sir H. Halford (*Medical Gazette*, x, 172) and others. Phlegmasia dolens most frequently occurs *after* parturition at that time when the fibrine of the blood is found to be most abundant; viz., during the early period of lactation; and it is most common in women who are weak at the time of delivery, or whose strength has been reduced by flooding, and especially in those in whom there has been, in addition, peritonitis or some inflammatory affection of the chest. Moreover, when a fatal result has followed, it has commonly resulted, not from the condition of the veins, but from some other cause.† It must, however, be observed that, in phlegmasia dolens, the pain is usually more severe, and the disease, on the whole, is of a more acute nature than in the ordinary obstruction of the veins: it seems sometimes to originate in a morbid condition of the uterine veins, and is sometimes attended with, or productive of, those inflammatory and suppurative affections in distant parts which are attributed to a morbid condition of the blood.

Indeed, phlegmasia dolens would seem to occupy an intermediate position between the simple and comparatively innocent obstruction of the veins, which we have been considering, and the more severe and dangerous affection of the veins, which has been described by Arnott,‡ and others, as an occasional attendant upon wounds and injuries. The changes which occur in the veins, and in the blood contained in them, seem to be much the same in the three classes of cases, except that in the traumatic variety the inflammatory symptoms are commonly more severe. And there is the further important difference, that in it we are liable to encounter that alarming, and commonly fatal, train of symptoms which is supposed to depend upon a purulent infection of the blood; whereas, in the ordinary obstruction of the veins, as I have already said, such concomitants are little to be apprehended.

The purport of the foregoing remarks may be condensed into the following summary.

1. The great veins are very liable to become obstructed by clots forming in them when the patient is greatly debilitated, and when the circulation is enfeebled—by inflammatory affections, by discharging abscesses, difficult labours, and other causes.

2. The clots result from an altered state of the blood, disposing the fibrine to solidify in those parts of the veins which offer the greatest facilities for its so doing.

3. The inflammation of the veins is a consequence of the presence of the clot, and is chiefly confined to their outer coats, and to the surrounding cellular tissue.

4. The clots may soften and become intimately connected with the walls of the vessels, and may lead to the complete and permanent obliteration of their canals: more commonly, however, they are removed, or shrink into delicate bands or fibres, which offer little or no obstruction to the circulation.

5. The affection rarely leads to any serious result. It may be associated with so-called pyæmia; but has no necessary or frequent connection with it.

[*To be continued.*]

* Of forty non-puerperal cases tabulated by Dr. Mackenzie (*Medico-Chirurgical Transactions*, xxxvi, 235), about two-thirds were females, and one-third males.

† See paper by Dr. Davis, who first pointed out the true nature of this disease, *Medico-Chirurgical Transactions*, vol. xii; also papers by other writers in the same *Transactions*, and in various medical journals. Dr. Simpson, in his lectures recently published in the *Medical Times and Gazette*, calls attention to the fact that in some well marked cases of phlegmasia dolens the veins have been found quite healthy.

‡ *Medico-Chirurgical Transactions*, xv, 46. Mr. Arnott remarks, and I think he was the first to call attention to the fact, that the inflammatory changes "are usually limited by the passage of a current of blood; where a trunk is concerned, the boundary line being the entrance of a branch, and where a branch is concerned, the boundary being the junction of this with the trunk."

TWO ESSENTIALLY DISTINCT CONDITIONS OF KIDNEY GIVING RISE TO WHAT IS CALLED BRIGHT'S DISEASE.

(ABSTRACT OF A THESIS FOR AN ACT KEPT IN THE UNIVERSITY OF CAMBRIDGE FOR THE DEGREE OF M.B.)

By W. H. Dickinson, Caius College.

There are two essentially distinct conditions of kidney giving rise to what is called Bright's disease; and these may be distinguished from each other by the presence or absence of external granulation.

The results of the author's minute examination of the kidney under disease, lead him to the conclusion that the conditions, called after the name of Dr. Bright, are capable of arrangement into two great classes; that in the one we have disease proper to the secreting surface of the tubes; while in the other the disease is essentially intertubular, and that the characteristic difference between the two is the presence in the latter, and not in the former, of external granulation.

The "tubular disease" includes all the varieties of the large smooth kidney; notwithstanding that pathologists have subdivided it, according to the predominance of some one material, into "fatty degeneration," "waxy degeneration," "desquamative nephritis," and many others. There are two distinct stages. First, the period of enlargement; secondly, that of diminution. In the first stage, the capsule is thin and unadherent; the cortex is much, the cones slightly, enlarged; there is no appearance of preternatural vascularity. Parts, indeed, may be bloodless, giving a mottled aspect. The microscope shows the tubes entire; but in the cortex they are choked up with their epithelial secretion, which is often in various stages of disintegration, or fatty degeneration. These are probably consequences rather than causes of the derangement, and result from the cells, formed in excess from the inflamed membrane, being of unhealthy composition. In the cones there is the same tendency to excess of epithelial secretion, but it finds a readier exit, and does not, therefore, so often accumulate there. The tubes here shew rather a tendency to become filled with a glassy fibrinous material, studded with specks of oil, or cells of epithelium, which happen to be passing down, or blood-corpuscles; and this is shed in the form of cylindrical casts. The casts, therefore, are formed almost exclusively in the straight tubes.

The second stage is rarely reached. It consists in an overstretching and bursting of the tubes one after another, those nearest the superficies being first destroyed; and it appears that their contents are then absorbed. The tubes collapse, and the organ may be reduced below its natural size. The capsule becomes thickened and a little more adherent. The surface is still smooth, the colour unchanged. A section shews the gland to be chiefly composed of cone substance, and the remaining cortical substance is coarse, pale, and firm in texture, being reduced more or less to its fibrous nature; but there is no evidence of an increase of fibrous matter. The author agrees with Mr. Simon in believing that the cysts, often present in this condition, are developed out of epithelial germs, which are left on the walls of the ruptured tubules.

The "intertubular," or "granular disease," commences with slight thickening and adhesion of the capsule, with processes of fibrous-looking material passing from it into the interior of the gland; contraction of these follows, the points at which they originate become depressed, giving a superficial granulation to the exterior; and the tubes embedded in them, at first healthy, become gradually reduced to microscopic threads.

In what the author calls "chronic intertubular disease" there is generally diminution of size. The adherent capsule has a tendency to split into two layers; the inner one consisting apparently of fibrinous effusion. The surface is granulated, and fibrous processes pass from the capsule between the granules. The fibrous tissue of the cortical part is increased, and the tubules waste. Some of the fibrinous material passes into the interior of the tubules, lining them and displacing the epithelium. Cysts are often present, and evidently result from transformation of the tubes, not, as in the tubular disease, from a change in the epithelium.

In the "acute intertubular disease" the granules are larger and more distinct, and there is more fibrinous exudation between and into the tubules.

The anatomical evidence in favour of the intertubular origin of the disease may be summed up as follows:—

1. Near the capsule an effusion is often seen, obviously between the tubules.

2. Tubes are caused to shrivel by some influence which travels independently of their direction.

3. Tubes are sometimes divided into cysts, which can only be accomplished by a contractile force, external to themselves. In the smooth kidney this never occurs.

4. In most cases, some of the secreting tubes are found natural, as if they had been out of the way of the effusions; whereas, in the smooth kidney all are involved.

5. A decided difference exists in the contents of the tubes in well marked cases of each sort. In one they are filled by their own morbid secretion, in the other they are occupied by a material which is foreign to it, and which is probably derived from without.

Of three hundred and fifty-seven fatal cases in St. George's Hospital, of which the particulars were collected by the author, two hundred and fifty were granular, one hundred and seven smooth; of the latter the average age was twenty-eight years, of the former fifty years; proving that the one disease is not a sequel or stage of the other. In no single instance has he known or read of the granular form resulting from scarlatina; and it rarely results from cold. Gouty or rheumatic diathesis was associated with the granular form in seventeen cases, with the smooth variety in only one, and that doubtful.

In examining the kidney, besides the ordinary mode of tearing the organ into shreds and fibres, it is the author's plan to prepare translucent sections, so as to show the tubes and malpighian bodies in their relations to one another, and to the intertubular material.

A portion of the kidney is boiled in water, slightly acidulated with acetic acid. It is dried, and when hard a section can easily be cut from it, which, on the application of water, resumes its former bulk, and presents a beautiful picture of the anatomy of the kidney.

Transactions of Branches.

EAST ANGLIAN BRANCH.

PRESIDENT'S ADDRESS.

By John Kirkman, M.D., Lowestoft.

[*Delivered July 8th*, 1859.]

Gentlemen,—If I should feel diffident in addressing you under ordinary circumstances, you will readily I am sure believe me when I say that I feel increasingly so upon this occasion, surrounded as I am by those who are much more able to engage your attention. It is, however, an assurance, and at the same time a great comfort to me, that I can point to my predecessor, Dr. Durrant, a gentleman to whom this Branch of the British Association in general, and I myself in particular, must feel very much indebted. The pages of our Journal bear testimony to that support which he has rendered us; a support, professionally valuable, authoritative and large; and occupying this chair as his successor, I shall be contented if I am able to bear only a reflected light, borrowed, indeed, from a retrospect of his personal claims. It will be my duty, as well as my desire, to keep all such examples before me throughout this year of office; and if, in any respect I should fail, it *may* be from a deficiency of those necessary endowments for such a post of honour; but it most certainly will not be for want of a ceaseless anxiety to obtain and to secure the undivided friendship of our body. I know very well that a careful perseverance in a straightforward course and an honest desire to succeed *will* overcome many natural obstructions, and surmount very formidable obstacles. These once made the stammering Demosthenes shine forth as the greatest orator of polished Greece, and they have often raised the most obscure individuals to eminence and to honour. Science can never be taken by storm, and *medical* science above every other, whether in the extended culture of its more ample fields, or in that limited sphere of action to which my own speciality calls me, will yield to nothing but vigilance and care.

If it were not a tedious task, it might be interesting to trace some of those prominent steps in that onward course of gradual development which have brought us to that position we now occupy as professional men and as public benefactors. The growth of medical science itself may have been slow, but the spirit of the times and the patronage of the public have been slower still. It was long, very long, before either could look with a fostering eye upon the true and legitimate practice of medicine. For many centuries physic was almost entirely in the hands of the clergy (and I am not sure that it is quite free from them even now), who, by involving it in superstition, found it not only a very profitable employ, but in many instances an introduction to preferment. We are told, indeed, that when Galen came from Pergamos to Rome, near the close of the second century, he found surgery practised there as a separate branch of medical art; but this custom was soon lost in the convulsions which overthrew that once flourishing empire, and it was not till towards the close of the twelfth century that we find any traces, either in history or in romance, of its forming a distinct profession in Papal Europe. When the University of Paris began to assume a regular form, under the reign of Louis VII, a *Faculty of Medicine* was added to those of Divinity and of Arts; clerical physicians attended medical and surgical lectures, and laymen applied themselves to the study of physic. As the priests, however, were forbidden to leave their cloisters, they were consulted at home; and the servants or friends of the sick stated their symptoms, and these monkish physicians directed what medicines were to be given. Subsequently to these very early days, there arose two distinct classes of practitioners—those who had a regular though defective education in the foreign schools of physic, and who practised as physicians; and those who were originally employed as the servants of the priests, and who acted as their barbers, to perform those shavings of the head and other parts which were deemed necessary when cold ablutions were to be applied. Perhaps to this original conjunctive idea the barber-surgeons of England owed in some measure *their elevation*; and whether they followed or not the example of their friends in Paris, it is certain that, at the period to which I am adverting, neither medical nor surgical knowledge was very readily to be obtained in England. All the physicians of any note came over from the Parisian or Italian universities. France was the principal seminary of English learning, and the source of English customs; and in England, for several centuries, there were no surgeons who did not practise as barbers. Medicine must also have been in a very barren condition, its sphere of action narrow, and its state rude and imperfect; and it was not till 1518 that the English College of Physicians was established, and confirmed by Act of Parliament in 1522.

From this period medicine began to emerge from empiricism and neglect, and gradually to assume its just, its honourable, and its proper character; and arrangements were made in those magnificent Universities of Oxford and of Cambridge for those extensive and national plans of medical education whose adoption we rejoice in to this very hour. We may well, then, take our leave of European *barberism*, having been brought gradually, by steps which may be traced in historical record of dates, till we find ourselves in this year of reformation, 1859!

I trust that the recent Medical Reform Bill will produce great and valuable effects; that it will do all that its most strenuous supporters look for; and that now what I may denominate the great doctrines of the Reformation will be our ceaseless guides.

> "'Tis in construction, use, and combination,
> The true result of every act resides.
> 'Tis not the enactment, but the power that guides it;
> 'Tis not the abstract reason, but the intent."

We cannot expect that empiricism will cease; for there always are, and there always will be, people who become willing dupes of every quack who cries the latest nostrum, even if that nostrum should profess to take the old man like myself, and, as in a medicated cauldron, "boil him young again". But if the same old folly may exist, the new Act will so protect and support the honest and able practitioner, that impudent pretenders and frontless secret-mongers, and I had almost said, to form a triumvirate, globular homœopaths, will no longer be able to commit their frauds and carry on their fooleries with impunity.

In the abatement of evils known and acknowledged, some caution is, however, necessary; and I am not quite sure that the efforts to suppress may not occasionally have tended only to encourage. The means taken to destroy may have acted just in the opposite direction, and may have increased vitality. Care is demanded, both in support and in suppression: some unseen nerve or latent artery may be injured by an incautious hand.

> "Man's life is mingled with the seeds of death,
> And all his vital functions feed disease;
> Hence needful caution guides the healing art.
> The empiric may by violence expel
> Disease and health together."

There is a propensity in all men to aggrandise that profession to which they belong. It may be a natural infirmity to do

so; but this will surely be allowed us, that whatever can call into action the best and brightest faculties of the human mind; whatever can produce all that is lofty in attainment and brilliant in intellect, without debasing in *any* degree its high moral worth, that profession (and claiming it as our own, we unhesitatingly say) demands the ceaseless respect, and should receive (what it too often fails to do) the amplest recompense of society.

I am not aware, Gentlemen, of any particular circumstances connected with our limited Branch to which it is my province now to refer. The number of our members has varied, perhaps, as little as we might have expected since its original formation in 1843. I hope we shall obtain some valuable additions this year; but whether we stand numerically large or small, we may congratulate ourselves on the possession of a permanent interest and a firm stability. It is the object of every scientific body, and not the state of that body, from which we may estimate its value and importance. The latter may depend upon a variety of circumstances over which we can have no control; to keep the former in view will, I am sure, ever be the fixed solicitude of every member of the East Anglian Branch.

These feelings, Gentlemen, are reciprocated by our friends and associates in Lowestoft, and in their names I have to bid you a most cordial welcome to their beautiful town.

LANCASHIRE AND CHESHIRE BRANCH.

IS DIVISION OF THE SPHINCTER ANI ALWAYS NECESSARY FOR THE CURE OF ULCERATIO RECTI AND FISTULA IN ANO?

By Thomas Skinner, M.D., Liverpool.

[*Read June 8th*, 1859.]

The substance of the following remarks formed one of many subjects which used to occupy my leisure moments while labouring in the arduous position of a country surgeon. As such, I offer them to the profession. Our standard works on surgery are deficient as recording the results of country practice. Let us hope that this desideratum will soon be supplied; and, I doubt not, this excellent Association will do much to bring the valuable data of country practice before the members of the profession.

If I have misunderstood the writings of those I have quoted, or in any way misrepresented their practice, I am ready to be corrected; if I have dared to differ with opinions, hallowed by the names associated with them and by lapse of time, I do so, fully appreciating the humility of my position.

I. As regards *ulceration of the rectum*, Mr. Quain of London (*Medical Times and Gazette*, July 3rd, 1852) has long ago disabused the mind of the profession as to the supposed necessity of dividing the sphincter ani for such a condition; a practice so long and successfully employed by M. Boyer and other surgeons of the French school. Mr. Quain justly allows that Sir Benjamin Brodie was aware of this practice, and that the originality of the idea is due properly to Mr. Copeland.

The commonest form of chronic ulceration of the rectum, particularly in the female, is situated on the coccygeal aspect, immediately inside of the internal or circular sphincter. The ulcer is almost always single; it varies in size, from a trifling excoriation to about the size of a shilling; it may be superficial, including only the epithelium, but more generally it extends deeper into the mucous membrane; in some cases, I have seen the ulceration extend through the whole thickness of the membrane, but when such is the case, the ulceration will often be found in connection with sinuses or fistula *in ano*. Such ulcers sometimes bleed profusely, particularly where there is a hæmorrhoidal state of the bowel. (In one case of this kind, a lady in Liverpool was seized with a sudden gush of blood from the bowel: I was called in, and found her blanched, and arterial and venous blood issuing from the bowel. On examination, I found a large ulcer on the coccygeal aspect of the rectum, opening into hæmorrhoidal sinuses, exposing also the open mouths of several hæmorrhoidal arteries. When so complicated, ulcers of the rectum do not admit of cure by incision.) The simple chronic ulcer of the rectum is generally sensitive, but only at the edges, so that, when the bowels are at all confined, defecation is attended with acute cutting pain. Such an ulcer is always amenable to longitudinal incision of the mucous membrane, including the ulcer, without dividing a single fibre of the sphincter ani.

Mr. Quain has given sufficient proof of this; and, as I have frequently performed the operation myself with perfect success, I can confidently recommend it. Doubtless, in some cases the ulcer may return; if so, there will generally be found a low vitality in the patient, or sufficient strumous cachexia, to account for it. Or, if the cause which first produced it is still in operation—namely, constipation, however produced—the ulcer will very likely return, from the undue pressure to which the membrane is subjected between the hardened fæces and the extremity of the coccyx during the act of defecation.

II. In regard to *fistula in ano*, this unfortunate sphincter muscle again plays an important part.

Dr. Druitt of London, in his excellent *Surgeon's Vade Mecum*, says:—"The grand remedy for this affection is the division of the sphincter ani, so as to prevent contraction of that muscle for a time, and cause the fistula to heal from the bottom." (Sixth edition, p. 508.) Or, in the words of Chelius:—"The cure of the rectal fistula, which has an internal opening, is only to be effected by division of the sphincter muscle and the partition between the fistulous passage and the gut." He further adds:—"*The most important part of the operation for rectal fistula consists in the division of the sphincter muscle.*" (Vol. i, p. 727.)

Sir Benjamin Brodie was the first, I believe, to lay so much stress on the importance of dividing the sphincter ani. Speaking of the treatment of fistula *in ano*, he says:—"*First*, the sinus is to be laid open into the intestine, so that there may be no recess in which matter may lie and lodge. *Secondly*, the fibres of the sphincter muscle, which are implicated in the disease, and the action of which tends to prevent the healing of the sinus, are to be divided." (*Medical Gazette*, April 1836, p. 182.) In further explanation of this, he says:—"After the first incision has been made, turn the edge of the bistoury in the other direction—that is, outwards—and divide the fibres of the sphincter, so as to set the muscle completely at liberty.... A single stroke of the cutting instrument is not sufficient, and generally as many as two or three are necessary to accomplish this purpose." (*Medical Gazette*, vol. xviii, pp. 184-187.) For my own part, I do not see that this second incision is called for. I have seen many cases operated upon by Professor Syme, Dr. Dunsmure, the late Dr. R. J. Mackenzie, and others; and I have operated several times myself. I never saw those distinguished surgeons divide more than the fistulous sinuses, including the tissues between the openings; nor have I ever divided more myself. If failure resulted, of which I have no remembrance, the case must have been the exception to the rule, and easily accounted for, without attaching blame to the sphincter.

Sir Benjamin Brodie alludes to the fibres of the sphincter "which are implicated in the disease"; this must depend on the course taken by the fistula. So far as my own experience is concerned, it matters not what course the fistula takes; whether it passes through the substance of the sphincter, above it, or below it; I should expect the operation to be equally successful in all. The sphincter would be wholly divided in the one, partially in another, and wholly undivided in the last. And I feel assured this pertains in practice, if we are to believe the careful and extensive observations of M. Ribes. (*Quarterly Journal of Medicine and Surgery*, 1820, vol. ii, p. 344.)

Division of the sphincter is said by Chelius and others to be the most important part of the operation. Let us briefly examine the truth of this statement.

The only clear case which I can find to justify the conclusion, that division of the sphincter is the *sine quâ non* in the treatment of fistula *in ano*, is recorded by Mr. Curling as happening in the practice of Sir Benjamin Brodie. He states:—"That a lady consulted Sir Benjamin with a fistula communicating with the rectum in front, and opening externally just at the beginning of the vagina. Sir Benjamin made a free division of the sphincter ani on both sides, so as to set it completely at liberty. The discharge from the fistula gradually diminished; and, some five months after the operation, the fistula appeared soundly healed." (Curling, p. 75.) I repeat, this is the only case I have been able to find at all to justify the necessity of dividing the sphincter, as a sphincter, for the cure of fistula *in ano;* and I think I can prove that a more powerful argument against the practice, or rather the *rationale* of the practice, could not be given. If division of the sphincter as such could cure a fistula *in ano*, certainly here was an *experimentum crucis;* but what do we find? The sphincter is *divided freely on both sides*, without laying open the fistula; the discharge only gradually diminishes, and the fistula is not healed until five months afterwards. Did the sphincter remain divided all the time? Certainly not. Then its integrity in no way prevented the cure. The only way in which I can explain

the result, is the change of action which may have been set up in the fistula by the free division of the sphincter on both sides; and which change of action is the only legitimate object to be aimed at in the means we may adopt for the cure of fistula *in ano*.

Sir Benjamin Brodie gives us a golden rule when he recommends that "the bistoury should always be passed through the internal opening of the fistula, and says that the affection is very likely to return if this is not divided." (Druitt, edition vi, p. 508.) Here, again, we have the sphincter divided; but, because the essential part—the internal opening—is not included, the operation is a failure.

The pathology and treatment of many of the varieties of fistula in ano go far to show that division of the sphincter is not the most important part of the operation, for instance, the *horseshoe* form, where there are two external apertures communicating with one internal opening; or where there are two internal openings, one above the other, communicating with one external; or where there are two, side by side, in the rectum, and one external; with many other varieties. In such cases we may divide the sphincter as we please, and as often as we please, and portions of the sinuses as well. By such steps we could not expect to effect a cure; but if we could only throw all the sinuses into one, without touching the sphincter, we might expect a perfect cure, failure being the exception.

There is another large class of cases which throw considerable light on this question, namely, those which are cured without any cutting at all; such as, by the galvanic cautery, by pressure, or by stimulating, astringent, and caustic injections; particularly by the injection of iodine, which has been attended with signal success in the hands of Dr. Clay of Manchester, M. Boinet, Professor Simpson, and others. The division of the sphincter cannot, surely, be "the most important part of the operation" in such cases.

If division of the sphincter is the most important part of the operation, what are the reasons assigned for it?

Before I answer this question, it is necessary to understand that Sir Benjamin Brodie (who is not singular in this respect) uses the word abscess in connection with fistula *in ano* in a double sense. The words abscess and fistula *in ano* are used by him as synonymous terms. For instance, speaking of the termination of an anal abscess, he says, "In the course of time the margin of the orifice becomes hard and projecting, a sort of button or tubercle being formed round it, and it is while in this state that the *abscess* is said to be *converted into a fistula in ano*." He further states, "But it may extend in any direction; so that there may be a *very large abscess* running all the way from the rectum to the nates. *Such an extension of the abscess makes no alteration in its character: it is still a fistula in ano.*" Speaking of the treatment of fistula, he says, "What are you to do in this stage of the disease? How are you to heal the fistula? It was formerly the custom to dissect out all the hard callous parts around the *abscess* . . . all that is required is, to lay the *abscess* freely open into the bowel . . . . The matter runs freely out of the *abscess*, and yet the patient does not get well . . . . When the *abscess* is laid open, the fibres between it and the bowel must be divided," etc. (*Medical Gazette*, 1835, vol. xvii, pp. 26, 27, and 29.)

If I understand Sir Benjamin Brodie aright, he uses the word abscess in all the above quotations as synonymous with fistula *in ano*; and I cannot help remarking that as there is as distinct a line of demarkation between an abscess near the anus, and a fistula *in ano*, as exists between an abscess and a fistula in any other region—as in mammary abscess and fistula—I think the sooner our nomenclature is altered on this point, the more chance shall we have of avoiding errors in our pathology and practice.

I now proceed to consider the reasons assigned for the sphincter preventing the healing of a fistula *in ano*.

Sir Benjamin Brodie states as the chief reason for fistula not healing, that, "The sphincter muscle is constantly in motion, contracting and dilating, and consequently there is not the repose which is necessary for the cure of the abscess (fistula). The action of the muscle, in fact, prevents the abscess (fistula) from becoming consolidated." (*Medical Gazette*, Oct. 1835, p. 27).

He further states: "When the abscess (fistula) is laid open, the fibres between it and the bowel must be divided, and the sphincter muscle being thus set at liberty, not only is there a free and immediate escape of the matter, but the action of the muscle, which prevents the healing of the abscess (fistula) is put an end to." (*Medical Gazette*, October, 1835, p. 29).

Whether Sir Benjamin refers to a spasmodic condition of the sphincter, produced by the presence of the fistula, or to the temporary and intermitting action of the muscle during defecation, I am doubtful; but as I have never witnessed anything like a "constant motion of contraction and dilatation," unassociated with defecation, I must suppose that the action of defecation is meant; and if so, I cannot help thinking that the fact is somewhat strongly expressed.

The act of defecation, as a rule, occurs only once in twenty-four, or forty-eight hours, and it might be prolonged to many days. I know the wife of a retired medical man who was at one time under the professional care of M. Huguier, of Paris, and she informed me that her bowels were kept in a state of repose for seventeen days, during which time the rectum was filled with various pessaries for the replacement and support of a retroverted uterus. She was kept at rest on a sofa, and fed upon concentrated liquid food. She also informed me that M. Huguier had succeeded in keeping other patients a still longer period without a motion.

Now, if this action of defecation is so much to blame, some such plan as that adopted by M. Huguier ought to give a fistula *in ano* a chance of healing; or, by the use of aperients and opiates, the repose of the bowel might be insured for a week now and again.

By Sir Benjamin Brodie's showing it would appear that division of the sphincter is a better means of thoroughly placing the parts at rest during defecation. I doubt this very much. If the integrity of the sphincter interrupts the necessary repose, what does the integrity of the *levator ani* do? I feel certain that if any muscle is at fault by preventing the necessary repose, it is the *levator ani*; but we have not yet got the length, even by tenotomy, of freely dividing this muscle; and, supposing we could divide it, it would only complicate the evil.

In illustration of the power of muscular motion to prevent the healing of abscesses, Sir Benjamin cites the case of a man, in hospital with an abscess burrowing among the muscles of the thigh, and says, "There was no lodgment of matter, no dead bone, no diseased glands at the bottom; but the abscess penetrated in various directions among the muscles, and they were in constant action around it. As long as the patient was walking about and using the limb the abscess never healed. I put him to bed, and kept the limb in a state of perfect repose, as if the bone had been broken. Under this treatment the abscess which would not heal, healed readily." (*Medical Gazette*, 1836, p. 27).

The above illustration, let me observe, refers to abscess, and not to fistula *in ano*; the pathology and treatment of which latter Sir Benjamin is describing. As regards the motion, it was more or less constant, and in the erect position: conditions under which we could not look for the healing of an abscess in the thigh, or elsewhere. In such a case, all the muscles are put at rest by assuming the horizontal position, without the necessity of dividing one of them. It is very different in the case of fistula *in ano*. Rest, in the horizontal position, will not stop the action of defecation, nor will division of the sphincter ani. The latter will certainly remove the contraction of the sphincter; but defecation is a compound action, depending much more on the rectum itself, and the levator ani; both of which will interfere with the necessary repose in a far greater degree than the sphincter ani; consequently, to produce the necessary repose, all the muscles of defecation, "the fibres of which are implicated in the disease," ought also to be divided. Granting the sphincter divided, even then the necessary repose would not be attained, for defecation would proceed the same, as Sir Benjamin informs us that, "It is quite a mistake to suppose there is any well founded objection to even the most free division of the sphincter. *It scarcely interferes with the retention of the fæces (except they are actually liquid) even in the first instance.*" (*Medical Gazette*, vol. xviii, 1836, p. 184). In a previous lecture, he informs us that in Mr. Copeland's cases of recto-vaginal fistula, after division of the sphincter, "*the fæces are not retained in the rectum; they run out as fast as they enter it.*" (*Op. cit.*, vol. xvi, p. 239).

These observations are diametrically opposed to each other; but it matters not which condition obtains, because we may have the sphincter divided without the slightest change taking place in the fistula. In the words of Professor Syme, "In cases of complete fistula the most extensive incisions will fail to afford permanent relief, unless they include the internal opening." (Syme *Rect.*, 1837, p. 25).

If it is alleged that because division of the sphincter alone is

successful for the cure of *recto-vaginal fistula*, therefore it ought to be equally successful in *fistula in ano*, I must beg to differ. I am aware that division of the sphincter for the cure of recto-vaginal fistula has been successful in the hands of Mr. Copeland, and others; but we must be careful before we generalise. The recto-vaginal septum is not the recto-ischial fossa of fat and cellular tissue. Recto-vaginal fistula is complicated with two sphincters, the anal and vaginal; fistula *in ano* with the anal only. Recto-vaginal fistula has generally a totally different cause, and its pathology and treatment are very different from that of fistula *in ano*. The recto-vaginal fistula mostly proceeds from a lacerated or incised wound, or it may be the result of sloughing, following tedious labour; or it may arise from recto-vaginal abscess.

If it arises from either of the first two causes, there is not necessarily a pyogenic membrane formed, nor is there a secerning action established. In any case there is no sinus, or length of fistula, it is more a simple breech of continuity. From what I have seen of the disease and its treatment, there has been greater difficulty experienced in healing it—from the want of tissue, and the fibrous, non-vascular nature of what was left—than from the burrowing of sinuses, or from the existence of any low type of inflammatory action, as is the case in fistula *in ano*. I have seen cases where the length or depth of the fistula, so to speak, was not above one sixteenth of an inch; whereas, in fistula *in ano* we may have the sinuses several inches in length and depth. In short, the resemblance between recto-vaginal fistula, and fistula *in ano*, exists chiefly in the name.

The efficacy of dividing the sphincter for the cure of recto-vaginal fistula depends upon totally different principles. Duparcque says, "The passage of the stools over the fistula is rather advantageous than detrimental to the scarring (cicatrizing). In reality, their continual contact with the edges of the opening excites an inflammation which prevents their scarring simply of themselves. It causes development of cellular granulations necessary to fill up the space, and produce consecutive union .... But I repeat, the *principal and most important indication consists in putting the perforated parts in a condition most suitable for the approximation of the edges of the opening.*" (Chelius, vol. ii, p. 761).

Upon this principle, Mr. Copeland first proposed and performed division of the sphincter; not in order merely to produce incontinence of the stools, but, "that the contraction of the sphincter being destroyed, the parts surrounding the fistula were no longer acted upon by it, and the *tendency of the fistulous opening to concentric contraction being not opposed*, it gradually grew together till it had completely closed, whilst *the sphincter, uniting more slowly*, at last recovered the power of retaining the motions." (Chelius, vol. ii, p. 761).

The principle here expounded of healing a recto-vaginal fistula, is much the same as we sometimes adopt in healing a *breech of continuity* in otherparts. In large and obstinate ulcers of the leg it is a common and most successful practice to make incisions round them, which allow of the necessary *concentric contraction*; take off the tension arising from the thickened edges of the ulcer, and change the action of the part by the adhesive inflammation they set up, which is necessary for the healing of the incisions.

The operation of dividing the sphincter ani holds good for the cure of *recto-vaginal* fistula. In the hands of Mr. Copeland alone it was successful in five or six cases (Chelius, vol. ii, p. 761); but in fistula *in ano* I have already shown that the sphincter may be freely divided without any change taking place in the fistula.

I would further observe, that according to Mr. Copeland's method of curing recto-vaginal fistula, the fistula is always first in the order of cure—the divided sphincter last.

In Sir Benjamin Brodie's case, which I have quoted from the pen of Mr. Curling, (the only case of fistula *in ano* of which I am aware cured by simply dividing the sphincter) the order was reversed. The sphincter must have been the first to heal, as the fistula *in ano* was not cured until *five months* after the operation. It will be observed that this was a case most favourable to the cure by division of the sphincter, as it occurred in a female, the fistula opening into the rectum on its anterior wall, and externally at the beginning of the vagina, and so far resembling a recto-vaginal fistula. As I have before stated, the integrity of the sphincter could have been no hindrance to the cure; therefore, it was not healed on the principal laid down by Duparcque and Copeland for the cure of recto-vaginal fistula.

In conclusion, I have endeavoured to show that division of the sphincter ani is not always necessary for the cure of fistula *in ano*, as it depends on the course taken by the fistula. That division of the sphincter, as a sphincter, is not necessarily any part of the operation; far less is it the most important part. I have, at the same time, examined most of the reasons assigned for its importance in the operation.

On reviewing the whole subject, I conclude that the essential and most important part of the operation consists in making one common cavity of all the internal and external apertures and sinuses, in order that the action of the part may be changed, and the reparative substituted for the destructive action of the inflammatory process. The division of the sphincter is merely an accidental circumstance in doing so. In other words (and I say it with all deference to so distinguished a surgeon, and so eminent an observer, as Sir Benjamin Brodie), I believe that the sphincter, as a sphincter, has nothing to do with the non-healing of the parts, and, instead of it being the primary hindrance, I believe that it acts only secondarily, as forming a part of the tissues entering into the septum between the apertures, and which must necessarily be divided in whole or in part while dividing the septum.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, JULY 30th, 1859.

LADIES' ASSOCIATION FOR THE DIFFUSION OF SANITARY KNOWLEDGE.

The ladies propose to reform themselves. The announcement is startling, but it is nevertheless true; and they mean to do it all themselves. As with the silken graduates of Tennyson's University, not a man is to come near them in their grave work. Nevertheless, they have enlisted the services of the Earl of Shaftesbury, the Right Honourable W. Cowper, the Rev. C. Kingsley, and several other eminent men!

The first annual meeting of the Ladies' Association for the Diffusion of Sanitary Knowledge, held at Willis's Rooms a few days ago, was the public inauguration of a movement which, we trust, will bear good fruit. Woman is, indeed, beginning to find that she has a mission. The splendid services of the lady-nurses in the Crimea have broken the ice in this respect; and it is no longer considered indelicate, even on the part of the gentlest of the fair sex, to do service publicly on the behalf of humanity.

The task which the ladies of the Sanitary Association propose to themselves is indeed arduous. The nursery, the workroom, the kitchen, have to be thoroughly reformed; and they have begun at the beginning. Twenty thousand tracts have been issued, we are told, upon the management of children. It certainly seems odd to find the machinery of the Anti-corn-law League brought to bear upon a matter which some people will feel inclined to consider a matter of instinct; and the youngest mother will probably draw herself up a little offended at being twitted with a pamphlet headed *How to Feed a Baby*.

Nevertheless, instruction of this kind, if judiciously given, not thrust obtrusively forward, not placed too patronisingly in the hands of the poor, must do infinite good. All will depend

on the teachers in this movement. If it is to be conducted in the spirit of Almack's, we cannot hope much from it. Ladies who systematically neglect the first duty of womanhood—the suckling of their own children—can with little face shower pamphlets respecting the treatment of babies on the heads of poor women who do not neglect this duty. We are told that a hundred thousand children die yearly. This is a fact to which the world has lately been awakened; but have the "upper ten thousand" ever considered how far they are concerned in bringing about this? The fine lady, who, in order to spare her figure, delegates her duty to a hired wet-nurse, is directly chargeable with a portion of this slaughter. "Want of breast-milk" is a large item in the list of causes of infantile mortality; but how much of it is brought about by the deliberate vanity of fashionable women!

From mothers who neglect their own duty, then, we do not expect much good to flow. Advice as to the feeding of babies from such a source would certainly read rather ironically. There are thousands of good women and true, however, who have practised what they fain would preach, and whose experience will prove invaluable to their more unaccustomed sisters.

But it is evident that the presiding spirit of this movement, if it is to be successful, must be medicine. The ladies may profess to manage the Association without any aid from the other sex; but it is clear that they cannot move a step without the advice and aid of professional men; and this they will not require in vain. Medical men know too well that the health of the race depends upon early nurture and care. Strong men come of strong women; and the most weakly, with early care and attention, often grow up to shame the strong. The physical destinies of mankind are mainly in the hands of woman; and too much enlightenment cannot be brought to bear upon the nursery.

There is a question, however, which is only second in importance to that which the Ladies' Association has just answered —*How to Feed a Baby*; and that is—*How to Feed a Man*? The fair sanitarians should set their wits to work to give a full reply to this momentous question. It is admitted, we believe, on all hands, that the English poor—aye, and the middle classes too—are the worst cooks in Europe, not only in an economical, but in a healthful sense. We are, in fact, only *half* cooking animals. If the ladies can only stir the public mind in this direction, they will effect infinite good. *The Stomach and its Difficulties* was a capital title for a book, and one infinitely suggestive to the sanitarian. We create our difficulties in this respect by our ignorance. Food improperly prepared is at the root of two-thirds of the petty ailments of Englishmen. If this Association can only indoctrinate the people with good ideas on this head, they will do more for the nation than even that famous league which procured us cheap food.

We confess we do not put much faith in the accomplishment of this great end by the means of tracts. Cookery booklets will not help us here. We must have actual training. The child should be taught to cook as it is taught to read: with the poor, the knowledge would be quite as useful. Let us urge the Committee of the Ladies' Association to turn their attention to some method of affording instruction of this kind to our working classes; and medical men will hail their labours as among the most useful that sanitarians have yet undertaken.

THE WEEK.

At the Lambeth Police Court, on Friday week, Mr. Samuel Nunn, a chemist, druggist, and dentist, carrying on business at No. 8, Mount Terrace, Hercules Buildings, Lambeth, attended before Mr. Secker, to answer to a summons taken out under the fortieth section of the Medical Practitioners' Act; which enacts "that any person who shall wilfully and falsely pretend to be, or take, or use, the name or title of a physician, doctor of medicine, licentiate in medicine and surgery, bachelor of medicine, surgeon, general practitioner, or apothecary, or any name, title, addition, or description, implying that he is registered under this Act, or that he is recognised by law as a physician, or surgeon, or licentiate in medicine and surgery, or a practitioner in medicine, or an apothecary, shall, upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds." Dr. Ladd, the Secretary to the London Medical Registration Association, stated that he had examined the *Medical Register*, and could not find the name of the defendant in it. On visiting the house of the defendant, he had seen over the door the number, with the word "surgeon," in large letters; then the name "S. Nunn, Dentist"; there was also, painted on a square of glass, the words—"Surgeon's" (the letter s being a small one, and where it could be scarcely perceived) "prescriptions carefully made up." The inscription was such as to lead any ordinary person to suppose that Mr. Nunn was a surgeon, and made up prescriptions. A working man said that a short time ago he cut his hand, and was induced to go to the shop of the defendant for advice from seeing the word "surgeon" over his door. He asked the defendant if he was a surgeon, when he nodded his head in such a way as to lead witness to believe he was. The defendant then examined his hand and arm, and made him up a bottle of lotion, for which he charged him 1*s*. Mr. Secker, the magistrate, observed that it was quite clear that the defendant had brought himself under the provisions of a very useful act; but as the case was the first of its kind that had been proceeded with, and as it would be the first conviction under the statute, the circumstance was likely to create an unenviable notoriety, and therefore he considered that a small penalty would, under the circumstances, be sufficient. He convicted the defendant in a penalty of 40*s*., and £1 8*s*. costs, and told him that he must at once remove the description over his door, and in his window.

The subjoined letter, addressed lately by Dr. S. Nicolls to the Board of Guardians of the Longford Union in Ireland, expresses opinions similar to those which have several times been insisted on in this Journal. We commend it to all who have any concern with public institutions for the training of children.

"Longford, June 15th, 1859.

"Gentlemen,—With the view of promoting the sanitary condition and bodily strength of the boys and girls, I beg most strongly to recommend that suitable portions of the ground be set apart as play-grounds, and that they be of sufficient extent to admit of such sports as foot-ball and hunt-the-hare for the boys, and hide-and-seek for the girls. This I consider absolutely necessary to fit the children as farm-servants or labourers, as an occasional methodical walk on the high roads I deem insufficient to give them proper command of their limbs and develope their muscles. Without this, though they may look fat and plump, they will be soft and flabby, and unequal to en-

dure laborious work or sickness, when assailed by disease, like peasant children, who, though not nearly so well fed, have the advantage of good open air and laborious exercise.—I am, gentlemen, your very obedient, S. NICOLLS, M.D."

In the examination of candidates for medical appointments in Her Majesty's Indian forces, the examiners state that in determining the relative merits of the candidates, so far as they can be ascertained from answers to printed questions, regard will be had both to the number of questions answered, and to the accuracy and completeness of each answer. It is not, however, required that all the questions should be answered by every candidate; for they are not only intended for ascertaining whether each candidate is qualified for an appointment, but for testing, both by their number and their difficulty, the relative abilities of the best candidates; a design which is essential to a competitive examination, and which cannot be fulfilled unless some questions are asked to which only the best candidates can give good and complete answers.

A BILL

TO AMEND THE MEDICAL ACTS.

[*Prepared and brought in by* Mr. WHITESIDE *and* LORD NAAS.]

WHEREAS, by an Act passed in the twenty-first and twenty-second years of the reign of Her Majesty, chapter ninety, "The Medical Act" provision is made for the Registration of Members of the Medical Profession; and the said Act was amended by an Act passed in the twenty-second year of the reign of Her Majesty, chapter twenty-one; and certain disabilities are imposed by the said Acts, after a period mentioned therein, on Members of that Profession who are not then registered: and whereas Licentiates of medicine and Masters in Surgery of the Universities of the United Kingdom are authorised to be registered under the said first-recited Act; but no provision is contained therein for the registration of Licentiates in Surgery of such Universities: and whereas it is expedient that the said recited Acts should be amended as hereinafter mentioned. Be it therefore enacted by the Queen's most excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

I. From and after the *passing of this Act*, the Diploma or Licence in Surgery, as heretofore usually granted by any University of the United Kingdom, shall be considered a sufficient qualification to practise under the said first-recited Act; and every person to whom such Diploma or Licence has been granted shall be entitled to be registered under the provisions of the said first-recited Act, in the like manner, and with the like effect, and subject to the like provisions, as are prescribed by the said first-recited Act in respect of the registration of any Master in Surgery of any University of the United Kingdom.

II. The words "or Licentiate in Surgery" shall be added after the words "or Master in Surgery," to the qualifications described in the tenth head of Schedule (A.) of the said first-recited Act.

III. The *first day of July, one thousand eight hundred and sixty* shall be deemed to be substituted, in Sections thirty-two, thirty-four, thirty-six, and thirty-seven respectively of the said first-recited Act, as the same are amended by the said second-recited Act, for the first day of July, one thousand eight hundred and fifty-nine, so far as the same relate to any person authorised to be registered under this Act; and the said several sections, as so amended, and all the provisions of the said Act having reference thereto, shall, with respect to any such person, so authorised to be registered under this Act, be construed and take effect as if the words "*the first day of July, one thousand eight hundred and sixty*" had been originally inserted in each of the said sections, instead of the words "the first day of July, one thousand eight hundred and fifty-nine."

IV. No person authorised to be registered under this Act who on the *first day of October, one thousand eight hundred and fifty-nine* shall be acting as Medical Officer, under an order of the Poor Law Commissioners, or Poor Law Board, shall, by reason of the said recited Acts, or either of them, be, or be deemed to have been, disqualified to hold such office, or any appointment mentioned in Section thirty-six of the said first-recited Act, unless he shall have failed to be registered on or before the *first day of July, one thousand eight hundred and sixty.*

V. The said recited Acts, and this Act, shall be construed together as one Act.

VI. This Act may for all purposes be cited as "The Medical Acts Amendment Act, 1859."

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Thursday, June 23rd, 1859.

Present:—Dr. Williams, in the Chair; Dr. Apjohn, Dr. Smith, Dr. Leet, Dr. Corrigan, and Dr. Stokes; Dr. Maunsell, *Registrar.*

The minutes of last meeting were approved and signed.

The Registrar having submitted a third revise of the Irish Register, and reported that it was corrected in accordance with the MS. transmitted by him to the Registrar of the General Council, it was ordered to be forwarded to London.

Read—Letter from the Registrar of the General Council, asking for "information that may satisfy the minds of the Committee as to the diploma or qualification in surgery of the University of Dublin, and whether that university has by charter the power to make Masters in Surgery."

Resolved—In reply to letter of Registrar of General Council of 20th inst., inform: that the qualification of Licence in Surgery from the University of Dublin has been inserted on the General Register in accordance with a resolution of this Council of 25th May, transmitted in ordinary course to the Registrar of the General Council, and in virtue of cl. xxvii of the Medical Act, which declares that "Medical titles, diplomas, and qualifications, conferred by any corporation or university", shall be inserted in the General Registry. The power of the University of Dublin to grant a Licence in Surgery has never been impugned. The licence was instituted in 1851; and previously to conferring it, the opinions of the most eminent lawyers in England and Ireland were taken as to the power of the University of Dublin to confer such licence. Persons possessing it are deemed fully qualified to hold surgical appointments in the army and navy and civil service. The Council, under these circumstances, do not deem it now necessary to open the question of the right or power of the University of Dublin to grant a Licence in Surgery. C. H. LEET.

Association Intelligence.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

THE General Secretary of the British Medical Association begs to call attention to the Laws regarding the ADMISSION of MEMBERS, and the PAYMENT of their SUBSCRIPTIONS.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the BRITISH MEDICAL JOURNAL, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, July 1859.

BATH AND BRISTOL BRANCH: ANNUAL MEETING.

The annual meeting of this Branch was held on Thursday, July 14th, 1859, at the Institution, Park Street: J. G. Davey, M.D., President, in the Chair. There were also present: J. S. Bartrum, Esq. (Bath); J. Beddoe, M.D. (Clifton); W. Budd, M.D. (Clifton); G. Burder, M.D. (Clifton); J. B. Burroughs, Esq. (Clifton); W. M. Clarke, Esq. (Clifton); C. Collins, Esq. (Chew Magna); J. Crang, Esq. (Timsbury); W. Davies, M.D. (Bath); F. Flower, Esq. (Chilcompton); R. S. Fowler, Esq. (Bath); E. L. Fox, M.D. (Bristol); J. Godfrey, Esq. (Bristol); T. Green, Esq. (Bristol); W. B. Herapath, M.D. (Bristol); J. Lancaster, M.D. (Bristol); F. P. Lansdown, Esq. (Bristol); C. Leonard, Esq. (Bristol); E. S. Mayor, Esq. (Bristol); S. Martyn, M.D. (Bristol); J. S. Metford, Esq. (Clifton); G. Norman, Esq. (Bath); H. Ormerod, Esq. (Bristol); A. Prichard, Esq. (Bristol); C. Rendell, Esq. (Westbury); R. N. Stone, Esq. (Bath); T. L. Surrage, Esq. (Clifton); J. G. Swayne, M.D. (Clifton); S. H. Swayne, Esq. (Clifton); J. A. Symonds, M.D. (Clifton); J. Tunstall, M.D. (Bath).

The Secretary read the minutes of the last annual meeting, which were confirmed.

James Crang, Esq., the retiring President, having briefly thanked the members, resigned the chair to Dr. Davey, who delivered an address, which will be published.

REPORT OF COUNCIL.

Mr. Leonard (the Bristol Secretary), read the following report.

"In presenting their Annual Report, your Council congratulate the members on the continued prosperity of the Branch. The meetings have been numerously attended, and the various subjects brought forward, as well as the subsequent discussions, have been highly interesting and important. The following papers and cases have been read.

"1. Case of Mollities Ossium. By J. K. Spender, Esq.

"2. On the Clinical Diagnosis of Glucosuria. By W. B. Herapath, M.D.

"3. Case of Gall-Stones voided through the Abdominal Parietes. By Joseph Hinton, Esq.

"4. Case of Stone-swallowing by a Lunatic. By J. G. Davey, M.D.

"5. Case of Loss of Speech following a slight Accident, the Understanding not being impaired. By Geo. Norman, Esq.

"6. On some of the Medico-Legal Relations of Infanticide. By W. B. Herapath, M.D.

"7. Case of Hydatid Cyst in the Brain. By F. Brittan, M.D.

"8. Case of Hydatid Cyst in the Liver, cured by Operation. By Wm. Budd, M.D.

"9. Case of Bite of an Adder. By Thos. Green, Esq.

"10. Case of Dislocation of the Knee. By Thos. Green, Esq.

"11. Treatment of Stricture of the Urethra. By G. Norman, Esq.

"12. The Application of strong Nitric Acid in some forms of Entropion. By E. Boult, Esq.

"13. On Nyctalopia. By A. Prichard, Esq.

"14. Observations on Teale's Rectangular Flap Operation. By J. Godfrey, Esq.

"During the past year there has been an increase in the number of members; and your Council would again urge the members individually to use their influence in assisting the endeavours of the Secretaries, to secure the cooperation of the practitioners in their district who have not yet joined the Association; believing that with a little effort a great accession may be made to the ranks of the Association.

"Your Council have to deplore the death of an old member of the Bristol district, who has for many years been a regular attendant at the meetings; viz., Mr. Allen of St. George's.

"Since the last anniversary meeting at Bath, the Medical Bill has passed into law; and your Council refer with pleasure to the important part which for many years past the Association has taken in the cause of medical reform, considering that the result now obtained may in great measure be attributed to the influence which individually and collectively it has been enabled to bring to bear upon the legislature. The question of forming a Medical Registration Society, to assist the General Registrar appointed by the Medical Council, has been considered by both the Bath and Bristol District Councils, who came to the conclusion that unless the method of registration adopted by the Registrar appeared inefficient, there was no need of any such local society.

"Your Council notice with great satisfaction, that at last the government has recognised the just claims of the medical officers in the army and navy, who are now, under the new regulations, placed in a position more honourable to themselves, and more befitting them as members of a learned profession.

"The Medical Benevolent College and Fund, kindred institutions, continue their career of usefulness, and are earnestly commended to the favourable consideration of the members and the public generally; as, with increased resources, they are capable of conferring a vast amount of benefit amongst those of our profession who at present are excluded on account of limited funds.

"Your Council advert with much regret to the loss which the Branch is about to sustain by Mr. Bartrum's resignation as one of your honorary secretaries. During his thirteen years of office, he has laboured earnestly and indefatigably in promoting the welfare of the Association; and generally and especially in developing the Bath and Bristol Branch; and its present prosperous condition may in a great measure be attributed to the tact and good management he has displayed, not only in matters of business, but also in furthering harmony and good fellowship amongst the members. Your Council begs to recommend to your consideration as his successor, Mr. R. S. Fowler, a gentleman who from his industry and habits of business is, in their opinion, fully qualified for the office.

"The members elected to fill the vacancies in the local Council are Messrs. George, Flower, Vicary, and Bartrum, for the Bath district; and Drs. Symonds, Brittan and Budd, and Messrs. Smerdon and Prichard, for the Bristol district.

"The members of the Branch are called upon at this meeting to elect six representatives to the General Council of the Association for the ensuing year. The retiring members are Drs. Budd and Davies, and Messrs. Flower, Norman, Prichard, and J. S. Soden, who are eligible for re-election."

The financial statement, which was appended to the report, showed the receipts of the year 1858 to have amounted to £24:18, and the expenditure to £8:3, leaving in hand, on December 31st, a balance of £24:18.

Dr. Tunstall proposed, and Mr. Burroughs seconded—

"That the Report and Financial Statement now read be adopted."

This was unanimously agreed to.

REPRESENTATIVES IN THE GENERAL COUNCIL.

The following gentlemen were then elected by ballot, as representatives of the Branch to the General Council of the Association: Wm. Budd, M.D.; Geo. Norman, Esq.; Wm. Davies, M.D.; A. Prichard, Esq.; F. Flower, Esq.; and J. G. Davey, M.D.

VOTES OF THANKS.

Mr. Prichard moved and Mr. Flower seconded—

"That the best thanks of this Branch be tendered to James Crang, Esq., for regular attendance to the duties of his office during the past year, and for the interest he has always taken in promoting the welfare of the Branch."

Dr. Martyn moved, and Mr. S. H. Swayne seconded—

"That the thanks of this Branch be given to the Council and Honorary Secretaries for their services during the past year."

These resolutions were unanimously adopted.

ELECTION OF OFFICERS.

Mr. Norman moved, and Mr. Mayor seconded—

"That John Soden, Esq., of Bath, be the President-elect of this Branch."

This resolution was unanimously agreed to.

Mr. Bartrum stated his intention of resigning the office of Honorary Secretary for the Bath district. During his thirteen years of office, he had devoted all his energies to the performance of its duties, and it had been to him a labour of love. He could no longer afford the necessary time; and retired, as he could not continue to fill the office in a manner satisfactory to himself.

Dr. Davies moved, and Dr. Budd seconded the following resolution; which was supported by Dr. Lancaster, and unanimously carried—

"That the members of the Bath and Bristol Branch of the British Medical Association desire to express in the strongest and most cordial manner their sense of the great services rendered to the Association by the late Bath Secretary, John S. Bartrum, Esq. Mr. Bartrum has held the office of Bath Secretary for a period of thirteen years, during which time the Association has passed through periods of great difficulty and some danger. On all these occasions, Mr. Bartrum has exerted himself most assiduously for the good of the Association.

We need only mention by way of illustration the difficulties—which even threatened to destroy the Association—which preceded and followed the annual meeting of 1852 at Oxford. It is only presumptuous to claim for the Bath and Bristol Branch of the Association a large share in settling the misunderstandings of that period, and of this end Mr. Bartrum was an unfailing and zealous promoter; and as such, and for the manner in which he has performed his various duties, this meeting desire to tender to him their most sincere thanks."

Mr. Bartrum acknowledged the compliment.

Mr. Flower proposed, Mr. Green seconded, and it was unanimously resolved—

"That Mr. R. S. Fowler be appointed Honorary Secretary in place of Mr. Bartrum, resigned; and that Mr. Leonard be reappointed.

Carried unanimously.

Dr. Fox proposed, and Dr. Budd seconded—

"That the thanks of this meeting be given to the Committee of the Institution for kindly allowing the use of the theatre for this meeting."

A vote of thanks to the Chairman was carried by acclamation.

The members afterwards dined together at the White Lion Hotel.

METROPOLITAN COUNTIES BRANCH: ANNUAL MEETING.

The seventh annual meeting of this Branch was held at the rooms of the Medical Society of London, George Street, Hanover Square, on Tuesday, July 19th, at 8 P.M.: Edward W. Murphy, A.M., M.D., President, in the Chair. There were also present: J. W. Barnes, Esq.; J. Bird, M.D.; J. Birkett, Esq.; W. Camps, M.D.; Sir J. Forbes, M.D.; G. D. Gibb, M.D.; A. Henry, M.D.; E. Lankester, M.D.; W. G. Marshall, Esq. (Colney Hatch); S. W. J. Merriman, M.D.; J. H. Paul, M.D.; C. H. F. Routh, M.D.; J. Seaton, M.D. (Sunbury); F. Sibson, M.D.; E. H. Sieveking, M.D.; A. P. Stewart, M.D.; G. Webster, M.D.; and A. Wynter, M.D. Sir Charles Hastings, being in London, was present as a visitor.

The minutes of the last annual meeting were read and confirmed.

NEW MEMBERS OF THE BRANCH.

The following gentlemen, members of the parent-Association, were elected members of the Branch: L. S. Beale, M.B.; J. R. D. Bright, M.D.; Holmes Coote, Esq.; H. Hanks, Esq.; E. Hart, Esq.; T. Holmes, Esq.; Jonathan Hutchinson, Esq.; C. H. Jones, M.B.; J. Z. Laurence, Esq.; T. W. Nunn, Esq.; R. Quain, M.D.; H. H. Salter, M.D.; E. C. Seaton, M.D.; J. Stanton, M.D.; T. Taylor, Esq.

REPORT OF COUNCIL.

Dr. Stewart (one of the Honorary Secretaries) read the following report:

"In presenting a brief report of the proceedings of the past year, the Council of the Metropolitan Counties Branch feel it to be their first duty to express the deep regret they have experienced—in common, they are sure, with all the members of the Branch—in being deprived by death of the valuable counsel and assistance of their much respected President, Mr. Squibb, whose high integrity and earnest readiness on all occasions to advance the welfare of his profession gained him universal esteem, and made his accession to the chair an honour o the Branch.

"The number of members continues as at last annual meeting. Besides the loss to which allusion has just now b een made, the names of eleven members have been removed from the last printed list; three, those of Mr. Dobson of Harlow, Dr. John Scott, and Dr. Snow, by death; and others in consequence of resignation of the membership either of the Branch or of the Parent Association. Since the list was issued, the death of Dr. Samuel Griffith has increased the number of losses to thirteen—a deduction which is nearly balanced by the admission of eleven new members, leaving the total number at ninety-three. The Council, while directing attention to the fact that a very large proportion of the members of the Parent Association resident within the limits of the Branch do not belong to it, are happy to report the adhesion of not fewer than *fifteen* who have just been admitted, raising the number of members to 108.

"At the last annual meeting the Council were desired to revise the laws of the Branch, with the view of increasing its usefulness. This they accordingly did in the course of the autumn; and at a special general meeting, held in December, a new code of laws was submitted and adopted. With other modifications of a minor character, a provision was introduced to enable members of the Branch resident in various localities, especially in the country districts, to form societies for the promotion of the general objects of the Branch and of the Parent Association. This plan, when tried elsewhere, has been highly beneficial to the Association; and it is hoped that by its adoption, especially in the extra-metropolitan portions of the district included in our limits, the members both of the Branch and of the Association may be materially increased, and their usefulness greatly promoted. The new code of laws, having been enacted, and having received the assent of the Committee of Council on the 5th of April, is now in force, and has been printed and circulated among the members of the Branch.

At the meeting held in December, a Committee was appointed to attend closely to the progress of registration under the new Act—a subject which deserves more attention than has hitherto been bestowed upon it.

"Among the public events of the past year, in the development of which this Branch has always taken a deep and active interest, the foremost is the passing of the Medical Act. Though, in regard to some of its details, there is much difference of opinion, the Council believe that the members of this Branch, on a retrospect of their past proceedings in relation to medical reform, will be gratified at finding in the Act a general recognition of those principles which have been steadily advocated, and have sometimes originated, in the meetings of this body.

"An important question arising out of the passing of the Act led to the calling of a special general meeting of the Branch in the month of October. That meeting, numerously attended, was summoned to discuss a resolution proposed by Dr. Sieveking, and affirming the propriety of appointing a member of the medical profession as President of the Medical Council. Though on this occasion the supporters of the resolution were in a minority, it will not, we believe, be denied that the publication of the views then expressed led to a more general discussion of the question in the public journals and throughout the country, and evoked an unequivocal manifestation of feeling on the part of the medical profession in favour of the appointment of one of their own number as their head and representative in the General Council. This feeling has found appropriate expression in the election of our most illustrious surgeon, on whom, in his old age, science is now showering those honours he has earned so well and wears so gracefully.

"The grant, by Her Majesty's late Government, of the new warrants for regulating the rank and pay of the medical officers of the army and navy, is an event in the record of which the Council feel the highest satisfaction. After a long struggle, the surgeons of the two services are at last placed in a position at once of equality and of honour. The mention of the naval service especially will no longer carry with it the idea of professional degradation; and, what is of no less importance than professional honour, the efficiency of our land and sea forces cannot fail to be materially promoted by the inducements which are now held out for medical men of high acquirements to enter either of the public combatant services.

"The Council cannot conclude this sketch of the expiring year without expressing their conviction that this annual meeting of the Branch will cordially ratify the vote of thanks given by the Council to their late excellent Secretary, who has been compelled by the ill health of his family to give up his practice in town, and those duties in connexion with the Association which were to him a labour of love.

"As regards the future, there are several problems towards the satisfactory solution of which the efforts of the Branch might be directed, with advantage alike to itself and to the medical profession. To urge upon the Government the absolute necessity of some arrangements by which the benefits of vaccination shall be made coextensive with the area and the population of the British Isles; to insist on the adoption of some legislative provision which may effect an amicable adjustment, on some broad general principle, between the claims of local self-government, the health of the poor, and the much neglected rights of the medical profession; and finally, to aid in devising and carrying some measure regarding the sale of poisons which may render impossible the recurrence of such wholesale murder as that which last autumn gave to Bradford a painful and unenviable notoriety,—surely these are objects towards the attainment of which the ablest and the wisest of our noble profession might be proud to contribute their most earnest efforts."

On the motion of Dr. Routh, seconded by Dr. Gibb, the report was unanimously adopted and ordered to be entered on the minutes.

THE LATE HONORARY SECRETARY.

On the motion of Sir John Forbes, supported by Drs. Sieveking and Lankester, a vote of thanks was unanimously accorded to the late Honorary Secretary, Dr. Ogier Ward, for the zeal and devotion with which he had performed the duties of his office from the time of the institution of the Branch.

OFFICERS AND COUNCIL FOR 1859-60.

The following gentlemen were elected the Officers and Council of the Branch for 1859-60:

President, E. W. Murphy, A.M., M.D. *President-elect*, J. Birkett, Esq. *Vice-President*, E. Lankester, M.D., F.R.S. *Treasurer*, E. Lankester, M.D., F.R.S. *Secretaries*, A. P. Stewart, M.D.; and A. Henry, M.D. *Other Members of Council—for the Metropolitan division*, S. S. Alford, Esq.; W. Camps, M.D.; S. W. J. Merriman, M.D.; J. Propert, Esq.; C. H. Rogers-Harrison, Esq.; E. Smith, M.D.; Spencer Smith, Esq.; J. Toynbee, Esq.; *for the extra-Metropolitan division*, C. T. Carter, Esq. (Hadley); E. Ray, Esq. (Dulwich); J. Seaton, M.D. (Sunbury); G. Webster, M.D. (Dulwich). *Representatives in the General Council*, E. Lankester, M.D.; B. W. Richardson, M.D.; C. H. F. Routh, M.D.; E. Smith, M.D.; and A. Wynter, M.D.; with one of the Secretaries.

SIR CHARLES HASTINGS.

Dr. Lankester said that the meeting would be glad to know that they were honoured that evening by the presence of Sir Charles Hastings, to whom thanks were due for his persevering efforts in behalf of his medical brethren. At the present time, Sir Charles Hastings stood in a peculiar relation to the Association. When the new laws were elected, the offices of President of the Council and Treasurer were offered to him for life; but it was resolved that these appointments should afterwards be triennial. Sir Charles had, however, three years having nearly expired since the enactment of the laws, offered to place his offices in the hands of the Association. Dr. Lankester thought that the Branch would not interfere with the privileges of the annual meeting of the Association if the members expressed an earnest hope that Sir Charles Hastings would consent to be reelected to the offices he was about to resign.

Sir John Forbes, Dr. Webster, and Dr. Sibson, warmly supported the desire expressed by Dr. Lankester, which was evidently the unanimous sentiment of the meeting.

Sir Charles Hastings said that throughout life his earnest desire had been to gain the good will of the profession. Any one who remembered in what state the provincial practitioners were thirty years ago—perfectly powerless, incapable of giving expression to their views, and having no means of becoming heard—would be able to appreciate the results that had been effected by the Association. He took no other merit to himself than that of having been connected with men who supported his ideas in the foundation of the Association. As to medical reform, that subject had been brought forward by the Association twenty-five years ago; and a committee was formed which had, he believed, been the pioneer of all the exertions since made. At that time, the late Dr. Barlow, of Bath, enunciated these principles, which have been all along adhered to. He believed that the success obtained was owing to the resolution to fight the battle of medical reform in the House of Commons, and not merely to depend on the government. The government, indeed, had shewn no desire to settle the medical reform question until the table of the House of Commons was filled with petitions from the provincial members of the profession. As to the offices which he (Sir Charles Hastings) held, he felt that the time was come when he ought to be succeeded by a man better able to perform the duties [*No, no*]. He would not for one moment consent to hold office if it impeded the prosperity of the Association. He was thankful to the meeting for their kind expression. It had always been a solace and comfort to him that he was connected with the Association, and that he had the respect of the medical profession. [*Cheers.*]

Mr. Webber observed that all present must have listened with interest to what had been said regarding Sir Charles Hastings. He then went on to make some remarks on the subscriptions of the Branch, the management of the Journal, etc., but did not propose any resolution.

VOTES OF THANKS.

Dr. Sibson proposed, and Dr. Camps seconded, a vote of thanks to the Officers and Council of the Branch for the past year.

On the motion of Dr. Henry, seconded by Dr. Lankester, a cordial vote of thanks was unanimously given to the Council of the Medical Society of London, for their kindness in granting the use of their rooms for the Meeting of the Branch.

PRICE OF THE MEDICAL REGISTER.

Dr. Seaton (Sunbury) proposed, and Mr. J. W. Barnes seconded:—

"That in the opinion of this Branch it is inconsistent with the dignity of the profession that the Medical Council should issue a Register at a price higher than is sufficient to pay expenses."

Drs. Routh, E. Smith, Wynter, Lankester, and Webster, each made some observations on the subject. It being the general opinion that there were not sufficient grounds apparent for consenting to the resolution, Dr. Seaton consented to withdraw it, with the understanding that the Association should express an opinion at the annual meeting.

NORTH WALES BRANCH: ANNUAL MEETING.

The annual meeting of this Branch was held on Tuesday, July 19th, at the Royal Hotel, Rhyl. Frederick Theed, Esq., President, in the Chair. There were also present:—Thos. Davies, Esq. (Llanfairtalhairn); J. C. Davies, M.D. (Holywell); T. F. Edwards, Esq. (Denbigh); J. R. Hughes, M.D. (Denbigh); R. Jones, Esq., retiring President (Carnarvon); G. T. Jones, Esq. (Denbigh); T. E. Jones, Esq. (Wrexham); Edwin Jones, M.D. (Rhyl); J. R. Jenkins, M.D. (Ruthin); D. K. Jones, Esq. (Beaumaris); Ll. Lodge, Esq. (St. Asaph); T. Morris, Esq. (Marford); W. Maugham, M.D. (Carnarvon); Hamilton A. Roberts, Esq. (Brynmeurig); O. Roberts, M.D. (St. Asaph); J. Turnour, M.D. (Denbigh); E. Williams, M.D. (Wrexham); and Evan P. Williams, M.D. (Denbigh).

Letters were received from Dr. Hughes of Mold, Mr. Griffith of Wrexham, Dr. Lloyd of Llangefni, and others, regretting their inability to attend the meeting.

The President delivered an address; after which, the Secretary read the following Report of the Council.

REPORT OF COUNCIL.

"It is usual at the annual meetings of the North Wales Branch of the British Medical Association, that your Council should lay before you whatever subjects of interest and importance may have occurred in the profession during the year that has elapsed since the last general meeting of this Branch.

"Among the most prominent matter for congratulation, is the settlement of the long-agitated question of Medical Reform, which it is hoped will be found, upon the whole, to work satisfactorily. The most important element in the new Medical Act is the registration of duly qualified members of the profession. It was not until some time after the passing of the Medical Reform Bill, that the sentiments and views of the Parent Association were expressed in the Medical Journal, respecting the desirability of forming Registration Societies throughout the country where District Branches existed, in order to assist the registrar to place none except legally qualified persons on the register.

"Your Council were much pleased to find that in Carnarvon, Wrexham, Mold, and other places, through the active and indefatigable exertion of some of our associates, Registration Societies had already been established, and promised to effect much good in their localities.

"Your Council desire to express their satisfaction at the greatly improved position of the medical officers of the army and navy; and hope that the time is not far distant when the poor-law medical officers will obtain a redress of their grievances so long and unsuccessfully urged upon the Government.

"Your Council trust, in conclusion, that the members of this Branch will continue to use their influence to recruit their numbers, as it is by unanimity and cordial understanding in all the varied phases of an arduous and high calling, that we can alone hope to raise our character for usefulness, and, at the same time, achieve the respect, admiration, and gratitude of the public.

"The financial statement shewed an income for the year of £8:19:3, and an expenditure of £4:8:4, leaving a balance in hand of £4:10:11."

Dr. Turnour moved—

"That the Report of Council be received and adopted."

The motion was seconded by Mr. Eyton Jones, and unanimously approved.

VOTE OF THANKS TO THE LATE PRESIDENT AND COUNCIL.

Upon the motion of Dr. Williams (Wrexham), seconded by Mr. Francis Edwards, it was unanimously agreed to pass the following resolution:—

"That the most cordial thanks of this meeting be given to Robert Jones, Esq. of Carnarvon, the late President, for the able, efficient, and courteous manner in which he has discharged his duties; and also to the other members of the Council, for their kind and valuable services during the past year."

ELECTION OF PRESIDENT-ELECT AND OFFICERS FOR 1860.

Dr. Roberts (St. Asaph) moved, and Mr. Lodge seconded—

"That Dr. Turnour, of Denbigh, be the President-elect for 1860; and that Rhyl be the place of annual meeting."

It was moved by Mr. Hamilton Roberts, and seconded by Dr. Davies (Holywell)—

"That the following gentlemen constitute the Council of this Branch for the current year, in addition to the President, ex-President, President-elect, and Secretary; namely—Ll. Lodge, Esq. (St. Asaph); G. T. Jones, Esq. (Denbigh); J. R. Hughes, M.D. (Denbigh); T. Francis Edwards, Esq. (Denbigh); J. C. Davies, M.D. (Holywell); and R. Davies, Esq. (Llanfairtalhairn).

Dr. Williams (Wrexham) moved, and the President seconded—

"That Mr. Kent Jones be re-elected Secretary and Treasurer."

REPRESENTATIVES IN THE GENERAL COUNCIL.

Mr. Lodge moved, and Dr. J. R. Hughes seconded—

"That Dr. Roberts of St. Asaph, and Frederick Theed, Esq., of Rhyl, be elected to represent this Branch in the General Council."

CASES AND COMMUNICATIONS.

The following cases and communications were read:—

1. A Preparation of Diseased Stomach, with an Ulcerated Opening of the size of a five-shilling piece. By J. Turnour, M.D. It was evidently a disease of old standing, the opening having smooth round edges. Adhesions had taken place externally to this opening between the peritoneum, etc., by which a sort of sac or second stomach was formed, large enough to hold a small orange. The history of the case was this:—Recurrent attacks of gastrodynia for three or four years prior to death, and generally yielding to ordinary treatment in a week or ten days. A sudden and increased amount of pain with symptoms of collapse, showed that perforation or rupture had taken place; and this was found to be the case in the outside of the sac, where there was a recent rent, through which the contents of the stomach had passed into the cavity of the peritoneum. The patient was a female servant, aged 40, and otherwise in good health.

2. A Case of Diphtheria. By O. Roberts, M.D. (St. Asaph.)

3. Dislocation of the Hip-Joint. By Hamilton A. Roberts, Esq.

4. A Case of Hernia. By Robert Jones, Esq. (Carnarvon).

Thanks were unanimously accorded to the gentlemen who brought forward the several papers.

NEW MEMBER.

Dr. Josiah R. Jenkins, of Ruthin, was elected a member of this Branch.

REGISTRATION UNDER THE NEW MEDICAL ACT.

It was agreed that this Branch should watch over the registration through the district, and that sub-committees be appointed in every town for that purpose.

VOTE OF THANKS TO THE PRESIDENT.

A vote of thanks was carried with acclamation to the President for his conduct in the chair, and for his courteous hospitality to the members at his own residence.

DINNER.

All the members, with several guests, including the Rev. H. Morgan, incumbent of Rhyl; — Richards, Esq., judge of the County Courts and chairman of the Quarter Sessions of Flintshire; partook of an excellent dinner, and concluded the day in an agreeable and pleasant manner.

Editor's Letter Box.

THE MEDICAL REGISTER: FOREIGN DIPLOMAS.

LETTER FROM C. B. NANKIVELL, M.D.

Sir,—If there is one thing more than another from which I am disposed to shrink, it is from that of obtruding before my professional brethren, or any other body of men, anything personal to myself; but I feel that I should be wanting in a sense of justice to myself, and of regard for the esteem of the members of my profession, if I allowed to pass unnoticed a wrong which has been done me by the Registrar appointed under the new Medical Act.

Before the 1st of May—nearly three months before the publication of the *Register*, within the period advertised by the Registrar as entitling applicants to be included in the first registration—I made my application in the form supplied by the appointed officer, and as directed by the Act of Parliament.

My claims were founded on my diploma from the Royal College of Surgeons, London, on which I had extensively practised as a pure surgeon for twelve years in this country; and on my degree of M.D. from the University of Pisa, which I had received after four years residence and attendance on the university courses, and after a public examination, by the professors of the university, before a large audience. On this degree I have practised in Torquay since my return to England in 1848. In making my claims, I filled up the forms sent me by the Registrar; and to substantiate my statement that my medical degree was received after public examination, I forwarded to the office my diploma from Pisa, which explicitly and fully expresses this fact. I had thus done everything required by the Medical Act to entitle me to the first registration, and had complied with all the requirements sent me by the Council; I was therefore perfectly justified in expecting that my name and qualifications would be included in the first *Medical Register*. I had no intimation of any doubt on the subject, or of any delay, until, in answer to my inquiries, I was informed by the clerk of the office, *after the Register was published*, that my medical degree had not been inserted because the Council had received no return from the university stating that it had been granted after examination, a fact fully stated in the only document they had required of me—a printed document, authenticated by the seal and signatures of the university authorities.

Now, sir, I do not in the least question the right or the propriety of any investigations which the Registrar or the Council may think fit to make in order to satisfy themselves of the justice of any claims brought before them; but surely, when an applicant has complied with all the requirements of the Act of Parliament, and has produced all the documents necessary to substantiate his claims, the Council cannot consider it right to inflict upon that applicant the punishment of suspending his registration, and subjecting him to all consequent penalties, merely because the Registrar may have delayed the application for some corroborative testimony, or have sent for it to a country involved in revolution, or at a season when a university may be closed.

The new Medical Act expressly states that every person possessed of one or more of the qualifications described schedule (A) "shall be *entitled* to be registered *on producing* to the Registrar the document conferring or evidencing the qualification or qualifications whereof he seeks to be so registered." I am aware that the documents produced must be to the satisfaction of the Council, but this clearly must be a *reasonable* satisfaction; and whilst any "false or fraudulent representation" is punished by imprisonment, no right is either expressed or implied in the Act by which a legally qualified applicant, who has complied with all its conditions, can be deprived of his claim to be registered, or placed in a false position on the register, or suspended for several months from registration, on account of some fault or delay of the Registrar, or of the authorities to whom application may have been made to authenticate the documents produced. Such obviously would be to assume a penal power beyond the powers of the Act, and to make the applicant suffer for the delinquency of the Registrar, or the carelessness of the officer of some unconnected and uninterested institution.

But the object of this letter, sir, is not so much to point out the inequitable, and what appears to me the illegal, course adopted at the Registration Office, as to explain to my professional brethren that the false position in which I am placed on

the register, does not arise from any fault or disqualification of mine, but from the provisions of the Medical Act having been in my case wrongly suspended.

I am, etc., C. B. Nankivell.

Torquay, July 23rd, 1859.

Parliamentary Intelligence.

HOUSE OF LORDS.—Thursday, July 21st, 1859.

PUBLIC HEALTH BILL.

Earl Granville moved the second reading of this measure.

After a few words from Lord Wynford, the Bill was read a second time; and, on the following day, passed through Committee.

Monday, July 25th.

PUBLIC HEALTH BILL.

The report of the amendments to this Bill was received.

Tuesday, July 26th.

PUBLIC HEALTH BILL.

The amendments in this Bill were considered and agreed to.

HOUSE OF COMMONS.—Friday, July 22nd, 1859.

STAMP DUTIES ON MEDICAL DIPLOMAS.

Lord Fermoy asked the Chancellor of the Exchequer whether he intended to remit or reduce the stamp duty on the diplomas for licence or fellowship of the Royal Colleges of Physicians of London, Edinburgh, and Dublin, and the degrees granted by the Universities of Scotland?

Mr. Laing said it was proposed to reduce the stamp duty on the diplomas for licences of the Royal Colleges referred to; but it was not proposed to interfere with the stamp duty for fellowships or for degrees granted by the Universities of Scotland.

THE MEDICAL ACTS AMENDMENT BILL.

Mr. Whiteside moved the second reading of the Bill.

Mr. Grogan expressed a hope that this Bill would be postponed until the opinion of the profession in Ireland was taken upon it. The Bill had been only printed and sent over to Ireland yesterday.

Mr. Whiteside declined to postpone the second reading. The object of the Bill was merely to amend an omission in the Medical Acts.

Mr. Vance supported the proposition for postponement.

The House then divided upon the question that the Bill be read a second time.

For the second reading	115
Against it	14
Majority in favour of second reading	—101

The Bill was then read a second time.

Monday, July 25th.

ADULTERATION OF FOOD, etc., PREVENTION BILL.

This Bill passed through Committee *pro forma*.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

* *In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Davis. On July 20th, at 11, Brunswick Square, the wife of Maurice Davis, M.D., of a son.

Hill. On July 22nd, at 22, Mecklenburgh Square, the wife of Samuel Hill, Esq., Surgeon, of a son.

MARRIAGES.

Brook—Jefferson. Brook, Thomas George, Esq., Surgeon, of Caxton, Cambridgeshire, to Annie Adelaide, second daughter of the late R. Jefferson, Esq., of Jarron, Durham, at St. Pancras Church, on July 21st.

Hawkins—Haywood. Hawkins, Francis, M.D., of Bolton Street, London, to Sarah Jane, only daughter of the late George Haywood, Esq., formerly of Park Hall, Derbyshire, at Tamworth, on July 23rd.

DEATHS.

Gore. On July 23rd, Isabella Lucinda, eldest daughter of Henry John Gore, M.D., of Finchley New Road.

Leach, Robert, Esq., Surgeon, at Martock, Somerset, aged 33, on July 15th.

Stafford, William, Esq., Surgeon, at Long Bennington, Lincolnshire, aged 51, on July 20th.

PASS LISTS.

Royal College of Physicians. The following Fellows of the College were elected Censors at the last Quarterly Comitia Majora:—

Baly, William, M.D., Queen Anne Street
Barker, Thomas Alfred, M.D., Grosvenor Street
Gull, William Withey, M.D., Finsbury Square
Weber, Frederick, M.D., Green Street, Grosvenor Square

Apothecaries' Hall. Members admitted on Thursday, July 21st, 1859:—

Day, William White, Acton Vale, Clifton
Fisher, Frederick
Payne, Charles William, Hoxne, Suffolk
Rigby, James Morris, Chorley, Lancashire
Tuck, Buckmaster Joseph

HEALTH OF LONDON:—WEEK ENDING JULY 16TH, 1859.

[*From the Registrar-General's Report.*]

Fourteen hundred deaths were registered in London in the week that ended last Saturday. The numbers returned successively in the last four weeks exhibit the rapid increase of mortality under an increasing and unusually high temperature of the air; these were 970, 1024, 1226, and 1400. The mean temperature in each of the same periods was 60°, 63·5°, 67·4°, and 71°. The mean temperature of the first two weeks of July exceeded by 7° that of the last two weeks in June.

In the ten years, 1849-58, the average number of deaths in the weeks corresponding with last week was 1000; but, as the deaths of last week occurred in an increased population, they should be compared with the average raised in proportion to the increase, namely, with 1,100. The comparison gives an unfavourable result; for it shows that the deaths in the present return were higher by 300 than the number which the average rate of mortality for the second week of July would have produced.

The most striking feature in the returns for last week is the increase in the mortality from diarrhœa. Taking again the last four weeks, it appears that this disease was fatal in 34, 58, 132, and 264 cases. The mortality of last week from this disease was, therefore, exactly double that of the preceding week, and more than four times as great as that of the last week of June. In the corresponding weeks of 1857-8, the deaths from diarrhœa were 150 and 126: in 1857, the deaths reached 302; but not till the end of July. Of the 264 cases now returned, 245 occurred to infants before they were two years old. It may also be observed that more cases occurred in the north and east districts than in those on the south side of the river, although the population of either of the former groups is much less than that of the latter.

A girl, aged 6 years, died on July 10th, at 2, Circus Road, Gospel Oak Fields, from "exposure to the sun, effusion;" a Captain of the Royal Artillery (half-pay), aged 58 years, died on July 15th, in Kentish town, from "sunstroke, inflammation of the brain (40 hours);" a stoker in a steamboat, aged 22 years, died on July 11th, at 12, Globe Lane, Woolwich, from "apoplexy from exposure to excessive heat (3 hours);" and a widow, aged 68 years, died on July 14th, at 5, Duke Street, Bloomsbury, from "enterodynia (16 hours), and exhaustion from extreme heat."

Last week the births of 891 boys, and 876 girls, in all 1,767

children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1,434.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·058 in. The mean daily reading was above 30 in. on every day except Tuesday. The highest reading was 30·14 in. on Monday and Thursday; the lowest, 29.97 in., occurred on Tuesday. The mean temperature of the week was 71°, which is higher by 9·3° than the average for the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average throughout the week, and on Tuesday this excess was so great as 14°, and on the next day was nearly as much. The thermometer in the shade attained its *highest* point, 92·5° on Tuesday; its *lowest* point was 52·1° on Friday. The range of the week was therefore 40·4°; the mean daily range was 30·3°. On Tuesday, the thermometer in the sun reached 116°, on Wednesday 115°. The difference between the mean dew-point temperature and air temperature was 12·3. The mean degree of humidity of the air was 61. The mean temperature of the water of the Thames was 71·4°, which is nearly the same as that of the air. No rain fell in the week.

WEEK ENDING JULY 23rd.

The returns for the week that ended last Saturday show a further and rather formidable increase of the deaths in London. The weekly number was below a thousand in June, till near the end of the month; it then rose above a thousand; in the first week of July it was 1226, in the following week the number was 1400, and last week it rose to 1605. The mean temperature of the air in June was 61·4°; in three weeks of July it has been 69·1°. An increase in the heat of nearly 8°, acting in connexion with other circumstances that are necessarily unfavourable to health, has been attended by an increase of 600 in the deaths.

In the ten years 1849-58, the average number of deaths in the weeks corresponding with last week was 1064; but as the deaths included in the present return occurred in a population which has increased, they can only be compared with the average raised in proportion to the increase; namely, with 1170. The result of the comparison is unusually unfavourable as regards the present time, for the 1605 deaths of last week exceeded by 435 the number which the average rate of mortality would have produced.

On referring to the causes of death, the increase is found under diarrhœa, the deaths from which rose last week to 415, a number which is much greater than that of any week in previous years. The average number in corresponding weeks of 1849-58 (corrected for increase of population), is 108; the numbers previously ranged from 51 in the year 1850 to 259 in 1857. It is important to remark that the complaint was far more fatal last week in the east districts, particularly Shoreditch, Bethnal Green, Mile End, than in the other metropolitan divisions. Of the 415 deaths from diarrhœa, 153 occurred in the east districts, although they comprise little more than a fifth part of the population of London. The disease was also fatal in Kentish Town, where no less than 16 deaths occurred from it. A large majority of the fatal cases, as was shown in former returns, are amongst infants, 381 out of the whole number in the present return having occurred to children who were not two years old. Of the remaining 34, ten occurred to children more advanced, only four between the ages 10 and 60, and twenty at 60 years and upwards. Besides the deaths from diarrhœa, 39 were returned as caused by cholera, "choleraic diarrhœa", etc., nine of which were the deaths of adults. Scarlatina was fatal in 48 cases; diphtheria in eight.

Four deaths were recorded in the previous week as the result of the unusual heat; last week eight of a like description were returned thus:—A boy, aged 6 years, died on the 14th inst. in Islington, from "congestion of the brain and convulsions, from heat of the sun (twelve hours illness)"; a girl, aged 9 years, on the 13th, from "convulsions and symptoms of cholera, brought on by exposure to heat"; a brickmaker's labourer, aged 21 years, on the 16th, at Rockhill, Sydenham, from "sun-stroke, congestion of the brain"; a sugar-baker, aged 32 years, on the 11th, in Whitechapel, from "congestion of the brain produced by heat and labour"; another sugar-baker, aged 34 years, on the 18th, in the London Hospital, "suddenly from sun-stroke"; a solicitor, aged 77 years, on the 17th, "natural decay, accelerated by the excessive heat of the weather"; a man, aged 68 years, on the 20th, from "natural decay, and debility from the heat of the weather (ten days)"; and a weaver, aged 46 years, at 36, New York Street, Bethnal Green, on 18th July, from "coup-de-soleil, from working in a factory with a glass roof." With reference to this last case, the deputy coroner states that "the medical evidence was conclusive, that the sun's rays produced inflammation and congestion of the brain, and coma."

Last week the births of 855 boys and 748 girls, in all 1603 children, were registered in London. In the ten corresponding weeks of the years 1849-58, the average number was 1491.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·756 in. The mean temperature was 69°, which is 7·4° above the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily temperature was above the average on every day except Saturday; and on Sunday and Monday the excess was about 12°. On Monday the thermometer in the shade reached 93°, and in the sun 115·2°. On the same day, the thermometer in the shade fell to 56·7°, the *lowest* point in the week. The entire range of temperature of that day, and also of the week, was 36·3°. The mean temperature of the water of the Thames was 73·9°, or nearly 4° above that of the air. The wind was generally in the south-west. Rain fell to the amount of 2·15 in., more than half of it on Thursday.

PUBLIC VACCINATION.

The following memorial has been addressed by Mr. Griffin to the Privy Council, the Poor-law Board, and the Registrar-General.

"12, Royal Terrace, Weymouth, July 4th, 1859.

"My Lords and Gentlemen,—The Right Hon. the Earl of Shaftesbury having, during the last session of Parliament, called the attention of Government to the defective state of vaccination, I have been induced to examine the public records on the subject, and find that, from the inefficient state of the registers, it is impossible to arrive at any accurate conclusion as to the extent to which vaccination is performed in England and Wales. To obviate this deficiency, and insure a perfect system of vaccination, requires that a joint committee should be appointed by your honourable boards, in order that uniform regulations may be issued; and then would cease that curious anomaly of the Privy Council, the Poor-law Board, and the Registrar-General, each issuing separate orders on this one branch of the legislature.

"I beg to submit that the present system requires amendment in the following respects.

"That order should be withdrawn which directs a medical man to fill up two sets of certificates, the one for the parent (No. 1), and the second for the Registrar (No 2), with their duplicates on the fly-leaf; also Nos. 3 and 4, in the case of the public vaccinator, who has the additional task of making two sets of entries in his book for the guardians. The length of time occupied in completing these documents is of so serious a nature, that many medical men refuse to fill them up. In 1857, although 411,268 vaccinations were paid for by the public, only 376,798 were returned to the registrars; and, doubtless, very many of these were furnished by medical men who did not receive payment from the guardians; proving incontestably that, even in the case of the public vaccinators, the order is felt to be so irksome that it is not complied with. As a remedy for this uncertain mode of registration, I beg to suggest that in future the printed paper (No. 5) now given by the registrars to the parents or other parties registering the birth of a child should be abbreviated, and have No. 1 appended to its foot; the Registrar filling up the blanks therein with the names of the child and its parent, and the residence, leaving the other blanks only to be filled up by the vaccinator on the child being successfully vaccinated. On the return of this paper to the registrar, he should be authorised to pay the vaccinator a small sum for the same; and, in the case of the public vaccinator, his fee in addition; thus insuring at least a return to the registrars of all *public* vaccinations. On the registrar making a record of the vaccination in his books, he should affix his name and seal of office (a die-stamp) to the medical certificate, and give it to the parents of the child on application for it, he retaining the other half of the printed paper, which should contain the vaccinator's receipt for his fee, to produce to the guardians as his voucher that the payment has been made. Should the public vaccinators be paid by the registrars, and in accordance with the number of printed certificates they produce, it will be necessary for the registrars to furnish the public vaccinators with blank forms for re-vaccina-

tions; and some rule should be laid down as to the age at which re-vaccinations may be paid for.

"Mr. Simon, Medical Officer of the Privy Council, in the Appendix to his Report of 1858, says: 'Do not re-vaccinate persons who in infancy have been efficiently vaccinated, unless they be more than fifteen years of age, or if, during any immediate danger of small-pox, more than twelve years of age.' It has been said that a repugnance on the part of the people exists against vaccination; but, as far as my experience goes, this is not the case, except with the very few. Apathy with some, and procrastination or postponement with others until they hear of some neighbour's child who is healthy 'to have it done from', are the prevailing obstacles to surmount. It is, therefore, most desirable that at the expiration of a given period (say twelve months from the birth of a child, for by that time most of the unhealthy will have ceased to exist, as 106,634, or about one-sixth of all the registered births, die during the first year of life), a quarterly list of those then living, and not registered as vaccinated, should be made out by the registrars, and sent to the vaccinators of their respective districts, whose duty it should then be to call upon the parents or other persons having the custody of those children, and urge upon them the necessity of immediate vaccination. Failing their compliance with this request, he should make his return accordingly; and the registrar should forthwith sue for the penalties, unless a medical certificate be produced to him that the child is not in a fit state to be vaccinated. For conducting this inquiry, and making a report to the registrar, the public vaccinator should be entitled to a fee of one shilling for each case, in addition to the usual fee for vaccination if performed by him.

"Registrars, who have not registered the birth of a child, receiving certificates of vaccination, should be ordered to forward duplicates of them to the registrar of the place where the child's birth was registered. As many vaccination districts are so small that it is impossible to keep up a supply of lymph from their own population, it is desirable, when vacancies occur among the public vaccinators (which average two hundred and seventy annually), the smaller districts should be united. By the table it will be seen there are nine hundred and fifteen vaccinators who receive less than £5 per annum each, and many of these only a few shillings. Should a fresh Act of Parliament be introduced on the subject of vaccination, or a Medical Poor-law Bill be brought forward, as promised by the Right Hon. T. Sotheron-Estcourt when President of the Poor-law Board, I trust the subject of the payment of the public vaccinators will be made a part of one of the said Bills, and a definite system laid down. At present, the payments are capriciously made, one board of guardians paying 1*s.* per vaccination, whilst another board gives 2*s.* 6*d.*, or even higher. This remarkable disparity of payment exists even in whole divisions of the kingdom. In the south-midland division, 2*s.* 6¼*d.* is the average remuneration, whilst in the metropolis it is only 1*s.* 0¼*d.*; and the officers of union-houses have no fees at all. With such a system, it is no wonder the Acts of Parliament are imperfectly carried out. As the labour of vaccinating and inspecting five hundred cases would not occupy five times as long as one hundred cases, I would suggest a graduated scale of payment—say 2*s.* 6*d.* per case for the first hundred cases per annum, 2*s.* per case up to the next four hundred, and above this 1*s.* 6*d.* per case; and an extra sum to be allowed for all those cases vaccinated at a distance from the residence of the medical officer.

"Vaccinators not giving a certificate of having performed vaccination when it has been successful, or giving a certificate without having ascertained by inspection that the child has been successfully vaccinated, should be subjected to a fine of 20*s.*, recoverable in like manner as other fines under the Vaccination Acts. One-half of all fines should go to the party suing for the penalties, and the other half to the poor's rate.

"Trusting these suggestions, which are of a practical nature, may meet with due consideration,

"I have the honour to be, my lords and gentlemen,

"Your obedient servant,

"Richard Griffin.

"To the Honourable the Privy Council, the Poor-law Board, and the Registrar-General."

Ladies' Association for the Diffusion of Sanitary Science. The first annual meeting was held on July 22nd, at Willis's Rooms, the Earl of Shaftesbury in the chair. The report stated that the promoters of the Association had made considerable progress in the objects contemplated by them. The committee had issued upwards of 20,000 tracts upon the management of children. The chairman, in the course of a long address, said, among the number of institutions that he was interested in, none gave him so much hope as this small one. He then mentioned the disorders of children, and what was proper for their management and education. He was certain that if the few things to which he had alluded were watched it would prevent many disorders among children. One hundred thousand deaths had occurred during the year from prevalent diseases. The Association would prevent many of these deaths. The Report was then agreed to, and a resolution to the following effect was carried unanimously:—"A great part of the premature mortality and disease in this country results from ignorance of the laws of nature. The efforts of the Ladies' Sanitary Association are worthy of great encouragement." A vote of thanks to the chairman closed the proceedings.

Conflagration at Jersey Hospital. The particulars of a dreadful fire at the Jersey Hospital were received on Saturday. The outbreak took place late on the night of the 20th. It was a very large institution, and contained between 400 and 500 inmates. The fire was discovered to be raging on the second floor, and speedily extended throughout the whole of the upper part. A frightful panic ensued amongst the inmates, but, providentially, all were rescued. The 15th Regiment of Foot rendered very valuable aid in checking the progress of the flames, but it was some time ere that was accomplished, nearly the whole of the upper stories being consumed. The property was very largely insured in the London fire-offices.

Testimonial to Dr. Bruce, R.N. Dr. William Bruce, staff-surgeon of the dockyard at Chatham, having completed his term of active service, has, on his retirement, been presented by the captain-superintendent, Captain G. Goldsmith, C.B., and the resident officers of the yard, with a very elegant and massive silver salver, bearing an inscription expressive of their high esteem and regard.

Testimonial to the Surgeon of the Osborne. We (*United Service Gazette*) have much pleasure in stating that His Royal Highness the Prince of Wales, in recognition of the services of Mr. J. R. Holman, surgeon R.N., serving in the *Osborne*, and specially appointed to attend upon his royal highness on his voyage home from Gibraltar, has transmitted to that gentleman a valuable gold ring set with diamonds, together with a letter from Colonel Sir Charles Phipps, expressive of the Prince's satisfaction at the attention received.

TO CORRESPONDENTS.

M.D. Cantab. We are not aware that Doctors of Medicine of the British Universities are restricted as to the line of practice which they shall follow; indeed, we are acquainted with an Oxford M.D., possessing no other qualification, who has for years acted as a general practitioner near London. Even the Royal College of Physicians of London lays no other restriction on its licentiates admitted under the provisions of the "year of grace," than that they shall abstain from the dispensing of medicines.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Communications have been received from:—Dr. Barker; Dr. Skinner; M.D. Cantab; Dr. Barham; Dr. McEwen; Mr. William Martin; Dr. Nankivell; Mr. Griffin; Mr. D. Kent Jones; Dr. Kidd; Dr. John Kirkman; and Mr. W. Copney.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Notes on Hospitals: being Two Papers read before the National Association for the Promotion of Social Science, at Liverpool, in October 1858; with Evidence given to the Royal Commissioners on the State of the Army in 1857. By Florence Nightingale. London: John W. Parker & Son. 1859.
2. Remarks on the Anatomical Relations between the Mother and Fœtus. By Henry Madge, M.D. London: Renshaw. 1859.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

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Addresses and Papers

READ AT THE

TWENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LIVERPOOL, JULY 27th, 28th, and 29th*, 1859.]

PRESIDENT'S ADDRESS.

BY

JAMES R. W. VOSE, M.D.EDIN.,

PHYSICIAN TO THE ROYAL INFIRMARY, LIVERPOOL.

GENTLEMEN OF THE BRITISH MEDICAL ASSOCIATION,—If to succeed to a chair now vacated by a son of the author of the Essays on Taste, by a nephew of the author of the Conspectus Medicinæ Theoreticæ, by a brother of the historian of Europe, and by one who is known to all through the philosophical precision of his professional and general writings, would be embarrassing to even a man of mark, what must it be to the very ordinary individual who has now the honour to address you? And when it is added, that that individual once stood towards his immediate predecessor in this chair as the admiring pupil of a celebrated preceptor, you will all feel with him that, although by your favour he succeeds, he does not affect to replace, William Pulteney Alison.

Let me, however, proceed at once to welcome you, which we do earnestly, on the occasion of your visit to Liverpool. It must be a high gratification to the profession here that you now come among them for the second time, remembering, as they do, that but few places have been thus distinguished by you; while there are many towns of great importance which hitherto you have not visited.

Twenty years have passed since this Association, which began its career by a reunion of about fifty members in the Board-Room of the Worcester Infirmary, met in Liverpool. How many of those who assembled at that meeting, and who fostered by their every care the infancy of an Association which is now vigorously flourishing among the institutions of the country, are at rest from their unselfish labours in the tomb! For us this has a true pathos; while the mournfulness of feeling which such a reflection inevitably engenders, is soothed by seeing still among us the President of our Council, the founder and untiring friend of this Association, who, happily, continues as full of ardour for the interests of the profession as when, more than a quarter of a century since, he inaugurated your proceedings by a preliminary discourse, pregnant with high-minded and practical suggestions in relation to the objects for which our society was founded, and which have proved the author's sagacious foresight, by holding good to the present day.

Gentlemen, you have assembled in a town which, to borrow the language of its accurate historian, "enjoys a greater amount of commerce than is now, or ever was, possessed by any other emporium in the world". Nevertheless, we must feel that to a scientific and highly educated body like yourselves, a place of trade, however vast and prosperous it may be, cannot hope to compete in attractiveness with many of those localities which you have visited of late.

Oxford, the august University whose cloisters are trodden by the votaries of knowledge from the widely parted regions of the globe which look to England as their mother country; York, in rank the second metropolis, rich in the architectural miracles of the Middle Ages, and in the remains of those still more distant times when this island was a mere dependence upon Imperial Rome; Edinburgh, the fairy city, whose intellectual renown, matchless site, picturesqueness, and symmetry, constitute her one of the glories of our land,—have all received you during the last few years, and their fascinations must be fresh in your memory.

Yet, although we seem to be absorbed in material pursuits, there has been no indifference here to the interests of science, of philosophy, or of elegant literature. The Life of Petrarch, the Life of Poggio Bracciolini, the Life of Lorenzo de' Medici, the Life of Leo the Tenth, Roscoe's great work upon Monandrous Plants, the best of the Lives of Burns, the Physiology of Bostock, the Lives of British Lawyers, and the well known translation of that most recondite work, Kant's Critique of Pure Reason, have been given to the world by inhabitants of Liverpool; and while it may be said that all these works continue to enjoy no ordinary reputation, some among them, as the Italian biographies by Dr. Shepherd and by Mr. Roscoe, belong to a high rank of literary skill.

There is, then, no necessary antagonism between commerce and intellectual excellence. Antiquity, indeed, and the Middle Ages, inform us of the same truth. It was to commerce that Athens, the Corinthian capital of all intelligence, owed her wealth and her greatness. It was to commerce that the Republics of Venice, of Florence, of Pisa, and of Genoa, so conspicuous in the arts and sciences before their loss of liberty, owed theirs. Although the treasuries of these celebrated cities overflowed with the riches of the East, borne to them on the waves of the Adriatic and the Tyrrhene Seas; although the brightness of the skies and the softness of the air made mere existence there almost a sufficient happiness; yet their activity and their proficiency in every department of literature and of art have been the admiration of mankind. Dante, Petrarch, Boccaccio; Ariosto and Tasso; Raphael, Michael Angelo; Machiavelli, Columbus, and Galileo,—sprang from commercial cities, and conferred deathless fame upon the cities from which they sprang.

But it is time to turn from these general remarks, which have been perhaps too desultory, and to glance shortly at some topics which have a special interest for us as professional men. And here let me hope to be forgiven if, from a natural desire that this town should stand favourably in your estimation, we proceed to pass rapidly in review some of those improvements in medicine and surgery, which we believe to have originated here.

It was towards the end of the last century that Dr. Dobson, guided by a practical acuteness which seems to be intuitive in some men, was induced to deviate from the ordinary treatment of a formidable disease—acute hydrocephalus; and, by employing mercury instead of the then usual remedies, he showed that the antiphlogistic plan is the true one; and long before the anatomical physicians, as they may be called, led on by Baillie, Cheyne, and others, he elucidated the pathology of the affection, and established its therapeutic requirements upon a scientific basis.

To Mr. Alanson, formerly a surgeon to our Royal Infirmary, we are indebted for many important suggestions, made at a time when the science of hygiene was but little regarded, anywhere. His remarks upon the ventilation of hospitals, the use of iron bedsteads, the necessity of frequent white-washing, and the establishment of sanatoria, in the pure air of the country, for convalescent patients, testify to the correctness of his professional judgment, and to his zeal for the welfare of his fellow creatures. It is by his Treatise upon Amputation, however, that the memory of this gentleman, as an original thinker in surgery, has the strongest claims to our gratitude and regard. He tells us that, among upwards of forty amputations, performed upon the old system, which had come under his notice, ten died of tetanus, two of bleeding, three from mortification, four from exhausting suppuration; while eighteen experienced hæmorrhage, and nearly all had excessive fever, most of the patients suffered from exfoliation of bone, conical stumps, or wounds that would not heal. After the adoption of his improved method of procedure, he had the satisfaction of being able to announce that, out of upwards of thirty amputa-

tations, taken indiscriminately, which were performed at the Infirmary, not one died; and none had secondary hæmorrhage, while, in a month after operation, the wound was either altogether, or, as nearly as possible, healed in all the cases.

The colleague of Mr. Alanson, Henry Parke, in a letter to Mr. Pott, on a New Method of Treating Diseases of the Knee and Elbow Joints, has the merit of having been the first to recommend the excision of those structures, an operation which he performed successfully, and which is now both widely and advantageously practised. Mr. Parke's memoir may, therefore, be regarded as marking an important era in surgery; while the author is entitled to take rank among the original minds which have appeared in that science. Nor can we take leave of him without adding, that with the candour and zeal for progress, which were eminently his characteristics, he was among the first to recognise the discovery of Jenner, and became the founder of gratuitous public vaccination in this town.

The Life of Burns, a work which established the literary reputation of Dr. James Currie, who, like Dobson, was one of the physicians of the Liverpool Royal Infirmary, has already been referred to. This is not the place to enter upon any consideration of his remarkable political abilities; but these cannot have failed to impress all who have studied the masterly letter, which, under the name of Jasper Wilson, he addressed to Mr. Pitt, at the commencement of the war with the French republic, and which caused so profound a sensation, that it circulated through the United States of America, and was rendered into German and into French. But, it is to the views propounded by Dr. Currie, in his Medical Reports upon the Cold Affusion in the treatment of Febrile Diseases, that we wish to draw your attention, momentarily, here. Although this plan had been pursued in the West Indies, before the publication of his work, Dr. Currie has the merit of systematising the practice, and of placing it upon a scientific footing; shewing, among other things, "that the affusion of cold water may be safely used, when there is no sense of chilliness present, when the heat of the surface is steadily above what is natural, and when there is no general or profuse sensible perspiration." Further, it is mainly to the untiring exertions of this physician, that the town owes the erection of its Fever Hospital; whereby the mortality of the disease, and its diffusion by contagion, are kept so materially in check.

We fear that we must already have wearied you, by enumerating so many of our professional worthies. Yet, we should justly lay ourselves open to a charge of ingratitude, were we entirely to omit from this obituary notice the name of the late John Rutter, a physician belonging to the Society of Friends, which has furnished so many eminent men to the medical sciences. Ever zealous for the promotion of useful knowledge, Dr. Rutter, in his earlier days, cooperated with Currie and Roscoe, in establishing our Athenæum and Botanic Garden, the catalogue of which last he arranged and wrote. Besides bestowing upon it his very constant care, Dr. Rutter contributed a thousand pounds towards the foundation of the Institution, wherein we are now assembled, and which has become a resting place for the medical library, which, originally formed by Parke, had wandered about for seventy years in search of a permanent settlement. In addition to the large donation just named, Rutter bequeathed to the Institution a collection of books and of minerals, valued at more than this sum. And when your former meeting in Liverpool was contemplated, he expressed a wish, shortly before his death, that it should take place in this building, the erection of which we owe especially to his patronage.

To pass on—you will have seen, even upon arriving here, that you must not expect in this town any display, either of metropolitan grandeur, or of academical elegance. The absolutely mercantile character of the place, together with its modern importance, will account for the absence of historical edifices, and of ecclesiastical and other architectural attractions in Liverpool.

There is, however, a large array of charitable institutions here, as well as of other objects, well deserving of your regard. A Royal Infirmary, with its dependencies; a Hospital at the north, another at the south end, of the town; several Dispensaries; an Obstetric Hospital; a Hospital for Children; a Self-Supporting Hospital; Institutions for the Blind, for the Deaf and Dumb, for Orphans, and for Disorders of the Sight and Hearing; the Town Hall; the Custom House; Saint John's Market; the Sailors' Home; Saint George's Hall, with an organ surpassing those at Fribourg and at Haarlem; the Collegiate Institution, and the Queen's College; the Royal Institution, with its peculiarly valuable collection of paintings, illustrative of the progress of early Christian art, from the age of Cimabue to the age of Michael Angelo Buonarroti; the statues of Nelson, by Westmacott; of Canning and Roscoe, by Chantrey; and of Huskisson, by Gibson; the Derby Museum; Mr. Mayer's Museum of Egyptian Antiquities; the Athenæum; the Lyceum; the Philharmonic Hall; the noble structure, erecting for the purpose of a Free Library, by the munificence of Mr. Brown, so long the laborious and faithful representative of this division of Lancashire in Parliament; the Botanic Gardens; the Prince's Park; the Drinking Fountains, which we owe to the liberality of Mr. Melly, and which, together with our Public Baths, are of such practical interest to all who have at heart the health and the morals of their fellow men; the Landing Stages; the River Views; and the forest of masts, indicating the course of the Docks in its mighty outline—are some of the principal objects which are worthy of the attention of intelligent strangers.

The past year, gentlemen, has been marked by many incidents, which are of peculiar interest to our profession. The Medical Act, whose progress was eyed so watchfully, and which received so much aid in its principles and details from this Association, has come into operation. It would be premature to speak of the results of that measure. But this we may, perhaps, be permitted to say: that although it, by no means, gave us all that we want, and hope eventually to get—yet, all that it did give us, we very greatly wanted.

We heartily congratulate our gallant brethren in the public service upon the appearance of the new Warrant, which announces their advancement in rank; as well as upon the recognition which has, at last, been wrung from the authorities, of their right to a participation in those honourable distinctions and decorations which are so willingly conferred upon other officers; and with which their heroic conduct in action, and their self-sacrifice under all circumstances, have ever been requited upon the continent of Europe.

Nor can we forget that some of the best feelings of our nature have been gratified upon more than one occasion of late. We rejoice that a statue has been erected to Jenner, and on the most celebrated site in the metropolis; where we may now see, through a spirit of fairness, of which it is to be regretted that we have so few examples, a genius, successfully dedicated to the preservation of mankind, in juxta-position with another genius, who was less conservative in his dealings with them.

The lukewarmness of England in doing honour to her men of literature and science bewilders foreigners, and is pondered by many at home with sorrow and surprise. Even our immortal dramatist lives, so far, only in the minds of his countrymen; while it is but yesterday that the discoverer of the mechanism of the universe received in his native Lincolnshire some proof that he was not forgotten. The same strange apathy has weighed upon our profession for upwards of two generations, in withholding all public honour from the greatest man who has ever appeared in the medical sciences. When Hunter died, his wife, gauging the value of his labours and discoveries with an accuracy which shews the correctness of her judgment, "was anxious to erect a monument to her husband's memory in Westminster Abbey; but the fees demanded to place him, in a reserved niche, among the great geniuses of his country, were too large to admit of it, and the intention was given up." Yet, how short a time elapsed after the death of Geoffroy de Saint Hilaire, a man immeasurably below John Hunter on the ladder of science, before a noble statue was adjudged to him in France, and exhibited in front of the Louvre.

Let us be thankful, however, that at last the enthusiasm of a private individual, to whose father (the late Dean Buckland), natural knowlege is so largely indebted, has succeeded in awakening the leaders of our profession from their insensibility. The remains of John Hunter now rest in the Old Abbey of Saint Peter; and, ere long, the artist's chisel will reproduce, for the contemplation of the world, the wonderful lineaments of a countenance which caused Lavater to exclaim: "Assuredly, that man must have thought for himself."

We venture to express a hope, that this revival of interest for the memory of our great men is not destined to be of a merely ephemeral character. Much remains yet to be done; for even the bones of William Harvey are still mouldering in a damp and neglected vault in Essex; while those of the successful alderman, and of the enterprising railway contractor, are often consigned to gorgeous sepulchres.

We should fail in our respect to you, gentlemen, as lovers of

science, were we to omit all reference to the gigantic intellect which has just been taken from the world, and which the Supreme Disposer of all things permitted to remain here, for the improvement and civilisation of mankind, so much beyond the usual term of human existence.

Of Alexander von Humboldt it has been impressively said that, "His canvass was the universe, and he used his pencil with a master's hand. His mind grasped with iron strength everything it met, and, instead of being weakened by the immensity it was brought in contact with, its appetite grew with what it fed upon. His merits are of such transcendent quality that praise is out of place. There is not one branch of science to which Humboldt has not contributed something—nay, much." We may say of him, indeed, what the Tuscans proclaimed on Machiavelli's tomb, in Santa Croce, "Tanto nomini, nullum par elogium."

When such men as those who filled this chair at Oxford and at Edinburgh did not think it right to omit all reference to the subject of empiricism in their introductory addresses, it might be unbecoming in me to do so, although I am conscious of the jarring transition of feeling to which such a course must necessarily give rise. Let us trust, however, that a very few words upon this repulsive topic may be thought sufficient. Concurring in the remark of Dr. Alison, that the success of imposture is owing to two causes—"the credulity of mankind and the *vis medicatrix naturæ*"—we differ from those who conceive that it will have a definite duration. On the contrary, we believe that it will be coeval with human society itself; inasmuch as the *vis medicatrix naturæ* must endure as long as our organism; while the masses of mankind are as liable to be led astray by their credulity now as when, nearly three thousand years since, the Samian Pythagoras taught believing multitudes the fantastic Absurdities of the Metempsychosis.

While it appears to be obvious that our attitude towards so tainted a thing as empiricism should be one of merely contemptuous indifference, we feel some embarrassment in defining the conduct to be observed towards those members of the profession—often found in a rank where we should not have expected such time-serving—who show a disposition to undermine the distinction between regular and pseudo medicine, by cooperating, more or less, with the professors of the latter; and thus aiding their fondly cherished object of elevating themselves by obtaining some sort of recognition, no matter what, from either the individual members or the general body of our order. There are many, whose opinion is entitled to very high regard, who do not hesitate to ascribe this disposition to the most sordid motives; but let us hope that it admits of a more charitable, and at the same time of a more correct interpretation. Let us hope that it arises from a want of moral courage, rather than from a want of moral principle; from weakness, rather than from meanness of character.

But we gladly abstain from prolonging this merely parenthetical digression, and revert at once to less distasteful matters.

You need not be reminded that you belong to a profession where no political distinction awaits you, and where no riches are to be amassed—nay, you belong to the only one among the professions through whose portals a man cannot, by the force of his genius, conquer for himself the honours of the state. And yet we congratulate you, for you belong to a profession whose annals glow with the triumphs of the intellect. Despite the penalties which all excursions into the domain of general knowledge inevitably inflict upon their material interests, so irresistible has been the thirst for it among the members of our profession, that there is scarcely a department of literature or of science, which has not received illustration and advancement from their labours. Nor do we ever fail to find them arrayed among the steady friends of civilisation and enlightened progress; the unflinching foes of every phase of tyranny and intolerance. You belong to a profession which has given to classical literature the names of Julius Scaliger, and of Thomas Linacre, the protégé of Lorenzo de' Medici, the friend of Erasmus, and one of the foremost spirits of his age at the revival of learning. To ethical philosophy and to political science it has given the name of John Locke: to natural history, Hans Sloane, Linnæus, and Blumenbach: to poetry, Akenside and Goldsmith: to comparative anatomy, physiology, and zoology, Hunter and Owen: to chemistry, Black, the discoverer of fixed air, and of the doctrine of latent heat: to the fine arts, John and Charles Bell: to natural philosophy and antiquities, Thomas Young, the discoverer of the key to the lost literature of Egypt, the greatest discoverer, after Newton, in the field of optics. To sacred knowledge it has given Haller and Abercrombie, the candid interpreters of those imperishable truths which serve as a beacon light to man's weary wanderings while on earth, and sustain him with the hope of unceasing rest when his wanderings shall end.

These are, indeed, matters for the very highest satisfaction. But we congratulate you, still more emphatically, upon being the members of a profession whose mission it is to be the humble ministers of that mysterious aid, which the Incomprehensible One permits man to lend to the suffering helplessness of his fellow man, and which has never been better apprehended, or expressed with more terse sublimity than where, in the mediæval idiom of his country, it is thus enunciated upon the bust of Ambroise Paré, in that old amphitheatre at the School of Medicine, in Paris—

"Je le pansay, Dieu le guarit."

Original Communications.

THE FORMATION OF CLOTS IN THE VENOUS SYSTEM DURING LIFE.

(A thesis for a medical act in the university of cambridge.)

By GEORGE MURRAY HUMPHRY, M.D., F.R.S.,
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II.—On the Formation of Clots in the Pulmonary Arteries.

The following examples of this affection have come under my notice.

Case I. A thin, delicate lady, aged about 35, was confined with her third child, and had so quick and easy a time that the medical attendant, who lived close by, was not summoned. No unfavourable symptoms followed till the fourteenth day, when, having been nursing her infant, she went into an adjoining room, and whilst in the act of standing up to pour out tea, she suddenly fell back upon the sofa, as if faint, and died. The pulmonary arteries, on both sides, where they enter the lungs, were plugged with dark clots of moderately firm consistence. These were not of uniform colour, some parts being darker than others; and they did not appear to have formed long before death. They extended into the second divisions of the arteries, and were only slightly adherent to the walls of the vessels. The latter were quite healthy. The lungs, heart, and other great organs, and the blood in them and in other parts of the body, presented nothing remarkable.

Case II. An exceedingly fat woman, aged 54, had been confined to her room three weeks by a sore leg, and in the last few days had suffered three attacks of dyspnœa and faintness, for which ammonia had been given by her medical attendant. One of these occurred on the 21st of the month, and she felt very ill all that day. On the 22nd she was better. On the 23rd, being in a neighbouring house, I was summoned to her in consequence of a sudden seizure, and was in time only to see her die. There were a few inspirations, but I could not feel the pulse. When first attacked, a few minutes before her death, she was quite sensible, and said, "It's of no use; I'm dying." The main trunks of the pulmonary arteries, on both sides, were distended with firm, dark, mottled clots, which extended into the second and third divisions of the arteries. The interior of the vessels was discoloured, but for the most part it preserved its polish. In a few places, where the clots were slightly adherent, it had lost somewhat of its natural smoothness. In other respects it was quite healthy. The substance of the lungs was natural. The walls of the heart were flabby and thin, but the muscular structure and the valves were healthy. The right auricle and ventricle were distended with clots which were large, firm, and fibrinous in their upper parts.

Case III. A girl, aged about 18, had been in service in the town, in a hard place, under a hard mistress, had been ailing for several days, had one or two fainting fits, and in the last few days had suffered from shortness of breath, and other symp-

toms which excited suspicion of inflammation of the lungs. When she was admitted into the hospital she had an anæmic appearance, her breathing was quick and hurried, and her manner was suggestive of hysteria, rather than real disease, to the gentleman who then saw her. Next day a faint abnormal sound was thought to be audible about the base of the heart; ten minims of tincture of digitalis were prescribed. At six o'clock that day, just after the bowels had been relieved in bed, the bed pan being used, she fainted, and died before the house surgeon could reach the ward. The left pulmonary artery contained a tough clot, tightly impacted in the main trunk, with prolongations extending into the third and fourth branches. It was party-coloured, with alternating black and white portions, quite free and smooth in the smaller branches of the vessel; but in the first and second divisions it adhered at some points to the lining membrane so as to require slight pressure with the handle of the scalpel to detach it. The vessel appeared to have lost its epithelium at these points, and presented some patches of red. The right pulmonary artery was still more tightly plugged with a tough, dry, party-coloured clot, which was adherent to about the first and second divisions of the vessel, and was at this part softened in its middle to a considerable extent. The heart, and the large vessels of the trunk and extremities, were healthy. The clots in the venous system were rather larger and firmer than usual, but appeared to have been all formed after death. The contiguous parts of the upper and lower lobes of the right lung were consolidated by pneumonia, and covered with lymph.

Case iv. An emaciated young man had for several weeks suffered under symptoms of abdominal and pulmonary phthisis, with feverishness and diarrhœa. He was reduced to a very low state, and was slowly dying for some days. There were tubercles in the peritoneum, and in both lungs. In the pulmonary artery of one lung was a large, firm, fibrinous clot, nearly filling the vessel, with prolongations extending into its third and fourth divisions. It was slightly adherent about the point where the artery first divides; and the interior of the vessel, at this part, was rather rough and reddish when the clot had been removed. At the corresponding situation in the other pulmonary artery was a mottled clot of darker colour, and apparently more recent. It was slightly adherent to the vessel, and its prolongations extended into the large branches. The left lower extremity was œdematous; and the femoral and profunda veins and their tributaries were distended with dark, mottled clots, which were slightly adherent about the neighbourhood of the valves. Neither the coats of the vessels, nor the investing tissue, had undergone any change. In the profunda, two valves were adherent together; and a narrow, tough bridle, of yellowish colour, passed from them to the adjacent side of the vein. It looked as if it were the remnant of a clot which had formed at some previous period.

Case v. A lad, aged 12, died, much emaciated, with disease of the hip and discharging abscesses. The left pulmonary artery was extensively occupied by clots. These, in the larger branches, were light coloured and soft; in the smaller branches they were darker, more mottled, tougher and drier; in neither were they adherent to the lining membrane, except in one situation where a vessel looked as if converted into a long narrow abscess. There was no other disease in the lungs. Well formed coagula, of the usual character, and some fluid blood, were found in the cavities of the heart. The lower part of one external iliac vein, with the femoral and profunda veins, were blocked up by coagula, which were closely adherent in the vicinity of the valves.

Case vi. An old man died exhausted, after suffering retention of urine for some time, which required the frequent use of the catheter. The left lower extremity was swollen; and the great veins were distended with clots from the junction with the right iliac, where the clot terminated abruptly, to low down in the leg. They appeared to have commenced where the profunda joins the femoral. In the left pulmonary artery, where it divides into its primary branches, was a small, toughish, slightly mottled clot, adhering to the lining membrane, which was very slightly altered.

Case vii. In the patient who died after removal of a portion of the lower jaw, followed by erysipelas and pneumonia, whose case has been before referred to (page 602), the trunk and primary branches of the right pulmonary artery were nearly filled up by a firm, white, fibrinous clot, which was for the most part loosely adherent to the vessels, but in some places was so firmly attached that the lining membrane was torn up in the attempts to detach it. In the smaller branches of the artery the clot was mottled with red and white portions, was less adherent, but was firm and dry, and filled up the canal. Its ramifications extended as far as I could follow them. The lower lobe of the lung was hepatised; and there was sero-purulent fluid in the pleural cavity. The trunk and primary branches of the left pulmonary artery were occupied by a still firmer and older clot, which was white, quite closely adherent to one side of the vessel, so as to form a part of its wall; and the smooth surface of the clot was continuous with that of the artery. Though the new structure stood out in strong relief, and occupied a considerable space of the canal, there was still room enough for a large column of blood. The ramification of this clot in the secondary and tertiary branches of the artery were closely adherent to the sides of the vessel, so as to form mere ridge-like projections, which would not have much interfered with the current of blood. They were marked with dark lines and spots, as if from deposit of pigment in them. In some of the branches of the artery the only remaining trace of the clot was a staining of the lining membrane with delicate dark lines. These stains were continuous with the clots which occupied the larger branches. There was no apparent disease of the vessel itself. The lower lobe of this lung was in a pneumonic state.

There can, I think, be little doubt that the formation of the clots in the pulmonary arteries, in these, and other like cases,* is due to the same causes as the formation of the clots in the great veins; that is to say, it is due, primarily, to an increase in the coagulative tendency of the fibrine of the blood, and, secondarily, to some facilities which the vessel offers for that coagulation to take place. With regard to the primary cause: the pulmonary clots have been found chiefly, if not exclusively, in cases where the vital powers have been lowered by some other disease; in short, in cachectic states, especially where an inflammatory affection was superadded; and after confinements; that is, in precisely the same conditions as the venous clots. Moreover, the clots are often found in both situations in the same patient, as in Cases iv, v, vi, and vii.†

With regard to the secondary, or immediately inducing cause: it has not been satisfactorily shown in any one instance that the clot was preceded by, or attributable to, disease in the coats of the vessel. The discoloration and roughening, where it was present, was evidently due, as in the case of the veins, to the presence of the clot, and was not the cause of it.‡

It appears, from the above related cases, and others which have been recorded, that the clots begin to form, in some instances, in the smaller branches of the vessels; and that in these instances there is often some obstruction to the circulation in the artery, caused by inflammation, pulmonary apoplexy, or other cause, which must tend to promote the settling of the fibrine. In other cases the affection commences in the larger branches, or in the main trunk; and in these the spot at which the first deposit takes place is usually at or near the root of the lung. In this situation the pulmonary artery breaks up at once into a number of branches, which radiate off from it, at different angles, to the several parts of the lung. Consequently, a large extent of surface is presented to the blood, and there are numerous angular projections into the current; both which conditions are calculated to induce the coagulation of the fibrine. It must also be remembered that the rate at which the blood travels through the pulmonary arteries is subject to considerable variations, depending, partly upon the alternating contraction and repose, and the varying force of the contraction, of the right ventricle, and partly upon the vicissitudes of respiration; and both these sources of disturbance become more marked in those enfeebled states, with tendency to fainting, in which we have found that the fibrine has a peculiar tendency to settle. In such states the circulation in the vessel must always be feeble; and, probably, the current is sometimes absolutely suspended in certain portions of the artery, or in the main trunk, for short periods. Moreover, the venous blood seems to exhibit an increasing tendency to coagulate in the body as it approaches the lungs, and therefore may be presumed to acquire the property in the greatest degree in the pulmonary arteries.

* Baron, *Archives Générales de Médecine*, ii, p. 1, appears first to have directed attention to the subject. Paget, *Medico-Chirurgical Transactions*, ix and x. Ormerod, *Medical Gazette*. Virchow, *Archiv*, x, 225. (In the case related here, the blood in the heart was fluid.) And *Handbuch der Speciellen Pathologie*, Bd. i.

† Virchow, *Froriep's Notizen*, xxxviii, 35, remarks that in only one case out of eleven, in which clots were found in the pulmonary arteries, did he fail to discover them in some other part of the venous system.

‡ Kidd, *Dublin Journal of Medical Science*, xxii, 376, attributes the affection to inflammation of the pulmonary artery. Baron alludes to the absence of an inflammatory condition of the vessel in the case described by him. Nevertheless, in some other cases, to which he refers, he conceives that inflammation of the wall of the vessel led to the formation of the clots.

At any rate, the clots which we find in ordinary *post mortem* examinations are more common and larger in these vessels, and in the right cavities of the heart, than in any other parts of the body. Frequently they are of firm consistence, while the blood in the veins, and in the left side of the heart, is quite fluid.

Virchow attributes the formation of these plugs in the pulmonary arteries to the lodgment there of small clots, or fragments of clots ("emboli") which have been formed in the veins, and have been wafted with the blood through the right cavities of the heart, towards the lungs. These fragments, he thinks, become detached from the ends of the clots which project into the great venous trunks; thus, in any case where the end of a clot, formed in one iliac vein, projected into the vena cava, a portion may be washed off by the blood flowing against it from the other iliac vein, and, being carried into the pulmonary artery, may lodge upon one of the projecting angles of the vessel, and constitute a nucleus for the formation of a plug. It is not improbable that this may sometimes occur. It must, however, be remembered that the surface of the venous clots is usually quite smooth, and therefore not very likely to be dismembered by the slowly flowing current of blood; secondly, that in many cases, as in No. I, II, III, there was no reason to suppose that the pulmonary clots were preceded by clots in the veins; and thirdly, the effects of a preternatural tendency of the venous blood to coagulate are, for the reasons just given, likely to be exhibited in the pulmonary arteries as well as in other parts of the system.

The pulmonary clots undergo the same changes as those in the veins, provided that the patient survives. They may soften (Cases III and V)* or become firmly adherent to the vessel and disappear, leaving scarcely a trace behind (as in Case VII); or be converted into threads or bands, stretching from one part of the tube to another. I do not know an instance in which they have caused obliteration of any of the pulmonary vessels; though it is probable that this may take place occasionally in the smaller branches.

The plugging in the pulmonary arteries does not appear so easily to induce inflammation on the exterior of the vessel as it does in the case of the veins of the limbs. It is not usually attended with pain or uneasiness, or any symptoms which lead, with certainty, to a diagnosis. Hurried, oppressed breathing, with faintness, occurring without any other obvious cause, would make us suspicious of this affection, and should induce us to auscultate in the situations in which a bruit, originating in the pulmonary arteries, would be most likely to be distinguished. I am not aware that a bruit, produced in this manner, has yet been recognised, though it probably would have been discovered had attention been directed to the point during the life of any of the patients.

It is indeed a remarkable feature in the affection that the pulmonary arteries, one or both, in the main trunks, or in the larger branches, may be blocked up to a considerable extent without causing any sign of obstruction to the circulation, or of affection of the lungs, or, indeed, without producing any symptom whatever. In Case VII, it was clear, from the size of its remains, that a clot must at some time have occupied nearly the entire calibre of the main trunk of each of the pulmonary arteries; yet there had been no symptom of such condition observed during the life of the patient. In Case I, the patient appeared to be in her usual health till the moment of the fatal seizure. In this, and other parallel cases that have been recorded, there can be no doubt that the clots were forming for some time before death, and that sufficient blood found its way by the side of them into the lungs to maintain the circulation and supply the wants of the system.

The sudden death is probably caused by a slight exertion following a period of repose. During the repose we may judge that the clots are increasing; and the ensuing exertion, by causing a greater demand for oxygenated blood than can be supplied through the impeded pulmonary vessels, induces fainting, which is fatal. The extreme suddenness of the fatal seizure in these cases has suggested the idea that it may have been caused by some displacement of the clots, producing more complete occlusion of the vessels; but this is opposed by the facts that the clots are usually more or less adherent to the walls of the vessels, and show no sign of such displacement having taken place.

[*To be continued.*]

* In the case related by Dr. Kidd, *loc. cit.*, one of the clots was softened in the middle, and the tissues around the artery, on one side, were condensed and indurated.

REMARKS ON THE INTENDED CHANGE OF THE WEIGHTS USED IN PHARMACY.

By G. E. Paget, M.D., F.R.C.P., Cambridge.

It is generally understood that the Committee for the Preparation of a National *Pharmacopœia* have come to a resolution to make a complete change in the weights for pharmaceutical purposes. The avoirdupois pound and ounce are to be substituted for the troy pound and ounce, which have hitherto been used in apothecaries' weight; and a new drachm, a new scruple, and a new grain, are to be established.

The former of these changes is manifestly desirable. The avoirdupois pound has, by recent enactment, become the standard imperial weight; and the avoirdupois pound and ounce are those which have long been used in all mercantile transactions, except those of goldsmiths and jewellers. They are the weights which are used by manufacturing chemists, as by all other manufacturers; and their adoption for the dispensing of drugs would do away with the ambiguity and inconvenience arising out of the use of two different sets of weights by manufacturing and dispensing chemists.

The substitution, therefore, of the pound avoirdupois for the pound troy, may be hailed as a sensible improvement; and the corresponding change in the ounce might be allowed to pass unquestioned. But the change in the values of the drachm and scruple is less free from objection; and the establishment of a new grain appears to me to introduce inconveniences greater than those which it is intended to remove.

The object of the *Pharmacopœia* Committee, in proposing to establish a new grain, seems to be this: to make the avoirdupois ounce divisible into 480 *integral* parts, like the troy or apothecaries' ounce. The latter, as everybody knows, contains 480 standard grains. But the avoirdupois ounce contains only 437.5 standard grains; so that if this be divided, like the apothecaries' ounce, into drachms and scruples, each drachm will contain 54.6875 standard grains, and each scruple will contain 18.2291666 .... standard grains.

These, then, will be the actual weights of the proposed new drachm and scruple. But, in order to make the scruple contain 20 grains, the drachm 60, and the ounce 480 grains, as heretofore, the Committee propose to establish a *new* grain, which shall be lighter than the standard grain, in the proportion of 91 to 100.

To the establishment of this new grain there are objections which seem to me deserving of consideration. The present standard grain has been formally established by Act of Parliament, being defined as the seven-thousandth part of the standard pound deposited in the Exchequer Office. It is not only in actual use for medicines and the precious metals, and in scientific investigations, but has been in use for ages, and is known and understood both at home and in foreign countries as our standard grain. It will, of course, continue to be used by men of science in their experiments and calculations.

The establishment of a new grain to be used for drugs alone would have the effect of making diverse what is now common between medicine and other sciences. This will not be a mere temporary inconvenience; it will occasion an ever-recurring ambiguity. When we meet with statements of weight in grains in medical, physiological, or chemical investigations, we may be left in doubt which kind of grain is meant, the standard or the new grain; and this is a doubt which calculation will not solve.

Besides, for the honour of medicine, is it advisable to sever any of its bonds of connexion with the more exact sciences? Shall we not be blamed for it by men of science? and shall we not be liable to incur ridicule, if, while remedying the ambiguity of the pounds and ounces, we create ambiguities of the same kind and greater in degree?

It may be added, as a minor objection, that the new grain, if it be the four-hundred-and-eightieth part of an ounce avoirdupois, will not be .91 of standard grain, but the long recurring decimal .911458333.... If the new grain be .91 standard grain, 480 new grains will not make exactly an ounce avoirdupois. The difference is unimportant in the dispensing of drugs, but not so in scientific investigations; and a *reform* involving such an error of calculation would do little credit to medical accuracy.

These are not the only objections to the proposed change. The new drachm and scruple will be different from the drachm and scruple heretofore used. The names will be preserved, but will not have the same meaning; and hence will arise further ambiguities or inaccuracies.

With regard to the drachm there will, moreover, be this strange inconsistency: it will be the eighth part of an ounce avoirdupois, and will therefore be exactly twice as heavy as another weight of the *same name*, viz., the drachm avoirdupois, which is the sixteenth part of the same ounce.

One of the immediate consequences of the proposed change will be, that an entirely new set of brass weights will be required by every general practitioner and druggist in the kingdom; all the old weights will become valueless.

Be it observed, that the inconveniences which have thus been pointed out are not the immediate consequence of the praiseworthy aim of the Committee to get rid of the confusion between the two ancient sets of weights—the troy and avoirdupois pounds and ounces; they are not the *necessary* consequence of substituting these avoirdupois weights for the corresponding troy weights, but are the consequence of an endeavour to effect the division of the ounce avoirdupois into 480 integral parts. It seems to me that this object is not of so essential an importance as to justify the introducing new elements of confusion into our English system of weights.

It may, perhaps, be worth while to point out a plan by which all these inconveniences might be avoided. This may be done simply by ceasing to use the ounce in prescriptions; of course, I mean the ounce in weight, not the fluid-ounce, which is a measure, and with which it is unnecessary to interfere. Let the quantities of solid substances be prescribed in drachms, scruples, and grains, such as are now in daily use. When larger quantities are required, they can be written in drachms; or, if of the largest kind, may be expressed by the pound of 7000 grains, which is an exact multiple of the drachm.

Perhaps a still better (and the simplest) plan would be, for all quantities less than a pound, to prescribe in grains alone—*in standard grains alone.* The calculations between large and small quantities would always be easy, because the standard pound is a large round number (7000) of grains. We should have weights of 100, 200, 500, and 1000 grains, such as are now occasionally used in scientific investigations. There would be no difficulty in writing our prescriptions. Five hundred grains (gr. D) is as easily written as ℥j. Fifty, or a hundred, or a thousand grains, are likewise easily written, either in the ordinary figures, or as gr. L, gr. C, or gr. M.

As the grain would not be changed, *all the brass weights now in use for dispensing might still be used.* A single set of the small weights might be made to serve for dispensing any drug not exceeding 250 grains in weight. If any new weights were needed, they would be one of 300 grains, and one of 500 grains; and these would only be required in cases in which ounce weights are now used. No other weights would be needed for dispensing and compounding on a moderate scale; and if larger weights were needed, they would be the ordinary avoirdupois pound, half-pound, and quarter, which are in common use in every shop and most private houses, and which weigh respectively 7000, 3500, and 1750 grains.

As the intentions of the *Pharmacopœia* Committee have not yet been published *on authority*, my remarks may appear premature. But the intentions are well known; and to wait for their authoritative publication is to wait until it might be difficult or impracticable to have them reconsidered.

ILLUSTRATIONS OF THE USE OF THE OPHTHALMOSCOPE.

By William Martin, F.R.C.S., late Professor of Ophthalmic Surgery in the Calcutta Medical College.

[*Continued from page* 598.]

Choroid.

Congestion of the Choroid may be diagnosed by a hyperæmic state of the chorio-capillary layer. Choroidal inflammation, in various degrees, may then be expected to ensue, and to cause atrophy, maceration of the pigment, layers of exudation, etc. These again, would, in the end, bring on disorganisation of the retina.

In the first instance, we may find an unusually pale condition of the fundus. It does not light up well, and the appearance is rather of a pale orange-yellow than the natural bright pink colour. We shall be likely, also, to find some discoloration of the fundus; instead of a uniform field, we see pigmental patches in parts. If these appearances last long the disease progresses to disorganisation. The effects on vision will be more evident according as this disorganisation—whether it be maceration of the pigment, or anything else—affects the macula lutea, or its immediate vicinity. The yellowish tint of the fundus becomes of a paler hue. We see the choroidal vessels through the retina, which before only formed part of a uniform red field. After a time we cannot distinguish the vessels.

We may see patches, of a rounded form, arising from the discoloration of the choroid, and want of pigment; at the same time the retinal vessels covering these become more tortuous, and probably varicose.

This state, which is called *maceration of the pigment*, there are strong grounds for thinking invariably leads to atrophy of the choroid and retina. According to Desmarres, the patches arising from disorganisation, the result of choroidal disease, may be distinguished from patches arising from exudation, by being of a rounded form; the exudation patches being almost always of an elongated, or oblong form. The pigment becomes collected into spots, which look dark, and have jagged edges. Between these pigmental spots are often portions, red from extravasated blood. We may have, at the same time, patches from disorganisation and the other form. See *Cases of Subacute Choroiditis*, in Desmarres, at pages 419, and 421.)

Choroidal Congestion is generally serious according to the length of time it has lasted.

Hyperæmia, of an acute character, is a concomitant of most internal ophthalmic inflammations; but is in many cases remediable, and goes off with the cessation of the primary disease. The exudation patches, which are by no means rare in choroidal affections, besides having an elongated form, like that of a fillet or band, present a colour more or less bluish, easily contrasted with the white rounded patches, indicating disorganisation, absorption of pigment, and obliteration of the vascular layer of the membrane.

Sclero-Choroiditis, which is often either a primary disease, or a concomitant of other internal affections, when it has become advanced is known by a peculiar appearance, situated in immediate contact with the optic papilla. We shall find this part surrounded, totally or partially, by a patch, which begins by being semilunar, apparently prominent, but in reality concave. This is often far from being regular in its outline; it is jagged too at the borders; and if the disorganisation has gone on to any extent, it is in turn partly surrounded by a black mark or border, arising from deficiency of the choroid, and accumulation of pigment in this part. As the disease proceeds, this white patch, or arch, extends, forming at length a complete circle, but of irregular breadth, round the papilla.

In bad cases, the papilla looks as if concealed in a large white patch, having the appearance of a double cone; and if the disorganisation proceeds, we shall have the state called *posterior, or sclerotic staphyloma*; when, in consequence of the total absence of the retina and choroid tunics, we see only the sclerotic beyond; or we may see it through a transparent retina. This is shown by our observing the retinal vessels traversing this white patch.

The entire absence of pigment epithelium, and other elements of the choroid, as well as of the retina, which has been noted in these and similar cases, by Desmarres, and other writers, we must remark is not observable in all cases, for Jäger states that in twenty-three instances he found the choroid a continuous membrane. (See Hogg *On the Opthalmoscope*, page 80.)

Apoplexy of the Choroid. We often find by itself or in conjunction with the deep-seated inflammations, apoplectic or bloody effusions. These may be in the form of a red patch, which may evidently raise the retina; there may be several of these, of different sizes, scattered over the fundus, and they may traverse the retina and pass into the vitreous humour, where they may become diffused, or appear as distinct clots. These clots are capable of absorption, and the time occupied by this process varies much in different cases. Some are very rapidly absorbed. While undergoing this process, they lose their bright red appearance, and become more or less brown; but those which remain unabsorbed a long time, often retain their primitive vivid red colour and character. As in other local changes in the fundus, the impairment of vision altogether depends upon the situation of these deposits. If they involve the immediate vicinity of the macula lutea, vision will be very much affected; but considerable bloody deposits may exist in other parts, and be more or less permanent, without materially impairing vision. Intermixed with these collections, we often see the white patches which indicate the disappearance of pigment. (See Desmarres, vol. iii, p. 437, in which a bloody patch is seen, having its original appearance, after ten months duration.)

Atrophy of the Choroid is a concomitant or consequence of

many of the internal inflammations, and is always a grave symptom. The ophthalmoscopical appearances differ according to the particular portion of the membrane: if it affects the first layer, the fundus, instead of the usual rose colour, presents a pale orange yellow or brown tint, and perhaps we find brownish patches and streaks, giving the appearance of a scratched picture. (Desmarres.) Secondly, where the arterial layer (*chorio-capillary*) has become affected, we have obliteration of the capillary network, and we see the larger vessels beyond with unusual distinctness. Thirdly, where the venous layer has become involved, we find pigmental deficiencies and accumulations in such a manner, that the fundus has a spotted appearance, like that of a tiger's skin.

Retina.

In cases of *congenital insensibility of the retina*, we find an anæmic state coexisting with a minute condition of the vessels. This is particularly observable in the circulation at the papilla. In certain cases, an *entire absence of blood-vessels* has been found; and this has been supposed to be congenital (Desmarres, vol. iii, p. 445). In many cases of amaurotic insensibility of the retina, we find a partial anæmic state; and the change is particularly observable in the papilla, which is unusually contracted, and presents the appearance of a pearly whiteness, with vessels few and small, etc.

Atrophy of the Retina is known by similar appearances—the pearly white contracted state of the optic papilla, etc.; a general pallor of the fundus; want of circulation, etc. In such a state, we must expect to find many other signs of severe internal disease and disorganisation, patches of exudation, patches of denudation, etc.

Varicosity of the Retinal Vessels is troublesome as a complication of the severe choroidal and retinal affections. It is said also (Desmarres) to exist in those who suffer from hæmorrhoids or habitual cerebral congestion, without producing any appreciable impairment of vision.

Retinal Patches of Exudation may be either nearly transparent, in which case we see a bluish white tint, scarcely perceptible; or in the form of thick patches, in which we find vessels of new formation, the original vessels being lost. The new vessels are said to be recognisable as being contrasted in direction with that of the normal vessels.

Hyperæmia of the Retina is frequently seen as a consequence of acute or chronic inflammation. It is recognised by the unusually brilliant colour of the fundus, and the want of the usual distinguishing clearness of the papilla, in consequence of its becoming masked by vascularity. It seems to be blended altogether, or in great part, with the rest of the fundus. Sometimes it is so red as to resemble pannus of the cornea, or it may present the appearance of fascicular redness, similar to what we see in pustular corneitis, etc.

Chronic Retinitis. We find a general obscurity of the fundus, arising either from exudation of some kind, or simply congestion, or possibly alteration, of the choroid tunic beyond. This obscurity is to be distinguished from that of the vitreous humour by its not being nearly so perceptible at a distance from the optic papilla (as in the direction of the ora serrata), and from its evident existence often also, but not invariably, behind the vitreous body. The obscurity arises from light being reflected in less quantity from the fundus. We often see also the borders of the papilla irregular and ill defined; the rest of the fundus is sometimes overlaid with regular stripes of a dull red colour. The vessels, instead of pursuing a regular course to and from the papilla, sometimes disappear, and then after an interval reappear. This is a phenomenon often seen in œdema of the retina also. The vessels, at the same time, are more developed than usual, and the minuter ramifications come into view. Under this head, Mr. Hogg relates a case at page 133—a case where there was excessive congestion of the fundus, so that the papilla could not be distinguished: the retina was raised by effusion. Also, at page 134, a case is related in which, with this obscurity of the papilla, floating bodies were discerned in the vitreous humour.

Acute Retinitis. In this, as we may expect to be the case, we find various signs of plastic exudation. The fundus is more or less obscure, and looks often as if covered by a bluish grey varnish. Along the course of the vessels on both sides, we may find small white tracts. With this obscurity we may expect to find vision very defective; and it is so, particularly if the exudation or vascular disturbance extends in the direction of the macula lutea; otherwise, the disturbance of sight seems in many cases to be hardly commensurate with the changes which have taken place. See an instance in Desmarres, vol. iii, p. 465, where, with a considerable patch of exudation (but which, however, does not extend to the vicinity of the macula lutea), the patient has very good sight. The exudation sometimes contains newly formed vessels; more often the normal vessels disappear in certain spots under the patch, to reappear at the farther edge of it, and then to pursue their regular course.

Œdema of the Retina. We find true thickening round the optic papilla. The vessels present a convex appearance, and the papilla has an unnatural yellow tint, which renders it less brilliant than usual. This affection occurs as a consequence of choroidal and retinal congestions of a chronic nature, and is a frequent concomitant of syphilitic affections of the posterior tunics. It may disappear gradually, as the primary affection subsides. Desmarres describes the appearances of the œdema which exists in conjunction with syphilitic cachexia as being of a dirty rose-colour, the raised portion of the membrane encroaching upon the papilla, which is always hyperæmic. Mr. Hogg, at p. 137 of his book, relates a case in which the papilla displayed a circular grey ring within the regular margin, with mottling of the fundus; vessels large and irregular. The retina was found in an œdematous state. Also, at p. 138, another case.

This *Mottling of the Fundus* is a very characteristic appearance. There is a want of uniformity of the red field, which presents the appearance of a pale yellow membrane, covered over with dark blue streaks in very many places. It occurs pretty often, and seems to indicate great disturbance of the chorio-capillary circulation, and possibly obliteration of many of the minute vessels, with a very irregular and deficient distribution of pigment. It is, therefore, a concomitant of many of the more serious posterior congestions or inflammations.

Fatty Degeneration of the Retina has been found in certain cases, but the characters to be discovered by the ophthalmoscope are unsatisfactory. It may be suspected where there is albuminous urine, if at the same time we find defective vision, and the fundus generally obscured, and partly covered with yellowish patches, apparently prominent. (See Desmarres; Hogg, p. 70, etc.)

Apoplexy of the Retina is found, but not necessarily as a concomitant of special diseases, both in the plethoric and anæmic subject; the local circulation being affected in one case with positive, in the other with relative plethora. We see the fundus, perhaps more highly coloured than usual, overspread in places with bloody clots of very various sizes. These may present the appearance of circles surrounded by other circles, and this is observable in cases of albuminuria: effusions at the central parts of the field have a radiated form. We may be able to see the point of rupture of the vessel, in the form of a dark red patch along its track; but generally we are obliged to wait until some absorption has taken place before we detect the exact point of rupture.

Sanguineous Effusions on the Retina are often observed in acute inflammations of the retina and choroid; also in many states of local and general debility, particularly in conjunction with albuminous nephritis, heart-diseases, amenorrhœa, and hæmorrhoids. In Desmarres, vol. iii, p. 474, is figured a case in which effusion of blood, with great impairment of vision, occurred from a sudden rush of blood to the head; absorption subsequently took place, and all morbid symptoms were removed.

Subretinal Dropsy and Serous Effusions on the Retina. A portion of the fundus we shall see covered over by a floating mass, of a bluish white colour, with vessels upon it or mixed up with it: this will retain its size and appearance a long time. Together with this we may see white folds, appearing as if stretched out from the optic papilla. This mass, with the liquid in it, is seen to be in a constant state of fluctuation, but rests more often at the lowest part of the fundus. Upon it are seen stretched the vivid red lines which are the retinal vessels; sometimes the mass, instead of floating freely, moving in all directions, and then, settling below, becomes fixed to a portion of the choroid. The neighbouring retinal surface having been raised into folds, these folds seem to be pasted together by the effusion. Sometimes bloody matter is mixed with the serous effusion. We may see so large a portion of the retina detached, that it presents the appearance of a funnel stretched from the ora serrata to the papilla. The most striking and characteristic appearance is the floating vessels in the posterior part of the eye. The symptoms are those of amaurosis.

Softening of the Retina. This affection has been described by Dr. Bader in the *Ophthalmic Hospital Journal* for January 1858. He gives some instances, such as—

1. In a case—W. F., aged 34—where there was little but perception of light, both optic papillæ, too, well defined, the surface of the papilla presented the appearance of blue-grey dots in a watery ground; and near its margin, on the fundus, were irregular white patches dotted with pigment; many brown pigment-islands in the field.

2. In another case—E. G., aged 55—in whom there was also only perception of light, the papilla well defined, a portion of it blue-grey, the inner portion presented a dirty white, finely dotted appearance; vessels normal, but unusually curved over a narrow ring, white, which forms its margin.

3. In another case—J. W., aged 57—vision of one eye lost; with the other he can with difficulty manage to find his way about. Optic papilla, too, well defined, and its surface blue-white, dotted on a watery ground. On the side nearest the macula lutea is a bluish grey crescent. On the fundus there are many brownish pigment-islands. Appearances of the two eyes similar.

As the disease advances, Dr. Bader describes the grey-blue appearance more marked; the circulation becomes less; and the vessels seem more bent over the margin of the papilla. Arterial pulsation is often seen. We also often see pigment-islands—that is, the hexagonal pigment layers—instead of the uniform choroidal red. He remarks it as an extraordinary circumstance, that the retina, although in this, as in many other affections, it is liable to become disintegrated, is still a transparent medium. This disease is one of the complications likely to result in acute glaucoma.

Detachment of the Retina. It has been above stated that, among other causes for this condition, may be enumerated subretinal serous effusions; and that it often presents the appearance of a funnel-shaped body, extending from the vicinity of the ora serrata to the optic papilla or other portion of the fundus. Mr. Hogg, at p. 72, relates a case of traumatic amaurosis where, with signs of exudation, the retina was becoming detached round the papilla; and notices cases of Gräfe, in which the retina was affected by various exudations, and had become detached. At p. 128 he also relates a case of Sichel's, in which, with general œdema of the retina, there was a partial detachment of it. The papilla could not be distinguished. Fundus much congested. At p. 131 he also relates a case in which the most prominent symptom was hemiopia. In both regions of the macula lutea were dark spots and pigment accumulations; in the right eye was detached retina.

Crystals of Cholesterine have been found mixed up with exudations of various kinds, as a consequence of retinal disease.

Malignant Diseases of the Retina. In certain cases we find, in an early stage of the disease, a portion, if not all of the fundus, covered by a brilliant coloured prominence, convex in shape, with blood-vessels which have become fixed to the surface, and do not fluctuate as in the partial detachment which arises from subretinal serous effusion. Sometimes, however, both conditions exist in combination (Desmarres).

Abnormal Insertion of the Optic Papilla, without any special disease, is described; but further observation is required on this point.

Anæmia of the Papilla is observed in all cases of atrophy arising from chronic retinal disorders, also as a functional and temporary change in many cases in which there is no organic alteration of the retina, but where the retinal circulation has become interrupted. It is known by the papilla being unusually distinct from the rest of the fundus, the want of blood making it look white; and, besides, we see what vessels there are unusually small and colourless. It seems sometimes to be smaller and more convex than natural, and is often somewhat irregular at its edges; at other times, it seems to be flattened out, and larger than usual. Around it the circulation sometimes has the appearance of being unusually active.

Hyperæmia of the Papilla—a state coexisting with many affections, acute or chronic, of the posterior tunics—is characterised, on the other hand, by a want of distinctness of the optic papilla; it becoming as highly coloured as the rest of the fundus, and often so very vascular that, even in cases where the entire fundus is hyperæmic, it cannot be distinguished, particularly at its margins, from the rest. The chief guide we have in that case is the course of the enlarged vessels. At the same time, we may find, particularly on compression, pulsation of the vessels which are enlarged, isochronous with the pulse at the wrist.

Aneurism of the Papilla has been spoken of by some writers.

Spontaneous Pulsation of the Vessels of the Papilla is a sign of severe disease. It is particularly noticeable as a sign in glaucoma, and is not always easily detected. We must observe carefully, to find the movement in the arteries; and this can generally be ascertained to be isochronous with the pulse.

Varicosities of the Vessels of the Papilla are often to be observed, in conjunction with various choroidal and retinal disorders. It is of consequence, as it is, of course, apt to lead to organic derangement; but some observers assert that considerable varicosities may exist without apparent derangement of vision.

Softening of the Papilla is a bad sign, and generally indicates approaching atrophy. The papilla looks unusually large and flattened out, with portions of it puffed; its colour a dirty yellow; borders very irregular; and there is often found, in combination, infiltration of the retina, exudations, etc.

Apoplexy of the Papilla, said to be confined to that part in some instances in which the disorder is not one of the most severe.

Atrophy of the Papilla is a sign of serious disease. It presents an unusually brilliant white appearance, the colour of mother of pearl, and is generally small and arched in the middle; the vessels sometimes small, at others rather dilated, and possibly varicose, seeming to disappear at the edges, and then reappear at another place. In cases in which the diminution of size is combined with unnatural prominence, and seems to arise from compression of the optic nerve at its entrance into the eye, the name of mushroom atrophy has been given. (See Desmarres, vol. iii, p. 515, fig. 66.) In other cases, we have a depression of the optic nerve at its entrance, or cupped atrophy (*A. en godet* of Desmarres), said to be due to retraction of the central fibres of the optic nerve. The essential disease, which must have given rise to this phenomenon, will have advanced to a considerable degree before it is observable.

Fibrinous Degeneration of the Papilla. Mr. Hogg, at p. 101, notices Gräfe's statement, that he has found a case in which the papilla appeared flattened out, with its vessels atrophied. On a *post mortem* examination, the papilla was found to consist of tendinous tissue, with here and there a few nerve-fibres interspersed.

[*To be continued.*]

Reviews and Notices.

Epiphora, or Watery Eye: its successful Treatment by the New Method of Dilatation. With Illustrative Cases. By James Vose Solomon, Fellow of the Royal College of Surgeons of England; Surgeon to the Birmingham and Midland Counties Eye Infirmary; etc. Pp. 32. Lond.: Churchill. Birmingham: Cornish Brothers. 1859.

This is a reprint, with additions, of a very valuable paper which was published some months ago in this Journal by Mr. Solomon, and in which he described the results of his application of the plan of treatment of epiphora recommended by Mr. Bowman. The work concludes with some remarks on certain changes which affect the puncta lacrymalia, in consequence of which they may be found patulous, obliterated, contracted, or displaced. We recommend it to the favourable notice of all who have any concern with the eye as operators.

A Memoir on the Treatment of the Epidemic Cholera. Read before the Members of the French Academy of Sciences: with their Report thereon. By Joseph Ayre, M.D. Pp. 44. London: J. Churchill. 1859.

This memoir was sent by Dr. Ayre to the French Academy of Sciences, in competition for the prize offered by the late M. Bréant for "A treatment of unquestionable efficacy, which shall cure Asiatic Cholera in the great majority of cases as certainly as cinchona cures intermittent fever." Dr. Ayre strongly advocates the claims of calomel, which he was led to employ in 1832. The author gives his own results, with those of other practitioners: he seems, however, not to have been successful in convincing the members of the section of Medicine and Surgery in the Academy of Sciences, that his treatment stands in the high rank which he claims for it.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, AUGUST 6th, 1859.

THE TWENTY-SEVENTH ANNUAL MEETING OF THE ASSOCIATION.

If the presence of large numbers of associates, and the prevalence of good feeling and generosity, may be considered to constitute success, the Liverpool gathering of the Association must be considered a most decided triumph. We have, during the twenty-seven years of our existence, visited nearly every corner of the island. From north to south, from east to west, (with the exception of the metropolis) scarcely any city has remained untrodden by the associates in their annual gathering. Yet without being ungrateful for their courtesies, we cannot help recording our sense of the magnificence with which Liverpool on the late occasion received us.

Sir Charles Hastings, at the Mayor's breakfast, happily remarked that our annual gatherings were of infinite value, on account of the manner in which they brought our profession before the general members of the community. In this respect, we have much to be thankful for, from the prominence with which our Association has been for a moment, as it were, mixed with the municipal life of the first purely commercial gathering of men in the world. When the Mayor of Liverpool entertained us in the splendid civic apartments of the Town Hall, he paid us a compliment which, as an Association of one of the learned bodies, we feel we deserved, but which is not so generally accorded to us. The Church and the Law are recognised institutions in the eyes of the community; but Physic hitherto has had no corporate existence, and we are only just beginning to "feel our feet", if we may use the expression, as a public body in alliance with the State. We accept, then, the Mayor of Liverpool's sumptuous banquet as an acknowledgment of the Association being the powerful representative of an old and noble profession, newly linked to the Government.

Neither must we forget to pay just tribute to the hospitalities of the resident members of the Association; private hospitality knew no bounds, and the public luncheons are a new institution, which Liverpool has had the honour of initiating.

The dinner may be termed the culminating point of the annual gathering. At the Adelphi, nearly a hundred associates graced the board—a larger number than has in almost any year before met their President at the annual banquet.

We may perhaps be taken to task for thus prominently dwelling upon the material graces of the meeting. In our opinion, however, it is these which form the true bond of union between the associates. If an Englishman must dine before he can fight, a body of Englishmen, legal, clerical, or medical, must most certainly meet at the prandial mahogany before they can make friends. Pure science never held any large body together since the creation; and we do not believe that in our own case it would be one whit more successful than with others. It must not be thought, however, that we wish to overlook the intellectual attractions of the Association, and assuredly the warm and glowing address of the President, and the searchingly scientific discourses of Dr. Waters and Mr. A. T. H. Waters, will not allow us to forget them.

The real business done at this anniversary was not of a very important character. Medicine is, in fact, reposing for a moment on its laurels so lately achieved. After the good fight of five-and-twenty years, the Association had a right to plume itself upon its labours, and certainly felt no inclination to be cantankerous. It must be admitted, however, that there is a spirit of inquiry abroad—a restlessness, if we may so term it, within the depths of our own Association—which prove that medicine, after its long condition of depression, is about to arouse itself. There was plenty of free thinking and free speaking at the general meeting—evidences that there were rods in pickle for all offenders. The Edinburgh College of Physicians, especially, must see that the public opinion of the profession is clearly against them in the very lax course they have taken of late with regard to the granting of diplomas.

The only matter which cast any shadow upon the otherwise universally bright aspect of the Liverpool meeting, was the statement of the Council that we are still in debt to our Treasurer. When debt is spoken of, Englishmen generally look gloomy; so our little responsibility may, in consequence, be dwelt upon by those who are no friends to the Association as a sign that we are not altogether so flourishing as would appear. A moment's consideration, however, will prove that we are flourishing exceedingly, even in our finance. Since the year 1856, we have paid off no less than £1700; and at the present time our annual income is in excess of the expenditure. Can any financial position be sounder than this? The fact, however, remains, that we owe our Treasurer three hundred pounds; and the Council could do no less than recommend a voluntary contribution. No associate can complain of this proposal, as it leaves the matter entirely in his own hands. If he do not feel inclined to give, he is not obliged to do so. For our parts, we feel pretty sure that those who three years ago contributed to the ten-shilling fund will be the first to contribute to the voluntary payment now asked for. The Bath and Bristol Branch, even before the proposal of a contribution was made public, nobly came forward with funds in aid of the liquidation of the debt; and the East Anglian Branch also passed a resolution calling on its members to contribute to the same object. We must confess that we heartily rejoice that the proposition for charging the postage of the Journal to the members was lost. Had it been carried, the Journal would practically have been weighted with the extra four shillings and fourpence for the purpose of getting rid of the old debt. The neck of the Journal was, no doubt, a convenient place on which to hang this millstone; but, seeing that "odorous" comparisons (as Dogberry would say) are already made between it and other publications which are charged nearly double its price, we heartily rejoice that the scheme was not adopted.

The choice of a meeting-place for the twenty-eighth anniversary is excellent. Possibly very many associates will com-

bine pleasure with business on that occasion: and Torquay, the queen of the south coast, will present attractions to the ladies which even the great manufacturing and commercial cities do not possess. We have always regretted that there is nothing in the shape of humanity to see but black coats at the annual *soirée*: and we must confess that, notwithstanding the loss we should thereby sustain in point of standing-room, a little crinoline would prove a graceful addition to those entertainments. The meeting at Torquay will form an admirable time for altering one of our social rules, which would, we believe, in the opinion of many, be better honoured in the breach than in the observance.

HOW DO WE BEST HONOUR THE MEMORY OF THE ILLUSTRIOUS DEAD?

The Hunter Statue Committee have resolved that, after placing a marble statue of John Hunter in the Royal College of Surgeons, the surplus of the subscriptions, and any further funds that may be contributed for that special purpose, shall be devoted to the establishment of one or more scholarships in comparative anatomy. This determination is one which will meet the views of those members of the profession who have objected to spend the money altogether on a statue, but who will now doubtless contribute to so laudable an object as a scholarship in memory of the distinguished physiologist and surgeon.

For our part, we heartily approve of the resolution of the Hunter Statue Committee, and trust that funds will be liberally supplied by the public, as well as by the profession, to enable it to be carried out. Our ordinary practice of honouring the memories of our illustrious dead by mere statues of stone or bronze is a mistake: not that we object *in toto* to the erection of such memorials as outward and visible signs of the respect felt for a man, but we aver that they are, by themselves, insufficient marks of honour. They are mere passive, dead expressions—*they have no life in them.* The greatest honour, we think, that can be paid to any one who has signalised himself for the good of his fellow-men is to promote the object which he had in view during his life. Otherwise, even if a graven or a molten image were erected to such a man in every town in the kingdom, such an honour becomes no honour, but a solemn mockery. Would it not seem very like a farce to erect a statue to Jenner, and then to utterly neglect the propagation of that inestimable benefit which he first pointed out to mankind? Statues have been erected as testimonials of the respect and gratitude of mankind to the discoverer of vaccination; but the noblest memorial of his labour consists in the millions of human beings who, but for the application of his discovery, would have long ago fallen victims in life or in feature to a dreadful scourge.

And so it is with all our great men—so with Hunter. The best testimony we can give of our respect for his memory and appreciation of his labours is to encourage and enable our meritorious youth to follow his footsteps in the pursuit of one of the noblest and most mind-enriching sciences which it is permitted to man to study. In doing this, the Statue Committee are but following what would certainly be the wish of Hunter. Depend on it, he never desired—nor did any truly great man ever desire—that he should be the alpha and omega of that object which had been the pursuit of his life; but that posterity should follow with steady step the path indicated and opened out by him.

In the establishment of scholarships of comparative anatomy in memory of Hunter, the committee will honour him far more than by a perishable statue. They will, indeed, raise to him a—

> "Monumentum ære perennius,
> Regalique situ Pyramidum altius;
> Quod non imber edax, non Aquilo impotens
> Possit diruere, aut innumerabilis
> Annorum series, et fuga temporum."

And not only is the kind of memorial we would have raised to our truly great men of the past "more lasting than brass"; it has life—it enables him for whom the honour is designed to live through all ages, and, as it were, to apply to himself the prophecy of the Roman poet—

> "Non omnis moriar.....
> .....usque ego postera
> Crescam laude recens."

THE WEEK.

Very many complaints have been made with respect to the price charged for the *Medical Register*, and some very absurd comparisons have been instituted between its expense and that of parliamentary papers. Those persons who imagine that the official register would ever have a large sale, will, we imagine, be greatly mistaken. It must be possessed by all who wish to quote it officially; but these persons are comparatively few. The *Medical Directory* will always remain the popular work of the profession. Medical men will at all times rather have a record of the medical life and position of their fellows, than a bare record of titles, etc.; and, be it remembered, the *Directory* going to press a short time after the *Register*, will be able to correct its pages up to the last moment from the official source. For these reasons, we see no probability of any adequate sale of the official Register taking place: and the Council were therefore quite right in fixing a paying price for what, they doubtless anticipated, would command only a small sale. If, however, it should turn out that the *Register* sells largely, a reduction in price would be undoubtedly called for, and most certainly made; as we do not believe for one moment, that the Medical Council wish to squeeze more money—as it has rather coarsely been termed—out of the great body of the profession.

Association Intelligence.

BATH AND BRISTOL BRANCH.

ASSOCIATION FINANCE.

At the recent Annual Meeting of this Branch, a letter from Mr. Terry, jun., of Northampton, was read, proposing that the Branches should contribute towards paying off the existing debt of the Association.

It was proposed by Mr. Bartrum, seconded by Dr. Budd, and unanimously agreed to.

"That £15:0:0 from the balance in hand of the Branch funds be forwarded to the Treasurer of the Association, for the above object."

[This paragraph was accidentally omitted in the report sent to the Journal by the Secretary of the Branch. In the report which appeared in last week's Journal, the word "only" has been misprinted for "not" at page 611, line 4. Editor.]

TWENTY-SEVENTH ANNUAL MEETING OF THE British Medical Association.

Held in Liverpool, 27th, 28th, and 29th July, 1859.

WEDNESDAY.

The general meeting of the members of the British Medical Association was held in the large theatre of the Medical Institution, Mount Pleasant, at 7 o'clock P.M. The following members, nearly two hundred in number, were present on the several days.

Allen, Joseph, Esq., Liverpool
Anderton, H., Esq., Wavertree
Baker, J. W., Esq., Derby
Barrett, B., Esq., Liverpool
Bartrum, J. S., Esq., Bath
Batty, E., Esq., Liverpool
Beecroft, S., Esq., Hyde
Bennett, J. R., M.D., London
Bickersteth, E. R., Esq., Liverpool
Bickerton, T., Esq., Liverpool
Bidwell, H., M.D., Albrighton
Birch, S. B., M.D., London
Bird, W. V., M.D., Seacombe
Blaikie, R., Esq., Oswestry
Blower, B., Esq., Liverpool
Brigham, W., Esq., Lymm
Brodhurst, B. E., Esq., London
Bromfield, J., Esq., Whitchurch
Byerley, J., Esq., Seacombe
Callon, W. T., Esq., Liverpool
Cameron, J., M.D., Liverpool
Campbell, S. H., M.D., Stoke-upon-Trent
Camps, W., M.D., London
Cantrell, W., Esq., Wirksworth
Cartwright, P., Esq., Oswestry
Cattell, T., Esq., Liverpool
Cayzer, T., Esq., Aigburth
Chalmers, D., M.D., Liverpool
Church, W. J., Esq., Bath
Churchill, J., Esq., London
Clement, W. J., Esq., Shrewsbury
Clover, J. T., Esq., London
Cohen, D., M.D., Liverpool
Coleman, E.H., Esq., Wolverhampton
Cooper, Sir H., M.D., Hull
Crang, James, Esq., Timsbury
Daglish, G., Esq., Wigan
Dale, T., Esq., Liverpool
Davey, J. G., M.D., Bristol
Davies, J. C., M.D., Holywell
Davies, T., M.D., Chester
Davies, W., M.D., Bath
Dawson, T., Esq., Liverpool
Denton, G. B., Esq., Liverpool
Desmond, L. E., Esq., Liverpool
Downs, George, Esq., Stockport
Duncan, W. H., M.D., Liverpool
Eden, T., Esq., Liverpool
Edwards, T. F., Esq., Denbigh
Ellison, K., Esq., Liverpool
Evanson, R. T., M.D., Torquay
Falshaw, W., M.D., Ramsbottom
Fayrer, G., M.D., Henley-in-Arden
Ferguson, F., Esq., Bolton le Moors
Ferguson, J. C., M.B., Liverpool
Fitzpatrick, W.H., Esq., Knotty Ash
Fletcher, F. D., Esq., Liverpool
Flint, R., Esq., Stockport
Flower, F., Esq., Chilcompton
Forbes, Sir J., M.D., London
Fuller, W., M.D., Oswestry
Galt, J., Esq., Ashton-under-Lyne
Gaskell, R. A., Esq., St. Helen's
Gibson, A. C., Esq., Bebington
Gill, G., Esq., Liverpool
Glazebrook, S., Esq., Liverpool
Godden, J., Esq., Birkenhead
Goulstone, J. G., M.D., Knighton
Griffith, T. T., Esq., Wrexham
Grimsdale, T. F., Esq., Liverpool
Hadley, J. J., Esq., Birmingham
Hakes, J., Esq., Liverpool
Hall, C. R., M.D., Torquay
Hamilton, W. T., Esq., Rock Ferry
Hardy, H. G., Esq., Byers Green
Hare, S., Esq., London
Harrison, John, Esq., Chester
Hastings, Sir C., M.D., Worcester
Hatton, J., Esq., Manchester
Henry, A., M.D., London
Hesslegrave, J., Esq., Marsden
Heywood-Thomson, T. R., M.D., Aigburth
Higgins, C. H., M.D., Claughton
Hill, Charles, M.D., Liverpool
Hitchman, J., M.D., Mickleover
Holman, C., M.D., Reigate
Holman, H. M., M.D., Hurstpierpoint
Hornby, T., Esq., Barnby Moor
Hughes, E. T., M.D., Mold
Hulme, H., Esq., Liverpool
Humphreys, J. R., Esq., Shrewsbury
Hutchinson, J., Esq., London
Imlach, H., M.D., Liverpool
Johnson, J., Esq., Kirkdale
Jones, Ellis, Esq., Liverpool
Kay, R., Esq., Liverpool
Lees, S. D., M.D., Ashton-under-Lyne
Lister, E., Esq., Liverpool
McCheane, W., Esq., Liverpool
McEwen, W., M.D., Chester
Macintyre, P., M.D., Liverpool
Mackesy, T. L., M.D., Waterford
Macnaught, J., Esq., Liverpool
Mallett, G., Esq., Bolton
Manifold, W. H., Esq., Liverpool
Manley, W. E., Esq., Tyldesley
Markham, W. O., M.D., London
Marshall, J., Esq., Liverpool
Martland, R., M.D., Blackburn
Mather, T., Esq., Ashton-in-Makerfield
Melson, J. B., M.D., Birmingham
Metcalfe, J. A., M.D., Hawes
Millett-Davis, G.M., Esq., Liverpool
Minshull, J. L., Esq., Liverpool
Mitchell, T. R., Esq., Liverpool
Moore, W. D., M.B., Dublin
Morris, T., Esq., Gresford
Morris, W. W., Esq., Gildersome
Nalty, J., M.D., Dublin
Nevins, J. B., M.D., Liverpool
Newnham, W., Esq., Tunbridge Wells
Newton, S., Esq., Astley
Nicholson, T., M.D., Antigua
Noble, D., M.D., Manchester
O'Bryen, J., M.D., Liverpool
Palmer, E., M.D., Lincoln
Parke, E., Esq., West Derby
Parker, E., Esq., Kirkdale
Parr, A., M.D., New Brighton
Paul, J. H., M.D., Camberwell
Pennington, J. F., Esq., Ashton-in-Makerfield
Pennington, T., Esq., Liverpool
Pope, J. J., Esq., Liverpool
Prichard, T., M.D., Northampton
Pritchard, H., Esq., Fairfield
Propert, J., Esq., London
Roberts, W., M.D., Manchester
Routh, C. H. F., M.D., London
Salusbury, J., Esq., Conway
Seaton, E. C., M.D., London
Seaton, J., M.D., Sunbury
Shain, J. M., Esq., Liverpool
Sharp, J., Esq., Warrington
Sibson, F., M.D., London
Skinner, T., M.D., Liverpool
Smith, E., M.D., London
Solomon, J. V., Esq., Birmingham
Southam, G., Esq., Manchester
Spencer, L., Esq., Preston
Spratly, S., Esq., Birmingham
Steele, A. B., Esq., Liverpool
Stevens, R., Esq., Markyate Street
Stewart, A. P., M.D., London
Stocks, G., Esq., Blackburn
Stone, R. N., Esq., Bath
Stookes, A., M.D., Liverpool
Swift, H., Esq., Liverpool
Taylor, R. H., M.D., Liverpool
Terry, H., jun., Esq., Northampton
Townson, B., Esq., Liverpool
Tuke, H., M.D., Chiswick
Turnbull, J., M.D., Liverpool
Turner, G., M.D., Stockport
Turner, W., Esq., Liverpool
Trevor-Roper, G., Esq., Rock-Ferry
Vale, J. T., Esq., Birkenhead
Vose, James, M.D., Liverpool (President)
Wall, A., Esq., London
Waters, A. T. H., Esq., Liverpool
Waters, E., M.D., Chester
Watkins, J. W., M.D., Newton
Weaver, J. D., Esq., Chester
Webster, J. H., M.D., Northampton
Whittle, A., Esq., Liverpool
Whytehead, H. Y., M.D., Crayke
Wilkinson, E., M.D., Manchester
Williams, E., M.D., Wrexham
Williams, P. H., M.D., Worcester
Williams, T. W., Esq., Birmingham
Williams, W., M.D., Mold
Wilson, C. B., Esq., Liverpool
Wilson, H., Esq., Runcorn
Wilson, J. K., Esq., Liverpool
Wolstenholme, G., Esq., Bolton
Wood, R., Esq., Ashton-under-Lyne
Woollam, G., M.D., Ashton-under-Lyne
Wynter, A., M.D., London
Yates, G., Esq., Birmingham

Mr. A. T. H. Waters (Liverpool) moved that, in the absence of the esteemed and honoured President, Dr. Alison, who was prevented by indisposition from attending the meeting, Sir Charles Hastings take the chair.

The motion was carried by acclamation, and Sir Charles Hastings took the chair accordingly.

INSTALLATION OF PRESIDENT.

The Chairman said he was exceedingly sorry that necessity compelled him upon the present occasion to open the meeting. All present remembered with what pride they were all moved, when they considered that Professor Alison was to be President of the year now gone by. All who were present in Edinburgh must recollect the manner in which he performed the duties of the presidential chair. That fact, of course, made them all exceedingly regret that he was not now present to witness the meetings of the Association in Liverpool. But it had been decreed otherwise. Dr. Alison's health had, unfortunately, been so infirm now for some months back that, in a letter which his sister wrote to the Secretary about a week ago, she stated that she felt she could not even open the subject to him. He was so unwell that he would not even be able to send a short address to be read to the Association upon the present occasion. It therefore now devolved upon him (the Chairman) merely to express his regret that they had been deprived of the attendance of so eminent an individual, whose name shed a lustre over their Association; and to request Dr. Vose, whom they all esteemed so highly, to take the chair for the present session, in the full confidence that he would worthily fill the office. [*Hear, hear, and applause.*]

Dr. Vose then took the chair, and proceeded to read an address, which is published at p. 617.

REPORT OF COUNCIL.

The Secretary read the following Report:—

"It is with sincere pleasure that your Council meet the members of the British Medical Association in the great mercantile town of Liverpool; and they feel assured that the celebration of this, the twenty-seventh Anniversary, will be attended with complete success, both in promoting the interests of the Society, and imparting instruction and gratification to each member who is able to be present.

"Your Council refer with satisfaction to the increased numerical strength of the Association. At the last meeting, in Edinburgh, there were 2180 members. Since that time, 220 names have been added to our list. There have been 60 resignations, and 30 deaths, thus leaving our total number 2310.

"It is a subject for congratulation that upwards of twenty members have been received from the Sister Island, constituting a Dublin Branch of the British Medical Association.

"The business of the Association has been carefully carried on at the quarterly meetings of the Committee appointed at Edinburgh, and uniformly presided over by Sir Charles Hastings, to whom, with the members of the Committee, our cordial thanks are due.

"*District Branches.* The prosperity of the District Branches has been generally maintained, and in many instances their extent and efficiency have been materially augmented through the indefatigable exertions of the Honorary Secretaries, to whom your Council desire to express its grateful acknowledgments for the essential benefits which they have conferred upon the Parent Association.

"*The Journal.* The Journal has continued to give satisfaction to the great body of the associates; and its able editorship by Dr. Wynter is a point to which your Council can refer with confidence and pleasure. It is highly satisfactory to observe that the amount of valuable scientific and practical matter, contributed principally by members of the Association, steadily increases. Your Council would nevertheless urge on the members the importance of systematically affording that help to the editor which would so much tend to place our

Journal in the high literary position which, as the representative of a large and eminent Society, it ought to occupy. Your Council cannot but regret the deficiency of contributions from the county hospitals and infirmaries. They are sure that from these institutions a vast amount of highly valuable matter might be collected, and rendered available through the Journal for the improvement of professional knowledge. The Council consider that, with the view of affording as much as possible of its space to those associates who desire to make contributions, judicious condensation should be exercised in some departments.

"*Finances.* The following is an account of the sums paid and received by the Treasurer from the 1st of January to the 31st of December 1858. This account was duly examined by Dr. Melson and Mr. Hadley of Birmingham, appointed auditors at the annual meeting in Edinburgh.

Receipts to December 31st, 1858.

	£	s.	d.
Subscriptions	1790	8	9
Advertisements, and sale of Journals	645	8	4
	2435	17	1

Expenditure to December 31st, 1858.

Balance from 1857	300	3	6½
Expended in the year 1858	2429	3	8
	2729	7	2½
Receipts 1858	2435	17	1
Balance due to Treasurer, Jan. 1, 1859	293	10	1½

The expenditure for 1858 is made up of the following sums:—

Expenditure for 1858.

Richards (Printing Journal)	1685	9	0
Honeyman (Sundries)	32	0	0
Davidson (Commission)	62	11	6
Mr. Orrin Smith (Wood Engraver)	3	18	6
Interest at Banker's	21	1	9
Salaries; viz.:—Dr. Wynter, Dr. Henry, Mr. Holmes, Dr. Williams, and a Clerk	570	10	0
Secretaries' Sundries	28	17	0
District expenses; Post-office orders, Stamped envelopes; Travelling expenses; and Collecting	24	15	11
	2429	3	8

"Your Council beg to call the attention of the members to the Financial Statement, and to remind them that, in the year 1856, there was a debt due by this body which amounted to nearly £2,000. By the call of ten shillings then made, and by the fact of the income having since that time exceeded our expenditure, that debt has been very considerably diminished; but this diminution is going on slowly, and inconvenience results, from the Treasurer not having funds in hand to meet the demands as they arise; and your Council are inclined to think, that if the present state of the finances shall continue, it will be a wise course to call upon the members at no distant period to adopt some means for the liquidation of the debt. Your Council desire most earnestly to remind the members that nothing conduces more to the satisfactory working of the machinery of the Association than the punctual payment of subscriptions; while the omission to pay them is always productive of embarrassment and injury.

"*Medical Reform.* Your Council cannot omit to congratulate the Association on the final passing of the Medical Act, and the formation of a Medical Council representative of the great professional body. At the same time, it appears to this Council that in some respects the provisions of the Act have not been carried out in a manner to give full satisfaction to the profession at large.

"On looking to the past history of this Association, you will find that so far back as the year 1835, a Committee was formed to watch over the interests of the profession, and to endeavour to obtain for it an improved organisation: from that year down to the present time, such a Committee has been annually appointed, and known as the Medical Reform Committee.

"The Committee took a comprehensive view of the questions submitted to them, and soon after their appointment announced the principles on which they contended any satisfactory amelioration of the organisation of the profession must be based. These were—

"First.—The establishment of the representative principle in the governing bodies.

"Second.—Uniformity of qualification, as tested by sufficient examination.

"Third.—Equal right of all so qualified to practise in every part of Her Majesty's dominions.

"Fourth.—The registration of persons so qualified, in order that the educated practitioner might be distinguished by the public from the ignorant pretender.

"The scheme thus submitted by the Committee was assented to by the Association, and they entered upon their task with a firm determination to allow no obstacles to defeat them.

"Year after year the labours of the Association were continued; but, for a long time, many took a desponding view of the matter, and considered we had entered upon an undertaking too vast for us to accomplish.

"For many years we unsuccessfully attempted to induce Her Majesty's Government to undertake the task, but we were continually met by indifference, and by an intimation that we must ourselves come to some agreement before the State could interfere. This we considered as an indication that if the organisation of the profession were to be improved, it must be by our own exertions, unaided by the State.

"Under these circumstances, the Committee determined to frame a Bill to carry out the principles advocated by the Association, and to obtain sufficient aid from Members of Parliament to carry it to a successful issue. This was done several years ago, and a Bill of the Association was read in the House of Commons.

"It is not necessary to relate the various difficulties which beset us, and the indifference which for a time was displayed by the Government. It is sufficient to say that by means of the influence possessed by our Society and its several Branches, we succeeded in obtaining the support of a large section in the House of Commons, so that we were enabled to demonstrate that the public were as much interested as the profession in a more enlightened medical legislation; and then Her Majesty's Government became convinced it would be inconsistent with their duty longer to delay lending their aid to the settlement of this important question; and thus the Bill, as originally introduced by the Association into the House of Commons, with some modifications, became the law of the land. It is well for the members to see what has been at length accomplished by a long-sustained and judicious agitation, because, if circumstances should again arise to call for similar exertions, we may learn a lesson that may teach us how to conduct similar efforts in future.

"*Benevolent Fund.* This most useful charity continues to confer its benefits upon those for whose aid it was established; and it is very gratifying to know that the sphere of its operations has recently been much extended through the liberality of a gentleman, who bequeathed to its funds a legacy of £3,000. A report from the Committee will be read.

"*Medical Legislation Committee.* Your Council hope to receive from this Committee a statement of its views on several very important subjects; viz., the cooperation of the members of our Association with Mr. Griffin and his coadjutors, in aid of some satisfactory measure with regard to Poor law Medical Reform; also, on the possibility of providing for the more efficient performance of Vaccination; also, on the restriction of the Sale of Poisons, and the best method of effecting it. Your Council would draw the attention of members to the warrants issued during the past year for regulating the rank and pay of medical officers in the army and navy. It is most gratifying to find that recognition has at length been given to the worth of the medical profession in the public services, and that a provision has been made which must tend to increase the efficiency of the land and sea forces of this country. A report from this Committee will be presented.

"*Address in Medicine.* The Address in Medicine will be delivered by Dr. Waters, of Chester.

"*Address in Physiology.* The Address in Physiology will be delivered by A. T. H. Waters, Esq. of Liverpool.

"*The late Mr. Booth Eddison.* Your Council refer with much regret to the death of Mr. Booth Eddison of Nottingham. Mr. Eddison filled the office of President of your Association; was a most active member of the Council; and ever took a lively interest in the welfare of your Society.

"*Conclusion.* In conclusion, your Council desire to express their conviction that the Association is decidedly advancing in numbers and in power. They would still urge upon all its

members the necessity of individual activity for the purpose both of maintaining its high status as a social and scientific institution, and of leading those who have hitherto remained outside its boundaries to unite with us, and cooperate in promoting the great objects which we have ever had in view."

Sir John Forbes said that he had had a resolution put into his hand by his friend Sir Charles Hastings. He was sure the meeting would receive with unanimity that resolution, which proposed

"That the Report now read be received and adopted."

He was very happy to hear, from the details of the report, that the society was, in most respects, in very good condition. The only exception, which was certainly a very important one, was the financial state of the Association, which, he was sorry to hear, was not equally satisfactory. He believed it was twenty years ago that he was in that room upon a similar occasion, and he thought they were then better off in their financial position than at present. He thought it was really rather discreditable, if he might use the phrase, to the Association, that it should be in a condition of debt. However, he was not at all surprised at it, because he had maintained for many years that, since the establishment of the Journal, the Association had no right to expect to be out of debt, when a great deal more was given to the members than was received from them. The Journal which was so received by every member of the Association was as good as any other weekly journal which cost 33*s*. a year. The Association, therefore, gave 33*s*. to each member, and received 21*s*. in return. By such a course they certainly might get credit, honour, and glory, as a very learned society, and as first-rate medical men; but he feared they should get little credit as financiers. [*Hear, hear, and laughter.*] Nobody would believe that they were well qualified to shine in finance, in such a state of things as that. He had always been of opinion, and was so still—and he was one of the oldest members of the Association, and, moreover, a very old man, who would not be long among them—that the members of the Association ought to pay for the Journal a certain sum. Let them subscribe, as at present, 21*s*. for the Association—it was surely worth that; and then pay 10*s*., or whatever sum was deemed sufficient, for the Journal. However, this was altogether a question for the Council, whether they would remain in debt, or otherwise. He hoped they would not consider that, because he had made these observations, he had been finding fault with the Journal. He thought it was most creditable to the Council; and he believed the whole management of the Association was extremely creditable to those who conducted it. [*Applause.*]

Dr. Melson (Birmingham) said, the observations which Sir John Forbes had made were peculiarly pertinent. He thought the members present might congratulate themselves not only that they had heard the President deliver such a classical oration in reference to the importance of that town in a mercantile and in other aspects, but also that Liverpool was, of all other places in the kingdom, the one in which they were likely to make a fair start in the improvement of their finances, if ever such a start was to be made. If it should turn out as a result of that meeting, as well as the meeting of the next and following day, that any plan or scheme could be devised by which their debt might be liquidated, it would be a very important and fortunate thing for the Association, of whose value to the nation at large, as well as in connexion with their own immediate profession, they had had proofs beyond all controversy by the result of their labours during the last twelve months in particular. That much might be done by the Association to attain to that large and œcumenical influence which it was so well calculated to exert over the profession at large, he thought was obvious; and, among other things which might be done during the session of that learned body, he hoped the Finance Committee—as he took it that they had such a committee—would bring before them some scheme which might be found at once practicable and calculated to relieve them from debt. It was a very pleasing duty which he had to perform, at the instigation of Sir Charles Hastings and the President, to second the resolution which had been so eloquently proposed by Sir John Forbes. They had at length obtained an entrance into the House of Commons. The House of Commons, he thought, had served them well. If they regarded what they had received only as an instalment of what might hereafter be expected, he thought great things might be anticipated with reference to the results of parliamentary interference on their behalf. [*Hear, hear.*] One thing he feared—and he thought he might base the observation simply and categorically upon the remarks which came out in the report—he feared lest they should be worse friends to themselves than the public at large were prepared to be friends to them. He referred now more particularly to what he thought he might call the unfortunate differences which had taken place for the last six or eight months between the College of Physicians in London and the College of Physicians in Edinburgh. [*Hear, hear.*] He hoped something might be done to remind those learned and august bodies of their duty alike to themselves and to the profession. [*Hear, hear.*] So far as things had gone hitherto, they had suggested the opinion to his mind that the best thing he could do for his own reputation was simply to stand upon his collegiate degree, and have nothing to do with any College of Physicians either in London, Edinburgh, or Dublin. [*Hear.*] For he was sure that, if the licentiate's degree were to be handed about in the way it had been, and the subject of fellowship to be left to float at large over the sea of opinion of a few men connected with this college or the other, medical men would never get their rights, and hole-and-corner legislation would be implanted upon the broad parliamentary basis to which they looked for so great an advancement in their position as professional men. Much might be said upon that subject, but he would not say any more at present. He congratulated the Council, the President, and Sir Charles Hastings—the latter as one of the main founders, if not the founder, of the Association—upon the position in which they found themselves now upon arriving at their majority. [*Hear, hear.*] It was now twenty-one years since they first fairly entered the field of medical legislation. During that time the parliamentary records of the twenty-first and twenty-second of Victoria would best show what had been achieved. All he could say with reference to the institution was, that he hoped it would go on to flourish; and whilst the nation at large was turning its attention upon them as a body, and was evidently prepared to do more than had been hitherto done for them, that they would show that they were friends to themselves, and see that by private squabbles and collegiate animosities they did not injure their own fair hopes and blight the prospects which were now falling upon them from such a propitious sky. [*Loud applause.*]

Sir John Forbes was not aware of the College of Physicians in London having had anything to do with the College in Edinburgh. At the beginning of the present year, they certainly passed a temporary act admitting into the College gentlemen in the country, more particularly elderly physicians long in practice, not simply as licentiates, but as fellows, in a way which the old laws did not permit. Two or three hundred gentlemen had been admitted as members of the College under these circumstances; but, instead of being blamable in this respect, he (Sir John) thought the College was much to be praised. [*Hear, hear.*] He could only say that since he had been a member of the college—for nearly twenty years—they had improved marvellously with regard to their liberality. Twenty years ago there was no possibility of getting into the College at all. [*Laughter.*]

The President then put the motion for the adoption of the report, which was carried unanimously.

THE OFFICES OF PRESIDENT OF THE COUNCIL AND TREASURER.

Sir Charles Hastings said, that in forming a new code of laws for the Association three years ago, it had been provided that the President of the Council and Treasurer should be elected every three years, but that a special exception had been made with regard to himself, and he had received the great honour of being elected president for life. He stated then, however, that he should consider it his bounden duty, after the expiration of three years, to tender his resignation; and he now begged to do so, expressing at the same time his feelings of gratitude to the members for the manner in which they had on all occasions estimated his poor services. He felt, however, that he was no longer equal to those exertions which he was formerly able to make [*No, no*], and he hoped they would appoint some successor who would to greater purpose, and to the better advantage of the Association, exercise those duties, the proper exercise of which was so essential to the prosperity of their great and flourishing society. [*Applause.*]

Dr. Radclyffe Hall (Torquay) hoped that the members present would by acclamation show their desire that Sir Charles should allow himself to be re-elected. [*Cheers.*]

Mr. Ellis Jones (Liverpool) hoped that Sir Charles would continue the valuable services which he had rendered for twenty-six years, and that so long as he lived they should never see another president of Council.

Mr. Watkin Williams (Birmingham) recommended Dr. Hall to alter his proposition to the effect that Sir Charles be requested to withdraw his resignation. By doing this, they would not break through the resolution passed at Birmingham, which declared that he should be continued the president for life; whereas, by re-electing him now, they would virtually elect him for the next three years only. After the labours that Sir Charles had performed, during twenty-seven years—to the last six of which he (the speaker) could bear personal testimony—some tribute of gratitude, and some tokens of honour, were surely merited. [*Hear, hear, and applause.*]

Dr. Hall thought that it would really be more complimentary to Sir Charles to re-elect him every three years, than elect him for life; but he bowed to the wishes of those present, and whatever would be most complimentary to Sir Charles, was the form of words which he most desired to use.

Mr. Bartrum (Bath) moved that Sir Charles be requested to withdraw his resignation, believing that the Society would sustain a severe loss by his removal.

Sir John Forbes would not have said a word upon this question, except that, being one of the oldest members, it might otherwise have been supposed that he was careless of Sir Charles retaining his position. He thought, however, they should not make him president for life, for he knew that Sir Charles would desire to resign, when he really felt that office was a burden to him, or that he was not sufficiently capable of performing its duties as he would wish. He trusted, however, that on the present occasion, Sir Charles would do as every one wished him to do, and withdraw his resignation. [*Cheers.*]

Dr. Mackesy (Waterford) though this was the first time he had addressed the Association, could not resist the opportunity of expressing the high sense which he entertained of Sir Charles's character and services, and his hope that he would still continue in office. [*Cheers.*]

Sir Charles Hastings (who rose amidst loud cheering) said he had at all times bowed to the recorded wishes of the Association; and, although he earnestly desired to see a more able successor, yet, as they had in such a very decided manner expressed their opinion that it was for the advantage of the Association that he should continue to fulfil the office he had for so many years occupied, whatever might be his private and individual feelings, and however much advancing years may have pointed to him the propriety of tendering to them his resignation, he found it impossible to resist their appeal, and he would therefore withdraw that resignation [*applause*]; and to the best of abilities, and as zealously as his declining years would enable him, he should try to do his duty to the Association. [*Renewed cheers.*]

APPOINTMENT OF AUDITORS.

Mr. T. W. Williams had been entrusted with a most important financial resolution. It related to the appointment of auditors for the ensuing year. He was fortunate, however, in being able to propose two gentlemen who had already performed the duty to the entire satisfaction of the Treasurer, the Committee of Council, and the Association at large. They had carefully pointed out all the existing errors and deficiencies, and had shown the exact condition of the Association. He moved, therefore,—

"That the cordial thanks of the Association be tendered to Dr. Melson and Mr. Hadley for auditing the accounts during the past year, and that they be requested to accept the office for another year."

Mr. A. T. H. Waters (Liverpool) seconded the resolution, which was put and unanimously adopted.

VOTE OF THANKS TO THE RETIRING PRESIDENT.

Dr. R. Hall moved, and Dr. Whytehead (Crayke) seconded the following resolution, which was carried unanimously—

"That the cordial thanks of this meeting be given to Dr. Alison, the retiring President, and that he be appointed a Vice-President of the Association."

Dr. Hall said that after the eloquent words of their president of the evening, and the universal reputation of Dr. Alison, comment upon the resolution was unnecessary.

VOTE OF THANKS TO THE COUNCILS.

Dr. Routh (London) moved—

"That the cordial thanks of the meeting be given to the Councils of the Association for their valuable services during the past year."

They were doubly indebted (he said) to gentlemen of high position in the profession, and necessarily numerous engagements, when they undertook to perform the work of the Council, and when they performed it so well. [*Applause.*]

Mr. Hadley (Birmingham) seconded the resolution, which was carried unanimously.

APPOINTMENT OF SECRETARY.

Dr. Hall moved—

"That the present Secretary, Dr. Williams, be re-appointed for the ensuing year."

Mr. Bartrum (Bath) seconded the resolution.

Mr. Solomon (Birmingham) deemed it highly important that so large a society should have for its secretary a perfect man of business, who could devote a very large portion, if not the whole of his time, to the duties. It was ridiculous to expect that an eminent physician like Dr. Williams, holding two very important appointments, and largely engaged in practice, could give the requisite amount of attention to the society's business. It was necessary in the secretary's department that all the orders and regulations of the Executive Committee should be carried out; that, in corresponding with branch secretaries, prompt replies should be sent; that the names of new members should appear in the Journal; that every year a list of the members of the Association should be published; and that the Journal should also contain a full account of the financial condition of the Association. Had a complete list of names been published some three weeks ago, their hospitable friends in Liverpool would have known exactly who belonged to the Association, and who did not. It was also advisable to have an officer who would see that members in arrear for two or three years did not get their Journal, and who would write to them from time to time energetic letters requesting payment. Great as was his (Mr. Solomon's) respect for the social and professional position of Dr. Williams, he could not say that that gentleman came up to the requirements which their secretary should possess. He was strongly in favour of appointing a perfect man of business unconnected with the profession, at a salary of about £120 a year, who should devote his whole time to the interests of the Association. There was now a debt of £400 or £500, and there was a disposition on the part of some members to pay a second call of five or ten shillings, and get rid of it. His own impression was, that with such a man of business as he had described, as the secretary, the Association would be self-supporting. A secretary unconnected with the profession had been objected to by some; but there happened to be a gentleman, not engaged in practice, who had rendered most important aid to the Association, who was a thorough man of business, and who would be unlikely to take any other appointment, provided he were allowed to assume the duties of secretary, in addition to those which he now performed. Dr. Henry was thoroughly devoted to their interests, and to his care and accuracy they were much indebted for the admirable way in which the letter-press of the Journal was produced. To Dr. Henry also they were in a great degree indebted for those important tables which some years ago informed them who were the members of the Association, and who had paid their subscriptions. He moved, therefore, as an amendment,—

"That Dr. Alexander Henry be the secretary of the British Medical Association for the ensuing twelve months."

Mr. Grimsdale (Liverpool) seconded the amendment.

Mr. Watkin Williams had no objection to the Secretary being stirred up now and then; but unless some graver grounds for dismissal were urged, he thought it would be a calamity to dispense with Dr. Williams's services. He (Mr. Williams) was decidedly opposed to a non-professional Secretary; and surely, if Dr. Williams was even incapacitated, they could find another efficient man of business within their ranks. When he (the speaker) looked at the arrears which existed three years ago, and at the state of the accounts now, he was astonished that Dr. Williams, in his very quiet gentlemanly way, had been able to get in so large a sum [*hear, hear*]; and he felt that they would be acting with the deepest ingratitude were they to call upon their Secretary now at a moment's notice to resign. Without desiring to pit one gentleman against another, he believed that Dr. Williams, with regard to his promptitude in answering correspondence, would be found quite equal to Dr. Henry, and he hoped that the amendment would not be pressed. With regard to "the man of business", he did not think they would be men of business if they expected to get a non-professional man to devote his whole time to their Association, comprising, as it did, 2,000 members, for the sum of £120 a year; and though he did not put up

Dr. Williams as perfection, he believed he was about the best man they could possibly have.

Mr. Waters (Liverpool) having had some opportunity of knowing the way in which Dr. Williams had conducted the affairs of the Association, expressed a very strong hope that Mr. Solomon would withdraw his amendment; and that the Association would never entertain the idea of having a non-medical Secretary. The Secretary to that Association should be a man of high professional standing, and capable, by his position and influence, of extending the influence of the Society. [*Hear, hear.*] This could never be accomplished by a non-professional Secretary. He had not the slightest doubt that Dr. Henry would make a most efficient Secretary; but he agreed with Mr. Williams, that they must hear something more forcible with regard to Dr. Williams's short-comings, in order to induce the meeting to adopt the proposition of Mr. Solomon. He hoped therefore that Mr. Solomon would withdraw his amendment. [*Hear, hear.*]

Dr. Routh thought that Mr. Solomon's proposition amounted to a vote of censure upon Dr. Williams. Even if he had proposed a resolution to employ a man of business, and not a medical man, it would have been competent for them to have discussed such a topic; but the reasons assigned for the dismissal of Dr. Williams were, that the records in the Journal would be better kept, and that it would be the means of paying off their debt, if another gentleman were chosen. Now, in his (Dr. Routh's) opinion, the question of the Journal was an entirely different one. He did not give unqualified approbation to the Journal; nor did he think that the appointment of Dr. Henry as Secretary would improve or influence the Journal in the way Mr. Solomon mentioned. Nor did he think that Dr. Henry himself would like, under the circumstances, to accept the appointment.

Mr. Solomon said that he should fall in with the wishes of the meeting, and withdraw his proposition [*loud applause*]; believing that what had taken place would have the effect of producing the reforms which he was quite sure were required.

Mr. Grimsdale explained, that in seconding the resolution, he was under the impression that Dr. Williams was an honorary and not a paid Secretary; and he thought that the Society ought to have a paid Secretary.

The original resolution was then put, and carried unanimously.

THE MEDICO-ETHICAL COMMITTEE.

Sir Charles Hastings stated that Dr. Barker, of Bedford, had not yet completed his report upon medical ethics, and requested additional time for the purpose. He moved—

"That the Medico-Ethical Committee be re-appointed, with the addition of Dr. Styrap, of Shrewsbury."

Mr. Solomon seconded the resolution, which was carried unanimously.

ALTERATION OF LAW XXV.

Sir Charles Hastings explained that, in one of the laws respecting the constitution of Branches, an alteration seemed to be rendered necessary. The constitution under which their Branches were formed was very stringent. No Branch of the Association could be formed of less than twenty members; this had opposed an obstacle to the formation of new Branches. It had been thought desirable, in reconstructing the laws, that no Branch of less than twenty members should send a representative to the Council; and though, as a general principle, this was perfectly correct, he thought that some modification was necessary in order to enable small societies to join the Association. He moved that the law be altered in this way—

"Any number of members meeting together may form themselves into a Branch of the Association; but no Branch consisting of less than twenty members shall have the privilege of sending a representative to the Council."

This alteration, he believed, while it would not deviate from the principle hitherto adopted, would enable them considerably to increase the number of their Branches.

Mr. Morris (Gildersome) seconded the resolution, w ch was unanimously carried.

MEDICAL ETHICS IN THE BRANCHES.

Mr. Flint (Stockport) drew attention to the question, which had recently been ably discussed in the Journal, that every Branch of the Association should have its own medico-ethical section. The editor had advocated the advantage of local medical societies amalgamating with the Branches. This brought to his recollection, that at the first appointment many years ago at Worcester of a Medico-ethical Committee of the Association, it was contended that each Branch should have the appointment of a medico-ethical section. Unhappily, the subject of medical ethics, though on the *tapis* for fifty years, had never been successfully prosecuted by the Association. The profession at large was very much alive to the subject; but still it was avowedly one of great difficulty, and requiring great care. At the Edinburgh meeting, Dr. Barker zealously undertook the re-formation, for the third time, of the Committee for Medical Ethics; though he was sorry to hear that he had not yet been able to complete his task. What he (Mr. Flint) wished to enjoin upon the members was, that an immense advantage would be gained by every Branch yearly appointing its medico-ethical section. By this means, they would get members of the section to attend to the moral interests of the profession from every quarter of the Branch. This would do away with the necessity for the local medico-ethical societies. Several of these had been working most efficiently for some years, because there was no other agency. These local societies, however, had great difficulties to contend with from local prejudice and rivalry; but where the Branches were so large, they had a right to expect that impartial judgments and awards would be given in every question which they had to decide. By such means, every Branch would afford to the Committee its aid in the formation of a code of laws, which was importantly wanted for the regulation of their profession in this great country. Every month produced scenes of contention in courts of justice, for which the profession had to blush—scenes, however, which he believed would be prevented by the formation of sections such as he had described.

Sir Charles Hastings suggested that Mr. Flint had better leave the question to the Council. He did not think the Association was in a position to make regulations, as regarded the Branches, which would in any way change them, at the present moment.

Mr. Flint asked if there was any rule in the Association with regard to the introduction of such a motion.

Sir Charles Hastings said any Branch could introduce it. There was no difficulty upon that subject. There was, for instance, the Shropshire Branch.

Mr. Flint understood that that was only an amalgamation.

Mr. Humphreys (Shrewsbury) said the Shropshire Branch had adopted the rules of the Medico Ethical-Society.

Mr. Ellis Jones (Liverpool) referred to an instance in the Lancashire and Cheshire Branch, in which the action was taken by the Branch in that instance in their character as a society. He did not think there was any occasion to make any fixed regulation upon the subject, because it was already fixed that every Branch had power to adjust any misunderstanding which might occur among medical men.

Dr. Routh (London) thought it would be well to move a resolution. What was wanted was not a Medico-Ethical Association in connection with every Branch; but they wanted certain medico-ethical rules to apply to the whole profession throughout the kingdom—that that which was considered unprofessional in one part of the kingdom should be considered unprofessional in another. This would obviate the quarrels which, he was sorry to say, often disgraced the profession.

Mr. Flint did not wish to do more than introduce the subject at present. There were many members of the Association who had not entered into the subject, and he thought it right that they should have some idea of what feeling was entertained upon the subject by others who had more years to teach them.

REPORT OF THE COMMITTEE ON MEDICAL LEGISLATION.

Dr. Henry read the following report—

"In coming before the British Medical Association on the present occasion, the Committee on Medical Legislation have not a statement of their proceedings during the past year to present, inasmuch as it has not been judged necessary to hold any meetings. The Medical Act, to the obtaining which the energies of the Committee were directed in previous years, having come into operation, the members of the Committee have considered it best at present simply to watch its working; feeling sure that both the merits and the defects of the measure will be rendered more and more conspicuous as time advances, and believing that an interference with the duties and judgment of the Medical Council would only be injudicious and embarrassing.

"Any reason which your Committee might have had for activity during the year has been diminished by the selection of their Chairman as one of the Crown Members of the Council of Medical Education and Registration. On this gratifying

event they would offer their sincere congratulations to the Association; and they have not the least doubt that the appointment of Sir Charles Hastings has been felt as a high compliment by the members of that body. It involves a recognition, not only of the important part which he has taken in promoting medical reform, but also of the fact that he, as the founder and leader of this Association, is the natural and fit exponent of the wishes of a large portion of the medical profession.

"Leaving for the present—but not losing sight of—medical reform, your Committee would observe that there are several matters of the highest professional and public importance which call for notice at their hands.

"In the first place, your Committee cannot refrain from expressing the extreme satisfaction they feel at the issue of the Royal Warrants during the past year for regulating the rank and pay of the Medical Officers of the Army and Navy. In previous years the members of the Association have endeavoured to procure for their brethren in the public services that treatment to which they were entitled; but from which, through various causes, they were debarred. It must now be a matter of the deepest satisfaction to the Association that the medical men of the public services have been placed in a position which can bring with it no other feeling than that of honour; and the Committee are sure that the members of the Association will join them in sincerely congratulating their brethren in the Army and Navy on the improvements that have been effected by the warrants to which reference has been made.

"The Committee feel that it would not be just to omit all allusion to the labours of those who have striven long and earnestly in behalf of the Army and Navy Medical Officers. To all these the thanks of the profession are due. It is difficult to particularise, yet the names of Dr. McWilliam, Dr. F. J. Brown, Mr. Ranald Martin, and Colonel Boldero, are fresh in every mind. Nor must the services of the Naval Reform Committee, instituted some years ago in London, nor those of the late Joseph Hume, be forgotten in our grateful recollections.

"The Association will doubtless agree too with the Committee, that the thanks of the profession are due to the heads, political and medical, of the Army and Navy in the late government, for having publicly recognised in so satisfactory a manner the claims of the medical officers of their respective departments.

"The Committee will now briefly advert to some other matters, to which, with the consent of the Association, they propose to devote their careful attention during the next year.

"The first of these is Poor Law Medical Reform. The labours of Mr. Griffin have placed before the profession a statistical demonstration of the insufficiency and inequality of the remuneration of those medical men whose duty it is to attend on the sick poor of this kingdom. For several years unceasing efforts have been made to obtain for the poor-law surgeons that consideration to which they are entitled; and your Committee believe that, acting with the authority of the Association, they may be able to afford valuable aid to those who are engaged in this cause. Your Committee have much pleasure in stating that Mr. Griffin has consented to be added to their number, and has moreover expressed his sense of the great services that may be rendered to the Poor-Law Medical Officers by the British Medical Association. The Committee would endeavour, with the valuable advice of that gentleman, and acting in co-operation with the Association of which he is the Chairman, to devise some measure which shall be at one simple, just, and satisfactory to all concerned.

"Public Vaccination is another subject which may well engage the attention of your Committee. It would be a matter for congratulation if popular apathy and prejudice were so far dissipated as to render unnecessary any legislative interference for the extension of the benefits conferred by the discovery of Jenner. But for the present such interference is shewn to be necessary by the mortality from small-pox which occurs among the unvaccinated portion of the community. The Committee propose, in regard to this subject, to endeavour to promote the adoption of a plan by which vaccination may be more widely extended, while at the same time the professional remuneration for the performance of the process may be rendered just and equal. They are glad to say they have been promised the assistance of Dr. E. C. Seaton, of London, a gentleman well known for his labours in regard to vaccination statistics, and from whose thorough comprehension of the subject much valuable aid may be expected.

"The number of deaths which have in recent years been tracable to the facilities for purchasing poisonous drugs, or to the want of care in disposing them in shops and warehouses, renders it evidently necessary that some provision should be made for preventing, as far as possible, these unfortunate occurrences. The subject has already been brought before the Legislature, but as yet with no definite result; and your Committee believe that they may, with advantage to the public, apply their energies in the direction of devising some means of diminishing the mortality caused by the indiscriminate sale of poisons.

"With these important materials for labour before them, your Committee ask to be reappointed, with the addition of the two gentlemen whose names have been mentioned in this report; and they assure the Association that no exertion shall be wanting on their part to procure a satisfactory settlement of one or more of the questions to which reference has been made.

"Charles Hastings, *Chairman.*"

Mr. Waters (Liverpool) in moving the adoption of the report, said the working of the Medical Act in regard to preliminary and professional education required very strict attention, in one portion especially, not only by the Medical Council, but by the Registration Associations, established in different parts of the kingdom. He referred to the practice of the medical profession by those who were not qualified, and to the necessity of carefully watching that none but regularly qualified practitioners were inserted upon the register. This was a matter of very great importance, and one to which the attention of the Committee might very fairly be directed. The questions alluded to in the report with regard to the Poor-Law Medical Reform, Public Vaccination, and the Sale of Poisons, needed no remark from him. He concluded by moving a resolution for the reappointment of the Committee.

Mr. Terry, jun. (Northampton), seconded the motion.

Dr. Mackesy (Waterford) was much gratified that the subject of preliminary education had been particularly mentioned, for he had always considered that its not being brought into a prominent point of view in the Medical Act was probably one of its greatest defects; and in the arrangement made to secure preliminary education he did not think the Act could be considered satisfactory to the public or to the profession. He merely mentioned this in the hope that the Committee might be induced to look more closely into the matter. But there was another point which had been taken up very warmly by the Irish Medical Association and several among the medical bodies of Ireland; viz., Parliamentary Representation. The great difficulty of having medical subjects introduced in parliament was to be considered. No matter how high the attainments of members of parliament, when medical men came to speak to them upon medical subjects it was very difficult to make them comprehend the requirements of the profession. Under these circumstances, it had been considered by several medical men of judgment and weight in his country (Ireland), that if a certain number of medical men could be introduced into parliament to sit upon committees great advantages would result, not merely to the profession in the status it would give them, but to the public, in having the various sanitary measures which came before parliament properly handled and carried out. With that feeling there had been different resolutions passed, and correspondences had taken place between the various medical bodies in Ireland, and different other bodies there and in England; and he felt it due to Dr. Williams to say that he had received every attention and support from him in the correspondence he had had with him. He should have risen when Dr. Williams's name was brought forward before; but being a young member, and unaccustomed to the regulations of the Association, he felt a difficulty in doing so. He had now, however, much pleasure in bearing his testimony to the attention and promptitude with which Dr. Williams had answered all his communications upon the subject. [*Applause.*] Of Sir Charles Hastings it was scarcely necessary to say to any one who knew him that he exhibited in this instance the same kindness and attention with which he treated every one with whom he came into contact. [*Hear, hear, and applause.*] To him also he begged to express his sincere thanks. The subject was brought before the Prime Minister by the Council of the Association and the College of Surgeons, in Ireland, and no satisfactory answer had been received. If, however, the profession chose to take the subject up, the only plan they could pursue would be to load the House of Commons with petitions. His object in bringing the subject before the meeting was that an addition should be made to the resolution now before them, recommending it to the consideration of the Committee. Its being taken up by the general meeting of the Association would give it a prominence and weight which it did not possess at present. If

they were to go on with it, nothing but great exertion could accomplish it. In Ireland there was not a parish which would not petition for it, provided it were supported here. It therefore depended upon the Committee whether the thing should go forward or not, and he only asked that it should receive their mature consideration. Dr. Mackesy read a statement issued by the Irish Medical Association, in which the following resolution had been embodied:—

"That, considering the numbers, respectability, and special acquirements of the medical profession in these kingdoms, neither its interests, nor its views on many questions affecting the health of the community, are adequately represented in parliament. That our president or secretary be requested to communicate with the Medical Colleges, Universities, and Associations of the empire, to impress upon them the necessity of bringing before the Prime Minister the claims of the profession, in its collective capacity, to parliamentary representation; in order that effect may be given to the same as part of any measure of parliamentary reform that may be brought forward during the next session of parliament."

He could not conclude without expressing his great gratification at having had an opportunity of attending the meeting. He had received great attention from the gentlemen of Liverpool since his arrival. He could not fully express the great gratification with which he had heard the very judicious, able, and eloquent address of the president. [*Hear, hear.*] In expressing his gratitude as a professional man for that address, he felt confident that he spoke the sentiments of every one present. [*Hear, hear, and applause.*]

Mr. Waters would have great pleasure in embodying in his motion the substance of Dr. Mackesy's suggestion, and recommending to the consideration of the Committee during the coming year the subject of the representation of the profession in parliament. Would that meet Dr. Mackesy's views?

Dr. Mackesy: Certainly. I conceive that its passing this meeting is in some degree approving of it.

The motion was altered in accordance with Dr. Mackesy's suggestion, and adopted in the following form:—

"That the Committee on Medical Legislation be reappointed, with the addition of Richard Griffin, Esq., and Dr. E. C. Seaton; that they be instructed to carefully watch the working of the Medical Act, especially in regard to preliminary and professional education; that they be desired to take into consideration, during the coming year, the subjects of the representation of the profession in Parliament, poor-law medical reform, public vaccination, and the sale of poisons; and that they be authorised to form sub-committees, if necessary, for the examination of the several subjects, and to consult and co-operate with such individuals and public bodies as may to them seem advisable."

The motion was agreed to; and, at the suggestion of Sir Charles Hastings, Dr. Mackesy's name was added to the Committee.

THE EDINBURGH COLLEGE OF PHYSICIANS.

Dr. Davies (Bath) begged leave to call the attention of the Council to an instance showing great laxity upon the part of the Edinburgh College of Physicians in granting their license. They had admitted as a licentiate of the College a man who had been for a good many years practising homœopathy, and who had been recommended by two homœopaths. Dr. Davies read a letter which he had received from Dr. Christison of Edinburgh, condemnatory of the recent proceedings of the Royal College of Physicians of that city. It seemed to him that the best way to initiate action upon the subject would be to form a small sub-committee to communicate the opinion of the body to the Edinburgh College of Physicians. He thought they were bound to protect themselves from having introduced among them homœopathic practitioners bearing the sanction of the College of Physicians. The obvious consequence of such laxity would be, in Bath, that such an individual might say to his friends, "Oh, yes, the medical men of Bath take no notice of me, or complain of me; but I go to Edinburgh, to the Royal College of Physicians there, and immediately I receive a license from them—to the extent to which it goes, an acknowledgment of the practice of homœopathy." He wished to leave the matter quite in the hands of the Committee. His own idea was, that it would be better to appoint a small sub-committee, which should communicate the opinion of the body—for there could be but one opinion upon such a subject—to the Edinburgh College, and to urge that there should be more care in selecting the men to whom they confided their license. The two men who recommended the person to whom he alluded were both homœopaths, and known as such to every man practising in Bath. Ultimately, Dr. Davies framed his resolution in the following terms:—

"That, in the opinion of the members of this Association, the admission of homœopathists as licentiates by the Edinburgh College of Physicians is highly reprehensible; and that the College is bound to make inquiries as to the character and standing of a man not known to any of its members."

Dr. Noble (Manchester), rather to obtain the privilege of speaking upon it than because it met with his approval, seconded the resolution. He was of opinion that the Edinburgh College of Physicians had given great ground for the adoption of a resolution condemnatory of their recent proceedings; but he thought the Association should rest their objection to the proceedings of the College rather upon some general principle, than upon an isolated case of neglect. He was not quite clear whether the Edinburgh College, or any other licensing body in this kingdom, had the privilege of refusing their diploma to any practitioner because he happened to have espoused particular doctrines. If his recollection of the Medical Act was correct, the proceeding which had been condemned on the part of the Edinburgh College was one concerning which the Medical Act gave them no option.

Dr. Davies. Every individual proposed must have two-thirds of the members in his favour.

Dr. Noble. The ground of condemnation against the College was, that they had opened their portals to any purchaser, whatever his mode of practice, or whatever pretensions he presented to them as a ground of claim; and he had it on the authority of Dr. Laycock, that the number of applicants for and recipients of these licenses very much corresponded; so that it had literally become a sale of licenses to everybody who would apply. The Council of the Edinburgh College, having no local knowledge of candidates, would of course admit homœopaths and every other kind of irregular practitioner. But it was not in this, Dr. Noble contended, that their objection to these proceedings should consist; but to the sale of licenses: and he suggested, therefore, that the resolution should be modified so as to embrace a condemnation of the system upon which the College had committed this error, and not of the error itself, because it might be one of many.

Dr. Davies did not see that they had anything to do with this, but that they had an immense deal to say when the Edinburgh College of Physicians gave their license to a man who, repudiating the regular practice, practised that which was false. What he wished to condemn was the admission of such men. It was a matter entirely for the consideration of the College, in reference to the value of their licenses, whether it was worth their while to admit all kinds of men. He himself thought they were quite wrong in doing so, though he did not think the meeting would be justified in passing a resolution upon that.

Dr. Noble (after stating, amidst some laughter, that, though he seconded the resolution, he should not vote for it) asked Sir Charles Hastings if there was not a clause in the Medical Act prohibiting Colleges of Surgeons and Universities from refusing their diplomas on the ground of the espousal of particular doctrines?

Sir Charles Hastings did not think the Medical Act had anything to do with it, and considered homœopathy the gravamen of the charge in the present case. The Act did not prohibit, but it would not compel, the giving of a license to a homœopath.

Dr. Noble having then withdrawn from the seconding of the resolution, it was seconded by Dr. R. Hall.

Dr. Melson (Birmingham) hoped the question would turn on the general charge, and condemned the conduct of the College.

Mr. Steele (Liverpool) considered the admission of a homœopathist, who was known to be one, was quite of sufficient importance. [Several voices: "*No, no; they did not know.*"] Then, his admission by the Edinburgh College without sufficient inquiry was important enough to occupy their special attention; for in Liverpool they had seen much of the evil which had accrued to the profession, not from the spread or success of homœopathy, but from the unfortunate cooperation and sanction which its practitioners received from medical men. On that ground a protest should be entered against these proceedings of the College, which had strengthened the hands of those who, for some extraordinary reason, seemed determined to sanction, and in that way to recognise, what the

vast majority of the profession had always considered nothing more nor less than quackery, and quackery of the most dangerous and insidious character. He hoped the motion would be carried, whatever steps might afterwards be taken with reference to the general question.

Dr. Lees (Ashton) for fifteen years a member of the Edinburgh College, defended it, stating that all Colleges were pursuing the same course. He adopted Dr. Christison's view, that none should have the title of doctor except from a regular university; and said the real reason of persons obtaining this inferior degree of licentiate was, that they assumed and received the title of doctor by courtesy; and if we refused to call them doctors, they would not apply for these titles. He disapproved of a resolution applying to this one case, for he could not suppose that the College would have admitted a homœopathist if they had known him to be one. [A voice: "*They were bound.*"]

Dr. Melson remarked, that graduates must stand upon the University distinction, and not upon their fellowship with any College. He could not suppose that the Edinburgh College would have admitted the practitioner in question, had they known him to be a homœopath.

Dr. Seaton (Sunbury) could bear testimony to the fact that homœopathy was a disqualification for admission to the Edinburgh College, because, when he was admitted, it was distinctly stated that homœopathy was a heresy which would disqualify any man for admission. He must believe that, in the case referred to, admission had been obtained by misrepresentation. They could not with propriety pass a resolution dictating to any College.

Dr. Routh (London) remarked that, if they were to pass such a resolution as that suggested by Dr. Noble, they would necessarily censure the London College of Physicians; and he could not stand there and hear such a vote passed. With regard to this particular case, it was evidently an oversight; and he had no doubt, when they heard that the new member was a homœopath, they would expel him, if they had the power.

Dr. Noble observed, that what the Edinburgh College proposed to do was to manufacture physicians for money payment, whoever the applicant was, and whatever his style of practice, if he were recommended by two or three other persons.

Dr. Seaton. No, no; certainly not.

Dr. Noble himself knew two or three gentlemen practising as apothecaries; and the limitation was not the practising of pharmacy, but the keeping of an open shop. Persons keeping a private surgery for their own patients were not disqualified. What the London College had done, had been merely to accede to an agitation long promoted in the country, namely, that those British graduates who were already practising as physicians should be incorporated into the London College. Dr. Routh and himself, having joined the London College of Physicians, were merely *incorporated*, not *made* physicians. Dr. Routh passed his medical examination when he took his degree, and so did he (Dr. Noble); but the persons who were now admitted by the Edinburgh College had never passed a medical examination at all; had never even been asked to decline "*Musa*" [*laughter*], and had no higher degree of accomplishment to show than that they practised as apothecaries.

Dr. Routh remarked, that the recent observations of Dr. Noble had removed the impression made by his former remarks.

Dr. Davies said, that nothing could have been more simple than for the Edinburgh College to have applied to half-a-dozen persons. If they were in the dark, it was quite as wrong as if they had their eyes open. They had, therefore, subjected themselves to the strongest censure for admitting homœopathists, with the means of ascertaining that they were such.

Sir John Forbes said, that in former years such a question would have been considered foreign to the objects of the Association. They had so many practical, useful, and important matters in hand, that it was a great pity to waste precious time on such questions.

After some further conversation the motion was put and carried, with five dissentients.

Dr. Noble then moved: "That, in the opinion of this meeting, the conduct of the Edinburgh College of Physicians, in offering their licenses for a money-payment to all applicants having any medical or surgical qualification whatsoever, is reprehensible in the highest degree."

Dr. Eason Wilkinson (Manchester) seconded the motion, which, however, on the recommendation of Sir John Forbes, the mover consented to withdraw.

Sir Charles Hastings observed, that he quite agreed with all that had been said about the great want of caution which the Edinburgh College of Physicians had shown; but he maintained that the resolution was not correct in stating that the College had offered their licenses to any applicants, because they had a veto upon every one.

THE FINANCES OF THE ASSOCIATION.

Dr. Seaton (Sunbury) observed that with regard to the old debt, which still remained a charge upon the Association, it had been hinted that it would probably be necessary to make some call upon the Association for its discharge. Whether or not there was ground for the observation of Sir John Forbes, that there might well be a debt when a Journal was given of considerably more value than the price charged for it, it was pretty certain that they ought to pay their debts, and that sooner or later they would be obliged to do so. What he would propose was, that the postage of the Journal, which amounted in the aggregate to nearly £500 a year, should be charged to each member. Thus, by each paying the small sum of 4s. 4d. a year, they would be enabled not only to wipe off the debt, but add nearly £500 per annum in future to the funds of the Association.

Sir Charles Hastings thought that this was a matter of so much importance that it should first be considered by the Council.

Dr. Wynter thought that, though no one would object to pay a penny a week for the postage, it would be a difficult matter to obtain £1 : 5 : 4 for the Journal instead of £1 : 1 yearly.

Sir Charles Hastings suggested, that the printer might send in a separate bill half-yearly for the amount of postage.

Mr. Bickerton (Liverpool) suggested that the object would be accomplished by each member paying either 2s. 6d. for two years, or 5s. for one year.

Dr. Tuke (London) opposed the proposition of Dr. Seaton, on the ground that it would make the entrance to the society 25 per cent dearer, and be particularly hard upon new members.

It was agreed to refer the matter to the Council to report next day.

INVITATION FROM THE MAYOR OF LIVERPOOL.

The President stated that his Worship the Mayor was desirous of showing every courtesy to the members of the Association, and had expressed a wish to entertain them to dinner at the Town Hall. The arrangements, however, prevented their accepting this invitation, and his worship therefore desired to entertain them at a *déjeûner* at the Town Hall on Friday morning, that being the only time which they had unprovided for. His worship found upon inquiry that he could accommodate about a hundred guests, and cards of invitation would be issued to that number. It was only the want of accommodation that prevented his worship inviting all the members of the Association; and he therefore desired to entertain as many of the strangers as possible. The local executive committee would in consequence be the only residents of the town invited, the other invitations, eighty-five in number, being distributed amongst the strangers according to priority of arrival.

THURSDAY, JULY 28TH.

At half-past eight, the members and their friends breakfasted at the Adelphi Hotel.

At ten o'clock, the members of the newly elected Council met in the small theatre.

The second general meeting of members took place at eleven o'clock, in the large theatre.

COMMITTEE OF COUNCIL.

The following ten members were elected by the Council from their own body, to form, with the President of the Association, the President of the Council, the General Secretary, and one Secretary from each Branch, the Committee of Council for the ensuing year:—E. Bartleet, Esq. (Birmingham); J. S. Bartrum, Esq. (Bath); P. Cartwright, Esq. (Oswestry); P. C. De la Garde, Esq. (Exeter); W. D. Husband, Esq. (York); Ellis Jones, Esq. (Liverpool); B. W. Richardson, M.D. (London); G. Southam, Esq. (Manchester); J. H. Webster, M.D. (Northampton); and T. W. Williams, Esq. (Birmingham).

THE DEBT QUESTION.

The Secretary read the minutes of the Council, which included a recommendation, "That for the liquidation of the debt of the Association a *voluntary* subscription by the members be instituted for the next two years, at the rate of five shillings per annum."

Dr. Martland (Blackburn) moved, and Mr. Anderton (Wavertree) seconded—

"That the recommendation of the Council respecting the voluntary contribution of five shillings for two years be adopted."

Dr. Edward Smith (London) observed that the Council were by no means unanimous in the recommendation; and his own opinion was, that without any effort of this kind, they were in a fair way of extinguishing the debt, which year by year was being reduced.

Dr. Seaton repeated his observations of the previous evening, and remarked in addition, that with other class journals, the postage was made an extra charge to subscribers. The very proposition of a voluntary subscription implied that the whole of the members would not join; and he submitted that it was a monstrous thing for those who chose to subscribe, to be called upon to pay the debts of those who did not. He moved as an amendment—

"That for one year the postage of the Journal be not paid by the Association, but that each member be called upon to pay his own postage."

Dr. Hughes (Mold) seconded the resolution.

Mr. Flower (Chilcompton) urged that the voluntary system should be acted upon, for at least a year.

Dr. Henry thought that a forced contribution, like that implied in the amendment, would be attended with disastrous consequences to the Association. If it was the opinion of the meeting that a contribution should be raised for discharging the debt, it must be distinctly understood that the payment would be entirely voluntary—there must not be the least appearance of compulsion. He believed, however, that the Association would be quite out of debt if members would pay their subscriptions regularly. The report of the Council gave £1790 as the sum received in 1858, up to the end of the year, from the subscriptions of members, which sum was equal to the subscriptions of about 1705 members; therefore, as at that time there were nearly 2200 members on the list, it was evident that four or five hundred members had not paid their subscriptions for 1858, at the close of that year. [*Hear, hear.*] He expressed his conviction that the present members of the Association would help greatly to mend matters, if each one would bring in an additional member. [*Hear, hear.*] Much of the difficulty in the way of improving the Journal—an object which many members desired—would be removed if the number of members were merely raised to 3000; and with 4000 members, he could state, from careful calculation founded on accurate data, that the size of the Journal could be permanently increased, contributors could be paid more liberally, and a large sum would remain, applicable to the furtherance of any object to which the Association might resolve to apply it.

Sir John Forbes urged that the payment of the postage by the members would place a surplus at the disposal of the Association, and enable it do something more for medicine than merely giving the members the Journal.

Mr. Bartrum (Bath) said that the change proposed in the amendment was a constitutional one, which could not be made without notice, which had not been given for this meeting, and five shillings a-year was such a serious thing to many of their members, that the addition of it to the subscriptions would be objected to by 25 per cent. of the total number.

In reply to Mr. Steele,

Sir Charles Hastings stated that, provided every member paid his subscription within the year, the amount received would be quite equal to the expenses.

During the subsequent discussion, it was stated that Mr. Terry had employed himself in initiating a voluntary subscription, and had already received considerable sums.

Mr. Ellis Jones (Liverpool) said that surely amongst so many members a debt so small could easily be liquidated. He recommended that each should subscribe voluntarily according to his means, and said that, for himself, he should be happy to give ten guineas. [*Applause.*]

Dr. Webster (Northampton) said that the Bath and Bristol Branch had voted £15; and that other sums were also promised.

After some further conversation, the amendment was put and lost, only a very few hands being held up in its favour. The meeting then divided upon the recommendation of the Council in favour of a voluntary subscription, which was carried by 54 to 35. A considerable number of members declined to vote.

THE NEXT ANNUAL MEETING: THE PRESIDENT ELECT.

Dr. Edward Smith (London) said that the Association had received an invitation to hold their next meeting at Torquay. He moved, therefore,—

"That the next meeting of the Association be at Torquay, and that Dr. Radclyffe Hall be the President-Elect."

Dr. Davies (Bath) seconded the resolution, believing that the members would be much interested at Torquay. From what they all knew of Dr. Hall, he was sure he would make an admirable President of the Association. [*Applause.*] The motion was unanimously carried.

Dr. Evanson (Torquay) expressed his sincere satisfaction at the determination of the Association to meet in Torquay, and said that he and his professional brethren there would do all in their power to make the visit agreeable and useful. It would be a matter of great gratification to the profession at Torquay, that Dr. Radclyffe Hall was appointed President-Elect; and he was happy to think it would also prove so to the members of the Association generally. [*Applause.*]

THE ADDRESS IN MEDICINE.

Dr. E. Waters (Chester), President of the Lancashire and Cheshire Branch, delivered the Address in Medicine.

Dr. Davies (Bath) moved, and Mr. Griffith (Wrexham) seconded—

"That the cordial thanks of the meeting be given to Dr. Waters for his very able and interesting address, and that he be requested to allow it to published in the Journal."

The motion was carried by acclamation. The meeting then adjourned for luncheon, which was provided, by the liberality of the Reception Committee, in an adjoining building; and reassembled at two P.M.

TWENTY-FOURTH ANNUAL REPORT OF THE MEDICAL BENEVOLENT FUND.

Mr. John Churchill (London) read he following Report:—

"The Committee have the pleasure of informing the subscribers that the progress of the Fund during the past year has been very satisfactory.

"In the first place, they are happy to announce that the ordinary subscriptions have exceeded the amount received in the previous (a festival) year; while, in the form of an extraordinary donation, a legacy of £3000 has been left to the Fund.

"In the second place, they have the gratification of stating that they have been able to afford assistance to a larger number of cases than during any previous year since the foundation of the Fund, the sum of £1,067 having been distributed to ninety-two applicants for temporary aid, while the sum of £255 : 10 was given to sixteen annuitants.

"The Committee have additional pleasure in contemplating the success of the Medical Benevolent Fund, because this success is not dependent upon measures adopted to keep it constantly before public notice, but manifestly upon that good feeling and sympathy earned by the constant endeavours of its managers to accomplish as large an amount of benefit, with as little expense, trouble, and publicity to the recipients, and as small an outlay to the Fund, as the Committee have found practicable.

"In illustration of the mode in which the principles of the Society, viz., economy of management and bestowal of aid by a Committee, instead of by the votes of the whole body of the subscribers, are appreciated, the Committee beg to quote the following words from the letter of a medical man to the Treasurer, in which a donation of £20 was inclosed: 'The small working expenses of your Society, and its non-elective system, were the chief reasons which induced my patient to contribute to the Medical Benevolent Fund.'

"The Committee cannot conceal from themselves, and they are desirous of impressing upon the subscribers, the fact that, besides conferring a great boon on the recipients of their bounty, by not causing them any expenditure of time and money, and by not submitting them to the indignity of parading their misfortunes before the world, they are upholding an important principle, which they sincerely trust will take root and so extend as to make assistance more readily accessible to the unobtrusive poor, who have neither heart nor means to make their sorrows known far and wide,—a principle the success of which will indeed render charity more worthy of its name.

"Bearing on this subject, the following case, which occurred during the past year, may be cited. Two orphan daughters of a medical man struggled hard during many years to obtain a livelihood; with advancing years, infirmities crept upon them;

one became blind, the other deaf and lame from rheumatism; while, to add to their troubles, the bank failed in which the greater part of their small savings had been deposited. In the extremity of their distress, these poor worthy ladies applied to the Fund through a brother resident in London, who, from circumstances, was wholly unable to assist his sisters. The Committee placed the ladies on the list of candidates for annuities, and voted them £20, which the brother took down to their home, a few miles from London. After expressions of gratitude to the Fund, the sisters said, 'Before we use any part of this money, the first thing is to pay to you out of it all the expenses which have been entailed; for we full well know how much money it costs to carry success in London charities.' The brother, smiling, said, 'My bill is not a very large one; it amounts to twopence, for two letters to the Treasurer.'

"It will be remembered that in their last Report the Committee suggested to medical men that they should bring the Fund under the notice of their friends and patients. They are happy to say that for the munificent legacy of £3,000 they are not only indebted to a medical man, the late Mr. Hind, but that the Fund was brought under his notice and recommended to him by another medical man, his friend Mr. Walker, of Budleigh Salterton, to whom the Committee beg to express their very sincere thanks.

"The Committee also beg to express their thanks to the numerous Local Secretaries, and to several lady collectors, to whose activity the success of the Fund is to be greatly attributed.

"In conclusion, the Committee ask for a continuation of the liberal aid which they have hitherto received. And when they recall to mind the numerous cases of bitter distress occasioned by want, to which, during the past year, they have been able to afford support and comfort, they feel that they can appeal with confidence to the liberality of the members of the medical profession; so that their distressed brethren, their widows and orphans, may continue to look to the Medical Benevolent Fund for succour, and that they will not look in vain.

"Subscribers will thus earn the enduring satisfaction of feeling that through their instrumentality many an hour of trial and calamity, the inevitable lot of every human being, is softened by the generous and active, yet considerate sympathy, due from man to his fellow-man, a sympathy which 'equally blesseth him that gives and him that takes'.

"James Clark, *President*."

To this Report was appended a financial statement, of which an abstract is subjoined.

Donation Fund.

Dr. RECEIVED.	£	s.	d.
Balance in hand, July 1st, 1858	508	13	6
Donations and Subscriptions in 1858-59	1039	3	6
	1547	17	0
Cr. PAID.			
For Grants	1067	0	0
To Annuity Fund, being one-third of the Donations	128	5	0
Salaries and Sundries	280	5	9
	1475	10	9
Balance at Banker's	72	6	3
	1547	17	0

Annuity Fund.

Dr. RECEIVED.	£	s.	d.
Balance in hand, July 1st, 1858	72	0	0
Dividend on £2600 Bank Stock	221	0	0
One-third of the Donations received in 1858-9	128	5	0
	421	5	0
Cr. PAID.			
Paid in Annuities	265	10	0
Balance at Banker's	155	15	0
	421	5	0

Mr. Churchill observed, that the Benevolent Society was distinguished as one of the gems of the British Medical Association. For several years after its formation, its income remained almost stationary, until Providence directed them to that highly esteemed member of their profession, Mr. Newnham, who by his philanthropic exertions added wonderfully to their funds, their income, and their success; and now he (Mr. Churchill) could say that no well authenticated case ever came before them which did not receive their assistance, their efforts being limited merely by the amount of funds in hand. [*Cheers.*] When increasing years whispered to their friend Mr. Newnham that he must retire from such active duties, his mantle was readily taken up by Mr. Toynbee, who had contributed the munificent sum of five hundred guineas to the Fund. [*Applause.*] The Committee, at one of their recent meetings, expressed a hope that they would receive a larger amount of assistance from the members of the Association. In Lancashire, for instance, there were 257 subscribing members to the Association, whereas only thirty were subscribers to the Benevolent Fund. They received subscriptions commencing at five shillings; and if the members of the Association could be influenced to subscribe an average of only five shillings per annum, it would afford an additional £500 to the income of the Committee.

Sir John Forbes moved—

"That the report now read be received and adopted."

He eulogised the services of Mr. Churchill, and mentioned that a large sum was annually saved to the Committee by Mr. Churchill's granting them gratuitous apartments and other conveniences for their meetings. While cordially endorsing the remarks of Mr. Churchill with regard to Mr. Newnham, Sir John could not help calling attention to the presence of Mr. Propert, who had rendered such eminent services in the establishment and promotion of the other great medical fund—the Medical Benevolent College, which was designed for the permanent relief of decayed members of the profession and their families, and for the education of the children of those who could not afford to educate them themselves. Sir John assured the meeting that the two institutions, so far from being opponents, were one the complement of the other; and that subscribers could with great advantage support both.

Mr. Propert (London) seconded the resolution, paying a high tribute to the benevolence and zeal of Mr. Newnham, and observing that the Association could have no idea of the amount of good the Benevolent Fund was quietly and unostentatiously effecting. [*Applause.*]

Mr. Newnham (who was received with loud applause) trusted that he might yet be spared to work, and be worn out in the service of benevolence. [*Cheers.*] After stating that there were 15,000 medical men in the profession throughout the kingdom, and that 1005 of these in fifteen counties were subscribers to the Association, Mr. Newnham read the following table, to show how comparatively small a number of these were subscribers to the Benevolent Fund:—

	Members of the Association.		Subscribers to the Fund.
Bedfordshire	20	....	5
Berkshire	31	....	20
Buckinghamshire	12	....	3
Cheshire	47	....	7
Cornwall	18	....	2
Devonshire	89	....	9
Gloucestershire	21	....	18
Herefordshire	21	....	2
Lancashire	257	....	30
Monmouth	2	....	0
Shropshire	63	....	17
Staffordshire	51	....	2
Worcestershire	54	....	9
Yorkshire	157	....	14

It would thus be seen, that while there were 1005 subscribers to the British Medical Association, there were only 174 to the Benevolent Fund. This is a state of things which ought not to exist. In a profession, which included 15,000 members, they ought to have more than a thousand subscribers to the Benevolent Fund. Mr. Newnham then read a statement, which showed the character, variety, and urgency of the cases which came before the Committee. He urged the members to contribute at least 5*s.* each; but said that if everyone contributed a guinea, he would find himself richer at the end of the year, besides having the unspeakable satisfaction of having done good. He left the case in their hands, confessing that he was an old beggar; but declaring that, as a beggar, he should not be content unless they gave him alms. [*Applause.*]

Sir John Forbes remarked that Mr. Newnham was not the only beggar in the room. There was a friend near him (Mr. Propert) upon whose tomb the best epitaph that could be

placed was—"Here lies the best beggar in England." [*Laughter and applause.*]

The Chairman then put the resolution, which was carried unanimously.

CASES AND COMMUNICATIONS.

The following papers were read:—

On a Peculiar Form of Sclerotitis. By R. Hibbert Taylor, M.D.

Oxygen as a Therapeutic Agent. By S. B. Birch, M.D.

Treatment of Tonsillitis. By W. W. Morris, Esq.

Internal Administration of Medicines in the Form of Vapour. By J. B. Nevins, M.D.

Dr. Evanson remarked that he had also used this mode of treatment effectually, applying turmeric in cases of catarrh; and he produced some toothpick-shaped camphor quills or cigarettes, to be simply held in the mouth, which had been found good substitutes for respirators, and were declared by many members of Parliament to be an excellent antidote to the vapour of the Thames. [*Laughter.*]

Case of Neuroma. By T. R. Mitchell, M.D.

Cynanche Submaxillaris. By R. T. Evanson, M.D.

In addition to the liability of the glands in the neck to become enlarged or inflamed, from sympathy, when disease exists within the mouth, children are subject to a painful swelling of the submaxillary glands, occurring in the spring or winter, and spreading in the form of an epidemic or even by contagion. But this is more a troublesome than serious complaint, not proving fatal, but occasionally leaving an enlargement of the gland. The surrounding cellular tissue rather than the glands seems to be the seat of the inflammation. The younger children suffer most in this complaint. The fever, though slight during the day, runs high at night, but after the fifth day, the swelling in the gland generally begins to subside, and with it the fever disappears, going off with purging or sweating which seems critical. Saline aperients, followed by tonics internally, with emollient applications to the tumour, we have found the best mode of treatment; but would recommend an early incision, when matter has distinctly formed, contrary to the opinion of Dr. Albers, who has well described this disease, as seen at Bonn. It occurred at the same time with cynanche parotidœa, but is a very different disease.

Mr. Griffith (Wrexham) made an extempore communication upon the "Use of Tincture of Ergot in Obstetric Cases." In cases where, from the use of chloroform, the labour pains have been suspended, the ergot brought them on immediately, and in this way he had used chloroform and ergot alternately. The cases which he wished to place on record were, the different forms of uterine hæmorrhage, and uterine inertia after delivery. Whenever a case of inertness occurred where the placenta was not thrown off, and where violent and dangerous attacks of hæmorrhage were apprehended, he administered one drachm of the tincture of ergot, which would operate sometimes in a shorter period than from fifteen to sixteen minutes, but seldom later than twenty-two minutes. In cases where he feared the occurrence of hæmorrhage, he had given it instantly, and the placenta had been thrown off, contraction of the uterus had taken place, and security to the patient restored. Where there were any symptoms of irregular action in the uterus, it seemed at once to excite the normal contraction; and in cases where hæmorrhage had taken place, he was seldom disappointed in its effects. Where the hæmorrhage did continue, so as to endanger the life of the patient, oil of turpentine, in not less a quantity than an ounce or an ounce and a half, was a remedy of the greatest value. He had used the oil of turpentine in half a dozen cases, and in all of them it seemed instantly to arrest the progress. If the patient vomited, this in itself was a good sign; and after a little time, if a second dose of turpentine were administered, it would be generally retained: the hæmorrhage ceased, the capillary circulation was restored and pulsation, colour and vitality returned. Mr. Griffith recommended all practitioners to supply themselves with the tincture of ergot before attending cases of labour, for no man could foresee the contingencies of such cases. At the end of forty-three years, chiefly employed in this branch of practice, he confessed that he should go to-morrow to attend the simplest case with all the anxiety which he felt when he was a young man.

Mr. Propert (London) felt exceedingly obliged to Mr. Griffith, in whom he recognised a countryman, and whom in future he should be proud to call his friend. He quite entered into Mr. Griffith's feelings as to the anxiety which he felt in attending such cases, but was desirous of asking him a few questions as to the strength of the tincture, as to its application, and also as to the principles which guide him in administering the oil of turpentine.

Mr. Griffith explained, that for twenty-five years he had used the saturated form of the tincture, prepared by breaking the best specimens of ergot into small pieces, and covering them with equal parts of spirits, distilled water, and alcohol. At the end of a fortnight it was ready for use. With regard to the strength of the tincture, he referred Mr. Propert to Dr. Ramsbotham, and to a very interesting paper by Dr. Llewelyn. With regard to the action of ergot there were two conflicting opinions: one maintaining that its activity consisted in its resinous constituent; the other, in the vegetable extract. It seemed very difficult to reconcile two such opposite opinions; but no one positively declared that the resinous part was poisonous. The preparation made in the way described above, embodied the advantages of both the decoction and fusion, and preserved both the vegetable and the resinous properties. One drachm was a dose; and if in from sixteen minutes to twenty-two it did not take effect, it was time to repeat it. He never had occasion to use it in any one case more than three times, and he never gave a patient three drachms. With regard to the time and the circumstances for the administration of oil of turpentine, Mr. Griffiths mentioned the case of a lady whose life had been imperilled on three or four occasions from violent hæmorrhage. He had given her two doses of ergot, but still the hæmorrhage went on, and was fast taking away the sources of life, when he gave her a tablespoonful of the oil of turpentine in milk. She then vomited; and as soon as he thought the stomach would retain it, he administered six drachms more, and the patient rapidly recovered.

Mr. Parker (of Kirkdale) was able to confirm in some degree the remarks of Mr. Griffiths. During the last eight or ten years he had administered the turpentine in three or four cases, and in all he had been successful. In fact, he always took a supply with him when he had any reason to apprehend hæmorrhage. He also had experienced great advantage in cases of hæmorrhage by the injection of iced-water, or spirits and water.

Dr. Evanson (Torquay), mentioned that Dr. Brennan of Dublin had employed turpentine in cases of puerperal fever twenty or thirty years ago, and that he always travelled about with a bottle in his pocket.

Mr. Morris (Gildersome) had the greatest confidence in the decoction of ergot; he generally put about half a teaspoonful of the powder into boiling tea, and allowed it to remain for a few minutes. He had also used, with great benefit, an aqueous solution, which he might call liquor ergotæ aquosus. Ergot was also admissible in cases where the uterus has a sluggish action.

SOIRÉE AT THE ROYAL INSTITUTION.

In the evening, the members took part in a conversazione and soirée, held at the Royal Institution in Colquitt Street. The extensive and interesting museum of the Institution (comprising also that of the Liverpool Chemists' Association) was thrown open, and brilliantly lighted. There was a numerous attendance of members and resident gentlemen connected with the Institution, who spent several hours very agreeably in conversation, examining the varied interesting objects in the museum, as well as inspecting a variety of splendid stereoscopes and microscopes lent by Mr. Foard, Mr. Chadburn, Messrs. Clay and Abraham, and other gentlemen. Several magnificent illustrated works were placed on the tables of the different rooms, as well as some exquisite specimens of "nature printing" from the Imperial Printing Establishment at Vienna. In the course of the evening, refreshments were served by Mr. Morrish in the Gallery of Art connected with the Royal Institution (a separate building on the other side of Colquitt Street); and while discussing ices, coffee, etc., the company enjoyed a rare artistic treat in inspecting the varied pictorial treasures adorning the walls, including some rare and admirable specimens of the oldest Italian masters. The company afterwards repaired to the theatre of the Institution, where Dr. Edwards of Liverpool exhibited a variety of curious and novel experiments in electrical science, one of which attracted especial admiration, being the production of a stream of coloured light, the phenomena of which are generally supposed to be identical with those of the *Aurora Borealis*. He also demonstrated the different appearances produced by the electric current in passing through different media, especially rarified gases. These interesting exhibitions of natural science, which were most lucidly explained by Dr. Edwards, brought the pleasures of the evening to a most agreeable termination about 11 o'clock.

FRIDAY, JULY 29TH.

BREAKFAST AT THE TOWN HALL.

In the morning, about one hundred members breakfasted with his worship, the Mayor, at the Town Hall. The Mayor was supported by Sir John Forbes and Sir C. Hastings. His worship proposed "Prosperity to the British Medical Association, and the health of Dr. Vose." The president acknowledged the toast, and proposed the health of the Mayor, stating the anxiety he had evinced to offer his hospitality to the members of the Association. The Mayor, in acknowledging the toast, expressed the great pleasure he felt in receiving the members, and assured them of the interest he took in the welfare of the Society. He then proposed the health of his guests, and coupled with the toast the name of Sir C. Hastings; who, in responding, expressed, on behalf of the Association and himself, most cordial thanks for the great kindness, courtesy, and elegant entertainment which his worship had provided, and which reminded him of the cordial reception given to the Association at Liverpool twenty years ago, when the Mayor for that year was able to place the Town Hall at their disposal. This concluded the toasts. All the rooms of the Town Hall were thrown open, as was also the staircase of the dome; and many members were seen surveying the town from the top of the Hall.

At eleven in the forenoon the last general meeting took place at the Medical Institution, Dr. Vose presiding.

LETTER FROM DR. W. P. ALISON.

A letter was read from the late president, Dr. Alison, of Edinburgh, who said that although he had again made a tolerably good recovery, yet, having felt it necessary, in order to avoid dangerous excitement, to withdraw, at least for a time, from all forms of practice, he was obliged to renounce the pleasure of attending this meeting. He did not, however, renounce the idea of successfully terminating the arranging and abridging of some portions of his lectures, such as he would fain hope would be of use to the world.

STAMP DUTY ON DIPLOMAS.

A letter was also read from Dr. Bell, of Goole, in reference to a resolution as to stamp duties on diplomas; which Sir Charles Hastings said had been rendered unnecessary, because an intimation had been received from the Home Office that the Government intended to remit the stamp duty on medical licences. [*Loud applause.*]

THE ADDRESS IN PHYSIOLOGY

Was read by A. T. H. Waters, Esq. (Liverpool).

Dr. R. Hall, in moving a vote of thanks to Mr. Waters, said that those only who were most conversant with the vast extent of the current literature and physiology of the nervous system, would be able fully to appreciate the amount of labour which must have gone before such a clear, concise, and yet comprehensive *resumé*, as that to which they had listened with so much pleasure. Were it a matter open to discussion upon that occasion, they could not listen to such an address without feeling that it opened up at least as many new difficulties for their investigation as it tended to settle old ones. It would be improper to occupy the time of the meeting by hinting at any of these; but, by way of giving a typical one, he might mention that if Brown-Séquard's experiments, which were only doubtful because too beautiful in their accuracy, tended to prove that the cross-action of sensation extended throughout the whole length of the spinal cord, and yet any one bit of grey matter was enabled to carry on sensation, a logical difficulty started up. If any bit of grey matter could take sensation, consciousness must be there; and we were handed back to the old idea that we not only felt *with* our finger ends, but *at* them, and *in* them; and that mind travelled down to them. But if mind were a diffusive force, what became of the limitation which cross-action was so essentially dependent upon, and so completely tended to prove? There was a difficulty here, not a practical, but a mere physiological one, which was not yet settled. He defied any man, accustomed to microscopical investigation of the grey matter, to find one bit of it in which there were not white nerve-tubes. The grey matter itself had nerve-cells, with a slight quantity of white nerve-tubes interspersed everywhere: therefore the question was not settled by saying that the grey matter conducted sensation. Passing this by, however, as a subject for future investigation, Dr. Hall would merely say that it had escaped Mr. Waters's recollection that this was not the first occasion upon which an address upon the physiology of the nervous system had been given to the Association. Mr. Ransome, of Manchester, and Dr. Charles Henry were appointed a physiological committee to report upon the subject of neuro-physiology; and the latter, to whom Mr. Ransome entirely left the matter, had communicated a most excellent address upon the subject, which was to be found in the *Transactions* of the Association. It was not, however, a matter of regret that this should have escaped Mr. Waters's attention, for otherwise he might have been prevented giving them that eloquent, clear, and complete summary of the subject, to which they had listened with so much gratification. [*Loud applause.*] He moved—

"That the best thanks of the meeting be offered to Mr. Waters for his excellent address, and that he be requested to allow it to be published."

Dr. Markham (London), in seconding the resolution, paid a tribute to the genius of Claude Bernard and Brown-Séquard, whose discoveries, he believed, would be most valuable and useful to the pathologist; for, after all, it was by means of pathology that they would be enabled to acquire a thorough knowledge of the various diseases, and build up a true system of medical science. Dr. Markham eulogised the skill and accuracy with which Mr. Waters had handled the subject.

Mr. Waters, in responding, said that the existence of white fibres in the central portion of the spinal cord had not escaped his attention, and that his paper included a reference to the subject; but he had omitted it for want of time. He quite agreed with Dr. Markham with regard to the great accuracy of Brown-Séquard's experiments, many of which he had had the honour to witness.

PAPERS AND CASES.

The following papers were then read:—

Retroversion of the Gravid Uterus. By T. Skinner, M.D.

Case of Cerebral or Subjective Vision. By W. Camps, M.D.

VOTES OF THANKS.

The following motions were then unanimously carried:—

Dr. Routh (London) moved, and Mr. Coleman (Wolverhampton) seconded—

"That the thanks of the Association be given to those gentlemen who have contributed papers and cases at this meeting."

Mr. Propert (London) moved, and Mr. Morris (Gildersome) seconded—

"That the cordial thanks of this meeting be given to the Council of the Medical Institution of Liverpool for the courteous manner in which they have placed it at the disposal of the Association."

Dr. Evanson (Torquay) moved, and Mr. Newnham (Tunbridge Wells) seconded—

"That the cordial thanks of this meeting be given to Dr. Vose, the President, for the very able manner in which he has conducted the meetings of the Association."

EXCURSION ON THE MERSEY.

After the business of the meeting was concluded, a number of the members made an excursion on the river in the *Jackall* steamer, which had been placed at the disposal of the Association by the liberality of Mr. McIver, a Liverpool merchant.

THE DINNER.

The Dinner took place at the Adelphi Hotel, at 6 P.M. Nearly a hundred members were present. The President, Dr. Vose, occupied the chair, being supported by the Bishop of Chester, Sir C. Hastings, W. Newnham, Esq., Colonel Smyth, R. Hutchinson, Esq., etc. Dr. Radclyffe Hall and Mr. Ellis Jones officiated as Vice-Chairmen.

Grace having been said after dinner by the Lord Bishop of Chester—

The Chairman proposed "Her Majesty the Queen, Duchess of Lancaster"; and "The Prince Consort, the Prince of Wales, and the other members of the Royal Family".

Both toasts were duly honoured.

The Chairman. We are this day honoured by the presence of a right reverend prelate, of whose early academical distinction, and subsequent eminence as the head of a house in the University of Cambridge, I need not remind you. Nor need I detain you by dwelling upon the success with which he dedicates what remains to him of leisure after the performance of his sacred functions and his senatorial duties in promoting the interests of literature and science. [*Hear, hear.*] We of Liverpool well remember how, when the festival took place in commemoration of the birth of Roscoe, our bishop was there; and when the banquet was given to Mr. Brown, the founder of our Free Library, our bishop was there also. [*Cheers.*] And

we all remember the delight and the instruction which we derived from listening to his speeches upon both these occasions. Without further comment, I give you "The Lord Bishop of Chester, and the Clergy of his Disease". [*Loud applause.*]

The Bishop of Chester (who was received on rising with a burst of applause) said: Mr. President and gentlemen, I assure you I hardly know how to express the manner in which I feel the kindness of your welcome. I am very frequently a visitor to Liverpool, and am greeted at the meetings of my friends with tokens of their kindness and good will; but among so many gentlemen as I find assembled here, and to whom I must be comparatively a stranger, I must say that I was not prepared for the kindness and heartiness of the welcome you have given me, and I thank you from my heart for it. I ascribe it, indeed, in great measure, to the kindness of the manner in which your President spoke of me. But as the clergy of the diocese have been coupled with my name, let me first say I thank you for them; and that I not only do that, but heartily join myself in any compliment, or any mark of respect which any assemblage of gentlemen can ever pay to the clergy of my diocese. [*Applause.*] I do not think there is a set of public men in the kingdom working more zealously, more laboriously, more truly, and, on the whole, with less of earthly reward, than the clergy of this diocese. Do not be alarmed, and think that I am going to make such a speech as your President recollects I made on some other occasions. [*Laughter.*] But let me still say a word. In the first place, I wish to thank you for the kindness you showed me in inviting me to your dinner. The first intimation I had of it was made to me, a good many weeks ago, at the request of the local committee here, through my friend Dr. Waters of Chester; and I hope it will not be taken amiss if I say from my heart that it was an additional gratification to me that the message came to me through one for whom I personally entertain so sincere and high a regard [*hear, hear*]—not merely on account of his professional eminence—not even on account of the kindness he has ever shown to the members of my own family when any of us have, happily only for slight matters, needed his medical help—not merely for that, but for the kindness and the benevolence which, in the exercise of his profession, he shows in Chester (as I myself can testify from my own knowledge) to many and many poor families from whom he can look for no return except gratitude and thanks. [*Applause.*] May I say that, in accepting your invitation, I wish not only to show my sense of the honour you have done me, but also, if I may add a single word without wearying you, to show what feelings of sympathy I have for your noble profession? There is at least one great feature of resemblance between your profession and that to which I myself belong—they are both directed to the alleviation of the sufferings and the sorrows of mankind. [*Applause.*] It is your happy privilege more than ours to see the fruits of your success in a visible and palpable and unmistakable way, in which the minister of religion is not permitted generally to see his. At your first entrance into a house, you find all sadness—silence—gloom—apprehension. When, after the successful exercise of your skill, you leave it, there is sunshine again in the dwelling—every eye brightened with joy—every voice full of gratitude and thanks; and I do not know, I cannot conceive, what nobler reward a man of humanity can desire—speaking of earthly rewards—than to have been the instrument of such a change as that from sorrow to joy. [*Applause.*] But, my friends, the minister of religion may be, under God, the blessed instrument of a change as real, as great; but then it is a change which does not lie upon the surface. It is rooted in the inner man; it is known only in its reality and extent to the individual who feels the change within himself, and to the God who sees in secret and sees the heart. The minister does not see his own success. Our ministry is in that respect a work not of sight, but of faith. Yet it is a glorious ministry. It keeps pace with your own through the whole course of human life in mitigating human sufferings and sorrows. Yet, let me say, there may be one advantage on the side of our profession. At the close of life, when your skill and your humanity can avail you no more, our office over them does not lose its power. Nay, there even more than ever it asserts and vindicates its power, and cheers even the bed of death with hopes which reach beyond the grave. I hope from my heart that two professions linked together as ours are for objects so congenial, so noble, so humane, I might almost say so divine, will always be united also by sentiments of personal friendship and of mutual kindness and good-will between the members of them both. [*Cheers.*] On that account, I thank you for the gratification it has been to me to join you here this day, and to make some little excuse for having, I fear, said more than an after dinner conversation could warrant. [*Loud applause.*]

The Chairman, in giving the toast of "The Army and Navy," said it was not for a mere civilian like himself to dilate upon the historical services of the noble profession, which chronicled among their achievements such victories as those of Trafalgar and Waterloo, and which were so laboriously devoted to the defence of England and her dependencies from the equator to the pole. [*Cheers.*] But it was not merely as an Englishman, that upon such an occasion as the present he ventured to allude to the army and navy. As a member of the medical profession, he felt an *esprit de corps* as it were in connexion with those services. The members of the medical profession could not forget that some of the most illustrious physicians and surgeons who ever adorned the annals of their science had been, to use an ordinary phrase, bred in the army and navy. [*Cheers.*] He might venture to recapitulate two or three names which could scarcely be too often mentioned. They all knew that Sir Hans Sloane, who succeeded Sir Isaac Newton, as President of the Royal Society, and who was the founder of the British Museum, was physician general to the army. [*Hear, hear*] They all knew that Sir John Pringle, also President of the Royal Society, was a physician in the army. None of them had ever forgotten that John Hunter, whose name he need only mention, was an army surgeon. [*Cheers.*] They all knew that Sir Gilbert Blane was physician-general in the navy; that the late Mr. Guthrie was an army surgeon; and that Sir Philip Crampton was surgeon-general to the forces in Ireland. [*Hear, hear.*] He therefore gave them with all his heart, the "Army and Navy," and joined with the toast the names of Colonel Smythe and Dr. Wood. [*Cheers.*]

Colonel Smythe said, he responded with pleasure to the toast which had been so enthusiastically received by the meeting. He was sure the British army would always meet with such a reception among Englishmen, as they had just given it. He was perfectly satisfied that the British army would always prove itself an efficient body, wherever it might be ordered to go for the service of the country. [*Cheers.*]

Dr. Wood responded on behalf of the navy, whose history he observed was connected with the growth of the extensive colonial empire of England. It had lately been greatly increased, not only in extent, but in efficiency, and would not be found wanting whenever the country called upon it. [*Cheers.*] Among the great improvements effected in regard to it, was that of the condition of the medical profession, which was placed in a better position as regarded rank and emoluments. The profession was much indebted to Sir John Pakington for these improvements. [*Cheers.*] No one present was more convinced than he (Dr. Wood) was of the great good the medical association had done and would still do by extending the bounds of medical science, and creating harmony and unanimity among the members of the profession. [*Hear, hear.*]

The Bishop of Chester: I have the great privilege of rising to do what I am sure every gentleman in the room will envy me, when he hears the toast I have to propose; and which happily does not need you to dread any long speech from me, for nothing can add to the announcement of the toast itself. It is the health of the "President of the Association." [*Cheers.*] It is a very great gratification to me to propose his health, because I know that my friend is in the foremost rank of his profession, in this great town of Liverpool. [*Hear, hear.*] I know that he is in the foremost rank of men of integrity and honour; and I know—I should know it if it were only from the genial, hearty kindness with which he welcomed me to-day, and made me feel at home the moment I was at his side. I am sure that his genial and social qualities of heart, as much as his professional eminence, have endeared him to the members of his profession, and to the people of Liverpool. [*Cheers.*] A sufficient proof of the high estimation in which he is held, is found in the fact of his holding the office he does, as your president upon this occasion. It is a noble thing to be placed in a high position, as in England we see men placed, by the free choice and spontaneous demonstration of the respect and confidence which the election to such an office implies. [*Hear, hear.*] I do not know anything of which a gentleman in England ought to be more proud, than to feel himself in such a position as your president holds among you at present. I only wish upon one account that this toast had fallen to some member of your profession to propose, because he might have done what I cannot do; he might have spoken of points of detail to show the manner in which the president conducted these meetings, to the services he rendered, and the kindness he showed, I am unable to do this in detail; but I have a con-

fidence that every one of you feel it all so well in your hearts, and know it so thoroughly, as not to need any speaker to detail it. I hope, therefore, that that defect, unavoidable in me, is more than supplied by what you all feel and know yourselves of your president, in your own hearts, feelings, and affections. [*Applause.*] I beg, therefore, to propose, with my most hearty thanks for his friendly and kind welcome, and with all the respect I have ever been led to entertain for him—for often as I have heard his name mentioned in Liverpool, where I so frequently am, I never heard it mentioned but with honour and respect—the health of your President, and to ask you to drink it with all the honours you could show upon such an occasion. [*Loud applause.*]

The Chairman said he was so entirely overwhelmed by the terms in which the right reverend prelate had spoken of him, that he thought in attempting a reply the better part of valour would be discretion. The less he said the better, fearing that he might fall in their estimation after he had been placed by the Bishop in so high a position. [*Laughter.*] He had simply to say that he thanked his Lordship for the extraordinarily kind manner in which he had proposed his health, and also the meeting for the very enthusiastic and really quite overwhelming manner in which they had received it. [*Loud applause.*]

The Chairman said the next toast he had to propose was the health of the gentleman who presided over the councils of the busiest port in the world. [*Hear, hear.*] They had all heard of Tyre and Sidon, Carthage, Alexandria, and Venice, as ports; but there was no business transacted in those ports in comparison with the business of the port of Liverpool. [*Hear, hear, and laughter.*] They would all readily see that the gentleman he had in view was "the Mayor of Liverpool." [*Cheers.*] He believed he might venture to say that he was deputed by his worship the Mayor of Liverpool to announce his great regret that he could not appear among them, as he had anticipated, that evening. They had all seen how kindly and hospitably his worship had gone through the duties of entertainment in the morning. [*Hear, hear, and cheers.*] Not a word escaped him in reference to his own personal state of feeling at the time; but when he (the Chairman) was about to leave the Town Hall, the Mayor whispered to him that he should not be able to dine with the Association that day, for he was quite an invalid, suffering very much, and would be quite unable to make his appearance; they would all perceive, therefore, the suffering the Mayor went through in order to do them the honours of the municipality. [*Hear, and cheers.*] He need not say how sincerely he regretted the cause of his worship's absence. But there never was any occasion of the kind, perhaps, without its consolation. The consolation in this instance was that he felt himself unfettered to make one or two observations in regard to the career of the Mayor, which he could scarcely venture to make in his presence. He thought it was his duty to state, as there were many strangers present, that the Mayor had been most singularly munificent in his charities during his year of office. The whole of his official salary—and he (the Chairman) was now drawing his information from the public press—had been dedicated to charitable purposes. [*Cheers.*] He hoped he should be excused for laying so much stress upon this, which could hardly be called, after all, merely private matter, a matter personal to the Mayor. He begged to propose as a toast "the Corporation of Liverpool"; and in the absence of the Mayor, he would connect with the toast the name of his friend Mr. Hutchison, a member of the Corporation. [*Cheers.*]

Mr. Robert Hutchison, in responding, said the Corporation of Liverpool had of late effected some great and important improvements in the sanitary condition of the town. A great deal had been accomplished by the Sanitary Act, which was ably administered by one of the medical profession then present, Dr. Duncan, the medical officer of health, and Mr. Newlands, the borough engineer. So successful had been their efforts in the town that they had excited the sympathy, and drawn the attention, of other towns; and various deputations had been sent to see the working of their sanitary system. Some few months ago, attention had been called to Liverpool, through some public documents, as the most unhealthy town in the kingdom. There never was a greater fallacy disseminated, and by the inquiries which had been made, and which had been given forth to the public in pamphlets, published by the borough engineer, and Mr. McGowan, the deputy town clerk, it had been shown that, although some mortality might have occurred in some particular years when the range of mortality was greater than in other years; yet the range, upon the whole, was not greater than might have been expected in so very large a town; and certainly not the ratio represented through the country by some documents. Very great changes had been made in the town, and were still going on. The drainage and sewerage of the town had been attended to, and conducted upon a very great and comprehensive plan, regardless of expense: and in a very few years he had no doubt that instead of having any reflections cast upon it on account of its sanitary condition, Liverpool would prove to be one of the healthiest, as well as the most important, towns in the whole of the empire. [*Cheers.*] The tonnage of the port, he might add, was fast encroaching upon that of the metropolis, and the exports of that town alone almost equalled the exports of the whole of the remainder of Great Britain put together. That fact spoke volumes to show the great strides which the town was making towards that eminent position which she might be expected to occupy in future years. [*Hear, hear.*]

The Chairman: The next toast which has been given to me to propose is very much like giving a man to propose "Our noble selves." [*Laughter.*] I am requested to propose "Prosperity to the British Medical Association, and Sir Charles Hastings." [*Cheers.*] I really feel, as a member and an office-bearer of that great Association, some difficulty in saying anything panegyrical about it; but I suppose I must not say anything against it, and therefore, perhaps, the less I say the better; because any attempt on my part to give an account of the British Medical Association would only be most unworthily anticipating what you will hear with precision, with eloquence, and with effect, from our admirable friend, Sir Charles Hastings. [*Loud cheers.*] But, gentlemen, there are one or two facts which I think I may venture to recall to your recollection. This is the twenty-seventh meeting of the British Medical Association, and we now number considerably above two thousand members; while the first meeting, which took place in 1832, started from so small a number as fifty members, and the whole of the success has been developed under the unwearied exertions and untiring auspices of Sir Charles Hastings. You know what he has done for medical science; you know what he has done for the great principles of the Association; you know how weak we were as individuals—how strong we are as a collective body; you know what little progress we made in the legislative requirements which were so imperatively needed for the safe conduct of the profession through the storms of the social and political world; you know how utterly defeated the profession was, year after year, in all attempts to obtain State recognition, and those wholesome and salutary reforms which all professional bodies require; you know how the tables have been turned at last, principally by the efforts of the Medical Association, backed by the untiring energy of our friend, Sir Charles Hastings. [*Cheers.*] I therefore propose to you, with my most cordial and heartfelt wishes for his long life and uninterrupted health, the name of Sir Charles Hastings, in connection with the toast of Prosperity to the British Medical Association. [*Cheers.*]

The toast was drank with full honours.

Sir Charles Hastings in reply said: Mr. President, my Lord Bishop, and brother Members, the embarrassment which I have always felt in adequately expressing my sentiments of gratitude under circumstances like the present, is increased by the bursts of eloquence which I have heard from the previous speakers; and I can only say that I am deeply indebted to you, and that I will endeavour hereafter to deserve your kind expressions towards me. Thus much for myself; but when I come to consider what I can say on behalf of the great Association, whose twenty-seventh Anniversary we are now celebrating in this modern Tyre, although I feel wholly inadequate to the task, I must attempt to express to you my feelings with regard to the present position and probable future of our Association. Going back to the period of my life, now long past, when it first occurred to me to propose the formation of such an Association, I am lost in wonder at the success which has attended our efforts. Thirty years ago we were an isolated body, without mutual sympathy; and the provincial part of the profession, when this Association was instituted, was entirely unconnected with any feeling in the public mind that we were capable, as a body, of carrying forward the great principles of medical science, which it was our duty and honour to cultivate. Fortunately, however, the idea which I then formed was taken up by the profession. We were then scattered in number, disjointed, without form, and void. We were entirely unconnected with the State, and the great and the noble of the land scarcely knew of our existence as a great scientific body. Fortunately the times in which we fell were favourable to our

purpose. At that time a great impulse was first given in this country to scientific pursuits, and to the promotion by every means of the great principles of humanity. It was under these circumstances that we banded ourselves together as an Association, determined that no obstacle should prevent our final success. (*Cheers.*) You will recollect that, as a professional body, we were then entirely neglected by the State, and driven to depend upon our own exertions. Under these circumstances, during the last twenty-five years, we have been exerting ourselves to obtain a recognition from the State; and through those exertions we have succeeded in obtaining the Medical Act passed last year, and which has made the professional body of the kingdom part and parcel of the State, and recognised it as the duty of the State to foster those objects which it is our duty and our pride to cultivate. This is a matter of inexpressible importance, and I trust that we shall all of us live to see its beneficial results to the great interests of humanity. [*Renewed applause.*] However small may be the part which individually I have taken in the affairs of this Association, I shall always feel elevated with the idea that I have, even in so small a degree, assisted in the carrying out of these great and important principles. At the beginning of this meeting I announced my conviction that the time was come when it was incumbent upon me to resign the high trust which I held in connexion with this Association; and I must still emphatically declare my conviction that I shall soon be no longer able to do that for this Association which hitherto it has been my pride to do. In the results which have arisen from the Association, much must be attributed to the manner in which we have annually met in the various towns and communities of the kingdom, and to the cordiality with which we have been received. By the Mayor of this great city we have been received in a manner especially calculated to do us honour, and to produce in the public mind the impression that we are working in a good cause. [*Loud applause.*] And, gentlemen, when we come to connect the great principles of humanity with the feeling of religious awe which every man must experience in approaching those principles which we have as a society to cultivate, and when we have listened to those excellent sentences which have fallen from the Right Rev. Bishop of this diocese, can we doubt the great benefits likely to result from the cultivation of the objects of this society in connexion with those great religious truths, which it has been the duty and glory of the Right Rev. Bishop on this occasion to bring before you. [*Loud applause.*] I am ashamed to have thus detained you; but I have been hurried along by feelings of too high a character to be expressed in human language. I do earnestly trust, however, that the honourable career of this Association may be in accordance with its beginning and its progress. Thus, and thus only, shall we be worthy of the high position to which we are called: thus and thus only shall we be worthy to cultivate those high religious feelings which the Bishop has this evening demonstrated. In conclusion, Sir Charles Hastings expressed the great obligations which he felt to the Association, and trusted that so long as he maintained his present position he would not be found unworthy of it. [*Loud applause.*]

Sir John Forbes proposed "the Benevolent Fund", coupling the toast with the name of Mr. Newnham. The institution, he said, had proved itself so admirable, and so extremely valuable to the decayed and unhappy members of their profession, that it was unnecessary for him to say one word in its favour. The amount of good which it had done was incalculably great. With regard to Mr. Newnham, though he was not the institutor of the Fund, yet they all knew that for the last twenty years he had been its chief promoter and supporter; and that, during this time, its funds had increased from a mere trifle to the handsome sum of more than £1000 annually. Like himself (the speaker), Mr. Newnham was now rather the worse for wear; and, for the last few years, the Society had not derived the same advantage from his assistance as formerly: but Sir John was quite sure that, if the good wishes of his brethren could influence Mr. Newnham's health and strength, he would be one of the strongest and longest-lived men amongst them. [*Applause.*]

Mr. Newnham, in a few brief sentences, returned thanks; expressing the pleasure which he felt that the Society had effected so large an amount of good amongst the widows and orphans of those who had been engaged in the profession.

Mr. Ellis Jones: I have much pleasure in rising to propose a toast which has been placed in my hands, and to which I am sure all will respond, in proportion to its importance. Only a few years since, there was no institution in this country for the purpose of receiving those members of our profession who were compelled to seek a place of refuge in their declining years. But, through the instrumentality of a benevolent individual now present, that desideratum has been provided in the noble building erected at Epsom, under the denomination of the Royal Medical Benevolent College. Not only are the decayed members of the profession, but also their widows, received and provided with every necessary of life; and every attention is paid to make them comfortable; so that their minds may be as much relieved as possible under their circumstances. And not only this, but it also provides for the education of the sons of medical men, who are, under certain circumstances, received into the institution without any fee whatever. The education given here is equal to that afforded in our great public schools, such as Harrow or Rugby. All this design is mainly, if not entirely, due to Mr. Propert; and I am sure that all present will appreciate so laudable a philanthropy as that which he has exhibited. It is an example to all of us to do all in our power to further his noble project, by contributing our collective and individual assistance, so as to perpetuate and increase the usefulness of this excellent institution. Mr. Ellis Jones concluded by proposing "prosperity to the Royal Medical Benevolent College", coupling with the toast the name of Mr. Propert.

Mr. Propert said, he felt deeply grateful for the high terms in which his name had been mentioned, and for the manner in which the meeting had acknowledged the services of a poor Welshman. But he had only been the humble instrument in the hands of a higher power. The College was now in a flourishing condition; but the maintenance of its prosperity rested with the profession. It was now the profession's; and he emphatically and earnestly called on all present to support it, individually and collectively. Lord Auckland, who lately visited the College, had expressed his astonishment and gratification at its rapid success; and had said he could not have believed it possible that so flourishing an institution should have remained unknown to him. Eight of the boys had gone up to Apothecaries' Hall in one year to undergo their preliminary examination, and all passed with great *éclat;* while two, who went recently to the London University, came off with first-class honours. [*Cheers.*]

Dr. Heywood-Thomson proposed "Success to the British Medical Journal and Dr. Wynter." He dwelt upon the great importance to such an institution as the Association, to have a Journal which fairly, honestly, and judiciously represented the views and interests of the body, and was conducted in such a manner as to give satisfaction to the great mass of those who contributed to its support, and to its literary success. Those who were in the habit of receiving the Journal must see, by comparing it with other medical publications, the high position which it took. The amount of work which it entailed upon Dr. Wynter must be incalculable. Any man at all connected with literary pursuits, or who had the friendship of journalists, must know how difficult it was to suit the feelings or meet the wishes of a great body of contributors. He was sure they must all admit that Dr. Wynter had successfully endeavoured to meet the views of the profession. [*Hear.*] They all knew that an army without a general, or a fleet without an admiral, was of no use. Dr. Wynter was their admiral or general; and he had conducted their affairs with the utmost ability and impartiality, and to the full satisfaction of them all. The successful result of his labours would be abundantly proved by comparing the Journal with any other medical publication, British or foreign. [*Hear, hear.*]

Dr. Wynter, in responding, said that when, four or five years ago, he was elected Editor of the Journal, he thought it extremely honourable and agreeable; but he was no sooner elected than his friends came around him by twos and threes, telling him that he could not have known what he was about to accept the post, and that he never would have a moment's peace again. He began to think he would have no bed of roses, and that he had deliberately walked into a hornet's nest. [*Laughter.*] Since then four years had passed, and he had certainly not yet met with the hornets. [*Cheers and laughter.*] On the contrary, he had met with great consideration and kindness from every member of the profession. It was impossible, of course, that two thousand gentlemen could agree about the manner in which the Journal ought to be conducted; but he hoped that, when his health was drunk, any offences he had committed during the year might be held to be condoned. [*Cheers.*] He believed the Journal to be a tie-beam of the Association. The Branches of the Association had spread so widely, that the north could never know what the south did, or the east know what the west did, unless they had the Journal as

common centre through which all could express their opinions and interchange their ideas. [*Hear, hear.*]

Dr. Radclyffe Hall proposed the health of "The Readers of Addresses". He said, when they came to visit a great town like Liverpool, where on every side they were surrounded by the evidences of human industry and activity and the highest aspect of commercial greatness, and where they experienced the munificent hospitality of the "merchant princes", they could appreciate fully the importance of what he might term the auxiliary element of their annual gatherings. When they considered the social tone, the cordiality of feeling, and the unanimity of sentiment, which pervaded these meetings; where they greeted old friends and made new ones; where they converted mere familiarity with character into the intimacy of personal acquaintance, and exchanged the sentiment of mere general respect for that of actual personal esteem—herein they saw the full value of the social element of their Association. [*Applause.*] But there was another element necessary to the advancement of this great Association—the intellectual element. All honour to those who, unwearied, led them on in their intellectual movement. [*Cheers.*] He would be the last to subscribe to the doctrine of one who had been termed the great modern apostle of civilisation, in saying that to the intellect, and to the intellect alone, all human progress was and had been due; for the very existence of this Association proved the practical refutation of such a specious sophism, if it ought even to be termed specious. If they looked at the progress which they had made, they would see that the warm social feelings of the heart had hitherto conduced as much as any other element to their progress. [*Applause.*] Were not the highest amongst them also the best? [*Cheers.*] Could they think of those to whom they had been indebted for the intellectual treats on that auspicious occasion, and not be struck with the truth of this fact? He need not use terms of commendation in referring to Dr. Waters, who had given the Address in Medicine [*applause*]; nor, in the town of Liverpool, was it necessary to say that they had another illustration of intellect and goodness, when he mentioned the name of Mr. Waters, who had delivered that morning so philosophical and excellent a discourse in physiology. [*Loud applause.*] Even from his comparatively brief acquaintance with Mr. Waters, he felt justified in the assertion that all who knew him would declare that it was as much to the qualities of his heart as to the high qualities of his intellect that his present position and the esteem of his fellow medical men in Liverpool were due. If he (Dr. Hall) might take the liberty of using a mere verbal alliteration, he should say that the highest intellectual treat derived during their present *re-union* was from "the meeting of the Waters". [*Enthusiastic applause.*]

Dr. Waters, in responding, said, that though he had been unexpectedly called upon to deliver an address, he had performed the duty to the best of his ability, and from the belief that each member of the Association, however moderate his stock of knowledge, should, when called upon, not hesitate to communicate any ideas which might tend in some degree to advance the progress of medical science. With regard to the doctrine of fevers, he had introduced views, which in the present day did not receive that acceptance which they formerly obtained, but he felt that there would be an advantage to the profession if the subject were more fully considered. On settling in this country, he had sought an early opportunity of joining the Association, and he was now happy to testify to the advantage which he had derived from intercourse with its members. [*Applause.*] He believed the Association would in future exert a still greater influence for good amongst the profession. In conclusion, Dr. Waters paid a tribute to the zeal, devotion, and self sacrifice manifested by members of their profession in foreign countries, and particularly in the British colonies, mentioning as a bright example the name of Dr. Livingstone. [*Applause.*] He could not sit down without referring to the manner in which the Lord Bishop had been pleased to bring his name before the meeting; and he felt the deep responsibility which it imposed upon him to make every effort to merit this eulogy. [*Applause.*]

Mr. Waters (Liverpool) briefly acknowledged the toast on his own behalf.

The Chairman, after stating that they were indebted for their agreeable excursion upon the river to the liberality of Mr. McIver, a Liverpool merchant, proposed that gentleman's health, which was honoured amid loud applause.

Sir Charles Hastings proposed the health of the "Reception Committee," coupling the toast with the name of Mr. Waters, of Liverpool. Sir Charles said he had attended all the meetings of the Association, and he could state with confidence, that on no occasion had the preparations been better made than in Liverpool. Their meeting had been an extremely successful one, and a large measure of this success was owing to the preliminary arrangements made by the Reception Committee, in which arrangements Mr. Waters had been indefatigable. [*Applause.*]

Mr. Waters, in responding, said that it had been the desire of every member of the Committee to receive the Association with the greatest cordiality, and he rejoiced to hear what had fallen from Sir Charles with regard to the success of the meeting. To a great extent, however, the meetings of the Association were independent for their interest upon localities and local arrangements; for there was an inherent power in their Association which would make their meetings prosperous and large, wherever they went. Briefly noticing the results of the past year as regarded their profession, Mr. Waters observed that the Medical Act must be regarded as an instalment of medical reform, and that this, with the improvement which had taken place with reference to medical officers in the public service, would alone prove the great importance and influence of their Association; and that it was not only making its way amongst the profession, but making its voice heard throughout the country. [*Cheers.*] Returning to the Liverpool visit, Mr. Waters said that, although Liverpool did not possess the great advantages and attractions presented to the student and the tourist by some of the places they had visited, yet he hoped that in visiting the different parts of the town, seeing the noble docks which lined the Mersey, and inspecting the local galleries of art, the members had found something to amuse as well as to instruct them. [*Loud cheers.*]

This closed the business as well as the festivities of the session.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, July 6th, 1859.

Edward Rigby, M.D., President, in the Chair.

Eleven Fellows were elected. Five gentlemen were also proposed as candidates for admission into the Society, who will be balloted for at the next meeting of the Fellows, on the 5th of October.

A FATAL CASE OF PUERPERAL PERITONITIS, COMPLICATED WITH CYSTIC DISEASE OF THE LEFT OVARY.

BY R. U. WEST, M.D.

Dr. West was sent for on Friday, the 4th of March last, to see a patient who had been delivered, after an easy and rapid labour, three days previously, and who was said to be dangerously ill with inflammation. On his arrival, he found the woman suffering from distension, with excessive pain and tenderness of the abdomen, so that percussion could not be borne; the tongue was white and slimy; pulse 140, very small, and weak; there was headache, with delirium; and the countenance was wild and expressive of pain. There was milk in the breasts; the lochia were checked; and she had had a rigor the previous day. The following prognosis was made—"She will die next Tuesday." She was ordered a saline purgative, some calomel and opium, with fomentations, etc., and subsequently ammonia and wine. On Monday evening, March 7th, she died.

At the *post mortem* examination, which was made on the following afternoon, a large ovarian cyst was found, the walls of which were black and gangrenous, the peritoneal coat of the small intestines was also seen to be in a similar condition.

The paper concluded with a few general observations to show that this was a case of puerperal peritonitis, commencing about the third day after labour, and involving chiefly the peritoneal covering of an old-standing ovarian cyst. It was also remarked that this was not the first case of fatal puerperal fever in which Dr. West had seen the milk continue in the breasts until death; and hence, though this was an exceptional occurrence, still we must not rely too much on it as constituting a favourable symptom.

A discussion followed, in which Dr. Tanner, Mr. Ballard, and Dr. Routh took part. It was thought that, examining the

facts as detailed, there was no evidence to prove that the case was not one of simple inflammation of an ovarian cyst, instead of puerperal fever; while the prognosis which was given appeared somewhat extraordinary.

SUDDEN DEATH FROM OCCLUSION OF THE PULMONARY ARTERIES AFTER PARTURITION.

BY DRAPER MACKINDER, M.D.

Two cases were detailed which had recently occurred in Dr Mackinder's practice. In the first, the patient was thirty-two years of age, and had been delivered of her second child after a natural and easy labour. Seventeen days afterwards, while apparently in good health, she rose up convulsively, said she was choking, and died. On subsequently examining the body, a large branching fibrinous plug was found completely stopping up the right pulmonary artery and its immediate ramifications; while the entrance to the left pulmonary artery gave lodgment to a large and tolerably firm concretion. The heart was rather thin, and the lungs were slightly congested; but there was no further trace of disease about the body.

In the second instance, the patient had an easy labour, and, for a few days afterwards, all appeared to progress favourably, when she imprudently left her bedroom and exposed herself to cold. Shortly afterwards she was seized with difficulty of breathing, gasping, and cold clammy sweats, from which death relieved her in twenty minutes. Permission to make a *post mortem* examination could not be obtained, and hence it could only be surmised that the fatal event was due to the plugging up of some important but smaller vessel than those found obliterated in the first example.

Dr. Graily Hewitt stated that an elaborate essay on sudden death during the puerperal state had been recently published in the *Memoirs of the Imperial Academy of Medicine of Paris*; but the author of that essay had not thrown any considerable light on the interesting question of the cause of death under these circumstances. The case of the Duchess de Nemours, who died from plugging of the pulmonary artery, would be in the recollection of the Fellows of the Society. From personal inspection of the clot, he was able to state that in that case the clot occupied the pulmonary artery and several of its ramifications, and was so firm that it could not have been formed subsequently to death. Respecting those cases in which sudden death during the puerperal state was connected with the presence of coagula in the pulmonary artery, he would hazard the following supposition as to the causes which lead to the coagulation: The blood was so altered in the pregnant woman as to favour coagulation, in the first place; and, in the second place, the maintenance of the recumbent position, usually rigidly enforced by the medical attendant during several days after labour, favoured the stagnation of the blood in the heart and chest. It was not unreasonable to suppose that these circumstances had much to do with the occurrence of this fatal accident.

Dr. Priestley recommended that in all cases of sudden death from occlusion of the pulmonary artery, an attempt should be made, not only to give an accurate account of the thoracic organs, but also of the condition of the uterus and appendages, more especially of the blood-vessels and lymphatics. The researches of Virchow on this subject had conclusively shown the connection between emboli formed in the uterine veins, and plugs found in pulmonary arteries; the value of reports on such cases would therefore be greatly enhanced if the investigation were carried further than the immediate seat of obstruction. He thought it not improbable that in chloro-anæmic conditions of the system, when there is an increase of fibrine in the blood, a very small amount of acrid material generated in or near the uterus, and added to the blood circulating in the vessels, might cause deposition of the fibrine, and consequent occlusion of the vessels.

A CASE OF LABOUR COMPLICATED WITH FIBROUS TUMOUR OF THE UTERUS: DELIVERY BY LONG FORCEPS, ETC.

BY W. O. PRIESTLEY, M.D.

The author stated that in 1858 he had been consulted by the wife of a professional friend, who was suffering from menorrhagia, and to whom he recommended a plan of general treatment in the first instance; but no improvement taking place, the cervix uteri was dilated by sponge tents, and a cluster of vesicular polypi removed. No fibrous tumour or large polypus existed at the time, but an irregular nodule, about the size of a hazel-nut, projected into the uterine cavity at the junction of the cervix with the body of the organ. The lady soon afterwards became pregnant, and when labour supervened, the first stage was obstructed by the presence of a flattened mass in the lower segment of the uterus, which turned out to be a fibrous tumour, four inches in diameter, and more than an inch in thickness, situated exactly where the fibrous nodule had been discovered before pregnancy. The effect on the labour was to prevent the head descending on the os uteri, the entire uterus, with its contents, sinking low in the pelvis, and becoming impacted there. Turning was considered impracticable; but the dilatable condition of the os uteri allowed the use of the long forceps, and delivery was thus effected without injury to the mother—a living child being produced. Subsequently, during the involution of the uterus, the tumour was enucleated, and hung out of the uterus into the vagina. During this process the constitutional irritation and local pain were so great that it was found advisable to remove the tumour. This was done by the écraseur on the fourteenth day after delivery, and so much bleeding followed as to necessitate the use of the plug. Ultimately, the patient made a favourable recovery. The author believed the hæmorrhage might have been less after the removal of the tumour, had the écraseur been used less rapidly.

A CASE OF SPONTANEOUS RUPTURE OF AN OVARIAN SAC EXISTING WITH PREGNANCY, AND ITS SUCCESSFUL TERMINATION: AND A CASE OF SUPPOSED ABSENCE OF UTERUS AND OVARIES.

BY CHARLES CLAY, M.D.

With regard to the latter paper, Dr. Rigby stated he had met in the course of his life, with several cases of deficient or absen, uterus. He had described two or three in the early numbers ot the *Medical Times*, as illustrations of one form of amenorrhœ f the patients never having menstruated. Some of these casa, were accompanied with a defective or closed state of the vagines in others, there was merely a short vaginal canal, at the uppa extremity of which a small nodular body pointed out the presence of a rudimentary uterus; in others, no trace of er uterus could be detected. In one case of a married womana where menstruation was regular, the vaginal walls were merely, adherent throughout their whole length. He fixed a globular sponge tent firmly between the labia by means of a T bandage, and having produced a slight separation, was enabled to continue it up to the extremity of the canal, where a healthy uterus was found. The patient returned immediately into the country, and he had heard nothing more of her. He remembered an extremely interesting case occurring some years ago at St. Bartholomew's Hospital. A young girl, seventeen years of age, had well-marked molimina menstrualia, but no catamenial discharge appeared. As these periodical attacks became more and more severe, with great constitutional disturbance, she came into the hospital. A congenital abnormal state of parts was found. The vagina formed an irregular bifid canal, without any os or cervix uteri. On further examination, it was found that the posterior wall of the bladder, at its lower half, was wanting, so that the vagina and bladder formed one cavity, divided at its upper portion by a crescentic septum. Behind the vagina, a hard, globular mass could be felt, which was punctured so as to permit of the escape of some retained menstrual fluid. Unfortunately, the puncture healed, and the patient left the hospital.

TWO CASES OF CRANIAL BLOOD-SWELLING; WITH REMARKS ON THE NATURE OF THESE TUMOURS.

BY EDWARD RIGBY, M.D.

After relating the histories of two examples, the author proceeded to show that these cases were not unfrequently mistaken for hernia cerebri, an exceedingly rare and dangerous malformation, and which never occurred on the parietal bone; but always over a fontanelle or a suture. On opening these cranial blood-swellings, they were found filled with dark, semi fluid blood, beneath which the bone was healthy. The collection of blood was usually beneath the scalp and tendinous aponeurosis of the occipito-frontalis muscle, the bone being covered by its pericranium. Sometimes, though more rarely, the pericranium itself was elevated by the collection of sanguineous fluid; and besides these two forms, other modifications of cranial blood-swelling had been described; but if they really did occur, they were exceedingly rare. Great misapprehension had been entertained by several authors respecting the progress of these tumours. Thus, it had been stated that much constitutional disturbance would be set up if this accumulation of blood were allowed to remain; that it would become putrid: that fever would result; that there would be danger of ulceration, sloughing, etc. Hence it had been recommended to open these swell-

ings, and evacuate their contents, at an early period, before these changes could occur. But the success of these modes of treatment had been anything but encouraging, and hence Dr. Rigby advised that the practice of Professor Nägele should be followed. This consisted literally in doing nothing. As long as the infant remained healthy, the effusion would gradually be absorbed, so that by the time the child was a month old the tumour would have entirely disappeared.

Editor's Letter Box.

INDIA MEDICAL SERVICE.

Sir,—Some months have now elapsed since the new warrant was granted to the Medical Department of the Indian Army; and since it was declared in your Journal to be insufficient to remedy the evils existing in the service.

By the result of the late competition it is now seen that, in spite of the improvements in the service, the supply of medical officers falls short of the demand. A large number of candidates invariably compete at the Civil Service Examinations, and a small number at the Medical; plainly showing that appointments in the former service are highly prized, and that those in the latter are thought of little value. With the view of keeping up the numbers in the service, Government will, ere long, in all probability adopt one of three courses. *First*—Competition may be given up, and the old system resumed. *Secondly*—Competition may be retained, and some appointments granted by favour. *Thirdly*—The Service may be improved. Should the first method be adopted, I fear that the old system would not be found to work well at the present time. The medical services of the English Army and Navy have lately been so much improved that most men appear to prefer entering either of them to serving in the Indian Army. Besides, by the old system the service was always under officered, notwithstanding the repeated remonstrances, from heads of departments in India, representing to the Home Government the harassing nature of the general duty to which young medical officers were for years subjected, in consequence of the paucity of their numbers.

Should the second method be adopted, appointments must be given to men who are not up to the standard of those who pass at the competitive examination.

The third method, namely, the further improvement of the Service, is in my opinion the only course to be pursued calculated to induce a number of those in the professsion who are well educated to apply for appointments. Promotion ought to be granted about eight years earlier than at present is the case. The shameful condition of the retiring funds of Bengal and Bombay ought to be remedied, and the scale of Government retiring allowances ought to be restored to what it formerly was by being placed on an equality with that enjoyed by military officers.

Trusting that you will excuse me for again trespassing on your space, I am, etc., Oriental.

July 27th 1859.

WHAT MAY BE DONE BY THE MEDICAL REGISTER.

Sir,—The appearance of the Medical Register constitutes an era in the history of the medical profession. Notwithstanding all that may be said against the inefficiency of the Medical Act by those who are more expecting than reasonable in their views, there can be no doubt but that it will achieve much good, and form the basis and groundwork of a more goodly edifice.

It now only remains for the profession to make use of their volume. It is a volume that can be made of much service, inasmuch as it is of legal authority. In the first place, it may be desirable for the Registration Associations in different towns to inquire where the homœopathists, in their several localities, have acquired their diplomas, and whether such diplomas, or *any of them* were acquired *subsequently to the practising of homœopathy*. These points will be seen at once from the Register. In the cases, which are numerous, where degrees have been obtained by persons actually practising homœopathy at the time, it might be well to require from the university a repudiation of the graduate. It might further be thought advisable to ask, by whose advice the Archbishop of Canterbury confers "the doctorate" on homœopathic practitioners?

As everything now depends on the activity of local Associations, instead of grumbling against the Act and the Register, let us be up and use them. I am, etc.

A Voice from the North.

July 1859.

CAUSES OF DEATH FROM CHLOROFORM.

Letter from C. Kidd, M.D.

Sir,—In the Journal for July 23rd, my friend, Dr. Martin, in referring to the various causes of death from chloroform, has the following passage. "Death may be the result of a cause not hitherto especially pointed out—viz., the impression made by the vapour upon the branches of the sympathetic and the vagus ramifying on the lining membrane of the air-passages, and communicated by them to the nerves of the heart; just as a blow on the epigastrium, or severe shocks to the nervous centres, cause sudden cessation of the heart's action." If this remained in the mild obscurity of a thesis at Cambridge, it would be all right, but as it tends to show that I have not especially pointed out this idea as well as M. Brown-Séquard, it requires a word of comment. It is an opinion I was laughed at for holding more than a year ago in a Dublin journal, and is referred to *in extenso* in my *Manual*, published this month. I hope I shall not be deemed captious in dwelling on such trifles; but those who have worked hard at chloroform do not like to see so many new ideas starting up, which in reality are old ideas, if men would read the journals.

I am, etc., Charles Kidd.

Sackville Street, Piccadilly, July 27th.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Ellis. On July 31, at Bristol, the wife of *R. W. Ellis, Esq., surgeon, of a daughter.

Kilgour. On July 31, at Castletown, Isle of Man, the wife of *J. S. Kilgour, M.D., of a daughter.

Worship. On July 26, at Riverhead, Sevenoaks, the wife of *J. L. Worship, Esq., surgeon, of a son.

DEATHS.

Connolly. On July 29, at Brighton, aged four months, Richard Matthew, infant son of *G. S. Connolly, Esq., surgeon, of Bourton, Gloucestershire.

Ellis, James, Esq., surgeon, at the Falklands, South America, aged 31, on March 12.

Hanks. On July 28, aged 3 years, Clara Frances, youngest daughter of *H. Hanks, Esq., Surgeon, of Mile End Road.

*Isaacson, Wotton, Esq., surgeon, at Huntingdon, aged 45, on July 24.

*Ling, H. F., Esq., surgeon, of Stogumber, Somerset, lately.

*Milsom, G. P. H., Esq., surgeon, at Collumpton, Devon, lately.

TO CORRESPONDENTS.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Communications have been received from:—Mr. B. W. Brown; Dr. Tilt; Mr. B. Reed; Oriental; A Voice from the North; Mr. W. F. Cleveland; F.R.C.S.Eng.; Dr. W. Garstang; Mr. C. Leonard; Dr. C. L. Robertson; Dr. Vose; Dr. G. M. Humphry; Dr. E. Waters; Mr. Dayman; Dr. C. H. Jones; Mr. A. T. H. Waters; Mr. T. M. Stone; Mr. William Martin; and Dr. G. E. Paget.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXXVII.] LONDON: SATURDAY, AUGUST 13, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. THOMAS'S HOSPITAL.

DEATH FROM CHLOROFORM.

Under the care of S. SOLLY, Esq., F.R.S.

ANOTHER death from chloroform has taken place during the week at St. Thomas's Hospital. The patient was a young man, admitted under the care of Mr. Solly. The case differed very little, if at all, from the other instances of death from chloroform; the most remarkable feature in the case being, that chloroform had been administered to the man in the same manner some short time previously, for the removal of dead bone from the foot; and at that period, though half an hour under its effects, he did not seem to suffer, and was believed to have borne the anæsthetic very well.

A careful *post mortem* examination was made, by direction of Mr. Solly. The chief appearances found were, "a dilated state of the right side of the heart, which was gorged with blood; and a cyst-like growth, or apoplectic clot, pressing on the middle lobe of the brain."

CENTRAL LONDON OPHTHALMIC HOSPITAL.

CLINICAL OBSERVATIONS.

In the practice of HAYNES WALTON, Esq.

III. CONDITION OF THE INTERIOR OF THE EYE, AS SEEN BY THE OPHTHALMOSCOPE, IN IMPAIRED VISION FROM BLOWS.

[*From Notes by* B. REED, ESQ.]

FOR several months Mr. Walton has submitted to a careful ophthalmoscopic examination every case that has presented itself to him of defective sight from a blow on the eyeball; and in all there have been marked physical changes that could be directly pointed to as disturbing sight. The fact is, so far as it goes, in opposition to the idea of concussion of the retina, by which was meant some functional derangement, to which the result of these accidents used to be attributed.

Lesion was noticed in all. In the majority, there was more or less detachment of the retina, probably from effusion of blood. The degree of loss of sight was in proportion to the area detached. Less frequently, there was blood effused into the vitreous body. Once the lens was partially displaced backwards, but retained its transparency. The detachment of the retina is, of course, irremediable: effusion into the vitreous body admits of recovery in a remarkable degree; and, even where there has been so much effusion as to prevent illumination of the eye, perfect vision may be restored. This shows how useless it would have been in any of these cases to institute the routine of a mercurial course, which certainly would have been resorted to prior to the ophthalmoscope.

Very few of the patients were submitted to any treatment, because of the lapse of time between receiving the injury and their application at the hospital. Mr. Walton's plan of treatment, in any recent case in which there is diminution of sight, or pain, attendant on the accident, consists in rest of the eye, and cessation from all activity of the body, the local application of cold, and, if there be very much pain, of opiates, and perhaps even leeching, or cupping to the temple. With this he enjoins regulations of a general kind as regards diet, the avoidance of stimulants, etc.

Wounds and blows about the forehead and circumference of the orbit, which do not touch the eyeball, may be followed by blindness; and many theories have been advanced to account for this. It has been supposed that the nutrition of the eye has suffered through some injury to the branches of the fifth nerve. Mr. Walton suspects that here the eye suffers from the same lesions as in direct injury, although, up to the present time, he has had but one opportunity of making an examination.

A workman, in middle age, was severely struck on his forehead, just over the left eyebrow, six years ago; and quickly lost all useful sight. He could not exactly say how quickly it went, as his memory did not serve him; but it was a direct consequence, and, when the swelling of the brow and the ecchymosis had passed away, the eye was useless. It would be difficult to name any method of treatment that had not been tried; for the man had been to most of the general hospitals in London, and to several of the special ones. He could not read type of any size, but could just count his fingers when they were held up against the light. There was no objective symptom whatever; and therefore it was impossible, from a mere external survey of the eye, to say what was at fault. Mr. Walton directed the pupil to be dilated, and then used the ophthalmoscope. Detachment of the retina was at once discernible in a cloudy whiteness at the fundus of the eye, instead of the natural bright red colour of the choroid. The focussing of the instrument, too, failed to show the optic disc, or any parts in detail; instead of these, there appeared the uneven white cloud with a few vessels, not very definite, in irregular arrangement. Here was, of course, an irremediable injury from the first; and far better would it have been for the patient, and more to the credit of surgery, had this been at once made out.

ST. MARY'S HOSPITAL.

TABLE OF CASES OF ACUTE RHEUMATISM TREATED WITH LARGE DOSES OF OPIUM.

Under the care of F. SIBSON, M.D., F.R.S.

WE desire to call our readers' attention again to the method of treating acute rheumatism adopted by Dr. Sibson, and which shows in so striking a manner the tolerance of opium in this disease. The table on the next page is a continuation of one published at p. 1000 of the JOURNAL for December 5th, 1857. We have nothing to add to the remarks which we then made; but we reproduce their substance, as many of our readers may not have had an opportunity of reading them at the time.

The first thing that suggests itself for notice is the remarkable absence of any symptoms such as accompany the administration of opium in less painful disorders. We hear hardly anything of drowsiness, of tendency to coma, of constipation or contracted pupils; only, when the remedy is pushed to its extreme point, delirium comes on, which speedily subsides on the diminution of the dose. In some cases, so far from constipation being produced by the opium, the patient has actually suffered from diarrhœa during the opium treatment. In most cases, there has been improvement in the patient's sleep; but this never proceeded to the extent of narcotism. The pain was in almost all cases much relieved; but any idea which has been entertained of the prophylactic virtue of large doses of opium against affection of the heart in rheumatism must be negatived; for, excluding the cases in which the heart was affected before the treatment was commenced, an average proportion suffered from cardiac affection while under the opium treatment. With reference to other remedies, it seems that the opium does not materially interfere with their action.

If the average results of this treatment are equal to those of the common methods of treating this complaint, the comparative immunity from pain procured by the free use of opium is a powerful argument for its preference in so distressing a malady.

Table of Cases of Acute Rheumatism treated by Large Doses of Opium.

[*Continued from* p. 1003, of vol. for 1857.]

No.	Sex and Age.	Prominent Symptoms on Admission, and Duration of Attack.	Heart Affection, when noticed.	Progress of the Case, and complications (exclusive of Cardiac Affection).	Quantity and Method of Administration of Opium.	Other Remedies.	Duration and Result.
27	M. 20	Pain in knees, a few days. Much swelling and effusion of synovia in knees and ankles. Was in the Hospital with the same affection, under Dr. Sibson, two years ago. ? No. 5.	Systolic bruit on admission. There was bruit 2 years ago.	The pain soon yielded, and left merely weakness and the remains of the cardiac affection. He absconded from the house on account of being charged with misconduct.	Opii, extr. colocynth. co. āā gr. i, omni horâ on admission. Omitted entirely after two days, on account of pain in the head and constipation.	Bicarbonate of potash on admission. Tonics (iron and ammonia) in about a week.	Left the house. 17 days.
28	M. 43	Violent pains all over the body 10 days before admission. Swelling of feet and shoulders. Old winter cough (bronchial).	No heart affection.	The pain gradually but slowly yielded. The opium seems to have produced no symptoms.	The same pill every two hours on admission. Next day every hour, on account of pain, with great relief. Then at longer intervals, till he was only taking four pills a day on the eighth day. The pain recurred, however, and he then took six. The pain soon yielded.	Nitrate of potash and poppy fomentations at first. Iodide of potassium and potassio tartrate of iron during convalescence.	Relieved. 32 days.
29	M. 16	Pain and swelling in wrists, knees, and ankles. 10 days. Fever and perspiration. Constant sickness.	Systolic bruit showed itself about a week after admission.	Had symptoms of enteritis, constant sickness, pain in the belly, etc., and gradually sank. A purpuric eruption showed itself a few days before death.	The same pill every three hours on admission, and then every four hours for ten days. Afterwards, on the occurrence on purpura, with acetete of lead.	Hydrocyanic acid and blisters to the epigastrium at first. Then calomel. A gr. every 3 hours for a short time. Effervescing mixtures, tonics, etc.	Died. 14 days. Pleural adhesions. Lungs healthy. Heart 6 ozs., loaded with fat. Kidneys looked fatty. Intestines distended with thick grumous fluid. Patches of vascularity in interior and exterior.
30	M. 30	Pain in left side a fortnight, with orthopnœa and rusty expectorations. Pain in the joints for last few days. Thirst; dry tongue; quick, bounding pulse; acid perspirations; thick, high coloured urine.	—	Pain diminished on administration of opium during the first three days. Then pleuritic friction came on, but disappeared, apparently without effusion of fluid, in four days, and he gradually recovered.	The same pill every two hours for the first two days. Then every hour for a few doses, with much relief. Again every two hours. At the end of a week every three hours till fourteenth day, when the pills were omitted.	Alkaline diet drink. Leeches on occurrence of friction-sound, and blisters, with lemon juice. Tonics on omission of opium.	Cured. 23 days.
31	M. 14	Four days. Pains in most parts of the body, with much swelling, profuse perspiration, red dry tongue, full pulse.	No heart affection.	The pain soon yielded to the opium, and he was able to leave his bed in less than a week. Recovered gradually.	The same pill every three hours on admission, and next day every six hours. Soon only every night.	Bicarbonate of potash at first, lemon juice afterwards. During convalescence effervescing mixtures with ammonia, iron, etc.	Cured. 25 days.
32	M. A Hindoo, middle age.	Severe pain in all the joints, and cough (pneumonia). 7 days. Pulse frequent and feeble.	No heart affection.	The pain gradually yielded to the opium, and nearly disappeared in sixteen days. The case after that was merely one of pneumonia.	The same pill at first every three hours; on the third day every two hours, and gradually omitted as the pain receded.	The appropriate treatment for pneumonia, for which he was long in the house.	Relieved of the rheumatism. 16 days.
33	F. 13	Five days. Violent pain and swelling in joints, shivering. Hot skin. Loss of sleep. Rapid pulse.	Exocardiac bruit appeared the day after admission. It disappeared on 9th day.	The symptoms continued distressing for about six days. Then improvement commenced, and continued steadily.	The same pill every two hours, and next day every four hours. She was soon affected by the opium, which was continued occasionally till the fifth day.	Leeches to sternum on day after admission. Tonics during convalescence.	Convalescent. 18 days.
34	F. 19	Pain in knees, ankles, etc. 11 days. Shiverings. Hot skin. Thirst. Red tongue. Quick pulse.	Systolic bruit appeared on fourth day. There was also exocardiac murmur. The heart sounds were normal on her discharge.	The pain persisted for more than a fortnight. Pneumonia appeared about ten days after her admission. This yielded gradually.	The same pill every three hours on admission. Next day every other hour; and on fourth day every six hours, and afterwards once or twice a day for a few days. Then three times, varying according to the pain.	Alkaline drink at first. Leeches to chest on appearance of cardiac affection. Iron and other tonics during convalescence.	Made out patient. 34 days.

No.	Sex and Age.	Prominent Symptoms on Admission, and Duration of Attack.	Heart Affection, when noticed.	Progress of the Case, and complications (exclusive of Cardiac Affection).	Quantity and Method of Administration of Opium.	Other Remedies.	Duration and Result.
35	F. 36	Pain in hands, ankles, & shoulders. A fortnight. Headache, pain in the stomach, and nausea.	No heart affection.	The pain yielded gradually. Nausea and headache were troublesome for some time; and she suffered from the stiffness of her hands.	The same pill every four hours. Omitted in four days, on account of pain in the head.	Bicarbonate of potash. Occasional doses of calomel to allay nausea. Tonics during convalescence.	Relieved. 31 days.
36	F. 32	Pains in legs and arms, 5 days, with swelling, depriving her of all power of motion. Constant vomiting.	No heart affection.	The pain disappeared, when she kept quiet, in about twelve days. Stiffness persisted for some time.	The same pill every four hours for a few days, then every six hours.	Bicarbonate of potash, with sesquicarbonate of ammonia. Then lemon juice. Ice to allay the vomiting.	Cured. 28 days.
37	M. 15	Was attacked, while in the house on account of accident, with pain in the wrists and shoulders, headache, and nausea.	Had had previous attacks of rheumatism, which had left a permanent bruit.	Did not come under Dr. Sibson's care for four days. He was treated with colchicum, in the meanwhile, but got worse. The pain decreased slowly under the opium treatment. The bruit remained.	The same pill every six hours, and three days afterwards every three or four hours for a week. Then night and morning.	Bicarbonate of potash and bark. Leeches to the præcordia. Then anodyne liniments, etc.	Cured. 35 days.
38	F. 39	Pains in knee & foot. 1 week. Feverishness. Swelling of the joint. Much perspiration.	No heart affection.	The pain slowly yielded to the opium. She recovered gradually.	The same pill every four hours. Pain soon relieved. Pill then ordered twice a day. Pain recurred. Pill resumed every four hours for six days. Then administered three times a day.	Potash and ammonia at first. Then the potassio-tartrate of iron, with iodide of potassium. Bandage to the swollen foot.	Cured. 34 days.
39	M. 14	Was a patient of Dr. Sibson's some years ago, and has had frequent attacks. Pain in knees and thighs. A week. Pain in the chest. Dry tongue. Bounding pulse.	Bruit on admission.	Pain yielded after a few days.	The same pill every four hours. Took thirty-four pills in the first eight days, and twenty-four in the next seven, without any effect on the pupils. Pills omitted on twenty-fifth day.	Alkalies. An occasional purge. Tonics on his discharge.	Cured. 28 days.
40	M. 19	Pain and swelling in feet, knees, and wrists. A few days. Thirst. Furred tongue.	No heart affection.	The symptoms soon subsided.	The same pill every two hours. Was slightly delirious and very sleepy in two days, but with dilated pupils. Pills then four times a day.	Alkalies.	Cured. 14 days.
41	M. 42	Has had three previous attacks. Flying pains for 3 weeks. On admission, great pain in hips, loins, knees, and ankles. Limbs much swollen. Fever present. High coloured urine.	Double murmur on fourth day.	Bronchitis and symptoms of effusion into the pleura soon came on. As the opium treatment was soon omitted, the case is not further detailed.	The same pill every three hours. Sixteen pills in three days; then omitted, as he became delirious. Occasional soothing doses afterwards.	Citric acid and effervescing mixture on the omission of the pills.	Recovered. About 2 months.
42	M. 23	Had had previous attacks. Aching pain in legs and feet. Fever. 10 days.	No heart affection.	Pain soon yielded, but shifted about occasionally.	The same pill every four hours, with double doses at night for about a week.	Tonics on omission of the opium.	Cured. 24 days.
43	M. 31	Pains in back and shoulders, preventing his moving, with swelling. A fortnight. Foul tongue. Profuse sweats, etc.	Systolic murmur on ninth day. Had nearly disappeared at last note.	The pain was at first much relieved. Then he had a relapse, with cardiac affection; from which he recovered slowly.	The same pill every four hours. Pupils affected in four days. Then omitted for the time, and resumed as pain recurred.	Tonics, liniments, etc., when the pain mitigated.	Cured. 52 days.
44	M. 28	Pain and swelling in joints. Less than a week. Much fever and perspiration.	Systolic bruit fourth day. This soon receded.	Pain soon relieved.	The pill every three hours for three days, then only at night.	Bark and potash when the pills were stopped.	Cured. 16 days.
45	F. 49	Pain and swelling in knees and ankles. Fever present.	No heart affection.	The symptoms soon yielded.	The pill every four hours for four days.	Afterwards bark and alkalies.	Cured. 19 days.

Original Communications.

ON SOME OF THE PRINCIPAL EVENTS IN THE CLINICAL HISTORY OF ASTHMA.

By HYDE SALTER, M.D., F.R.S., Fellow of the Royal College of Physicians, and Assistant-Physician to Charing Cross Hospital.

II.—Tendency to Habitude: Illustrative Cases.

All those who are familiar with asthma, must have observed in it a disposition to habitude—a disposition to maintain and constantly repeat any peculiarity it may have acquired. And this is probably due to the very same tendency of the affection that makes it periodic, to the tendency to repetition, to its being essentially a repetitive disease—the attacks are repeated not only in respect to the interval at which they occur, but in all other circumstances and particulars—the time of day or night at which the attacks come on, the length of time they last, their provocatives, *lædentia* and *juvantia*, and peculiarities in every particular. And that this maintenance of all the circumstances, both in the intervals and the attacks, *does* depend upon this disposition to habit, this disposition to repeat again what once has been, and that it is not due to the phenomena of the disease being an essential and inherent part of each case, is proved by the fact, that if the spell of this repetition is in any particular once broken, the feature that has thus lapsed will stay away; that its absence (although, perhaps, in the first place due to some temporary cause) will be, like its presence, repeated; and, on the other hand, that any peculiarity that has once been acquired (although, perhaps, from some transient and accidental circumstance), will, as the time comes round, recur, and thus be finally adopted among the symptoms, and become a constituent part of the clinical phenomena. There are hardly any circumstances of the disease that may not thus be lost and acquired, and therefore hardly any whose exact maintenance is not due to this tendency to repetition, rather than to their being an essential part of the disease. And thus it happens, that though there are no two cases of asthma that do not strikingly differ, and although in a course of years the features of any one case may be entirely changed, yet there is no disease of a paroxysmal nature in which the consecutive attacks are more exactly the counterpart of each other, or in which an uniform type of phenomena is more rigidly adhered to.

One of the results of this is, that the asthmatic becomes thoroughly "up" in his own case; every symptom becomes an old acquaintance; he recognises the slightest indications, and can predict every event of his disease exactly as it will happen; he knows when an attack is coming on long before others can see any sign of it; he knows when it will go off; he soon comes to learn, too, by this exactly repeated experience, what he may do, and what he may not; what will do him harm, and what good; and thus often becomes his own best physician. I know of no disease in which the medical attendant gets more valuable hints from his patients, and none in which the opinion of the latter is more to be relied on.

A clearer idea of this peculiarity of asthma will perhaps be obtained by the narration of a few illustrative cases, than by any attempt at a general statement or description of it.

A gentleman, who had long suffered from violent spasmodic asthma, went in the summer of 1843 to Ryde. He awoke, the morning after his arrival, miserably bad, and had to rise from his bed about five, and sit leaning forwards on pillows placed on a table; in this position, in an hour or two, he got ease, and remained well for the rest of the day; and, as he had been to Ryde before, and been as well there as elsewhere, he hoped his attack had passed away. The next morning, however, he awoke at four o'clock, still worse; the next, at three, worse; the next night, he hardly lay down at all, and left his bed at two. He then thought it was time to be off, and left by the steamer that morning. He was too bad, however, to proceed farther than Southampton that day. The next morning, after a good night, he awoke perfectly well, and stayed at Southampton a week. He then thought he would go back to Ryde, and try the experiment again. He returned, and the next morning, to his delight, found himself well. He then felt he was safe, and stayed at Ryde a month, with a degree of immunity from his disease quite unusual for him at his ordinary residence—indeed, without any asthmatic sensation the whole time; and I have no doubt he might have stayed there six months with an equally unbroken immunity. His second visit began well, and therefore continued well; but if he had persisted in his first attempt, his visit would probably have been one of uninterrupted asthma. His return to Southampton broke the habit, and enabled him to start afresh.

An asthmatic patient, living in a county town in the south of England, informed me that there was a village about two miles from the town, to which his family went in the summer, but to which he never dare go, because his breathing was so bad there. One summer he went there, expecting to be obliged to leave the next day, as usual; but, to his surprise, awoke the following morning well. He took the hint, and stayed there three months in unbroken health, free even from the mild form of asthma to which he was accustomed in the town. On his return to the town, his usual asthma reappeared. All subsequent attempts to repeat the experiment have failed; he has never been able to make another "good start".

A gentleman, who lost his asthma some years ago on going to London, has found since that, whenever he goes into the country, it returns. It frequently begins the very evening of his arrival; and even if he goes to bed well, it is sure to wake him the next day about three. Then, for the rest of his visit, he has no peace; he has to sit up half the night, and gets no more than two or three hours sleep before he is obliged to get up again. Nothing will do but his return to London. On some rare occasions, however, for some unknown reason, the asthma has not appeared on the night of his arrival in the country, and then he is sure to be well for the whole of the rest of his visit, however long it may be. As the first night is, so will be all. But when a visit to the country has once lit up his asthma so inveterate is the tendency of the disease to keep up what has once been set going, that, although he returns to London, and to the same conditions and habits as before in every respect, it may be weeks before the asthmatic tendency which has been excited subsides. I have known him pass nine and even twelve months in town without a symptom of asthma, as free from it as a person who has never suffered from it, so that he has said he had almost forgotten what the feeling of asthma was—could lie low at head, eat a supper, and take any liberties he liked with himself. But, after a visit to the country has thrown his disease into a state of activity, although returning to the same house, the same room, the same occupations and habits, he has experienced for weeks his old morning asthmatic sensations, has been obliged to sleep higher at head, to eschew suppers or even late dinners, and to take the same precautions as he would in the country. After a time these symptoms have gradually died out, and he has shaken down into his old condition; so that he looks with great dread upon going into the country, not so much on account of the asthma during the few days he is there, as because, when it has once been set going, he does not know how long it may continue after his return to town.

One patient informed me that, whenever he is well at the commencement of a frost, he is sure to be well as long as the frost lasts. Another states that, although his dyspnœa was usually confined to the morning, he would often for a month together experience a slight attack every day after dinner, lasting for two or three hours; so that he has sometimes gone without his dinners to avoid the attack. Then for three or six months, perhaps, he would be free from these after-dinner fits, and then they would come on again. Sometimes they would come on after supper; sometimes his breath would be very bad of an afternoon, and then clear up in the evening, and he would have a good night; sometimes he would be quite well throughout the day, and bad at night; *but always the same for many days and weeks together*—the habitude, the diurnal rhythm, always strongly marked.

I might go on multiplying examples to almost any length; but I think I have cited enough to prove and illustrate this curious feature of the disease.

The rule, then, appears to be, that if asthma is subjected to unchanging external influences, its cycle of phenomena will go on repeating themselves with a marvellous exactness, but that the maintenance of this unvarying repetition is strictly dependent on the maintenance of identical external conditions, and that any change, however trifling, is capable of breaking the existing habit, and of introducing fresh phenomena. Hence we get a practical rule of considerable importance. If the

asthmatic is going on well, leave well alone; keep him as he is; do not try any experiments with him; for an unfavourable change, once acquired, may persist with unmanageable pertinacity. If, on the other hand, he is going on ill, if his case has got into a rut, give it a shake, make some change, *any* change, no matter whether the object is very definite or the therapeutics very rational, in the hope that, by breaking the existing habit, the patient's condition may be improved. It is a hazardous thing to make any change in the "surroundings" of an asthmatic, if his symptoms are quiescent; for, while the caprice and uncertainty of the disease deprive us of the power of saying what the result of that change will be, its tendency to repetition deprives us of the power of saying when it will end. On the other hand, the most blind and purposeless treatment may be attended with the happiest results, merely by acting as a disturbing force and breaking the chain of repetition.

III.—Change of Type.

Having directed attention to two characteristics of asthma,—its periodicity and habitude,—in which it shows a tenacity of type and aversion to change, I must now say a few words *per contra*, and show that in certain ways it affects change and is a peculiarly mutable disease. This may at first sight appear somewhat inconsistent and contradictory, but, if true, it *cannot* be so; and a closer examination will show that it *is not* so. The changefulness of asthma is quite consistent with its periodicity and its tendency to habitude. Its sameness is an iterated sameness, a constant and frequent repetition of like phenomena; its changes, on the other hand, are slow, gradually brought about by slight and almost imperceptible variations in these recurrent phenomena. This applies to one form of its changefulness—its tendency to change of type: the other, its capriciousness, must be admitted as qualifying, and rendering less marked and perfect, both its periodicity and habitude.

It is very rare to meet a case of asthma over which considerable changes do not pass in the course of years. In the severity of the attacks, in their character, in their duration, in the length of their intervals, in the time of day at which they occur, in their provocatives, in the remedies that control them, in the condition of the patient in the intervals, in the simplicity or complicity of the disease,—in all these points, asthma is prone to change. Independently of the changes that necessarily take place in the progress of a case, either towards a more severe and confirmed state, or towards recovery, there are others that can neither be considered progressive nor retrogressive, but which are so considerable, and which so completely alter the features of the case, that in a few years it would not be recognised as the same. From being irregular, the symptoms have perhaps become confirmed; from being occasional, they have become stated; attacks that were formerly confined to the morning now extend throughout the day; remedies that were formerly infallible have now become worthless; a more scrupulous care is necessary in avoiding possible excitants, whose number is greatly increased; the time in the twenty-four hours in which the paroxysm occurs is changed from morning to evening, or from evening to morning; and so on.

One very common change in the type of asthma—so common that it may be said to be its normal history—is as follows:—At first the paroxysms are of great intensity, and occur at distant intervals, and between them the breathing is perfectly free and clear. As the case progresses, the attacks become milder, but more frequent. At last they become so mitigated, that there can hardly be said to be any exacerbations of the dyspnœa at all. But in the meantime there has gradually grown up a constant dyspnœa, which never goes off in the intervals between the paroxysms, and which, from being at first very slight, almost inappreciable (indeed, in the first part of the case not existing at all), becomes very considerable, and an abiding source of distress to the patient, embarrassing his conversation and impeding his movements, but often, strange to say, less observed by the sufferer himself than those about him. Thus, by the mitigation of the attacks and the gradual development of dyspnœa in the intervals, a paroxysmal has been exchanged for an abiding condition. This is in part a change for the better, in part a change for the worse; for while the asthmatic no longer suffers from the agony of his paroxysms, and may be said rather to experience inconvenience than suffering, yet he now never feels the lightness and freedom of untrammelled breathing. Moreover, an abiding dyspnœa, however slight, affects more the general health than any intensity of paroxysm, implies a worse state of things at the present, and is more ominous for the future.

This gradual change in the phasis of asthma, which is the history of the majority of chronic cases, arises from the operation of three coexisting causes:—a gradual diminution of nervous irritability as life advances, diminishing the tendency to spasm, and mitigating the paroxysm; a gradual loss of reparative power, so that the temporary mischief to the lung left by each attack is less recovered from in the intervals; and the accumulated disorganisation of the lung from the continued operation of its cause. The process goes on for years; and the change is so gradual that it is only by comparing himself with what he was some time ago, that the patient recognises it. The experience of many asthmatics will, I am sure, bear me out in this description.

IV.—Capriciousness.

One of the most singular features of asthma, and one which it possesses to a degree perhaps not possessed by any other disease except hysteria, is its unaccountable *caprice*. It is always puzzling its victim and his friends by the exhibition of some unexpected vagary, giving him pleasant and unpleasant surprises, raising his hopes and then disappointing them, and altogether confounding his calculations. One may say of asthma as Horace did of Tigellius—

"Nil fuit unquam sic impar sibi."

Asthma is doubly capricious: the disease in general is capricious, and each case is capricious in itself.

The caprice of the disease in general is shown in the extreme unlikeness of different cases to one another. Not only are they unlike, but they exhibit the strongest contrarieties and oppositeness—in their behaviour to remedies, in their causation, in their paroxysms, in every point, in fact, of their clinical history. One case is better in dense crowded cities, another in the open country; one likes a low damp situation, another a high and dry one; one a relaxing air suits, another a bracing; one flies from the place which another seeks; one is confined to a spot in which another would die in a year; one is better in winter, another in summer, a third is equally bad all the year round; in one the attacks are entirely under the influence of the stomach, in another food makes no difference; one knows as well as possible when he is going to have an attack, another has no warning; in one the attacks occur with the regularity of clock-work, in another there is not a trace of periodicity; in one ipecacuan is the cause, in another it is the cure; in one nitre-paper acts like a charm, in another it is worthless; one patient says he would as soon be without life as without stramonium, another might as well smoke as much dried cabbage-leaves.

There are three questions in relation to the clinical history of asthma on which, in concluding this part of my subject, I would like to make a few observations.

At what age is asthma most disposed to come on?
What appears to be the influence of sex as affecting liability to asthma?
Is asthma hereditary?

V.—Time of Life of First Access.

There appears to be no time of life at which asthma may not make its appearance—from the earliest infancy to old age. The extremes of life, and any part of life between those extremes, are obnoxious to it. A few days after birth the infant may give unmistakable evidence of it; or the old man, after spending a long life without an asthmatic symptom, may be suddenly attacked by it. There are some periods of life, however, at which it is more apt to declare itself than at others; and, as one age is obnoxious to one cause of asthma, and another to another, cases of asthma differ in kind very much according to the age at which they commence. Thus the cases that come on in early life are generally due to the disorders of childhood—infantile bronchitis, measles, whooping-cough—acting on a constitution possessing a congenital proclivity to the disease. There is, in these cases, generally a sensitive bronchial mucous membrane, and often some pulmonary collapse and emphysema. The cases that come on in youth and early manhood are generally specimens of the pure spasmodic form, without any organic complication. Those that come on late in life are commonly cases of organic asthma—either asthma complicating chronic bronchitis, or cardiac asthma.

I find that in thirty-eight cases, in which I have noted the time of the first access, in seven it occurred during the first year of life. In one of these, distinct symptoms of asthma were recognised at fourteen days old, in another at twenty-eight days, in another at three months, in another at one year, and in three "during the first year," but the exact time is not remembered.

I have long known that early infancy is accessible to asthma, and that many of the best marked and purest spasmodic cases start from this early date; but, until I examined my cases, I was not aware so large a proportion, nearly one in five, occurred within the first year of life. In some of these the disease appeared so early that it would be difficult to say that it was not truly congenital. Within a few days of birth the breathing had the true asthmatic character. The constitutional tendency must be strongly marked indeed that would develope itself so early. And it is worthy of remark that, in all those cases in which the disease made such an early appearance, there was a history of inheritance, and this is quite consistent with what one would expect; its inheritance would imply its constitutional character; its being constitutional would make it probable that it would early declare itself.

The following is a table showing, in thirty-eight cases in which I have noted this point, the relative frequency in which asthma developes itself in the successive decades of life:—

During the first year	7	14
From one to ten	7	
From ten to twenty		8
From twenty to thirty		5
From thirty to forty		5
From forty to fifty		2
From fifty to sixty		4
		38

It would appear from this, that the first appearance of asthma is less and less likely to occur as life advances up to old age, when there is an increase. And this is exactly what one might expect from the constitutional nature of asthma. All constitutional diseases are, *ipso facto*, disposed to declare themselves early; the earlier, the stronger the constitutional tendency; and the longer they pass without appearing, the less likely are they to appear. This table, it must be remembered, is not a table of asthmatics at different ages, but of those who have *become* asthmatic at those respective ages. It is strictly a table of the relative frequency of the *first access* of asthma.

Almost all the cases of which I have taken notes are uncomplicated cases. Of a large number of cases of senile bronchitic asthma I have preserved no record; if I had, the number of cases commencing between fifty and sixty, and upwards, would have been much larger. The number four in the table by no means indicates the proportionate frequency of the commencement of organic asthma in old age.

VI.—Influence of Sex.

In fifty-four cases in which I have noted the circumstance of sex, thirty-six have been in males, and eighteen in females, or exactly twice as many in the former as in the latter. To what does this fact point? It unmistakably asserts that the causes of asthma are circumstances to which men are more exposed than women; such as the inclemencies of the weather, the wear and tear and hardship of life, the stress of violent and sustained respiratory efforts as in heavy labour, and intemperance. Unless this is the cause of the difference, we must suppose it to depend upon some greater proclivity to asthma on the part of the male nervous system than the female. Now this I do not believe. Indeed, I believe the reverse. An asthmatic nervous system is a mobile, sensitive, nervous system, and certainly the female nervous system is more mobile and sensitive than the male.

Consistently with this, I believe it will be found that idiopathic asthma—the pure neurosis—is as common in women as in men, and that the cases by which so large a preponderance is given to men, are cases starting from bronchitis. Senile asthma (chronic-bronchitic and cardiac) is, I should say, ten times commoner in men than in women.

VII.—Is Asthma Hereditary?

I think there can be no doubt that it is. Not that I would take this fact for granted, or on the common assertion that it is so; for I think this a point on which error is apt to arise. In all diseases a certain number of cases will be found in which, on the mere doctrine of chances, the parents, or other members of the family, have been similarly affected. But I think the number of cases in which there is a family history of asthma is greater than will admit of this explanation. Out of thirty-five cases in which I have noted this circumstance, I find distinct traces of inheritance in fourteen; in twenty-one not. It appears, therefore, to be inherited (and my numbers are sufficient to give some evidence) in two cases out of every five; that is, in the proportion of two to three. The kind of inheritance differs very much, sometimes it is direct, sometimes lateral; sometimes immediate, sometimes remote; as will be seen in the following specification of the inheritance in these fourteen cases:—

1. Inherited from the father.
2. Father a confirmed asthmatic.
3. Inherited from the father.
4. Father a confirmed asthmatic, brother suffers from hay asthma.
5. Grandfather a confirmed asthmatic.
6. Brother and paternal grandmother asthmatic.
7. Father, two paternal uncles, and paternal grandfather asthmatic.
8. Inherited from father; paternal sister died of it.
9. Father died asthmatic at forty-seven.
10. Several indirect branches of the family asthmatic, but neither parent.
11. Mother slightly asthmatic, maternal grandmother severely.
12. Grandfather now suffers from asthma.
13. Grandfather and uncle both asthmatic.
14. Sister and paternal grandmother asthmatic, brother with hay asthma.

With regard to the inheritance of asthma, I have observed one curious fact, which suggests an interesting general pathological question. It is, that several brothers and sisters in a family may be asthmatic without the parents having been so. This would seem to suggest, in respect to disease, a principle with which breeders are familiar—that certain *combinations* produce certain results, and lead to the *creation* of certain peculiarities, and that the qualities of the progeny are not the mere resultant of the combined qualities of the parents—just as we sometimes see a family of red-haired children, both the parents of which have black hair.

[*To be continued.*]

THE FORMATION OF CLOTS IN THE VENOUS SYSTEM DURING LIFE.

(A thesis for a medical act in the University of Cambridge.)

By GEORGE MURRAY HUMPHRY, M.D., F.R.S.,
Surgeon to Addenbrooke's Hospital; Lecturer on Surgery and Anatomy.

III.—On the Clotting of the Blood in the Cavities of the Heart.

In the following case the evidences of the formation of clots in the cavities of the heart and in the blood-vessels were unusually clear, and there can be little doubt that death was due to this cause.

A delicate girl, aged 11, was received into the hospital, March 27th, 1859, with a burn upon the outer surface of the right thigh, and on the palmar aspect of the right forearm. The skin was destroyed over a considerable extent; but it was hoped that she would recover, and, for several days, the wounds proceeded favourably, under the application of flour. About April 8th, without any apparent cause, she became rather feverish and refused her food. The slight feverishness subsided, but left her very feeble, with small pulse, dryish tongue, and shrivelled, harsh, scaling skin, the finger-ends feeling as after scarlet fever. Wine and nutritious diet were administered, and some improvement took place. On the morning of the 17th she was very low, but enjoyed her meals more than on previous days; and the nurse thought her better. About four in the afternoon she was somewhat uneasy, and asked the nurse to sit by her; but nothing remarkable was observed till about two hours afterwards, when she asked to be raised up in the bed. As soon as this request had been complied with, it was perceived that she was dying, and in a few minutes she was dead. No marked difficulty of breathing or other especial symptom was noticed.

Fifteen hours after death we found the right cavities of the heart, the left ventricle, and all the vessels connected with these cavities, filled with fibrinous clots. The left auricle also contained a clot, but was not filled by it. The central and greater parts of the clots presented the ordinary characters of the fibrinous masses often found in the heart, though they were tougher and firmer than usual. They were not laminated. Under the microscope they exhibited very fine linear fibres, disposed in an irregular network. The exterior of the clots presented, however, in many places, quite a different appear-

ance. It had a more opaque white, or cream colour, something like lymph in the neighbourhood of an abscess, and was composed, apparently throughout, of well formed cells, larger, clearer, and less granulated, than pus cells, with distinct nuclei. This cream-coloured portion of the clot was, in the right auricle, separated by a defined line from the remaining buff-coloured part, and could easily be peeled off from it. It had not quite a smooth external surface, and adhered slightly to the interior of the cavity, particularly in the appendix; nevertheless, it remained with the clot when the latter was turned out of the auricle. In the ventricles it adhered to the lining membrane of the heart more closely than in the auricles, especially about the edges of the valves, and near the apex. Where the clots extended into the pulmonary artery and aorta, they were deeply impressed by the sigmoid valves; but were not adherent to them.

Near the bifurcation of the pulmonary artery the whole thickness of the clot had a dull cream colour, and this was the case in the primary divisions of the vessel. In no place were the clots adherent to the walls of the pulmonary artery. Fibrinous strings, presenting the usual appearance, extended into the smaller branches of the artery.

In the inferior cava and the iliac veins was some fluid blood, which coagulated on exposure to the air; and mingled with it were numerous small clots, coloured in different degrees, and some of them partycoloured. They appeared to be free in the fluid blood, or, if adherent to the walls of the vessels, their connexion was very slight. In the great veins which converge to the superior cava, the clots were more numerous, larger, and more fibrinous, but still loose in the tubes, or very slightly connected with their walls. The left jugular and subclavian veins, at and near their junction, were almost filled by yellowish or cream-coloured clots, having a peculiar coiled or wrinkled exterior, which must have been caused by their being subject to some movements during the flow of the blood, or to their having been formed or increased by smaller clots carried in the current from other parts, and intercepted there. None of the vessels were distended by the clots.

In all the arteries which I examined, except the aorta and pulmonary arteries, the blood was fluid. The heart itself was quite sound, and there was no disease of the internal organs.

I have seen other cases more or less similar. In none of them, however, did the symptoms and the appearances after death so clearly indicate that death had been caused by the clotting of the blood in the cavities of the heart and in the adjacent great vessels. They form a highly important class of cases, to which the attention of pathologists and practical men is being more and more closely directed, and for the clear appreciation and discrimination of which much information as to the causes influencing and regulating the coagulation of the blood within the body, before and after death, has yet to be sought. At present, I think we are unable to explain many of the appearances we are in the habit of observing, and of deciding with certainty whether they are to be referred to *post mortem* changes, or whether they commenced during the life of the patients. For instance, we often find the cavities of the heart (the right auricle and ventricle more particularly, the left ventricle not unfrequently, the left auricle rarely) filled with fibrinous clots, and the prolongations of the clots extending into the adjacent vessels and descending into the most dependent branches of the pulmonary arteries; so that the absence of colour in them does not admit of explanation upon the ordinarily received hypothesis of the subsidence of the red corpuscles during the slow coagulation which goes on in the recently dead body, because the lowermost portions of the clots in the several cavities, and the most dependent portions in the pulmonary arteries, are as devoid of colour as the uppermost parts. Nevertheless, it seems pretty certain that clots of this kind are, for the most part, formed after death. Coincident with these fibrinous clots is sometimes a variable amount of fluid blood, which may be in the same cavities as the clots; commonly there is some fluid blood in the left auricle. Not unfrequently the clots extending from the ventricles into the pulmonary artery and the aorta exhibit well marked impressions of the semilunar valves, showing clearly that they were moulded upon the valves; and this is regarded as evidence of their having been formed before death (Richardson *On the Coagulation of the Blood*, pp. 407 and 420). Yet these clots are almost invariably found not adherent to the valves, but quite free from them and smooth. Moreover, each one commonly bears the impression of each of the three valves in an equal degree; and this often happens on both sides of the heart in the same body. If, therefore, these clots formed, as is supposed, or commenced, before death, upon the valves, they must have lined the whole of the interior of the vessels at and near their connexion with the heart, and must have completely covered and impeded the action of all the semilunar valves in such a manner and to such an extent that it would scarcely have been possible for the circulation of the blood to have been continued at all.

I think that additional observations upon the coagulation of the blood in the dead body, under varying circumstances and after various diseases, must be made before we can agree with the author of the excellent work *On the Coagulation of the Blood*, that either the tubular or the laminated structure of a clot, or the fact of a clot consisting of a fibrinous tube containing red blood in its interior, is conclusive evidence of the coagulation having begun before death. Lamination is a singularly prevalent and remarkable feature in the inorganic, as well as in the organic world; and the circumstances under which it occurs and the causes which induce it would prove a fertile subject for study and experiment. It is doubtless more commonly observed in those clots which, there is good reason to believe, have formed before death, than in those which have commenced subsequently. It would seem to depend upon the deposition of the fibrine in successive layers; though that is not certain, inasmuch as it may depend upon some peculiarity in the manner of the solidification of the fibrine, the particles becoming disposed in plates and layers, just as we know they have a disposition to be arranged in fibres; and it is no unreasonable supposition that this may, under favourable circumstances, take place after death. With regard to the tubular form of a clot, it is by no means improbable that, in certain peculiar conditions of the blood, the tendency of the fibrine to separate itself and settle upon the walls of the vessels, on the valves, and on other structures, may be manifested after death, in the same way that it often is before death; and may thus lead to peculiarities in the appearance and structure of the clot which render it very difficult, or impossible, to distinguish whether they are *ante* or *post mortem* formations.

The mode in which the *fibrinous* and the *corpuscular* varieties of the fibrine are combined in the same heart, or even in different parts of the same clot, are difficult of explanation. Thus in a lad, who died with cerebral symptoms after amputation, I found in the right auricle and ventricle a firm white clot, which presented, under the microscope, a distinctly fibrous structure, the fibres being clear and delicate, but strong; and in the left ventricle were small reddish clots, containing an unusual quantity of pale nucleated corpuscles. When the two varieties coexist in the same clot, the fibres generally preponderate at the circumference, and the corpuscles nearer the centre: the reverse, however, was found in the clots occupying the heart in the case above related.

CASE OF POISONING BY SIR WM. BURNETT'S DISINFECTING FLUID: RECOVERY.

By Henry Porter, M.D., Peterborough.

I was summoned at six o'clock on the morning of February 26th, to go five miles into the country, by a message to the effect that "Mr. F. had swallowed something by mistake, which had made him very sick and ill," but with no more definite statement. I therefore at once proceeded to visit my patient; and, on inquiry, found that he had returned home late on the previous evening from a dinner party, when, according to custom, he had gone to a cupboard where a bottle of Dinneford's Fluid Magnesia was usually kept, for the purpose of taking a dose, as a corrective to his port-wine. Unfortunately, however, on the present occasion, a bottle of Sir Wm. Burnett's Disinfecting Fluid had been placed by the side of the fluid magnesia, resembling it so much in size, shape, and colour of the label, that he at once put it to his lips, threw his head back, and, taking a full inspiration, swallowed a draught, amounting at least to two ounces, before perceiving the mistake. "At once," says my patient, "I felt a burning sensation all down my throat, with great pain and a sense of tightness in my stomach. My wife directly prepared me an emetic of mustard and water; and in less than four minutes I was violently sick, ejecting all the food I had taken, as well as the fluid I had swallowed; and I have been in excessive pain up to the present time": which was about seven o'clock A.M. when I first saw him.

He then had that particularly anxious expression of countenance indicative of irritant poisoning, with a small, quick,

and feeble pulse, and cold clammy skin. The back part of the mouth and fauces were much inflamed, but free from swelling or disintegration of surface, and the slightest pressure over the region of the stomach caused great increase of pain, with tendency to vomit.

I prescribed fifteen grains of carbonate of soda, to be given every hour in a wineglass of water, with total abstinence from food or other drink, and perfect rest in bed.

In the afternoon of the same day, I revisited my patient, accompanied by Dr. Paley of Peterborough. He was much in the same state as when I left him, except that the pulse was more feeble and the surface colder. He had continued to vomit at intervals large quantities of mucus, mixed with a considerable portion of dark coloured blood. He was then ordered ten grains of carbonate of soda with six drops of Battley's solution of opium in water every three hours, with total abstinence from food or drink, and warm fomentations to the abdomen.

Feb. 27th. He passed a restless night, but with a diminution in the amount vomited; the matter being darker and more grumous. The pulse had slightly improved in force, and there was more warmth of surface, but much pain over the region of the stomach. The tongue and mucous membrane of the fauces had assumed a milk white appearance. He was ordered to continue the medicine every four hours, and take half an ounce of castor oil; his diet being limited to milk and water.

Feb. 28th. He passed a comfortable night without much vomiting; the matter being only slightly tinged with blood. The pain of the hypochondrium had considerably diminished, and his countenance had lost much of its anxiety. He had passed a copious evacuation, of a dark colour; the greater part of which was evidently altered blood.

From this date to March 8th, the symptoms gradually subsided; the only alteration in medicine being the omission of the opiate and the use of infusion of cusparia with alkali. He had commenced to take solid food, and drink beer, contrary to my wish; and on March 8th, diarrhœa set in, which was at first exceedingly obstinate, but yielded in the course of a week to gallic acid and sedative solution of opium.

March 20th. He left home for the Isle of Wight; and after three days, wrote to me, complaining of inability to swallow his food. I therefore advised his speedy return.

March 26th. I saw him again, and examined his throat, but found no stricture whatever, and soon discovered that the symptom was entirely a nervous one. I ordered him to abstain from all solid food, but to take the most nutritious liquids, prescribing the mineral acids with bitter infusion three times a day. He continued this plan until April 20th, being then free from all complaints, and gradually resuming his accustomed food and active occupation.

I met my patient a few days since, when he declared himself well in all respects, and free from even the least discomfort after meals, having quite resumed his natural robust appearance and active habits.

Remarks. On reviewing this case, I consider it almost miraculous that my patient should have escaped after taking so large a quantity of such a noxious poison, amounting (according to Dr. Pereira) to more than six drachms of chloride of zinc; and can only attribute his recovery to the full state of the stomach at the time, and the speedy removal of the poison by the domestic emetic. With regard to the drug employed as an antidote, as I do not look upon the stomach as a purely chemical laboratory, I will not presume to say that the carbonate of soda acted by converting the chloride into a carbonate of zinc; but most certain it is, that its administration proved most beneficial; and I would earnestly recommend its use in any similar catastrophe. Since such a close resemblance exists between the bottles and labels in which these two highly useful and much used preparations are supplied to the public, I greatly fear that such a misadventure is very liable to recur—this not being the first case of the kind which has come before the public. I believe that, if means could be adopted to render poisonous articles in general more conspicuous by each one having some peculiar form in which it only could be retailed, the sale of them would be fraught with much less danger than is at the present time unluckily the case.

In justice to my patient, I may state, that he is invariably an abstemious man, and when the accident occurred was perfectly sober. I may also mention the coincidence, that his mother swallowed a large quantity of liquor potassæ, and died, after dragging out a miserable existence for two years from stricture of the œsophagus.

Transactions of Branches.

LANCASHIRE AND CHESHIRE BRANCH.

STONE IN THE BLADDER OF A FEMALE: FISTULOUS OPENING FROM THE BLADDER INTO THE LEFT GROIN: OPERATION: RECOVERY.

By William McEwen, M.D., Chester.

[*Read June 8th*, 1859.]

I am indebted to my friend Mr. J. E. Moreton, of Tarvin, near Chester, for the following report.

"Miss M. M., aged 24, in the middle ranks of life, came under my observation on the 19th of May, 1858.

"When a child, she had disease in the right hip-joint, which is now ankylosed in a slightly flexed position, causing the leg to be shorter than its fellow, and giving a lame gait in walking. Upon the whole, she has never enjoyed good health, but cannot give any well defined or specific account of her ailments, which have rendered her weak and delicate-looking.

"She evidently avoided in any way alluding to her sufferings, which must have been present, more or less, for some years; for I remember casually calling her attention to any pain or difficulty she might have had in passing urine.

"When I first saw her (May 19th, 1858), she had a small abscess in the left groin, in the region of the superficial glands of the neighbourhood. The abscess opened spontaneonsly in a few days, presenting very much the character and appearance of a small scrofulous collection of matter, and was, indeed, so considered.

"Her health had suffered considerably; during the last few months she became much emaciated, with a quick feeble pulse, at 120; no appetite; indeed, she had a hectic appearance. Cod-liver oil with iodide of iron were administered internally; and iodide of lead was applied to the groin. Four days after the abscess opened, urine came out with the matter. I thought she might be mistaken; but, on careful examination, I found that such indeed was the case; and to satisfy myself as to the condition of the bladder, on the 5th of June I passed first an elastic catheter, then a silver catheter, through which no urine came, but which struck against a calculus of very large size, blocking up the bladder and internal meatus.

"Again and again I asked her whether she had any previous symptoms of disease of the bladder; but all I could glean from her was, that four years ago the same train of symptoms had accompanied the bursting of an abscess in the same groin; and that urine had then passed through the opening for some weeks, and then ceased of its own accord, leaving her in a very poor state of health."

These are the circumstances under which Mr. Moreton did me the honour to call me in consultation; and I must confess the general appearances of the patient were by no means favourable for an operation. There she lay, helpless, emaciated, hectic, with a pulse running upwards of 120 per minute: great pain along the region of the bladder; and all the urine, as it was secreted, passing through the sinus which Nature had made to the groin. The skin around the opening was red and tense, from the perpetual flow of urine; none apparently was passing, or had passed for some time, through the meatus, which was filled with pus from the bladder.

The patient was very pressing that something should be done to relieve her from pain and her loathsome condition. Upon carefully examining the bladder as far as it could be done, it became obvious from the position of the stone, and its great size, completely filling the bladder, which was much altered both in structure and position, that dilatation or crushing was impossible, leaving, as the only alternative, incision, which was performed on June 11th. She was placed on a mattress, and tied up in the usual manner, and chloroform administered. Mr. Moreton held a straight grooved staff, the point being in contact with the stone. With a probe-pointed knife I cut first a little laterally, and then downwards and outwards. The staff was then removed: the stone was gently but easily removed. This which I show you is a section of the first stone, which weighed two ounces *minus* thirty grains; its longest diameter is two inches, and it is one inch in thickness. I introduced my finger into the bladder, to ascertain if any portion had been left; and, to my surprise, found another stone, apparently as large as the one I had just removed; and the difficulty I had to get it raised from its bed was very considerable, for the bladder

seemed tied round it, and the distance from the opening was so great that I could just feel it with the point of my finger. That portion of the bladder lay right into the left iliac fossa, exactly corresponding with the opening that Nature had made in the groin for the escape of urine. After several ineffectual attempts to secure the stone, I caused Mr. Moreton to press down the soft parts of the left side of the abdomen, so as to keep the parts steady, and bring the stone more within reach. This movement had the desired effect. With a long scoop I was successful in slightly raising it, and instantly secured it with the forceps, and brought it away without difficulty. Here is the specimen, weighing one ounce and five scruples, one inch in thickness, and, like the first, of a triangular form. Finding that I had cleared the bladder, or what was once the bladder, of stone and *débris*, it was carefully washed out with tepid water, and the patient was placed in bed. Very little blood was lost; the effects of chloroform soon passed away; and in the evening she was able to take a little tea, etc., and expressed herself as being very comfortable.

I will again quote Mr. Moreton's words, as he took the subsequent charge of the case.

"She had but little subsequent pain—in a word, recovered steadily, without a bad symptom. Urine continued to flow through the opening in the groin for about a week; it then ceased, and the opening healed of its own accord. She has now (May 30th, 1859) tolerable command over the bladder, and can retain her urine for four hours. Her ability in this respect is uninfluenced by position. She has perfectly recovered her strength, and is now well and healthy-looking."

P.S. Both the calculi are of the same character, and composed, for the most part, of triple phosphate, combined with phosphate of lime. The composition of the nucleus is doubtful.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, AUGUST 13th, 1859.

THE MEDICAL COUNCIL.

Those who wished the Medical Reform Act to miscarry, prophesied all manner of evil things with respect to its working, and especially levelled their shafts at the Medical Council, which has been designated as a mere do-nothing body, receiving splendid pay out of the pockets of the profession. The report of the proceedings of our medical parliament, to be found at page 653, will at once dissipate the prognostications of the grumblers, and prove that we have a real working body. Indeed, we question if more real business has not been transacted, calculated to elevate the profession in our own and in the public eye, within these last few days by the Council, than has been accomplished otherwise during the whole century.

In the first place, they have silenced the absurd rumours which have been flying about, especially on the other side of St. George's Channel, as to the exorbitant scale of charges they were about to institute with respect to their own fees for attendance and travelling expenses. It is quite clear that five guineas per day is a sum which would not tempt leading medical men from their practices; indeed, there is not a man on the Council who would not rate his time at a much higher price than this, if called any distance in a professional case. The Council, therefore, deserve the thanks of the profession for their modest estimate of the value of their time.

The great work of the present sitting has, however, consisted in the steps taken to keep the Register pure as far as possible of persons possessing insufficient qualifications, and to provide for the intellectual elevation of the coming race of medical men. As far as the first object is concerned, the Council have formally declined, it is true, the task of forming themselves into a prosecuting body, inasmuch as they contend that they have neither time nor money to do so. We certainly think they have exercised a wise discretion in renouncing this duty. The Council form by far too unwieldly a body to act vigorously as prosecutors. Moreover, they have not the requisite local knowledge to enable them to act successfully. That duty is best delegated to local societies. We have all seen how admirably the London Medical Registration Association has done its work in the metropolis; and the Brighton Registration Committee, organised by the South-Eastern Branch of our own Association, has just brought a prosecution to a successful issue, showing that our Branches are quite capable of performing the process of winnowing the provincial part of the profession satisfactorily. The refusal on the part of the Medical Council to act the part of prosecutors of illegal practitioners is far from being accompanied with a disposition on their part to shirk the duty of thoroughly sifting the claims of persons demanding to be registered in respect of foreign degrees. Thus on the 4th, it was agreed that a foreign degree, conferred without examination at the seat of a University or College, is not to be accepted. This decision at once closes the Register against a great number of objectionable persons who have no other qualification. It is also observable that the Council have taken great care to examine the numerous special claims for registration, and have exercised their power of refusal to registrate pretty freely. The name of the notorious Dr Kahn, is, we see, struck off, on the plea "that the Committee are not satisfied that he was practising as a physician in the United Kingdom before the 1st day of October, 1858". Thus the glory of that house of disgusting waxwork is departed, and we trust speedily to see the title of "Dr." dissociated from his prurient exhibition. The Council, too, have had to exercise their judgment in the case of several persons who have actually claimed to be registered without possessing any qualification whatever—not even the privilege of having been engaged in practice before 1815. All these, who, for aught we know, have long practised, are of course excluded from the Register. The proceedings in regard to Registration must have convinced all, who have calculated on the supineness or good nature of the Council, that they have been wofully mistaken.

Having made their arrangements with respect to existing practitioners, the Council pass on to provide for the coming race of practitioners. The question as to what bodies shall form the examining boards of the future general practitioner, is one of the most important to which the Medical Act has given rise; and the Scotch corporations have proposed the only true and fitting reply. The Colleges of Physicians and Surgeons of Edinburgh, and the Glasgow Faculty, propose, with the approbation of the Medical Council, to cooperate in their

examinations for this licence. If the Colleges of London and of Dublin unite in the same manner, we shall have boards of examiners established who will, without doubt, give us a very high order of general practitioners—physicians and surgeons rolled into one. Some months ago, we stated that there was an intention on the part of the London Colleges to make some arrangement of this sort, and we have no manner of doubt that they will eventually follow the lead of the northern Colleges. We most heartily congratulate the profession on the initiation of this scheme; if carried out thoroughly, it will be of immense importance to the public, in furnishing them with a supply of most highly educated medical men throughout the country.

A still more important topic, if possible, which has been under the consideration of the Council, is General Education. Our Association has laboured so long in this direction, and the clause in the Bill making general education compulsory was so insisted on by us, that its elimination from the final measure was looked upon as a great blow and discouragement. We rejoice to find, however, that the Council have taken a right view of their duties in this particular, and that a Committee appointed by them has drawn up a plan which must be productive of vast benefit, if ultimately adopted. By this scheme, all medical students entering the profession after September 1861, will have to pass an examination in general education, before they commence their strictly professional studies. This examination may be either the "little-goes" or matriculations of the Universities of Oxford, Cambridge, London, or Dublin; or the middle-class examinations of the two former Universities, or of Durham; or an examination of any other University of the United Kingdom, equivalent to the middle-class examinations of Oxford and Cambridge. We refer for the details of the scheme, however, to the report of the Council itself. While we write, we have received information that the proposal, after having been received and undergone careful consideration, has been confirmed by the Council.

Such have been the proceedings of the Council for the six days for which we have received reports. If all they have sketched out is brought into good working order, there can be little doubt that the week just past will be a most memorable one in the annals of British medicine: and the Council will have proved that the profession has men within its own limits quite capable of mastering difficulties, before which successive ministers of state have recoiled in despair.

THE WEEK.

The proceedings of the Medical Council in regard to the price charged for the *Register*, must at once remove the idea that seems to have been hastily—and therefore, we must say, unjustly—formed by some members of the profession, that a profit on the sale of the work was sought to be extracted from the pockets of its purchasers. The printer's account being considerably less than was anticipated, the Council have reduced the price in future to four shillings; and have decided that a copy of the next *Register* shall be presented to each person who has already laid out seven shillings and sixpence on the one just published. Those who have been disposed to accuse the Council of a trading spirit, derogatory to their position and functions, will now, we are sure, acknowledge that they have judged too hastily.

Two cases were tried before the Brighton magistrates on Wednesday, July 27th, which afford additional proof of the efficacy of Medical Registration Associations in restraining illegal practice. A person named Bradley, a druggist in Brighton, was charged with describing himself in such a way as to lead to the belief that he was a qualified medical practitioner. It was proved that over his shop window were the words "Dr. Bradley," in large and easily read characters, preceded by "Son of the late," in much smaller letters. After a careful hearing, the magistrates decided that there was no doubt that the name was put up to hold out to the public that a Dr. Bradley lived there; but, as it was the first case that had come before them, they would fine the defendant only twenty shillings and costs; the latter amounting to fourteen shillings and sixpence. The defendant could alter the "D" into an "M." The next case was that of a man named Stowell, who was charged with writing the words "Dr. Stowell" on the outside of his house, and with appending the letters "M.B." to his name. The defendant pleaded that "M.B." meant Medical Botanist; and produced his card, on which he was described as a "botanic physician, not registered." The magistrates decided that the words "not registered" went for nothing, and that the use of the word "physician" constituted an offence. The case was not proceeded with, as the defendant undertook to remove the "Dr.," to discontinue the use of the titles objected to, and to pay the costs of the proceedings. These two cases, which have been so successful, were brought forward at the instance of the Brighton Registration Committee, one of a series of Committees which were instituted last year by the South Eastern Branch of this Association, for the purpose of aiding in carrying out the provisions of the Medical Act. Mr. Taaffe, of Brighton, the Secretary to the Committee, who attended the trials, stated to the magistrates that he appeared in his official capacity, and not from any ill-will towards the defendants. He further said that the Committee were determined not to allow the Medical Act to be a dead letter in Brighton; and that he, as Honorary Secretary, would not shrink from the duties attached to his office. The result of the efforts of the Brighton Committee confirms the opinion we some time ago expressed, as to the great good likely to be derived from the establishment of Registration Associations under the auspices of the British Medical Association, or of its Branches; and we trust that similar institutions, especially since the Medical Council have for very good reasons, declined to become a prosecuting body, will be called into activity in every district of the kingdom. We specially commend this subject to the consideration of those members of the profession, to whom the path of duty has not hitherto seemed clear in respect of organising themselves as auxiliaries to the Medical Council. They must now see that their functions commence where those of the Council terminate. The Council can close the Register against unqualified persons: and it is then for the legitimate members of the profession to call the law into action to prevent them from imposing further on the public.

THE MEDICAL COUNCIL.

MINUTES OF MEETING.

Wednesday, August 3rd, 1859.

Royal College of Surgeons of England, London.

Sir Benjamin C. Brodie, Bart., *President*, took the Chair at Two o'clock P.M.

Present:—Sir James Clark, Bart., Dr. Thomas Watson, Mr. Green, Mr. Nussey, Dr. Bond, Dr. Embleton, Dr. Storrar, Dr. Acland, Dr. Alexander Wood, Dr. Andrew Wood, Dr. James Watson, Mr. Syme, Dr. A. Smith, Dr. Williams, Dr. Leet, Dr. Apjohn, Dr. Corrigan, Sir Charles Hastings, Mr. Lawrence, Mr. Teale, Dr. Christison, and Dr. Stokes; Dr. Francis Hawkins, *Registrar*.

The minutes of the last meeting of the General Council were read and confirmed.

1. The following Report of the Committee, appointed November 26th, to consider the fees for attendances on the General and Branch Councils, was presented. Dr. Stokes, the Chairman of the Committee, stated that Dr. Corrigan dissented from it.

REPORT.

"That the rate of payment for attendance on the General Council be the same for all members of the Council.

"That the fees for attendance on the General Council during the first year from the passing of the Medical Act, be five guineas per day to each member attending.

"That members of the General Council residing at more than two hundred miles from London, shall receive five guineas per day for the day of their coming, and for the day of their return.

"That the travelling expenses be on the scale formerly approved of by the General Council, and that a guinea a day be allowed to non-resident members for hotel expenses.

"That the fees for attendance at the meetings of the Executive Committee and Branch Councils be two guineas to each member attending, his travelling expenses being also paid."

Scale of Travelling Expenses.

Scotland - -	£9	9	0	Worcester -	£4	4	0
Ireland - -	8	8	0	Cambridge -	2	2	0
Newcastle - -	6	6	0	Oxford - -	2	2	0
Leeds - -	4	4	0				

It was moved by Dr. Stokes, seconded by Dr. Acland, and agreed to—

"That the report be adopted."

It was moved by Dr. Andrew Wood, seconded by Dr. Watson, and agreed to—

"That the scale of payment for attendance on General Councils, Branch Councils, and Executive Committees, and travelling expenses agreed to by the General Council, be transmitted without delay by the President to the Lords of the Treasury for their approval, in accordance with Section 12 of the Medical Act."

2. A statement was read from the University of Dublin, relative to the Medical Acts Amendment Bill.

It was moved by Dr. Andrew Wood, seconded by Mr. Syme, and agreed to—

"That, in respect that this Council are not in possession of information sufficient to enable them to come to a satisfactory conclusion regarding the papers submitted to them as to the Medical Acts Amendment Bill, the consideration of the question be postponed till Friday next. To be the first business on that day."

3. A letter was read from the Home Office, enclosing a copy of a letter from a registered practitioner, "complaining of the high price of the Register, and calling attention to the fact that the Medical Council do not intend to be a prosecuting body."

It was moved by Dr. Christison, seconded by Dr. Alexander Wood, and agreed to—

"That in reference to that part of the letter transmitted by the Home Secretary, which complains that this Council 'does not intend to be a prosecuting body' for prevention of illegal practice, the Council appoint Dr. Christison, Dr. Alexander Wood, Dr. Corrigan, and Dr. Storrar, a Committee, to prepare an answer."

It was also moved by Dr. Aquilla Smith, seconded by Mr. Green, and agreed to—

"That a Committee be appointed, to report on the cost of the publication of the Register, and the price at which it should be sold:

"The Committee to consist of Dr. Aquilla Smith, Mr. Green, and Mr. Nussey."

4. It was moved by Dr. Aquilla Smith, seconded by Dr. Watson, and agreed to—

"That the General Council shall meet each day at Two o'clock P.M., and shall not sit after Six P.M."

5. It was moved by Dr. Acland, seconded by Dr. Watson, and agreed to—

"That a programme of the subjects which it is the intention of members of the Medical Council to bring forward be forthwith prepared by the Registrar, be printed, and distributed to the members of the Council to-day, and that such a programme be issued by the Registrar, from day to day, as may be required; and that a Committee be appointed, to aid the Registrar, consisting of Dr. Alexander Wood, Dr. Andrew Wood, Dr. Aquilla Smith, Dr. Embleton, and Dr. Storrar."

6. It was moved by Dr. Christison, seconded by Dr. Storrar, and agreed to—

"That for the purpose of guiding the Council in coming to a determination, in conformity with Sect. 20 of the Act, respecting the sufficiency or insufficiency of the course of study and examinations of the several bodies whose regulations for their fellowships, licences, and degrees, have been communicated to the Council, a Committee be appointed, to prepare a report, laying down a minimum of examinations, and subjects of examinations, without which no qualification will be held, by the Council (Sect. 20), such as to secure the possession by persons obtaining such qualifications, of the requisite knowledge and skill for the efficient practice of their profession; and that it be an instruction to the Committee to report on the expediency, or the reverse, of this Council recommending what, in their opinion, would constitute a sufficient course of general and professional education."

Amendment moved by Dr. Corrigan, and seconded by Dr. James Watson—

"That a Committee, consisting of , be appointed, to examine the Returns of Education and Examination furnished to the General Medical Council, under Clause xviii of the Medical Act, and resolution of General Council of November 27th, 1858, by the several Universities and Colleges, and to report to the General Council such amendments as may seem to them to be required, for the improvement of general and professional education."

The amendment was negatived, and the original motion carried,

7. It was moved by Dr. Andrew Wood, seconded by Dr. Stokes, and agreed to—

"That a Committee be appointed, to examine the returns by the different bodies included in Schedule (A), to report in regard to each of these as to how far the course of study and examination required by each is calculated to secure the possession by persons obtaining their respective qualifications of the requisite knowledge and skill for the efficient practice of their profession; and to report to the Council. As also in regard to the most effective machinery for superintending the examinations, so as to secure that they shall conform to a standard of examinations in general and professional education considered sufficient by the Council."

It was resolved that the Committee on Education, to be appointed in pursuance of the two preceding motions, consist of Sir Benjamin C. Brodie, Bart., Dr. Acland, Dr. Christison, Dr. Andrew Wood, Mr. Green, Dr. Stokes, Dr. Williams, Mr. Teale, Dr. Storrar, and Sir James Clark; Dr. Storrar to be Chairman.

8. It was resolved that the Finance Committee should consist of Dr. Andrew Wood, Mr. Green, Dr. James Watson, Mr. Nussey, Dr. Bond, Dr. Embleton, and Dr. Storrar.

Thursday, August 4th, 1859.

Royal College of Surgeons of England, London.

Sir Benjamin C. Brodie, Bart., *President*, took the Chair at Two o'clock P.M.

Present:—The same members as on the preceding day.

The minutes of the last meeting were read and confirmed.

The President informed the Council that he had received a letter from Dr. Lawrie, apologising for his absence, on account of severe illness.

1. It was moved by Dr. Alexander Wood, and seconded by Mr. Green—

"That any medical practitioner who is entitled to be entered on the Register, by virtue of his connexion with any of the bodies comprehended in Schedule (A), who holds besides a foreign diploma, granted before October 1st, 1858, shall be entitled to have these foreign diplomas entered on the Register."

Amendment moved by Dr. Storrar, and seconded by Mr. Syme—

"That degrees which have been conferred without examination at the seat of a University be not registered."

The amendment was negatived.

2. Dr. Alexander Wood and Mr. Green were allowed to withdraw their original motion, and to substitute the following—

"That all cases of gentlemen applying to register foreign diplomas granted before October 1st, 1858, and whose names are entitled to appear on the Register, by virtue of qualifications obtained by examination, be referred to a Committee to examine and to report thereon."

Amendment moved by Dr. Christison, and seconded by Dr. Williams—

"That all claims of applicants who possess a foreign degree, not acquired by examination at the University seat, be referred to a Committee for its report and opinion as to the individual claims."—Negatived.

The motion, as altered, by consent of the Council (2), was then put, and also negatived.

3. It was moved by Dr. Thomas Watson, seconded by Dr. Acland, and agreed to—

"That it does not appear to the General Council that a foreign degree, conferred without examination at the seat of the University or College granting the degree, furnishes sufficient reason for admitting (any person) to be registered."

4. Letters were read from the India Office, suggesting that the surgeons and assistant-surgeons of Her Majesty's Indian military forces, now serving in India, should not be required to register their names under the Medical Act, and that the General Council should, by special orders, as provided for under the 46th section of the Act, dispense with the provisions of the 36th section in the cases of those medical officers; but that future candidates for admission by competition to the Indian Medical Service, should be required to register their names under the Act.

It was moved by Dr. Corrigan, and seconded by Dr. Stokes—

"That Lord Stanley's request be acceded to; the exemption, however, not to extend to cases of medical officers returning from India to reside in the United Kingdom."

Amendment moved by Mr. Syme, and seconded by Dr. Andrew Wood—

"That the Council, in their present state of information, cannot see any reason for dispensing with the registration of officers in the Indian army."

The amendment was agreed to.

5. Dr. Alexander Wood, as Chairman, presented the following report from the Committee appointed respecting the complaint that the Council "does not intend to be a prosecuting body."

REPORT.

"In regard to the complaint made in the letter to the Right Honourable the Secretary of State, relative to the prosecution of irregular practitioners, the Committee is aware that exaggerated ideas have been currently entertained in the medical profession of the powers and duties of the Council in that respect, and think it right to take advantage of the present opportunity to state what the powers and duties of the Council really are:

"'1. The Council is called on to exclude all irregular practitioners from the Register, and it has exercised the greatest possible care in discharging that part of its duty.

"'2. The Council is called on to expunge from the Register the name of any unqualified person who may obtain admission by false pretences. This power has been already exercised.

"'3. The Council has the power to expunge from the Register the name of any practitioner who may be found guilty, in England or Ireland, of a felony or misdemeanour; or, in Scotland, of a crime or offence. One offence of this nature has occurred, but the name of the convicted person having been expunged from the Register for another cause, the Council need not proceed in the matter.

"'4. The Council has the power to expunge from the Register the name of any practitioner whose name may have been struck off from the list of the members of any of the bodies which grant medical qualifications.'

"It is no part, however, of the functions of the Council, according to the Act, to institute prosecutions at large for offences against the Act. The Committee has also to add, that the funds at the disposal of the Council are quite inadequate for that purpose.

"The enforcement of the prohibitory clause of the Act (Sect. xl) is attended with peculiar facilities in Scotland and in Ireland, in each of which divisions of the kingdom there is a public prosecutor, whose duty it is to relieve all other persons of the responsibility of prosecuting for public offences. In England, this duty unfortunately falls in general on private individuals, or associations, and in this respect offences against the Medical Act are not differently circumstanced from offences at large. The Council will supply any information in its power to those who may become concerned in such prosecutions."

The report was adopted.

6. Memorials having been read from the Lying-in Hospital in Dublin, and the Coombe Lying-in Hospital, requesting that their certificates should be received as qualifications for registration, it was moved by Dr. Storrar, seconded by Mr. Lawrence, and agreed to—

"That, in reference to the memorials of the governors of the Lying-in Hospital in Dublin, and of the Coombe Lying-in Hospital in Dublin, it is not in the power of the Council to comply with them."

7. A letter having been read from the Registrar of the King and Queen's College of Physicians, in Ireland, respecting the intended recognition, by the Director-General of the Army Medical Department, of the certificate of the Apothecaries' Hall of Ireland, as a licence to practise medicine, the consideration of this subject was postponed, all the documents relative to it not having been received.

8. It was moved by Dr. Alexander Wood, seconded by Dr. James Watson, and agreed to—

"That a Committee be appointed, to consider special claims for registration."

The Committee to consist of Dr. Alexander Wood, *Chairman;* Sir Charles Hastings, Dr. Bond, Mr. Syme, Dr. Watson (Glasgow), Dr. Embleton, and Dr. Aquilla Smith.

Confirmed—B. C. Brodie.

Friday, August 5th, 1859.

Royal College of Surgeons of England, London.

Sir Benjamin C. Brodie, Bart., *President*, took the Chair at Two o'clock P.M.

Present:—The same members as on the previous day.

The minutes of the last meeting were read and confirmed.

1. Dr. Smith presented the following Report from the Committee, on the Register:—

"The Committee appointed to report on the cost of the publication of the Register, and the price at which it should be sold, have examined the account, which has only just been received from the printer, and find that the amount of it is much lower than the Executive Committee were led to expect, from the estimates which had been laid before them; and that the cost of publication, therefore, will be considerably less than the Committee believed it would be when the price at which it should be sold was fixed at 7*s.* 6*d.* per copy.

"The Committee recommend that the Register should be sold at 4*s.* per copy; and, as they learn from the Registrar, that about 900 copies have already been sold, at 7*s.* 6*d.* per copy, they further recommend that to every person who has paid the sum of 7*s.* 6*d.*, a copy of the next edition of the Register should be furnished gratis."

It was moved by Dr. Storrar, seconded by Dr. Andrew Wood, and agreed to—

"That the Report of the Committee on the Register be adopted."

2. It was moved by Dr. Apjohn, and seconded by Dr. Stokes—

"That after having maturely considered the case of the Licentiates in Surgery of the University of Dublin, the Council are of opinion that the curriculum of study, both general and professional, which they must undergo before obtaining such qualification, is satisfactory. The Council further find that, by what is alleged to be an accidental omission in Schedule (A), of the Act of 1858, such Licentiates cannot legally be placed upon the Register. But, under all the circumstances, they leave it to the wisdom of Parliament to decide whether any, and what relief should be provided for them."

Amendment moved by Mr. Syme, and seconded by Mr. Lawrence—

"The Council having heard the statements of Dr. Apjohn, Dr. Williams, and Dr. Stokes, on their respective sides of the question, relative to the Surgical Licence of Trinity College, Dublin, and the opposition of the Royal College of Surgeons of Ireland, deem it inexpedient to express any opinion on the subjects in dispute. But the Council cannot refrain from expressing their hope that such differences may be speedily arranged."

Votes taken, and amendment agreed to.

Dr. Stokes was requested to take the Chair, which the President had been obliged to vacate.

3. Dr. Alexander Wood presented the First Report of the Committee on Special Applications for Registration.

"The Committee, in giving their Report, have to state that their labours have been much lightened by the resolution come to by the Council yesterday, to refuse to register all Medical Degrees obtained without due examination at the Seat of the University by which the Degrees are granted. In reporting on all the cases which up to this time they have been enabled to take into consideration, the Committee will first bring forward those which are virtually settled by the Resolution referred to."

I. *Degrees conferred without Examination.* J. Whitehead, Boulogne-sur-Mer; — Warren; W. J. Pasley Kidd, Glasgow; H. C. Taylor, Glasgow; John Cocker, Bank Hey, near Blackpool; John King, Stroud, Gloucestershire; W. M. Warcup, East Dereham, Norfolk; George Fearon, Edgbaston; R. L. Lobo, 35, Sussex Street, W.C.; Charles Cockerton, Islington; W. C. Bonthrone, Crail, Fifeshire; W. A. F. Browne, Dumfries; John Cochrane, Edinburgh; George B. Clark, Cupar Angus; Alexander Currie, Bowmore, Islay; James Edward, Forfar; Thomas Harle, Glasgow; Robert Jefferies, Dalkeith; W. D. McRitchie, Edinburgh; Archibald Mein, Edinburgh; A. M. Adams, Edinburgh; T. M. Alexander, Glasgow; W. A. Roberts, Edinburgh; H. C. Taylor, Glasgow; S. Shortridge, Greenock; J. Watson, Tranent; W. Young, Laurencekirk; A. F. Thomson, Esdaile. With respect to these gentlemen, the Committee have, of course, no alternative but to recommend that their claims be not acceded to.

II. *Persons applying to be Registered without any Qualification.* J. C. Chawner, Hanley, Staffordshire; Joseph Webster, Golcar, near Huddersfield; George Dansey, Stoke, Devonport; Francis Bingham, Everton, near Liverpool. The Committee recommend that in all these cases the application be refused.

III. *Licences conferred in Holland.* 1. P. D. Loeterbagh, Lerwick, Scotland. Qualified by examination before the Dordrecht Committee of Medical Education and Superintendence, as City Apothecary, Country Surgeon, and Naval Surgeon. The Scottish Branch Council have inquired into these qualifications, and approve of them; and the Committee, therefore, recommend the Council to allow Registration. 2. Solomon Kisch, 85, Duke Street, Liverpool, in similar circumstances. Also recommended for Registration.

IV. *Licences other than those under Schedule (A), conferred after Examination.* 1. J. M. Cookesley, Boulogne-sur-Mer. Licence from University of Paris. 2. Frederick Hesse, 4, Carpenter's Buildings, London, E.C. Examined by a Committee of the British Government in Hanover. A Medical Officer in the Hanoverian Legion. Both recommended for Registration.

V. *Cases of Persons claiming to have received Diplomas from Universities which have not yet answered the Registrar's Circular.* 1. John Mackenzie, Gourock, M.D. of the Academy of Medicine of St. Petersburgh; 2. W. Oliver, Laurencekirk, M.D. of Pennsylvania; 3. Henry Dewar, Aberdeen, M.D. Dartmouth College, Hanover, New Hampshire; 4. Francis Dawson, Rothes, M.D. Univ. New York. It is recommended that these claims be delayed until the returns be received.

VI. *Case of a Person requesting the Registration of other than the usual titles.* Dr. Thompson, Yeadon, near Leeds, already registered as M.D. of Giessen, claims to be registered—1st. On a Midwifery Diploma of Edinburgh. [N.B. This is a mere certificate from Dr. W. Campbell, formerly a Lecturer on Midwifery in Edinburgh.] 2nd. As a Doctor of Surgery of Giessen; 3rd. As a Doctor of Midwifery, of Giessen. The Committee recommend that these claims be disallowed.

The Council approved of the Report, and directed the Registrar to give effect to its recommendations.

4. *Finance Committee.* Dr. Smith, Dr. Apjohn, and Sir Charles Hastings, were placed on the Finance Committee, in the room of Dr. Andrew Wood, Mr. Green, and Dr. Storrar.

Confirmed—Joseph Henry Green.

Saturday, August 6th, 1859.

Royal College of Surgeons of England, London:

Mr. Green took the Chair at Two o'clock, P.M.

Present:—The same members as on the previous day, except the President, Sir James Clark, Bart., and Sir Charles Hastings.

The minutes of the last meeting were read and confirmed.

1. Moved by Dr. Corrigan, and seconded by Dr. Smith—

"That any motion or motions lying over from the previous day take precedence of new matter, except by special permission of the Council."

Votes taken, and motion carried.

2. Moved by Dr. Alexander Wood, seconded by Dr. Acland, and agreed to—

"That the attention of the Council having been called to the proceedings in the case of Henry Scott, at the Bow Street Police-Office, on the 5th inst., as reported in the *Times* newspaper of this morning, they resolve to appoint a Committee to consider and report on the whole subject, with power to take the opinion of counsel, if it be considered advisable."

The Committee to consist of: Dr. Alexander Wood, *Chairman;* Dr. Corrigan, Dr. Apjohn, Dr. Bond, Dr. Embleton, Dr. Smith, Mr. Nussey, Dr. James Watson.

3. Moved by Dr. Alexander Wood, seconded by Dr. Storrar, and agreed to—

"That the Committee appointed to consider and report on the case of the prosecution of Henry Scott be instructed to receive the deputation of the London Medical Registration Association, which had requested an audience of the Council."

4. Moved by Dr. Storrar, seconded by Mr. Syme, and agreed to—

"That a memorial presented by the Obstetrical Society of London be referred to the Education Committee."*

5. Moved by Dr. Acland, seconded by Dr. Storrar—

"That the General Medical Council have observed that Amendments of the Medical Act have been introduced, at the instance of bodies represented in the Medical Council, into Bills brought into Parliament, without previous communication with the General Medical Council; and that the Council consider it desirable that, in future, such Amendments should be first communicated to the President of the Council."

Votes taken, and motion carried.

6. Dr. Alexander Wood presented the Second Report of the Committee on Special Applications for Registration.

REPORT.

I. *Claims for Registration of Degrees conferred without Examination.* 1. Thomas Royston, M.D., Rostock; 2. Thomas Harle, Rostock; 3. J. P. Litchfield, M.D., Univ. New York; 4. J. W. Davidson, M.D., Homœopathic College, Cleveland, Ohio. —The Committee recommend that the foregoing claims be not admitted.

II. *Claims for Registration of Diplomas obtained after Examination.* 1. Simon Weil, License from Berne; 2. Alfred F. Stone, M.D. Medical College, New York; 3. Thomas Cutler, M.D. Louvain; 4. J. C. Franz, M.D. Leipsic; 5. L. E. Straube, Leipsic; 6. W. E. Swaine, Leipsic; 7. Matthew Truman, M.D. Naples; 8. A. T. Jackson, M.D. McGill College, Montreal; 9. J. D. McDiarmid, McGill College, Montreal; 10. W. Odell, McGill College, Montreal; 11. W. Darling, M.D. Univ. New York; 12. C. B. Nankivell, M.D. Pisa. The Committee recommend that the foregoing claims be admitted.

III. *Special Cases.* 1. Joseph Kahn, M.D. Erlangen, after examination. The Committee are not satisfied that Dr. Kahn was "practising as a physician, in the United Kingdom, before the 1st day of October 1858"; and, therefore, recommend that he be not registered. 2. Samuel Eadon, M.D. Western Homœopathic College, Cleveland, Ohio, examined. The Committee pronounce no opinion on this case, but refer it to the General Council.

The Report was adopted.

Moved by Mr. Syme, and seconded by Dr. Andrew Wood—

"That the name of Samuel Eadon be not inserted in the *Register*."

Votes taken, and motion carried.

7. Moved by Mr. Nussey, seconded by Dr. Storrar, and agreed to—

"That a Committee be appointed, to consider the future accommodation for meetings of the General Council; and that they be requested to render their opinion on the subject before the termination of the present session of the General Council."

* A copy of the Memorial will be found at p. 662.

The Committee to consist of: Mr. Nussey, *Chairman;* Dr. Bond, Dr. James Watson, Mr. Lawrence, Dr. Acland.

8. The following propositions were read relative to a proposed co-operation of the Royal Colleges of Physicians and Surgeons of Edinburgh, under clause nineteen of the Medical Act, for the purpose of granting a double qualification in medicine and surgery. Agreed to by both Colleges, and now submitted, in terms of the said Act, to the General Medical Council, for their sanction:—

1. By clause nineteen of the Medical Act, "any two or more of the Colleges and Bodies, mentioned in schedule (A), may, with the sanction, and under the directions of the General Medical Council, unite, or co-operate in conducting the examinations for qualifications to be registered under this Act." Hence it is quite competent for a College of Physicians and a College of Surgeons to combine, in order, by a joint examination, to give a double qualification, embracing medicine and surgery. 2. Co-operation between a College of Physicians and a College of Surgeons being legal, as stated above, the Colleges of Physicians and Surgeons of Edinburgh propose, with the sanction of the General Medical Council, to make an arrangement for the purpose of granting, by a series of examinations, preliminary and professional, their respective licences in medicine and surgery, so as to constitute a double qualification. 3. It is proposed that the preliminary examination in literature and science, and also the examinations on those professional subjects which are common to medicine and surgery, shall be conducted conjointly by a board formed of examiners in equal proportions from the two Colleges. 4. It is proposed that the examinations in medicine shall be conducted exclusively by examiners from the College of Physicians, and the examinations in Surgery exclusively by examiners from the College of Surgeons. 5. It is proposed that the decision as to the competency of the candidate in all the branches except medicine and surgery shall rest with the conjoined Board of Examiners from the two Colleges; but that the decision as to his competency in medicine and in surgery shall rest entirely, in the one case with the examiners from the College of Physicians, in the other case with the examiners from the College of Surgeons. 6. It is proposed that having passed through the final examinations, the candidate shall receive two separate diplomas—one from each College—signed by the office bearers of each respectively, so that he may be enabled to produce them to the Registrar under the Medical Act, and to register two separate qualifications; viz.: L.R.C.P., Ed., and L.R.C.S., Ed. 7. The Colleges wish it to be clearly understood that such co-operation is not to interfere in any degree with the right of each College to grant its diploma separately, as heretofore, to those who may wish a single qualification, or with the right of each College to make similar arrangements with other licensing bodies, if deemed expedient, and if sanctioned by the Medical Council. 8. For the purpose of carrying out the objects stated above, the Colleges have prepared a series of regulations, which they beg now to submit to the Medical Council for their consideration.

Moved by Dr. Alexander Wood, and seconded by Mr. Lawrence—

"That the proposed co-operation between the Colleges of Physicians and Surgeons of Edinburgh be approved of."

Amendment moved by Mr. Syme, and seconded by Dr. Storrar—

"That the consideration of the proposed union between the Colleges of Physicians and Surgeons of Edinburgh be delayed until the questions regarding qualifications for medical and surgical practice which have been submitted to the council shall have been decided."

The further consideration of this subject was adjourned.

Confirmed—B. C. Brodie.

Monday, August 8th, 1859.

Royal College of Surgeons of England, London.

Sir Benjamin C. Brodie, Bart., *President,* took the Chair at Two o'clock, P.M.

Present:—The same members as on August 3rd.

The minutes of the last meeting were read and confirmed.

Mr. Syme laid before the Council printed copies of the statutes for graduation in the University of Edinburgh, as amended by the University Commissioners.

They were referred to the Education Committee.

1. The adjourned debate on the application from the Colleges of Physicians and Surgeons of Edinburgh was resumed.

Moved by Dr. Alexander Wood, and seconded by Mr. Lawrence—

"That the proposed co-operation between the Colleges of Physicians and Surgeons of Edinburgh be approved of."

Amendment moved by Mr. Syme, and seconded by Dr. Storrar—

"That the consideration of the proposed union between the Colleges of Physicians and Surgeons of Edinburgh be delayed until the questions regarding qualifications for medical and surgical practice, which have been submitted to the Council, shall have been decided."

Votes taken; amendment negatived.

The motion was then put and carried.

2. The following propositions were read relative to a proposed co-operation of the Royal College of Physicians of Edinburgh, and of the Faculty of Physicians and Surgeons of Glasgow, under clause nineteen of the Medical Act, for the purpose of granting a double qualification in medicine and surgery. Agreed to by both bodies, and now submitted, in terms of the said Act, to the General Medical Council, for their sanction:—

1. By clause nineteen of the Medical Act, "any two or more of the Colleges and Bodies, mentioned in schedule (A), may, with the sanction, and under the directions of the General Medical Council, unite, or co-operate in conducting the examinations for qualifications to be registered under this Act." Hence it is quite competent for a College of Physicians and for the Faculty of Physicians and Surgeons of Glasgow (which has powers conferred on it by Royal Charter to confer licences in surgery equivalent to those of a College of Surgeons), to combine, in order, by a joint examination, to give a double qualification, embracing medicine and surgery. 2. Co-operation between the two Bodies being legal, as stated above, they propose, with the sanction of the General Medical Council, to make an arrangement for the purpose of granting, by a series of examinations, preliminary and professional, their respective licences in medicine and surgery, so as to constitute a double qualification. 3. It is proposed that the examination of all applicants to the faculty for the licences to be granted by the co-operating bodies shall be conducted in Glasgow. 4. It is proposed that the examiners shall be appointed in equal proportions by the Royal College of Physicians and the Glasgow Faculty. 5. It is proposed that in the examinations the examiners appointed by the Royal College of Physicians shall examinine in medicine, and the examiners appointed by the faculty in surgery; but in the preliminary examinations, and in those departments which are common to medicine and surgery, by the conjoined board. 6. It is proposed that the decision as to the competency of the candidate in all the branches except medicine and surgery shall rest with the conjoined board of examiners; but that the decision as to his competency in medicine and surgery shall rest entirely, in the one case with the examiners from the College of Physicians, in the other case with the examiners from the Faculty of Glasgow. 7. It is proposed that on approval the candidate shall receive a diploma from each of the Bodies, enabling him to register under two separate qualifications; viz.: L.R.C.P., Ed., and L.F.P.S.G. 8. It is proposed that the co-operation of the Edinburgh College and the Faculty of Glasgow shall neither prejudice nor interfere with any legal rights or privileges of the contracting parties, nor with the power of either body to grant its diploma separately, as heretofore, to those who may wish a single qualification; nor with their right respectively to unite or co-operate with any other qualified body under the provisions of the Medical Act, and with the sanction of the General Medical Council. 9. For the purpose of carrying out the objects stated above, the College of Physicians and the Faculty have prepared a series of regulations, which they beg to now submit to the Medical Council for their consideration.

Moved by Dr. James Watson, seconded by Dr. Storrar, and agreed to—

"That the Council now approve of the proposed union between the Royal College of Physicians of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow."

3. The following letter was read, which had been received from the Poor-Law Board:—

"Poor-Law Board, Whitehall, S.W., August 5th, 1859.

"Sir,—I am directed by the Poor-Law Board to forward to you, for the information of the General Council of Medical Education and Registration of the United Kingdom, copies of memorials received by the Board from—The Senatus Academicus of the University of Edinburgh, The Council of the Royal College of Physicians of Edinburgh, The President and Council

of the Royal College of Surgeons of Edinburgh, The Senate of the University of Glasgow, The Faculty of Physicians and Surgeons of Glasgow, The Principal and Professors of Marischal College and University of Aberdeen, The University and King's College of Aberdeen, The Royal College of Surgeons in Ireland, The Medical Protection Association of the County and City of Cork, The Senate of the University of London.

"The object of these memorials is to procure an alteration in the provisions of article 168 of the Consolidated General Order of the Poor-Law Commissioners, whereby the qualification of Medical Poor-Law Officers has been settled and fixed. According to the terms of that article (a copy of which is enclosed), it will be seen that, although surgical qualifications are admitted which depend upon diplomas or degrees conferred by competent authorities in all parts of the United Kingdom, medical degrees, or licences, conferred by the Universities and other public bodies in England alone are deemed essential. The exclusion of Scotch and Irish degrees was based upon the consideration that the holders of such degrees had no legal authority to practise medicine in England; and therefore, however skilled in their profession they might be, the Poor-Law Commissioners could not legally admit them to an office which it appeared that they could not discharge without a violation of the law. This further principle also entered into the consideration of the Commissioners, and has since always been kept in view by the Board, namely, that no person should be admitted as a fully qualified medical officer whose diploma or licence did not afford evidence that he had acquired a competent knowledge of the practice of medicine or pharmacy, and also of surgery. The late statute, 21 and 22 Victoria, cap. 90, sec. 31, enacts, that 'every person registered under the Act shall be entitled, according to his qualification or qualifications, to practise medicine or surgery, or medicine and surgery, as the case may be, in any part of Her Majesty's dominions.' Hence, the ground upon which the Poor-Law Commissioners mainly acted in reference to the exclusion of Scotch and Irish degrees appears to have been removed. But the important question still remains, as to what is the exact extent and nature of the qualification which is obtained by the degrees or licences conferred by the several Bodies who have made their applications to the Board. The Board do not possess any authoritative information on the subject which they can act upon; and they therefore request to be informed by the General Medical Council how far the degrees, diplomas, or licences, of the several Bodies by whom memorials have been addressed to the Board, confer respectively the right of practising medicine or surgery, or medicine and surgery, and are evidence that the persons to whom they are granted have attained a competent knowledge of either, or both, of those branches of the profession.

"I have the honour to be, Sir, your obedient servant,

"W. G. Lumley, *Assistant Secretary.*

"To the Secretary to the General Council of Medical Registration and Education of the United Kingdom, 32, Soho Square, W."

Extract from the Consolidated General Order referred to :—

Article 168. No person shall hold the office of medical officer under this order unless he possess one of the four following qualifications; that is to say:—1. A diploma or degree as surgeon from a Royal College or University in England, Scotland, or Ireland, together with a degree in medicine from a University in England, legally authorised to grant such degree, or together with a diploma or licence of the Royal College of Physicians of London. 2. A diploma or degree as surgeon from a Royal College or University in England, Scotland, or Ireland, together with a certificate to practise as an apothecary, from the Society of Apothecaries of London. 3. A diploma or degree as surgeon from a Royal College or University in England, Scotland, or Ireland, such person having been in actual practice as an apothecary, on August 1st, 1815. 4. A warrant or commission as surgeon or assistant surgeon in Her Majesty's Navy; or as surgeon or assistant surgeon, or apothecary, in Her Majesty's Army; or as surgeon or assistant surgeon in the service of the Honourable East India Company; dated previous to August 1st, 1826.

Moved by Dr. Storrar, seconded by Dr. Christison, and agreed to—

"That the communication from Her Majesty's Poor-Law Commissioners in England be referred to a committee to consider and report upon to the Council; and that a paper from Sir John McNeill, Poor-Law Commissioner for Scotland, laid on the table by Dr. Christison, be referred to the same committee. The Committee to consist of Dr. Corrigan, chairman, Dr. Apjohn, Dr. Jas. Watson, and Sir Charles Hastings."

4. Moved by Dr. Thomas Watson, seconded by Mr. Nussey, and agreed to—

"That it shall be lawful for the Treasurer of the General Council to contribute, under direction of the Branch Councils, any portion, or the whole, of any money penalty, which may accrue to the Council from a successful prosecution under this Act towards defraying the expenses of such prosecution."

5. Moved by Dr. Corrigan, and seconded by Mr. Syme—

"That the General Medical Council is of opinion that any degree or licence obtained since the passing of the Medical Act, without regular examination by the University or College granting such degree or licence, ought not to be placed upon the *Register*, excepting *ad eundem* degrees, or degrees or licences in medicine or surgery of any University in the United Kingdom, admitted to the Fellowships or Licentiateships of the several Colleges of Physicians and Surgeons."

Amendment moved by Dr. Alexander Wood, and seconded by Dr. Williams—

"That the General Medical Council is of opinion that for the future no licence or degree should be given by any of the Bodies in schedule (A) of the Medical Act, without examination."

Votes taken and amendment carried.

Confirmed—B. C. Brodie.

Tuesday, August 9th, 1859.

Royal College of Surgeons of England, London.

Sir Benjamin C. Brodie, Bart., *President*, took the Chair at Two o'clock, P.M.

President:—The same members as on the previous day.

The minutes of the last meeting were read and confirmed.

The following letter was read:—

"London Medical Registration Association, 5, Charing Cross, London, S.W., August 9th, 1859.

"*To the President of the General Medical Council.*

"Sir,—I think it right that the Medical Council, over which you preside, should be informed that, upon applying at the Lambeth Police Court for the penalty of 40*s.*, in '*Re* the London Medical Registration Association *v.* Nunn', for the purpose of paying the same over to the Treasurer of the Medical Council, I was informed by the Clerk of the Court that the Police Court Act, 2 and 3 Vic., cap. 71, s. 47, ordered that the penalty should be paid over to the 'Receiver of Police', Clause 42 of the Medical Act notwithstanding; and such penalty will be so paid, unless the Medical Council prove their right to receive the same, before the police magistrate at that court.

"I have the honour to be, sir, your obedient servant,

"Theod. Ed. Ladd, M.D., *Hon. Sec.*"

Referred to the Executive Committee.

1. The case of Richard Organ having been taken into consideration, it was moved by Dr. Andrew Wood, seconded by Mr. Syme, and agreed to—

"That the case of Richard Organ be delayed till the opinion of counsel has been obtained in regard to it."

2. A memorial having been read from the Royal College of Physicians of London, relative to the forty-seventh section of the Medical Act, it was moved by Dr. Alexander Wood, seconded by Dr. Williams, and agreed to—

"That the Medical Council disapprove of the latter part of Clause xlvii of the Medical Act, and will give all assistance that they legally can to the London College of Physicians, to obtain the alteration of the Medical Act suggested in the memorial."

3. A letter was read from the Registrar of the King and Queen's College of Physicians in Ireland, communicating copies of letters received from the Director-General of the Army Medical Department, on the subject of his intended recognition of the certificate of the Company of the Apothecaries' Hall of Ireland as a license to practise medicine; also a statement embodying the views of the President and Fellows, on the right of practice which the certificate of the Company confers; also a reply to that statement, presented by Dr. Leet.

Moved by Dr. Smith, and seconded by Dr. Corrigan—

"That it is the opinion of this Council that the license of the Apothecaries' Hall of Ireland is not equivalent to a degree or licence in medicine from a University or College authorised to

grant such, as, from a perusal of the Apothecaries' Act, 31 Geo. III, there does not appear to be any provision or authority for examining in medicine; and, further, that if a candidate be rejected by the Apothecaries' Hall of Ireland, the Apothecaries' Act, sec. 23, declares that the rejected candidate may appeal to the King and Queen's College of Physicians of Ireland, who are then authorised to reverse such decision, if it seem fit to them, and to grant to such appellant the right to practise the art and mystery of an apothecary without any examination in medicine."

Amendment moved by Dr. Storrar, and seconded by Dr. Christison—

"That the words 'Licentiate of the Apothecaries' Hall, Dublin,' having been introduced into Schedule (A) of the Medical Act, such licentiate is, by Section 34, declared to be a 'legally qualified medical practitioner', or 'duly qualified medical practitioner'.—Further than this the Medical Council feel themselves incompetent to express an opinion on the subject before them."

Votes taken; amendment negatived.

The motion was then put, and carried.

4. Dr. Storrar presented the following Report of the Education Committee:—

I. *General Education.* The Education Committee of the Medical Council, having given their attention to various plans for ensuring and testing the general education of medical students, are of opinion that it is desirable—1. That all medical students shall pass an examination in general education, before they commence their professional studies. 2. As far as it may be practicable, to accept Testimonials of proficiency granted by the National Educational Bodies, according to the following list, with such additions as the Medical Council may from time to time think proper to make. A Degree in Arts of any University of the United Kingdom or Colonies, and such other Universities as may be specially recognised from time to time by the Medical Council. Oxford Responsions or Moderations; Cambridge previous Examinations; Matriculation Examination of the University of London; Oxford Middle Class Examinations, Senior and Junior; Cambridge Middle Class Examinations, Senior and Junior; Durham Middle Class Examination; Dublin Entrance Examination; An Examination by any other University of the United Kingdom, equivalent to the Middle Class Examinations of Oxford and Cambridge. 3. That the Examination on General Education be eventually left entirely to the Examining Boards of National Educational Bodies, recognised by the Medical Council. 4. That Candidates who shall not produce any of the Testimonials referred to in the Second Resolution, shall be required to pass an Examination in Arts, established by any of the Bodies named in Schedule (A) of the Medical Act, and approved by the General Council; it being provided that such Examination shall be, in every case, conducted by a Special Board of Examiners in Arts. 5. That without professing to ay down any complete scheme of General Education for persons intending to become Members of the Medical Profession, the Committee recommend that the scheme of Examination in Arts of the Licensing Bodies be as nearly as practicable that of any one of the National Educational Bodies above specified. 6. That on and after October 1st, 1860, all Medical Students shall be required to be Registered by one of the Bodies named in Schedule (A) of the Medical Act. 7. That the list of Students Registered shall be closed within a week after the commencement of each Session. 8. That no Student beginning Professional Study after Sept. 1861, shall be Registered, who has not passed an Arts Examination, in conformity with Resolutions 2 and 4. 9. That the Committee are of opinion that the age of Twenty-two is, in most instances, the earliest age at which the Professional Education should be completed, and that four years of Professional Study should be required. The Committee are, however, not decided, that under circumstances, the Examination might not be passed at an earlier age, provided the General Examination had been passed full four years before the Professional.

II. *Professional Education.* The Committee having recommended that, as a general rule, the earliest age of Professional Examination for a Licence to practise shall be twenty-two, and that four years shall be passed in Professional Study, the Committee have further to recommend:—1. That the Registrar be directed to obtain Returns of the Courses of Study and Examinations of the various National Educational Bodies, enumerated in Resolution 2, and that they be printed, and transmitted to the various Licensing Bodies named in Schedule (A) of the Medical Act. 2. That the Professional Examination should be divided into at least two distinct parts:—that the first should not be undergone till after the termination of the Second Winter Session; nor the final examination till after the termination of the Fourth Winter Session. 3. That the first Professional Examination shall be conducted partly on paper, and partly *vivâ voce;* and that such subjects as admit of it, shall be made as practical and demonstrative as possible. 4. That the Second Examination shall be conducted partly on paper, partly *vivâ voce;* and, as far as is convenient and practicable, clinically. 5. That the Professional Examinations shall be held by the several Licensing Bodies, at stated periods (except in special cases), to be publicly notified each year. 6. That regular Returns be required from the Licensing Bodies under Schedule (A), stating the number of candidates who have passed their Examinations and of those who have been rejected, and that the Examining Bodies should be invited to express their opinion on the general character of the Examinations, as to the Qualification of the Candidates.

The Educational Committee have had referred to them the returns from the several licensing bodies, named in Schedule (A) of the Medical Act, of the professional education adopted by each of them; they have considered the question, whether it is desirable to lay down one general scheme of subjects of examination, such as should be recommended as a minimum to every examining body.

They are of opinion that they have no power under the Act to dictate forms and details of examination to the examining bodies as to professional education. But inasmuch as by Section 18 and 20 of the Medical Act, it is the clear duty of the Council to satisfy themselves that the licensing bodies do conform to the intention of the Act with respect to the examination, they think it their duty to recommend that the Council should immediately lay before the several examining bodies the resolutions which they now submit to the General Council.

(Signed) John Storrar, *Chairman.*

Moved by Dr. Andrew Wood, seconded by Dr. Apjohn, and agreed to—

"That the Report of the Education Committee be taken into consideration by the General Medical Council, as the first business to-morrow."

5. Mr. Nussey presented the following Report of the Accommodation Committee—

"That the Committee having to acknowledge a communication from the President of the Royal College of Physicians, offering accommodation to the Medical Council at the Royal College of Physicians, recommend to the Council to accept this advantageous offer, and that the best thanks of the Council be communicated to the President and Fellows of the Royal College of Physicians.

"That the Treasurer, Mr. Nussey, be requested to obtain, if found necessary, accommodation in the immediate neighbourhood of the College of Physicians, for the ordinary business of the Registration Office."

Moved by Mr. Nussey, seconded by Dr. Storrar, and agreed to—

"That the Report of the Accommodation Committee be adopted, and that the Registrar be instructed to communicate the best thanks of the Council to the President and Fellows of the Royal College of Physicians of London."

6. Moved by Dr. Acland, seconded by Mr. Green, and agreed to—

"That whereas representations have been made to the Finance Committee of the General Council, concerning the unexpected amount of labour which has devolved on the Registrar and on the Clerks of the Medical Council, it is expedient that the question of the duties and salaries of the Registrar, and of the Clerks of the General Council, be referred to a committee to report thereon.

"The Committee to consist of Dr. Storrar, Dr. Stokes, Dr. Smith, Mr. Nussey."

Confirmed—B. C. Brodie.

Academy of Medicine in Paris. The name of Mr. Adams of Dublin, the author of the excellent treatise on *Rheumatic Gout, or Chronic Rheumatic Arthritis of all the Joints*, was, at a meeting of the above body on July 28th, placed on the list of candidates for the honour of being foreign correspondents of the Academy.

Parliamentary Intelligence.

HOUSE OF COMMONS.—Thursday, August 4th, 1859.

THE MEDICAL ACTS AMENDMENT BILL.

On the motion for committing this Bill—

Mr. Cowper moved, as an amendment, that the Bill be committed that day three months.

Mr. Whiteside resisted the amendment, which he contended would be an act of injustice to the University of Dublin.

The Solicitor General for Ireland concurred in the opinion expressed by Mr. Whiteside; and added that the Bill was simply intended to remedy a clerical error in the Medical Act of last year.

Mr. Dunlop denied that there was any clerical in the Medical Act, which was passed in its present shape intentionally.

After some discussion, the amendment was negatived without a division, and the House went into Committee.

On Clause 1 being proposed—

Mr. C. Ewing moved that the Chairman should report progress.

The Committee divided, and the numbers were:

Ayes - - - - - -	19
Noes - - - - - -	97
Majority against the motion - -	—78

The clause was ordered to stand part of the Bill. Clause 2 was omitted. The other clauses were then agreed to, and the Bill reported to the House.

THE SERPENTINE.

On the vote of £17,000 for cleansing the Serpentine river, Hyde Park,

Mr. Fitzroy said, he had obtained the assistance of Mr. Hawksley, an engineer of established reputation, who had submitted to him a plan which had been approved by Sir S. M. Peto, and Mr. Stephenson, as safe, practical, and economical. Mr. Hawksley said,—

"I propose to establish at the head of the Serpentine, in such manner as to be no detriment to its beauty, a proper filtering apparatus, similar in most particulars to those used by waterworks companies, and to draw from the lower end of the lake, by means of a small concealed steam-engine and pipe, about 2,000,000 gallons of water daily, which quantity of water, after passing through the filter-bed, would fall in a perfectly pellucid cascade into the lake at its head. By these means the whole volume of the water of the Serpentine would be passed through the apparatus once in every month, and be thereby rendered not merely perfectly free from all floating matter, but also perfectly clear and colourless. If small quantities of quick lime were also occasionally scattered along the shallow margins of the lake to destroy the conferva adhering to the pebbles of the beach, all grounds of just complaint against the condition of the water would be effectually removed."

It was computed, on a liberal estimate, that the expense of this plan would not exceed £16,500, for which amount it was believed that the proposed works could be successfully completed by the commencement of next May.

After a discussion, in which several members advocated the levelling of the bed of the Serpentine, and covering it with concrete, the vote was agreed to.

Monday, August 8th.

INSPECTORS OF HOSPITALS.

Colonel Sykes asked the Secretary for India upon what grounds deputy inspectors-general of hospitals in the British forces of less than five years service, doing duty at home or in the colonies, with the relative army rank of lieutenant-colonel, were to have the local rank of colonel while serving in India from the date of their arrival in that country, agreeably to Her Majesty's warrant of the 1st of February, 1859, in supercession of surgeon-majors and deputy-inspectors of hospitals of Her Majesty's Indian forces, who rank as lieutenant-colonels only, although of 20 to 30 years service.

Sir C. Wood defended the order referred to by the gallant colonel, but said he despaired of making the matter intelligible to the House without too great a trespass on their time.

MILITARY SURGEONS.

Colonel Dunne asked the Secretary for War why men who had received the legal right to practise surgery and medicine from the Royal College of Surgeons in Ireland were excluded from becoming candidates for medical appointments in the army; why the surgeons of cavalry were charged forage money for their horses, while those of infantry were exempted from that charge; and whether there would be any objection to grant to those deserving medical officers who had retired from the service the same additional rank which would be given to those who were at present serving on their retirement.

Mr. S. Herbert replied that, in consequence of the increased pay given to medical officers, and the increased acquirements expected from them, it had been decided that before admission to the army they should be furnished not only with the diploma of a College of Surgeons, but with a diploma of some other body, as a guarantee of their knowledge of medicine. He believed that the forage money of cavalry and infantry surgeons was regulated by the rules of their respective services. He did not think it would be prudent to grant additional rank to the medical officers who had retired. If every new regulation had to be made retrospective, it would be impossible to carry out reforms in the army.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Baber, John, M.D., 18, Brompton Row, on July 29.
Bannatine, R., M.D., at Old Cumnock, N.B., on July 27.
*McEwen, William, M.D., Chester, on August 8.
Marshall, Edward, Esq., Mitcham, on August 3.
Witten, E. W., Esq., 72, St. John Street Road, on July 31.

Of daughters, the wives of—

Freer, Alfred, Esq., Stourbridge, on August 6.
Gore, W. R. O., M.D., 25, Chesham Street, on July 25.
Maund, Henry, Esq., at Ashford, on August 5.
Peck, F. M., Esq., Grassdale, Australia, on April 13.
Rimington, Joseph S., Esq., Assistant-Surgeon, Bombay Army at Brixton, on July 30.

HEALTH OF LONDON:—WEEK ENDING JULY 30th, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... { Boys .. 881 / Girls .. 992 }	1803 ..	1419
Average of corresponding weeks 1849-58..	1485 ..	1262

The deaths from diarrhœa, as compared with those of the previous week, decreased from 415 to 382; the deaths referred to "cholera" and "choleraic diarrhœa" were 39 in the previous week, and last week 19. Out of 382 cases in which diarrhœa is recorded, 356 occurred to children. In the east districts, 109 deaths from it:—29 in Shoreditch; 27 in Bethnal Green; 12 in Whitechapel; 9 in St. George-in-the-East; 20 in Stepney and Mile End Old Town; and 12 in Poplar. There were 14 in Westminster; 20 in Marylebone; 33 in Pancras; and 16 in Islington. Of the 19 deaths referred to cholera, 5 were those of adults. Scarlatina was fatal in 36 cases; diphtheria in 16; and small-pox in 23.

Barometer:
Highest (Mon.) 30; lowest (Sat.) 29·68; mean 29.909 in.

Thermometer:
In sun—highest 104°; lowest 91°.
In shade—highest 85°; lowest 46.5.
Mean—67°; difference from mean of 43 yrs.+4.8.
Range—during week, 38.5°; mean daily, 20.8°.

Mean humidity of air (*saturation*=100), 70.
Mean direction of wind, S.W.—Rain in inches, 0.03.

WEEK ENDING AUGUST 6th.

	Births.	Deaths.
During week ..... { Boys .. 860 / Girls .. 858 }	1718 ..	1337
Average of corresponding weeks 1849-58..	1530 ..	1306

The deaths caused by diarrhœa fell last week to 312. In Shoreditch 19 deaths from it occurred; in Bethnal Green, 10; in Whitechapel, 8; in St. George-in-the-East, 16; in Stepney

and Mile End Old Town, 19; and in Poplar, 12. On the south side of the river 13 occurred in the sub-district of St. Peter, Walworth. Amongst northern districts, Marylebone returned 22 and Pancras 21 deaths from diarrhœa. There are also 24 deaths recorded as due to "cholera" and "choleraic diarrhœa", 14 of which were amongst children. Small-pox was fatal in 20 cases; diphtheria also in 20; scarlatina in 63; and syphilis in 8. Three infants and an adult died by murder or manslaughter. Five nonagenarians are returned, the three oldest of whom died at the respective ages 94, 95, and 97. A girl, aged 14 months, died on the 29th ult., of *coup-de-soleil*, and on the day following a widow, aged 83 years, died of "cerebral congestion from exposure to intense sunlight".

Barometer:

Highest (Sat.) 29.96; lowest (Sun.) 29.51; mean 29.803.

Thermometer:

In sun—highest 100.3°; lowest 84.7°.
In shade—highest 80°; lowest 48.9°.
Mean—63.8°; difference from mean of 43 years.+1.5°.
Range—during week, 31.1°; mean daily, 22.2°.
Mean humidity of air (*saturation*=100), 64.
Mean direction of wind, S.W.—Rain in inches, 0.13.

OBSTETRIC EDUCATION.

The following Memorial has been presented to the General Council of Medical Education and Registration, by the Council of the Obstetrical Society of London:—

"The Council of the Obstetrical Society of London desire, respectfully, to call the attention of the Council of Medical Education and Registration to the generally defective condition of medical education and examination in the Obstetric department of the profession; and they beg especially to remark upon the regulations of the various metropolitan examining bodies, with respect to this branch of practice.

"University of London. Candidates for the degree of M.B. may attend a single course of Lectures on Midwifery, but this is not compulsory. They are required to produce a certificate of having conducted six labours. They are examined in Midwifery and the Diseases of Women and Infants at the second M.B. examination, in writing and *vivâ voce*,—for the degree of M.D., no additional certificates are required. At this examination, a commentary is required either on a case of Medicine, Surgery, or Midwifery, at the option of the candidate.

"Royal College of Physicians. Candidates for the Licence are directed to study the Obstetric Art, but no regulations are laid down respecting attendance on Lectures or Practical Instruction in this department. In the examinations, no provision is made for testing the Obstetric acquirements of candidates. It is well known that, with one or two exceptions, none of the Censors, who are the examiners, have ever been selected from among those Fellows of the College engaged in the practice of Obstetric Medicine.

"Royal College of Surgeons. Candidates for the Diploma of Membership are required to have attended one three months' course of Lectures on Midwifery. No attendance on cases is enjoined. In the examination, Midwifery is excluded. This is also the case with regard to the examination for the Fellowship. The College of Surgeons examines candidates, and grants special certificates of qualification in Midwifery to the Fellows and Members, *and to others possessing no previous qualification;* but the examination is altogether optional. Before obtaining these certificates, candidates must attend one three months' course of Lectures, and conduct thirty cases of labour.

"Society of Apothecaries. Candidates for the Licence are required to attend one three months' course of Lectures on Midwifery, and to conduct twenty cases of labour. The examination includes Midwifery, and the Diseases of Women and Children.

"The insufficient attendance required on Obstetric Lectures and Practice, and the slender provision made for examinations in this department of Medicine, stand in strong contrast with the requirements of the various examining bodies in all that relates to Lectures on Medicine and Surgery, and attendance on Medical and Surgical Hospital practice.

"The University of London requires one year's Medical, and one year's Surgical practice, in separate years, for the M.B. degree; and two additional years of Practical Medicine for the M.D. degree. The College of Physicians requires for its Licence, three years attendance on the Medical practice of a recognised hospital. The College of Surgeons requires for its Membership, attendance on Surgical practice in a recognised hospital during three winter and two summer sessions; and on Medical practice during one winter and one summer session. The College also requires, for the same examination, attendance during two winter sessions on Lectures on the Principles and Practice of Surgery. For the Fellowship, attendance is required during four years upon the Surgical, and during one year upon the Medical practice of a recognised hospital. Candidates are also required to have attended Lectures on the Theory and Practice of Surgery and on Clinical Surgery; as well as on the Theory and Practice of Medicine and on Clinical Medicine, during two sessions, each of six months duration. The Society of Apothecaries requires for its Licence, attendance on the Medical practice of a recognised hospital during eighteen months; attendance on one course of Lectures on the Principles and Practice of Medicine, and on one course of Lectures on Clinical Medicine.

"With regard to the required attendance upon Lectures on Medicine and Surgery, it deserves to be remarked that the courses on Medicine and Surgery are winter courses of six months duration; while the single course of Midwifery, required by the most stringent of the examining bodies, is a summer course, of three months duration only. Until within the last few years, the Lectures on Midwifery formed a winter course, when it was of six months duration; and, up to a comparatively recent period, the Apothecaries' Society required two six months' courses of Lectures on this subject. Thus, of late years, the provisions for Obstetric education have greatly diminished. The following Table gives a comparative view of the requirements of the several examining bodies, as regards attendance on Lectures and Hospital Practice in Medicine, Surgery, and Midwifery, respectively.

Diplomas.	Hospital Medical Practice.	Hospital Surgical Practice.	Obstetric Practice.	Lectures on the Practice of Medicine.	Lectures on the Practice of Surgery.	Lectures on the Practice of Midwifery.	Lectures on Clinical Medicine.	Lectures on Clinical Surgery.	Lectures on Clinical Midwifery.
M.D.Lond.	Two years.	—	None.	—	—	None.	—	—	None.
M.B.Lond.	One year.	One year.	Six cases of labour.	—	—	Optional.	Some: number not specified.	Some: number not specified,	None.
L.R.C.P.L.	Three years.	—	None.	—	—	None.	—	—	None.
F.R.C.S.E.	One year.	Four years.	None.	Two sessions of six months each.	Two sessions of six months each.	None.	Two sessions of six months each.	Two sessions of six months each.	None.
M.R.C.S.E.	One winter and one summer session.	Three winter and two summer sessions.	None.	—	Two sessions of six months each.	One session of three months.	One winter and one summer session.	Three winter and two summer sessions.	None.
Licentiate in Midwifery.	—	—	Thirty cases of labour.	—	—	One session of 3 months.	—	—	None.
L.S.A.	One year and six months.	—	Twenty cases of labour.	One session of six months.	—	One session of 3 months.	One session of six months.	—	None.

"The number of medical men engaged in Obstetric practice probably equals the number engaged in the practice of either Medicine or Surgery. They comprise a considerable number of the graduates of the University of London; of the fellows and licentiates of the College of Physicians, and fellows of the College of Surgeons; and the great body of members of the College of Surgeons and licentiates of the Society of Apothecaries. The M.B. degree of the University of London, and the licence of the Society of Apothecaries, are the only qualifications which offer any guarantee of the fitness of their possessors to practise in this department.

"The College of Surgeons has instituted a special examination in Midwifery, but the Medical Council cannot fail to observe that the possession of this licence is entirely voluntary, and that any fellow or member of the College may practise Midwifery without having passed any examination in this subject. On the other hand, the licence in Midwifery may be given to persons who are neither members of the College, nor possessed of any other qualification. Such licentiates in Midwifery may engage in general practice without any qualification in Medicine or Surgery. This special licence in Midwifery is derogatory to the position of the Obstetric practitioner, as tending to revive his supposed inferiority to the practitioner of Medicine and Surgery, which inferiority it has been the province of progressive science to remove. The social effect of the Midwifery licence is felt the more severely, since it has been proposed by the College of Surgeons to institute a special licence in Dentistry, with which it would in future be associated as apart from regular Medical qualifications.

"The Council of the Obstetrical Society believe that the interests of the profession, and the welfare of the public, demand that the standard of education and examination for those who are engaged in the practice of Midwifery, should be as high in this department, as that which obtains in Medicine and Surgery. Speaking of the large numbers occupied in the general practice of Medicine, Surgery, and Midwifery, they venture to assert that in the actual responsibilities of the practitioner, Midwifery is equally important with Medicine or Surgery. The reputation of the medical attendant, and the safety of the patient, depend as often upon a knowledge of Midwifery, as upon an acquaintance with the sister branches of the healing art.

"The Council respectfully suggest that the attendance on Lectures on Midwifery by the student, should equal the attendance required on Medicine or Surgery. They beg to express their deliberate conviction that it is quite impossible to teach the principles of Midwifery in a single three months' course of lectures. As regards Practical Instruction, the Council suggest that Lying-in-Hospitals, the Maternity Departments of general hospitals, and other institutions be in future recognised as schools of instruction in Practical Midwifery, and that a specified and sufficient attendance upon them, similar to the attendance upon medical or surgical hospital practice, should be required from all students. As regards Examination for Licences, Diplomas, and Degrees, they further suggest that all candidates should, as in the Continental schools, be tested in Midwifery to the same extent as in Medicine and Surgery.

"Signed on behalf of the Council,

Charles Locock, *Honorary President.*
Edward Rigby, *President.*
Graily Hewitt, } *Honorary Secretaries.*
Thos. H. Tanner, }

53, Berners Street, August 1st, 1859.

TO CORRESPONDENTS.

"Je le pansay, Dieu le guarit." A correspondent has objected that this sentence was incorrectly quoted in Dr. Vose's address, as the words "pansay" and "guarit" do not exist in French. Certainly they are not to be found in *modern* French; but the orthography of the quotation belongs to the sixteenth century, the period at which Paré flourished.

Deferred Matter. Dr. Beale's Lecture, the Report of the Cornwall Medical Society, and various letters and other articles, are in type, but have been deferred in order to make room for the report of the proceedings of the Medical Council.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

Communications have been received from:—Dr. Francis Hawkins; Mr. T. Holmes; Dr. Hyde Salter; Dr. Lionel Beale; Dr. G. M. Humphry; Dr. W. Newman; Dr. A. P. Stewart; Medicus; Dr. Mc Ewen; Dr. Henry Porter; Mr. R. M. Craven; Dr. Kidd; Mr. Haynes Walton; Dr. Chevallier; Dr. P. H. Williams; Dr. S. W. J. Merriman; Dr. J. B. Nevins; Dr. R. H. Taylor; Dr. H. Y. Whytehead; and Mr. J. B. Carter.

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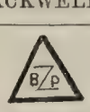
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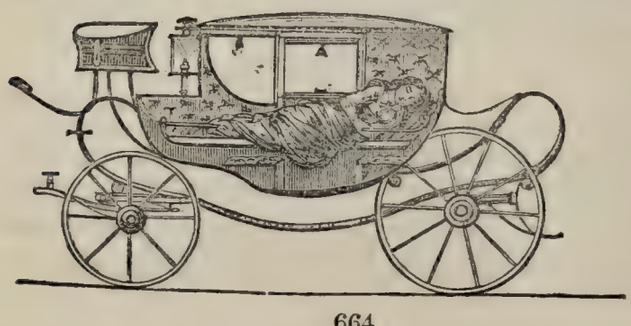
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXXVIII.] LONDON: SATURDAY, AUGUST 20, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

I. HÆMORRHAGE FROM THE SUPERFICIAL PALMAR ARCH: CURE BY FLEXION OF THE FOREARM.

Under the care of H. C. JOHNSON, Esq.

[*Reported by* E. VINING, Esq., *House-Surgeon.*]

OUR readers may remember that, a short time ago, a paper was read at the Royal Medical and Chirurgical Society by a pupil of the London Hospital, in which the very simple plan of controlling hæmorrhage from the vessels of the palm by flexing the forearm, so as to make pressure upon the brachial artery in the bend of the elbow, was advocated, and a successful instance of its adoption was recorded. This plan, although not uniformly successful, is so easy, and interferes so little with other means that may be adopted, that it deserves to be widely known, especially as the accident is so common, and frequently occurs in country practice, where few resources are at hand. We therefore have much pleasure in citing the following instance of its success.

Thomas Cross, butler, was admitted on August 1st, with a punctured wound on the palmar surface of the right hand, just over the region of the superficial palmar arch. At the time of admission, there was free hæmorrhage from the wound; but this was restrained by pressure on the radial artery. The hæmorrhage ceased after the radial artery had been compressed for a short time; but, on removing a clot which had formed in the wound, the bleeding again commenced with great vigour.

The history was this. The man was packing some wine, and one of the bottles broke, and a piece of glass entered the hand at the spot above named. On finding the hæmorrhage recur, Mr. Vining determined to tie the ends of the bleeding vessel; but, just as he was about to do so, Mr. Johnson came into the ward, and advised him to try flexion of the arm, leaving orders that, if the bleeding commenced again, he was to cut down and tie the vessel. The forearm was flexed upon the arm, and a small pad of dry lint was put upon the wound, with very slight pressure. The pulsation in the radial artery was much diminished, but not stopped. In the evening, the patient complained much of the discomfort of keeping the arm in one position. This was altered a little, but the arm was still kept flexed.

Aug. 2nd. There has been scarcely any bleeding since the arm has been flexed. He complains of a good deal of pain in the hand to-day, and also of numbness in the fingers; and he also complains of some pain in a lacerated wound of the arm, which he received at the same time.

Aug. 3rd. No more bleeding has occurred. The arm is still kept flexed.

Aug. 4th. The pad of lint was removed from the wound to-day, which has almost entirely healed by the first intention.

Aug. 6th. All pressure was taken off to-day, except that the forearm was still flexed, in order to raise the hand.

Aug. 9th. He complains of pain over the wound to-day, when pressure is made; and the pain also extends up the fingers. This probably depends on some injury to the nerve. The wound, as far as any chance of hæmorrhage is concerned, may be reported cured.

II. TETANUS, SUCCESSFULLY TREATED BY STIMULANTS, ETC.

Under the care of H. B. JONES, M.D., F.R.S.

Hannah T., aged 7, was admitted under the care of Dr. B. Jones on June 20th. The account that was given of the disease was, that she had accidentally bitten her tongue on the 17th (but this was doubtful); that, on the day of admission, she had felt choked and unable to swallow; and that one leg felt rather stiff.

On admission, she could not, or would not, open her mouth sufficiently to let the fauces be seen. The mouth was forced open, and the tip of the tongue only was seen; it was thickly coated, and there was a large ulcer underneath the tongue. The skin was warm and moist; the pulse weak, 104; the breathing natural. There was no pain in swallowing.

℞ Decocti cinchonæ ℥j; tinct. cinchonæ ʒj; potassæ chlor. gr. x. M. Fiat haustus 4tis horis sumendus.

A glass of port wine was ordered to be given daily.

June 21st. She cannot open her mouth, and is quite stiff when raised up. There is no opisthotonos. The chlorate of potash was repeated. Two pints of strong beef-tea were ordered.

She went on without symptoms calling for note till the evening of June 23rd, when she was seized with a violent tetanic spasm; and on the 24th, it was noticed that the head was drawn back. There was no lockjaw, and the masseters were not rigid. The muscles at the back of the neck were hard. There were occasional slight startings of both arms. The fingers were persistently bent towards the palm. Pulse 96. A turpentine enema was given when the spasm first came on, and brought away a very lumpy motion. The quantity of wine was increased to three ounces.

June 25th. She is quiet, and has no pain, but moans in her breathing. The trunk is straight and stiff, both the abdominal muscles and those of the back being hard, like a board. The arms and fingers are generally flexed, but can be straightened voluntarily. The legs are a little apart, and perfectly straight and stiff, looking like a pair of tongs. The insteps are curved, and the toes bent down. The adductor and flexor muscles are hard; the extensors not so. The expression of the face is peculiar, the eyes being half shut, the eyebrows drawn up, the nostrils dilated, and the mouth a little drawn up at the corners. At times the arms become bent, and the child cries out as if in pain. Pulse natural. When raised, she is seized with tetanic spasm, and cannot swallow for a few minutes. At these times there is opisthotonos and pleurosthotonos to the left side. The medicine was continued.

She was in much the same state on June 26th. The enema was repeated. Five drops of laudanum were added to the draught. Morphia was ordered at night.

On June 27th, the convulsions were rather more frequent. She had no sleep even with morphia. The bowels were confined. A turpentine injection brought away lumpy fæces. Pulse 108.

The spasm continued every time she was raised during the next two days. When she was left quiet, she had no distinct spasms, but merely slight twitching of the muscles of the extremities. These became more frequent on June 30th. She was slightly delirious at night, and seemed to have had no sleep since the last note. She was getting very exhausted and thin. Four ounces of the mistura spiritûs vini gallici were ordered, in addition to the wine. She complained of pain in the abdomen, which was very rigid. An epithem of ʒviiss of laudanum and ʒss of chloroform was applied to the abdomen.

July 3rd. She has remained in much the same condition since the last note. To-day, for the first time, she has been free from tonic spasm; and the twitching of the muscles is less.

July 5th. She can now open her mouth better. The under part of the tongue is still sore, but the ulcer looks healthy. She is still very thin, almost a skeleton. She sleeps better. She takes six ounces of the brandy mixture and an ounce and a half of wine, with strong beef-tea. The chlorate of potash

mixture and opium were omitted. Ether mixture was given occasionally.

July 7th. The back is still somewhat bowed; the muscles of the limbs are relaxed. She wants more food. She is reduced to a skeleton. She was ordered pudding and eight ounces of egg and brandy.

July 9th. The muscles are quite relaxed.

From this period there were no further symptoms of tetanus, but she was so excessively weak that it was necessary to keep her a long time in the Hospital, in order to feed her up with meat and cod-liver oil. She was discharged on August 9th, having perfectly recovered, and being fatter than when she was admitted.

Remarks. It seems doubtful whether the above was a case of idiopathic or traumatic tetanus, as the wound or ulcer in the mouth was not known to have had any distinct connexion with the disease. Whether the sore really proceeded from the child's having bitten her tongue, was uncertain, as she seemed to have no recollection of having done so, and her mother spoke dubiously about it. The indications for stimulants and support in the treatment of the affection were clear, from the excessive prostration and extreme emaciation of the patient. The latter was remarkable, the child being reduced almost to inanition, although she was never unable to swallow.

KING'S COLLEGE HOSPITAL.

FISSURE OF THE HARD AND SOFT PALATE, WITH OTHER DEFORMITIES OF THE FACE.

Under the care of W. Bowman, Esq., F.R.S.

Harriet Page, aged 22, was admitted into King's College Hospital on January 19th, under Mr. Bowman's care, on account of fissure of both the hard and soft palate, extending from the alveolar process to the uvula. It was about a quarter of an inch wide at its commencement, and became wider as it proceeded backwards, being about an inch wide at the junction of the hard and soft palate. The septum nasi was deficient at its inferior part, allowing a communication between the two nostrils. The incisors in the upper jaw were absent, and the fissure extended between the two canines. There had been harelip, operated on in early infancy, when the intermaxillary bone had been removed. The lower lip was considerably everted; and just at the junction of the mucous and cutaneous surfaces, in the central line, two small orifices were seen, which admitted the point of a probe. They appeared to be the openings of the ducts of two buccal glands. They secreted saliva, which dribbled down over the lower lip, and not into the mouth. The teeth of the lower jaw were irregularly placed, one behind the other. The patient spoke in a low indistinct voice, and was only able to take small quantities of food at a time, as a large mouthful would pass into the cavity of the nose.

On January 22nd, the two orifices on each side of the lower lip, which were within a quarter of an inch of each other, were each dissected out as far as the buccal surface, through which ligatures were passed to establish a communication with the mouth; and a harelip-pin was inserted through the two, with a twisted suture round it, to close the opening on the lip. It was found necessary, a few days afterwards, to remove this pin, and introduce a seton between the two orifices of the glands, with its end tied in the mouth. On February 12th, it is noted that one of the openings remained closed, but that saliva still dribbled through the other.

On February 16th, staphyloraphy was performed on the soft palate. The levator palati was divided from behind on each side; and transverse incisions were carried outwards for about a quarter of an inch between the hard and soft palate, so as to approximate the flaps more completely. The edges of the soft palate were pared, and brought together with three metallic sutures. The adjustment of the uvula was not so complete as of the other parts, the opposite edges being somewhat twisted. She was ordered wine and beef-tea. On the 18th, she had a slight cough, with some muco-purulent expectoration and swelling in the throat. The mucous membrane of the palate was somewhat congested; the tongue furred; and mucus collected about the sutures. She was ordered a gargle of dilute hydrochloric acid; and, as the edges looked sloughy, they were touched with nitrate of silver. Still the union remained firm, although a small slough formed on the uvula; and ultimately the whole of the line of incision united, and the uvula was preserved. Two of the sutures were removed on the seventh day, and the other a day or two afterwards.

On March 12th, Mr. Bowman made the following attempt to reconstruct the columna nasi. The septum of the nose, before the operation, presented a beak-like projection, descending half an inch below the nostrils, and ending in a thickened rounded tubercle, half an inch from the front of the upper lip, thus leaving a notch between the septum and the lip, which was particularly unsightly in profile. The object of the operation was to connect the lip with the septum across this notch. For this purpose, a double flap was formed, one half from the interior of each nostril, the base of each being at the upper lip, close to the median line; and these flaps were half-twisted on their axis, and united by wire sutures to the septum, which had been previously reduced in size by the removal of the beaked projection to the extent of half an inch. This mode of operating was adopted in consequence of the extremely tight and narrow condition of the upper lip, from the removal of the intermaxillary bone, This operation did not succeed.

On May 14th, the following operation was performed, for the purpose of closing the hard palate. An incision was made with a rectangular knife along the nasal margin of the fissure down to the bone, from the incisors to the soft palate; and the soft tissues were dissected off the bone for some distance. The tissues thus separated were found to be a quarter of an inch thick, and very rigid, so that they did not drop down to the horizontal position until a transverse incision had been made on each side behind the incisor teeth, and an antero-posterior one on the left side, close to the soft palate. The parts then fell easily together, and were kept in apposition by two metallic sutures. There was not more bleeding than usual, and it ceased when the operation was finished. It recurred, however, shortly after the operation, and continued for five hours; it was checked by ice and perchloride of iron. She shortly afterwards vomited a large quantity of blood, which had run down the throat. She remained for some days weak from loss of blood, but nothing interfered with the healing of the wound; and, on March 30th, it is noted that the anterior part of the wound had firmly united, but that a narrow fissure was left, extending about half an inch backwards to the soft palate, and establishing a communication between the mouth and nose. Its edges, however, were almost in contact. In June, it is noted that the voice was much improved, and that the fissure was very narrow. This was, therefore, left to be closed by a small plate; and nothing now remained but to endeavour to repair the deformity of the upper lip.

Accordingly, on June 28th, Mr. Bowman proceeded to operate as follows:—The object was not only to close the gap between the lip and the columna nasi, but to remedy the tension of the upper lip, which was so great that the mouth could not be closed. A V-shaped incision was made from the ala nasi on each side to the centre of the lip, and the vertical cicatrix was removed. Then from the lateral points of the upper incisions a cut was made towards the angle of the mouth, so as to allow the flaps of the upper lip to fall together, which they did readily, and were united by two harelip-pins. A small flap was now brought from the cheek on each side, to fill up the gap left below the alæ nasi; and these were united, leaving a small orifice below the columna to heal by granulation. Her condition was rather threatening, as far as union was concerned, for a few days after this, as she complained of sore-throat and loss of appetite and sleep; but this soon passed away, and the orifice left at the operation began to granulate healthily. All the surfaces brought together united; the opening below the columna filled up by granulation; and she was discharged, wonderfully improved in appearance and health, on July 23rd. The small opening in the hard palate would be filled up by a plate.

Remarks. The history of this complicated deformity affords an encouraging instance of the powers of plastic surgery, patiently and judiciously applied, in remedying a very common congenital disease even in its most severe form, the simplest variety of which would, a few years ago, have been pronounced incurable. The patient was not the very best subject for long continued operative treatment, demanding union by first intention as a condition of success; still the textures in the face are so vascular, and consequently so disposed to unite, that measures may be successfully adopted here, which, in other regions of the body, would most likely lead to disappointment. In the present instance, the case was much complicated by the deficiency of the upper lip, occasioned by the operation in early childhood, the deformity occasioned by which was even more

formidable and more difficult to cure than the hiatus in the hard palate. It frequently happens, in successful operations for cleft of both hard and soft palate, that a small opening is left at the part where the two operations have met each other; but, in most of the cases which we have seen, the inconvenience produced by this has been so trifling that the patient has not been inclined to submit to the ordeal of a third operation for what is so easily remedied by mechanical means. Sometimes the opening will granulate up and heal spontaneously.

Original Communications.

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF CARDIAC DISEASES.

By W. O. Markham, M.D., F.R.C.P., Physician to St. Mary's Hospital, London.

II.—Pathological Anatomy of Pericarditis: Pericardial Adhesions: their Consequences.

It is most important that we should keep the fact already referred to constantly in view whilst studying the pathological anatomy of pericarditis, viz.: That pericarditis is not merely a local inflammation. Excepting in those rare cases in which it is the result of traumatic injury, or is excited by contiguous disease, pericarditis is to be regarded as one of the consequences of some exciting cause operating generally in the body.

The anatomical changes which represent the disease to us, it should be remembered, are not, essentially, the disease. What may be more truly called so, viz., the exciting cause of the local disorders, exists prior to them. The changes are but the consequences of the unseen, but pre-existing, causes which are working in the system. And these causes again, though pathology cannot in all cases clearly define their nature, are various; and they attack the vigorous and they attack the weak; and certain of them operate in particular at one period of life, and some at another; and they fall upon other organs and parts of the body besides the pericardium. The same cause, for instance, which produces the rheumatic pericarditis is doubtless that which produces the rheumatic joints, and which produces the endocarditis, and the pneumonia, and the pleurisy, which so often accompany pericarditis; and so again, the cause which, in disease of the kidney, excites inflammation of the pericardium, is the same which gives occasion to inflammation of other serous membranes and parts and organs of the body. To look upon pericarditis in such case as the disease, is surely much the same as if we were to designate typhus as a pneumonia or a cerebritis, whenever the lungs in the one case, or the brain in the other, happen to be the organs on which the essential element of these diseases has, in an especial manner, exerted its noxious influence. In pericarditis, certainly, as in the pneumonia and cerebritis of typhus, the local inflammation demands especial consideration; but in pericarditis, as in typhus, we must remember that the disease is general, and that, therefore, in the general character of the disease, and in the general bodily condition of the patient, we must still seek our main guides to direct us in the management of the local disease.

Pericarditis, anatomically considered, consists in an inflammation of the whole or a part of the serous membrane which lines the pericardial sac. The anatomical changes effected by the inflammation are the same as those which are observed during the progress of inflammation in other serous membranes of the body. We have to note the stages of congestion, of exudation, of new growth, of organisation, of absorption, and adhesion; or of degeneration of the products exuded.

In the early periods of the inflammation, the superficial vessels of the subserous tissue become visibly injected with blood, and form tuft-like arborescent patches, frequently having little ecchymoses scattered between them. The surface of the serous membrane, at the same time, loses its naturally smooth, shining, and semi-transparent appearance, in consequence of serum being infiltrated into it, and into the subserous cellular tissue. The membrane, in this condition, is softer than natural, and consequently is more easily torn, and more readily separated from its attachments.

As the inflammation progresses, exudations are poured out into the cavity of the sac, and pseudo-membranous growths form upon its surface. The exudations vary greatly, both in quantity and in quality. Sometimes only a few ounces, and sometimes several pints of fluid, are effused into the sac. The fluid has even been found in quantity so large as to distend the pericardium in a diagonal direction, from the sternal end of the first rib on the right side, down to the eighth rib on the left side, expanding the costal cartilages on either side of the sternum, and compressing backwards the lower lobes of both lungs. In one case which I lately observed, the distended pericardium reached twelve inches across the thorax, and contained three and a quarter pints of serum.

In quality the exudation varies much; it may be of a serous, a fibrinous, or a purulent nature, and is not unfrequently tinged with blood. It collects chiefly about the base of the heart and in front of it. The heart, being specifically heavier than the fluid, sinks beneath it when the patient lies in the recumbent position.

The new growth upon the surface of the membrane presents great varieties in appearance. At one time it is smooth and thin; or again, and as we generally observe it, uneven, flocculent, villous, or honeycombed. When very rough and villous over the heart, the organ takes on that appearance to which older authors gave the name of *cor villosum, hirsutum, hispidum, tomentosum.* The new growth, again, varies considerably in thickness and in colour; it is generally most developed on the convex surface, and about the base of the heart. Its variation in colour results from its being accidentally stained with blood effused from the newly formed blood-vessels, which at this period of their formation are very readily ruptured.

The character of the exudation depends much upon the nature of the formative impulse which presides over the inflammation, upon the constitution, the idiosyncrasy, and the condition of the health of the individual attacked by the pericarditis. It is especially influenced by the nature of the disease with which the pericarditis happens to be associated.

Purulent exudations commonly arise during the progress of severe disorders of a low type, as in pyæmia, tuberculosis, and small pox, puerperal fever, and scarlatina. They are also observed in connection with chronic diseases; but are comparatively not of frequent occurrence. For the most part they have a fatal issue; sometimes, however, they appear to undergo partial absorption, as we may suppose to have happened in those cases in which cheesy, calcareous, and fatty matters are found sacculated between the layers of new formed pericardial adhesions. I have known small abscesses, thus situated in the pericardium, mistaken for purulent deposits in the walls of the heart. The new growth—the so-called fibrinous deposit upon the serous membrane—is generally slight in such cases.

Exudations have a natural tendency to undergo certain changes, under the influence of that ever presiding force, the *vis medicatrix naturæ*; the portions being absorbed, and the fibrinous deposit becoming organised, and converted into areolar tissue. In the purulent sort, as we have seen, hard or softish, or tubercular and cretaceous matters, may be left in the pericardium after the serous portion of the fluid has been absorbed. Laennec and other authors have described cases where the whole pericardium has been thus converted into a so-called bony shell. Instances in which portions of the pericardium are hardened into calcareous plates are not unfrequently met with. In other kinds of exudation the fluid portions of them may be entirely absorbed, so that the opposed surfaces of the new growth—the false membrane—are brought into immediate contact.

Under such circumstances, the surfaces gradually unite, and by their cohesion a perfectly organised and vascular union is at last established between the surfaces of the pericardium. The union thus formed may be general or partial. When the union is partial or slight, the connecting areolar tissue is sometimes long and loose; but when a large extent of surfaces is united, the union is for the most part intimate. A new vascular connection is established between the vessels of the heart itself, and the vessels of the parietal layer of the pericardium—a fact worthy of observation in a therapeutical point of view.

Thus far, the description of pericarditis is the description of the inflammation of serous membranes generally; but there are certain peculiar facts incidental to pericarditis which must be referred to. The immediate and the secondary effects of the inflammation are exercised upon an organ whose uninterrupted action is essential to existence; and hence it is that the smallest pericarditic friction-sounds excite such deep attention.

The action of the heart is interfered with, during the course of the inflammation, in several different ways. We may suppose that, in the onset, the local irritation—the cause provoking the local inflammation—acts as a stimulant to the heart's contractions; and that both the nutrition and innervation of the organ are impaired. Then, after a period of unusual excitement, reaction sets in, and the over-wrought muscular tissue suffers depression and diminution of its vital force, and becomes, so to say, partially paralysed. The same result, this, as happens in the advanced stages of pleurisy and peritonitis, when the intercostal muscles and the muscular coat of the intestines have been subjected to the influence of contiguous inflammation.

But this is not the only way in which the heart's movements are impeded. When the fluid exudation is considerable, it necessarily acts as a mechanical impediment to the motion of the heart. The pressure of the exudation upon the surface of the heart, when the pericardium is much distended, is very considerable; and as the pressure is equally distributed over the organ must act with greater effect upon the auricles than upon the ventricles. The solid fibrinous masses spread over the pericardial surfaces likewise interfere with the heart's action, especially when collected in masses about its base. I have seen cases in which the heart looked as if it had been flattened by the pressure of the fluid on it; the auricles being thickly coated with false growths, and crumpled down, and hardly to be distinguished from the ventricles. I have also seen the aorta apparently indented, from a like cause, at one point.* The pressure thus exercised on the heart interferes with the respiration, as well as the circulation, by impeding the ready flow of blood into the auricles from the pulmonary veins and the systemic veins.

Hence it appears that the pericardial inflammation injures the action of the heart and its great vessels in two ways: by the mechanical pressure of its exudations; and through the vital changes effected in the contractility and elasticity of the heart and its vessels by the interference with their nutrition which the inflammation occasions; the changes being either temporary or permanent.

Pericardial Adhesions. One of the important results of pericarditis is adhesion of the opposed pericardial surfaces, through the medium of the new growths. These adhesions are formed by a gradual conversion of the solid exudation into a completely organised areolar tissue. Inflammation or exudation upon one part—the visceral layer, for instance—of a serous membrane, seems almost invariably to excite inflammation in the opposed part of the parietal layer. I know not how we can account for this fact, except by supposing that the friction of the roughened surface of the part originally inflamed excites, by its mechanical action, inflammation in the opposed portion of the serous membrane.

Consequences of Pericardial Adhesions. Different authors differ much respecting the effects produced on the heart through adhesions of its pericardial surfaces. Hypertrophy, hypertrophy with dilatation, dilatation, and atrophy, each of these has been set down as the ordinary consequence of pericardial adhesions. There can be no doubt that each of these abnormal states of the heart has been observed coincidently with such adhesions, and as a consequence of pericarditis, therefore; but that one particular state—viz., hypertrophy with dilatation—is their most ordinary consequence. The discrepancies of opinions of authors seem to me to be capable of ready explanation, when we take into consideration the several coincident facts which are, one or other, associated with pericarditis. In the first place, the inflammation may have left the muscular structure of the heart unimpaired; or it may have so interfered with its nutrition as to have occasioned atrophy or degeneration of that structure. Then, again, with pericarditis is very frequently associated endocarditis, and with endocarditis injuries of the heart's valves; and from such injuries naturally spring hypertrophy and dilatation. Then, again, the nature and extent of the adhesions will modify the results occasioned by them. We must also look at the length of time which the adhesions have existed, when considering their influence upon the organ; *i.e.*, the effects which they may have produced.

A consideration of these particulars would lead us to anticipate the occurrence of different conditions of the heart, according as one or other of the influences here mentioned is brought most prominently into action. When the nutrition of the heart has been seriously interfered with, the muscular structure may have, to a greater or less extent, been permanently damaged; and, in such case, we should reasonably expect to find the organ atrophied, or that its tissues had undergone degeneration. But when the muscular structure of the heart has not been permanently affected by the inflammation, then the impediment to the heart's free action resulting from the adhesions, or coexisting valvular disease, would probably produce hypertrophy and dilatation. Thus, in cases of adherent pericardium, atrophy and dilatation of the heart would follow its impaired nutrition and its muscular degeneration; and hypertrophy, or hypertrophy with dilatation, when its muscular structure remained sound. It is right to add, that cases of completely adherent pericardium are occasionally met with, in which the heart appears to be healthy, and to have perfectly performed its functions during life.

Relation of Pericarditis and Endocarditis. Endocarditis very frequently arises during the progress of pericarditis; sometimes it precedes, and sometimes seems to arise simultaneously with, the pericarditis. It is only, however, in the rheumatic form of pericarditis that we notice this connexion. In such case, the endocarditis must be regarded as the product of the same exciting cause of disease as that which occasioned the pericarditis.

We have already seen that pericarditis may be the occasion of fatty degeneration of the heart, through the injury which it has caused to the nutrition of the organ.

When the pericarditis is considerable, it usually extends by contiguity to the parts external to and around the pericardium, producing local pleuritis. In consequence of this exopericardial inflammation, adhesions form between the pericardium and the lungs and the thoracic walls. Through such adhesions, the heart becomes directly attached to the thoracic walls, and the lungs are prevented gliding over the pericardium during inspiration—an important fact in diagnosis.

The pericardial effusion not only impedes respiration (as already described) by its pressure upon the heart and the great vessels, but it also, when considerable, mechanically compresses the lungs, and particularly the left lung, which is sometimes in this matter rendered in great part useless. We shall have occasion hereafter to speak of the many other effects which result from the congestions of the different organs of the body produced by the impeded respiration and circulation.

White Patches on the Heart are very frequently met with. They appear to be of two kinds, consisting of a fibrinous exudation poured out *within* the tissue of the pericardium, and of a fibrinous exudation *upon* its surface. They were once thought to be purely of inflammatory origin; but there is great difficulty in thus regarding them. They are probably only quite exceptionally the results of inflammation, being, in the great majority of instances, merely the exudation of "unhealthy plasma", as described by Dr. Handfield Jones. In consequence of their usual position on the anterior part of the right ventricle, and on the right auricle, and sometimes on the posterior part of the heart, about the base of it, and over the coronary vessels, they have been attributed by some writers to the effects of friction produced by the heart's movements. "It is an appearance," said Dr. Baillie, "I believe, of no consequence whatever, and is so very common that it can hardly be considered as disease." This is exactly all that can be said at the present moment of these patches.

[*To be continued.*]

* Such a kind of pressure would probably excite an aortic bruit, it may be incidentally observed.

Action for Recovery of Fees. An action was tried a few days ago in the Marylebone County Court, brought by Dr. A. B. Wall, of Bayswater, against Mr. T. B. Gordon, a retired wine-merchant. The plaintiff had attended the patient's wife, who had cut her throat; he made altogether sixty-three visits (sometimes seeing her twice a day), for which he charged five shillings a visit. The defence set up was, that the plaintiff was not entitled to charge for more than one visit a day; and that the plaintiff's treatment had been unsatisfactory. The judge decided that these grounds of defence were altogether set aside: the first, by the testimony of several medical witnesses; and the second, by the fact that the defendant had paid ten guineas into court. He was of opinion that in law a medical man could charge for every attendance; the public had their remedy, by first making a contract if they chose. The jury at once found a verdict for the full amount; and the judge allowed full costs, amounting to £5:4:0.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY
LIONEL BEALE, M.B., F.R.S.,
PHYSICIAN TO KING'S COLLEGE HOSPITAL; PROFESSOR OF PHYSIOLOGY AND GENERAL AND MORBID ANATOMY IN KING'S COLLEGE, LONDON; ETC.

Lecture III.

Healthy Urine. III. Inorganic Constituents. *On the Salts generally; Changes effected in the Composition of the Salts by Incineration: Proportion of the Saline Matter in Urine: Phosphates; Common Phosphate of Soda; Alkaline Phosphate of Soda; Acid Phosphate of Soda; Phosphate of Soda and Ammonia; Phosphate of Magnesia; Phosphate of Ammonia and Magnesia; Phosphate of Lime; Estimation of the Alkaline and Earthy Phosphates; Quantity: Sulphates; Quantity; Estimation: Carbonates: Chloride of Sodium; Quantity; Detection; Circumstances affecting the Excretion of Chloride of Sodium: Bases in Urine: Soda and Potash: Lime: Magnesia: Iron: Silica: Alumina: Systematic Quantitative and Qualitative Examination of the Saline Matter of Healthy Urine.*

III.—Inorganic Constituents of Healthy Urine.

[*Concluded from page* 503.]

Alumina. It has been stated by authorities that this substance does not pass off from the system in the urine at all; but from several observations which I made some years since, and which I have lately repeated, I have been led to conclude that it is very commonly present in the ash of urine. The alumina detected in the urine is in great part, if not entirely, derived from the alum taken in the bread. Some time since, while in the habit of eating pure home-made bread, I was unable to detect the presence of this substance in the manner presently to be described; but afterwards, when my diet consisted of baker's bread, I found very decided indications of its presence.

The test which has been employed is the ordinary blow-pipe test. A little of the fixed saline residue, which has been perfectly decarbonised, is moistened with a solution of nitrate of cobalt, and heated gradually in the blowpipe flame to a bright red heat. If alumina be present, the bead, upon cooling, is found to be of a beautiful *bright blue* colour. As is well known, there is great difficulty in separating phosphate of alumina from phosphate of lime; and the ordinary process of analysis is not sufficiently delicate to detect this substance in the small quantity in which it ordinarily occurs in the ash of urine. When the ash contains as much as one-fiftieth part, however, I have been able to detect it by the liquid tests. The blowpipe test above referred to is not without objection, inasmuch as any bead containing phosphates exhibits a blue colour when heated in the blowpipe with nitrate of cobalt. The blue colour produced is certainly very different to that developed when alumina is present. A bead consisting of phosphates of soda, lime, and magnesia, gave a very dull grayish blue colour with the cobalt; but, when the slightest trace of alumina was added, a very bright and decided colour resulted. I have applied this test, therefore, to the urine salts before and after alum was taken in the food. In the first case, the blue tint was very undecided, or not at all manifested; while in the last it was bright and distinct.

At a time when I was taking home-made bread perfectly free from alum, I examined the urine. The ash was tested for alumina with nitrate of cobalt in the usual manner, but only a faint blue colour was produced. Immediately after evacuating the bladder (12, noon), five grains of alum were taken, dissolved in an ounce and a half of distilled water. At 6 P.M., about fifteen ounces of urine were passed. A portion of this was evaporated to dryness, and the residue incinerated and decarbonised. A small quantity of the ash was treated with nitrate of cobalt, and heated in the blowpipe flame. The bead, on cooling, was of a very bright blue colour. This experiment was repeated, with the same result. A similar reaction is met with in a great many specimens of ash obtained from the urine of hospital patients. Although this is not a perfectly accurate test, it indicates the presence of alumina in some specimens of urine in which one would expect a salt of this base to be present; while in urine which was perfectly free from alumina, no indication of its presence was afforded by the test. I think, therefore, if the cobalt test be employed carefully, it is worthy of more trust than most chemists seem disposed to place in it. A further series of researches is required to prove the proportion of alumina removed in the urine to that which escapes by the intestinal canal, when salts of this base are taken with the food. But I think there can be little doubt that a certain amount of this substance is really carried off in the urine. The urine salts of most persons give a very decided reaction indicating the presence of this substance, a considerable quantity of which is taken with many kinds of bread. Although there are many objections to mixing alum with the bread, and the practice ought clearly to be put an end to, I am not aware that any deleterious effects have been produced by its introduction. Some have attributed habitual constipation to this cause.

It is desirable that the student should be acquainted with the principal characters of the most important inorganic salts of urine; and it has been considered desirable to give the following short course of systematic analysis. When it is required to estimate the constituents quantitatively, the volumetric process will be found the most accurate as well as the most convenient.

Systematic Qualitative or Quantitative Analysis of Healthy Urine: Inorganic Constituents.

The portion of urine B (p. 428) is also to be evaporated to dryness, and the dry residue incinerated in a large platinum capsule, and maintained at a dull red heat until it is perfectly decarbonised and nothing remains but an almost perfectly white ash. This, consisting of the fixed salts, is now to be examined as follows. Boiling distilled water is to be poured upon the saline residue, and the mixture thrown upon a filter.

The *solution* contains the *alkaline salts.*

The *insoluble matter*, consisting of *phosphate of lime, phosphate of magnesia*, and *silica*, remains behind on the *filter.*

1. The residue *insoluble in water* is to be treated with nitric acid, and boiled if necessary. *Silica* remains undissolved. If effervescence occur upon the addition of the acid, *carbonate of lime* was present in the ash. Filter; add excess of ammonia to the filtered solution, and redissolve the precipitated phosphates by adding excess of acetic acid. Next precipitate the lime as oxalate, by the addition of oxalate of ammonia. If the *quantity* of lime is required, the oxalate must be heated in a platinum capsule, and weighed as carbonate.

After the separation of the oxalate of lime by filtration, concentrate the clear solution by evaporation, and add a little ammonia and chloride of ammonium. Stir the mixture, and set it aside, that crystals of *triple or ammoniaco-magnesian phosphate* may form.

2. The *original solution*, containing the urinary salts, soluble in water, is divided into two portions, 2 *a*, 2 *b*.

2 *a*. The first portion is acidified with nitric acid, and treated with *nitrate of silver. Chloride of silver*, indicating the presence of chlorine, is precipitated. The chlorine originally existed in combination principally with sodium.

2 *b*. The second portion is also to be acidified with nitric acid, and an excess of solution of nitrate of barytes added; a precipitate of *sulphate of barytes*, proving the presence of sulphuric acid, occurs.

The mixture is boiled and filtered; and, upon the addition of ammonia to the solution, *phosphate of baryta*, showing the presence of phosphoric acid, is precipitated, care being taken to prevent the formation of carbonate of baryta by exposure to the air.

Next the phosphate of baryta is to be separated by filtration; and the solution, which contains nitrate of barytes, ammonia, and the fixed alkalies, is to be concentrated. Excess of carbonate of ammonia and ammonia is to be added, and the mixture thrown upon a filter. The solution is to be concentrated by evaporation, and the barytes separated by sulphuric acid, after which the solution is to be evaporated to dryness, and the residue heated to redness in a hard glass tube, in the mouth of which a fragment of carbonate of ammonia has been placed. The residue is to be treated with water, and filtered. The

solution contains the salts of the alkalies, *potash* and *soda*. The former is thrown down in the form of minute octohedral crystals of the *potassio-chloride of platinum*, upon the addition of a solution of bichloride of platinum. After stirring, these may be filtered off.

The solution contains the *sodio-chloride of platinum*. It is to be concentrated, in order that the beautiful acicular crystals of this substance may form.

Thus we have shown the presence of the following substances in the specimen of urine submitted to examination.

Fixed Salts .....
- Lime .....
- Magnesia .....
- Potash .....
- Soda .....
- Chlorine .....
- Phosphoric Acid .....
- Sulphuric Acid.....

The constituents not included in the above list, and in that on page 429, require special processes for their demonstration; and, as many of them exist in very minute quantity, it is not desirable that the student should attempt to test for them in the small amount of urine usually operated upon. If the observer desire to carry on special researches on these constituents, I must refer him to works which treat fully upon the processes of analysis, especially to Dr. Thudichum's recent work. The substances alluded to are the following:—

Creatine.	Ammonia.
Creatinine	Hippuric Acid.
Sarkine	Iron.
Uræmatine.	Alumina.*
Uroxanthine.	Carbonic Acid.
Phenylic Acid, Damaluric Acid ?	Leucine, Tyrosine †

The characters of several of these have already been discussed, and the methods for separating them from the urine described.

Average Composition of Healthy Urine, and the Quantity of the different Constituents excreted in twenty-four Hours.

It is clearly very important that we should form a general idea of the quantitative composition of healthy urine, and the amount of the various constituents which are excreted from the healthy organism in twenty-four hours. Those who are making observations on the urine in disease should be acquainted also with the relative proportion to each other of these different substances. It is true that the healthy variations are very great; but, in certain cases of disease, the difference in the quantity is so considerable that the observer cannot fail to be struck with the importance of the fact. Thus, in health, from 400 to 500 grains of urea are excreted in twenty-four hours. In certain cases of kidney-disease, when the cortical portion is impaired in structure, not more than 100 grains are eliminated; while, in some cases of fever, upwards of 1000 grains have been removed in the same time. Of the significance of such facts there can be no question; and the physician cannot fail to reflect upon the very different chemical conditions under which life is being carried on in these cases. Without considering all the circumstances likely to affect these abnormal processes, how can we hope ever to gain that insight into the nature of disease which in many instances can alone enable us to modify or counteract the morbid changes going on?

The composition of healthy urine is given in the analyses by Berzelius, Lehmann, and Dr. Miller. With a view of giving a rough idea of the general amount of the different urinary constituents excreted, and the proportion which these bear to each other, in twenty-four hours, I propose to arrange the results of numerous observations in a tabular form. The proportion of some of these substances is so variable, that it is impossible to give an average. In most cases, I have purposely given a round number, and avoided fractional parts; but in other instances, in which I have not been able to institute examinations for myself, and when the question has only been examined by one or two observers, I have given the exact figures published by the authority who has made the matter an object of special study. In constructing this table, I have not attempted to follow any single observer, but, with the exceptions alluded to, have put down numbers which appear to me to be tolerably correct. They have been obtained by consulting numerous authorities, and from my own analyses. This table, therefore, is only to be looked upon as a rough approximation to the truth. In the second column, the composition of 1000 grains of urine is given; in the third, the quantity of constituents in 100 grains of solid matter; and in the fourth, the percentage composition of the salts.

From what I have said before, it is obviously quite impossible to give what may be regarded as an *average* of the quantity of constituents removed in the urine in the course of twenty-four hours; since it will vary with the weight and power of the individual, the amount of exercise, quantity of food, etc. The figures in the table may be regarded as the proportion excreted by a strong healthy man in good nutrition, on full diet. Healthy women would excrete about one-third less than the quantities given in the first column.

The same exception may be taken to the numbers expressing the *relative* amount of the different ingredients. For instance, the proportion of urea to extractive matters undergoes the greatest variation. Sometimes the urea is double the weight of the extractives, while in other cases the numbers would be reversed. Many of the saline constituents also exhibit the greatest variations, not only in different individuals, but in the same person, on different days. Thus the quantity of chlorides is twice as great on some days as on others; depending, as before remarked, partly on the amount taken in the food, partly upon the quantity of fluid and other saline matters. As yet, these extraordinary fluctuations have not fully been accounted for; but, doubtless, in time the circumstances which determine them will be accurately made out.

A. An analysis of 1,000 parts of healthy urine by Berzelius;
B. One by C. G. Lehmann.

	A		B	
Water	933·00		932·019	
Solid matter	67·00	100·0	67·981	100·0
Urea	30·10	44·9	32·909	48·4
Uric acid	1·00	1·4	1·098	1.5
Lactic acid			1·513	2·3
Lactates	17·14	25·5	1·732	2·6
Water extract			·632	1·0
Spirit & alcohol extract			10·872	16·0
Chloride of sodium	4·45	6·6	3·712	5·5
Chloride of ammonium	1·50	2·2		
Alkaline sulphates	6·87	10·2	7·321	10·8
Phosphate of soda	2·94	4·3	3·989	5·9
Biphosphate of ammonia	1·65	2·4		
Phosphates of lime and magnesia	1·00	1·4	1·108	1·7
Mucus	·32	·4	·110	·3
Silica	·03	·04		

The following is an analysis of healthy urine by my friend Dr. W. A. Miller, of King's College:—

Specific gravity		1020	
Water		956·80	
Solid matter		43·2	100·00
Organic 29·79	Urea	14·23	33·00
	Uric acid	·37	·86
	Alcohol extract	12·53	29·03
	Water extract	2·50	5·80
	Mucus	·16	·37
Fixed salts, 13·35	Chloride of sodium	7·22	16·73
	Phosphoric acid	2·12	4·91
	Sulphuric acid	1·70	3·94
	Lime	·21	·49
	Magnesia	·12	·28
	Potash	1·93	4·47
	Soda	·05	·12

Vogel gives the following estimate of the quantity of urine and its most important constituents excreted in twenty-four hours in a state of health:—

Average quantity in twenty-four hours	52¾ to 56 oz.
Average specific gravity	1·020
Average quantity of urea	556 grains.
Average quantity of chlorine	154 „
Average quantity of free acid	33 „
Average quantity of phosphoric acid	66·7 „
Average quantity of sulphuric acid	30·88„

* Not necessarily present in healthy urine.
† In urine in certain diseases. Probably not in healthy urine.

Table showing the amount of Urinary Constituents excreted in twenty-four hours, and in 1000 *parts of Healthy Urine, with the percentage composition of the Solid Matter and Fixed Salts.*

	Excreted in twenty-four hours.	In one thousand parts of urine.	In one hundred grains of solid matter.	In one hundred grains of salts.
Specific gravity . . 1015 to 1025				
Quantity	40 oz. to 60 oz. 17500 grs. to 26250 grs.			
Water	16700—25050	968·0 —940·0		
Solid matter	800— 1200	32·0 — 60·0	100·0	
Organic matter . . .	600·0—900·0	24·0 — 45·0	75·0	
Saline matter . . .	200·0—300·0	8·0 — 15.0	25·0	100 00
Urea	400·0 —600·0	12·0 — 30·0	45·0	
Kreatine	3·45*– 6·32*			
Kreatinine	5·50*– 10·00*			
Uric acid	5·00— 8·00	·3 — 1·0	1·5	
Hippuric acid . . .	7·50*– 30·00†			
Extractives and colouring matter	140·0 —200·0	9·0 — 20·0	20·0	
Free acid	20·0 — 30·0	·32— ·64	1·0	
Ammoniacal salts . .	6·0 — 15·0	1·50— 3·00	5·0	
Mucus	10·0 — 30·0	·1 — ·4	1·0	
Sulphates	50·0 — 85·0	1·5 — 6·0	8·0	30·0
Alkaline phosphates . .	60·0 —100·0 or 160	2·0 — 9·0	9·0	38·0
Earthy phosphates . .	6·0 — 20·0	·5 — 1·2	1·5	6·0
Chlorides	100·0 —300·0	4·0 — 8·0 or more	7·0 or more	25·0 or more
Chlorine	60·0 —180·0	2·4 — 4·8	about 4·2	15·1
Sulphuric acid . . .	25·0 — 42·0	·75— 3·0	about 4·0	15·0
Phosphoric acid . .	30·0 — 50·0 or 80	1·0 — 4·5	about 4·5	19·0

* Thudichum. † Hallwachs.

This table may perhaps assist you in some measure in remembering the general composition of healthy urine, and the proportion of the different constituents eliminated from the body in twenty-four hours. It is quite impossible to use this or any other table as a standard of reference, because the proportion of the urinary constituents secreted in health is very different in different individuals. Before we can judge if a man is passing too much or too little of any substance, we must ascertain his weight, and form some general idea of the activity of his vital actions when he is in a state of health. For instance, the statement that a patient is passing daily about 150 grains of urea indicates nothing; for a small woman in good health weighing much less than 100 lbs. secretes daily even less than this; but if this amount only were excreted by a tall, strong, active, healthy man, weighing 170 lbs. or more, it would indicate a very serious condition, and we should at once know from this fact alone that he was in the greatest danger. The secreting structure of his kidneys must be temporarily or permanently affected, and, unless relief be afforded very soon, death must result from the accumulation of excrementitious substances in the blood.* Some observers calculate the quantity of solids of the urine, etc., which should be excreted for every pound of the individual's weight; but it is perhaps simpler to state the total weight of the person only, as just mentioned. If, therefore, you propose to conduct any series of researches upon the proportion of substances excreted in the urine, in health or disease, you must weigh the individual; and you must carefully ascertain the amount of ingesta; and the quantity of excrementitious substances generally, including the sweat, if possible, must be estimated. Again, you will see how very little information you can gain from learning the composition of a given quantity of urine, without knowing the proportion excreted in the twenty-four hours. There is very much to be made out by carefully conducting series of researches of this kind in the cases of patients suffering from various acute affections; and, since the introduction of the volumetric process of analysis, which I shall describe in a future lecture, we have had great facilities for conducting such inquiries.

In the next lecture I propose to commence the consideration of the second part of my subject—*morbid urine*. It is not an easy task to define in few words exactly what is comprised in the term *morbid urine;* and I shall, therefore, not offer an exact definition, but merely draw a general distinction between *healthy urine*, in which the proper amount of all the constituents, relatively and absolutely, exists, and *morbid urine*, in which there is too much or too little of one or more of the substances occurring in health, or certain constituents are present which do not exist in the healthy secretion at all.

* In many cases, the most valuable information bearing upon the progress of the case may be gained by the simple process of weighing the patient, which is too seldom adopted. All our hospitals and public institutions ought to be furnished with weighing machines. How often in the course of many diseases one desires to know simply if the patient has gained or lost in weight? The weighing machines which I have seen at present in use are very expensive, and not accurate. A good simple apparatus, which can be made for a moderate sum, is much required. I have just heard that Messrs. Weiss are constructing an improved apparatus suitable for the practitioner.

Transactions of Branches.

CORNWALL MEDICAL SOCIETY.

PRESIDENT'S ADDRESS.

By Charles Barham, M.B., Truro..

[*Delivered July 19th*, 1859.]

[Dr. Barham, for himself and other professional gentlemen of Truro, expressed a hearty welcome to their visitors from other parts of the county; and then he spoke of objects of professional and general interest in Truro, which might possibly engage the visitors' attention, if they could sufficiently prolong their stay. In the first place, he mentioned the County Infirmary, the oldest institution of the kind in Cornwall, and which, formed about the end of the last century, had gradually been extended until now it contained about sixty beds, all which were generally occupied. If any of their professional friends from other parts of the county should remain in Truro till the following (Wednesday) morning, that being the day for receiving patients, the Infirmary staff would be glad to show them what he believed they would admit was a very comfortable and well arranged hospital. There was also in the town a very good and effective Dispensary. And in the building wherein they had now assembled there was a Museum, which was perhaps unsurpassed by that of any provincial town of equal size with Truro, for the value of the collections themselves, and for their favourable arrangement either for study or for casual inspection. This institution was largely indebted

to his friend on his left, Mr. Couch, whose reputation as a scientific naturalist was known to all the world. In former years, Mr. Couch laboured for the benefit of this institution, in the formation of a "Cornish Fauna", which was at the same time illustrative of the contents of this museum, and, in this respect, he believed it was unique in kind. The first two numbers of this "Cornish Fauna" were edited and written by Mr. Couch's father, Mr. Jonathan Couch; and the last and largest number, on Calcareous Corallines, was written by Mr. Couch himself. The peculiarity of the whole work was, that while it formed a complete catalogue of the natural history of Cornwall, it made reference, by means of asterisks, to specimens in the museum. He was not aware that in any collection there was such a true *catalogue raisonné* as this, which enabled a student to follow step by step in the museum the various links of natural history represented there, whilst at the same time it furnished information of the links still wanting; and for this, the institution was indebted to Mr. Couch and his father. The museum was also very rich in mineralogy and antiquities, and it contained a very splendid collection illustrative of the natural history of the East Indies, for which it was chiefly indebted to a native of this neighbourhood, Colonel Jenkins, who had been for many years superintendent of the Province of Assam. In this Institution, too, there had been produced, in the fields of science and antiquities, a variety of communications which had been put together in three substantial volumes; in which were also stored up many very interesting articles connected with natural history and vital statistics. He then proceeded:]

You will, I think, be of opinion that the chief objects of the periodical meetings of medical men are, the promotion of unity of professional feeling and action; the fostering a high sense of professional honour—a genuine *esprit de corps*; and the discussion of matters of medical polity. Our holidays are too few and brief to be spent in listening to essays which might almost as well be read in an easy chair at home; and this has appeared to me dull work, even at the annual gatherings of the British Medical Association, compared with the renewal of the friendships of early days, the formation of new intimacies, the personal knowledge of eminent men, and the rapid interchange of thought and argument, the chief advantage as well as charm of *viva voce* debate, which make these meetings so delightful to the feeling, and so refreshing to the intellect. The occasion may no doubt be well employed in giving those who live at a distance from the great medical centres, and to those who have anything to show, the opportunity of seeing or exhibiting what is new in design or application; and novelties in pathology and treatment must always be welcome, as well as remarkable cases, pithily narrated.

Under these impressions, I have not exerted myself to purvey any elaborate communications. Some short notices will be submitted; and others, relating operations of much interest, would have been added but for the untimely loss of our lamented friend, Mr. Spry. He had intended to lend his cordial aid to the profit of our meeting, and his genial spirit would have added much to its social enjoyment. Those who knew him will regard his death as a loss to the profession, as well as to the public; for it is clearly of advantage to the former as well as to the latter, to have, within easy reach, an authority in whom both feel confidence, both as to honour and skill, to whom reference may be had in cases of doubt or difficulty. My own first acquaintance with Mr. Spry is mixed with the recollections of student days. Just thirty-three years ago, he came, in company with a still earlier friend of mine, Mr. Coulson, from Berlin, where they had been completing their preparation for practice, to Paris, where I was staying on the like errand. These companions both achieved eminence in their respective spheres, and both have done honour to this their native county. I then noted in Mr. Spry the qualities of mind and character on which his success was based. Nature had marked him out for a surgeon. His perception was prompt and accurate; his mind inclined to positive knowledge, and retentive of facts; his judgment ready and decided; his will firm; his hand dexterous and neat. He also possessed, like many distinguished operators, a fine and commanding person. It was about ten years later, when, settling, as he had done, in this our native town, I met him again, and our intimacy became established; and each year of the long intervening period has added to my high estimate of his professional and public merits, and to my regard for him as a private friend. In the course of a very busy life, Mr. Spry had contributed more than fully employed provincial practitioners generally do to the records of the profession; and in the maturity of his judgment and experience, much might have been looked for from the stores which his methodical habit of taking ample notes had accumulated. But I must not write an obituary, though less I could not say in justice to his memory or to myself.

To-day, you will agree with me, our time must be principally, and cannot be better, employed than in considering and settling what shall be the future constitution of our Society. When I was invited last year by Dr. Littleton to co-operate in its formation, and to take my turn as its president, I expressed my readiness to assist, as far as I could, any well digested plan for the establishment of an efficient Medical Society in Cornwall, provided it was so constituted as to be part and parcel of the British Medical Association. To this I was attached as one of its early members, but much more so, because I had witnessed its gradual development as the only voluntary combination of the whole profession, and had seen it ultimately embrace the three kingdoms. It appeared to me then, and it appears to me now, that to be simply a Branch of that Association, is at once the easiest, and the best mode of existence for a local Society. The advantages of complete union with the parent stem are, in fact, equivalent to those of the connection of the Branches of a tree with its trunk and roots. The Journal is the sap, which flows through and maintains the vitality and growth of all alike. With this persuasion, I have always strongly urged all my professional friends to become members of the British Association. It is possible that some regulation may be made by the General Council, at the annual meeting next week, for the admission of members at a lower subscription, who may not wish to receive the Journal and other publications; but whether this be done or not, I would suggest for your consideration that it would be advisable to make the membership of the Association a necessary preliminary to that of our Society. Next comes an important question for our discussion. Is there any necessity or advantage in our complete severance from the South-Western Branch? I have, indeed, felt, in times past, the difficulty of attending meetings generally held in Devon; but that is in great measure obviated by the opening of the Cornwall Railway; and I cannot but think that when once a medical man in the west has resolved to treat himself to a holiday, it will be better worth his while to make an excursion to Torquay, as he would have done a few weeks since, or to Plymouth, as he would do next year, where he would find a large muster of the profession, than to limit his trip to his home circuit. The South-Western Branch, which has always consisted exclusively of members of the General Association, has been worked without any charge beyond the regular guinea subscription; and nothing more is expected by the central body. It would be perfectly competent to the Cornish members, to hold quarterly, or other meetings, in such districts as they chose; following, if it were thought well, the scheme laid down in our proposed regulations. It should also be borne in mind that Cornwall will take its turn in the selection of the places in which the annual meetings would be held. It is now twelve years since such a gathering of the South-Western Branch took place in this town. I had then the honour of being its president, and many friends from the adjoining county paid us a flying visit, a pleasant one, I have reason to believe, to them as to us. No doubt, had the number of Cornishmen increased on the list of members, instead of lessening, they would again have assembled west of the Tamar ere this; and the increased facility of intercourse now existing, by water as well as land, would establish the claim of Cornwall to have the Branch convened within its limits at least at intervals of five or six years, would the county but furnish, as it certainly ought to do, some thirty or forty members to the British Medical Association.

[Dr. Barham said it might, perhaps, be expected that he should make some allusion to the great medical event of the past year, the passing of the Medical Act; but he considered that that Act was now so much on its trial that he was not disposed to say much about it. It appeared to him valuable principally as a means of putting a stop to what might justly enough be called the cabal which had been existing and fermenting during the last twenty or thirty years—a sort of Medical Reform Agitation that was profitable neither for the purposes of science, nor for the amenities of private intercourse. It was provoking, however, to find that one of the earliest results of that Act was that their canny friends in Scotland should take advantage of the market, and endeavour to disturb the existing grades of the profession, by the wholesale manufacture of physicians at £10 a head. With regard to that Act generally, they could very well abide another twelvemonth, and then, at their next year's meeting, discuss its merits. It was very clear that neither the Central

Medical Council, nor either of the Councils for Scotland and Ireland, knew very well at present what would be the effect of that Act. But certainly, by defining the legal status of the practitioner, it afforded facilities for reducing the guerilla force around them—the poachers on their preserves. In that way the Act would be useful, by the test which it had provided for the exclusion of interlopers. The other day, in this neighbourhood, that Act was not applied, because the common law was found more effectual for the purpose; but he was glad to have been able to bring a most notorious quack to condign punishment, who was now reflecting on his misdeeds in Bodmin gaol; and, as he (Dr. Barham) hoped, with salutary effect on his own mind and on his compeers. With regard to the more scientific part of their proceedings, Dr. Barham said there would, by and by, be exhibited some illustrative examples of a particular condition of disordered blood, produced by circumstances under which the patients had laboured as miners in the tropical climates of Columbia and Cuba; but as the patients had far advanced in process of cure, the specimens were not so characteristic as they were a short time since. He had placed on the wall various pictorial representations of the variety of climates in Cornwall; he thought they would be regarded with interest, and that one of the best things which the medical men of this county could do professionally, was to endeavour to turn its climate to account. This county possessed such peculiarities and varieties of climate, that he had no doubt it would be much more resorted to than it had been for sanitary and curative purposes.]

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

A List of the Members of the British Medical Association will shortly be published in the Journal. Gentlemen whose designations or addresses, as given in the lists published on July 24th and October 9th, 1858, and June 18th, 1859, are inaccurate, will oblige by at once forwarding the necessary corrections to Dr. Williams, Worcester, or Dr. Henry, 37, Great Queen Street, London, W.C.

British Medical Journal.

SATURDAY, AUGUST 20th, 1859.

PURIFICATION OF THE SERPENTINE.

The hot dispute still going on in the pages of the *Times*, as to the best method of supplying the Serpentine lake with a regular and ample supply of pure water, in place of the turbid mass of slush, green with confervoid growth, is a testimony to the interest the public is beginning to take in sanitary matters. When St. James's Park was a mere Dutch canal, and Rosamond's pond a stagnant pool, how the old world of bagwigs and hooped petticoats of the period would have stared if a tenth part of the fuss had been kept up respecting the nuisances that we now make about a state of things, which, with all its shortcomings, must be purity itself compared with what once existed in the same locality. Little straws of this kind show in a very clear manner the advance public opinion has made in the all important science of public hygiene. The ingenuity of the contractors, who would do the work of purification for us, or of those who are appointed to do it, are so conflicting and so positive, that we, in common with the public, have felt a little puzzled to get at the real truth. Messrs. Easton, Amos, and Sons, who gave us a crystal lake in St. James's Park, in place of a filthy duck-pond, seemed to have some justice on their side in the attack they made upon what has been termed the "new-fangled" scheme of Mr. Hawksley, the engineer deputed by the Government to filter the lake; but there are two sides to a tale, and we are bound to confess that, in our opinion, the latter gentleman's rejoinder in Thursday's *Times* is at least conclusive as to the total uselessness of the contractor's scheme, which, so far from promising to raise the condition of the Serpentine to that of its sister lake in St. James's Park, threatens to reduce both to their former condition, and the ornamental water of the Queen's palace into the bargain. At present, the St. James's Park lake and the Buckingham Palace lake are supplied with pure water from a pump in Duck Island, situated in the former lake; but Messrs. Amos now propose to increase the supply from that source, conduct it to the head of the Serpentine, and there discharge it. From this point the water, after bathing 120,000 bathers, and, of course, becoming foul from a hundred causes, is in two months to circulate to its overflow; and, the utmost amount of pollution being perfected, it is then to be conducted into the St. James's Park to *Her Majesty's gardens*. We confess that we were not prepared to find any contractor hardy enough to serve up the slops of 120,000 very dirty little boys as a mess "to put before the Queen."

Mr. Hawksley's plan is certainly a great improvement upon this abominable scheme; and, as we believe that he is quite correct in stating that the chief, if not the only impurity of the Serpentine, is the confervoid vegetation to be found in it in common with all stagnant water, in our opinion his filtering scheme is not only a perfectly practical one, calculated to render the lake clear and pure, but the cascade itself from which the water will fall from the filtering-beds at the head of the Serpentine, now a pestiferous marsh, will prove a very beautiful object. Really, we cannot comprehend the sneers that have been indulged in by some scribblers in the *Times*, with respect to the proposed concealment of the filtering-beds in an Italian garden. It really seems as though any attempt at ornamentation in this country is still considered beneath the notice of rude and bungling Britishers.

So far, then, we think Mr. Fitzroy has done well in supporting the scheme of his engineer against all comers; but we see no reason why, in addition to filtering the water, the bed of the Serpentine should not have been levelled, and the deposit of sand covered with concrete. We feel convinced that the House would cheerfully have voted a sum sufficient to make the scheme of improvement complete. The First Commissioner of Woods and Forests, in inviting crowds of young children to bathe in these waters, full of pitfalls, and highly dangerous on account of the entangling weeds, is in a measure responsible for the numerous fatal accidents which take place. It is his duty, therefore, to remove this danger; and we hope that it is not yet too late to do so.

THE WEEK.

As we anticipated last week, the Colleges of Physicians and Surgeons of London have determined to form a joint board for the examination and licensing of the future general practitioners of this country. We greatly rejoice to find that the two

Colleges have at length come to an agreement on a matter which promises so materially to improve the status of the great mass of our medical men. There can, we suppose, be no doubt that, immediately the agreement comes into operation, the duties of the Apothecaries' Company, as a medical licensing body, will cease. In retiring from the official position which they have so long and so honourably occupied, this corporation will carry with them the pleasing reflection that they were the first among the examining bodies of England to raise the standard of medical education; and it cannot be denied that the curriculum of study for the Hall, as it has stood of late, is of a very high order, and well calculated to fill the ranks of the profession with educated English gentlemen, as well as with sound practitioners of medicine.

With every desire to mark our appreciation of the valuable services of the London Medical Registration, we are nevertheless prevented, by the demands on our limited space, from giving a full report of the proceedings of a deputation of the Association which waited on the Medical Council on the 10th instant, as well as of one which had an audience of the Under-Secretary of State for the Home Department on the following day. The omission of the former report, however, is of less importance, inasmuch as the pith of it is contained in a report of a Committee of the Medical Council which is published at p. 675; and which proves the presence of a wish on the part of the Medical Council, to accept in the most courteous manner the aid offered to them. It is most satisfactory to find that there is every prospect of harmonious cooperation between the Medical Council and the Registration Association, if we may judge from the expressions said to have been used by the chairman of the Committee. "The Medical Council," he said, "were sensible of the great advantages which had accrued from the exertions of the London Medical Registration Association, and hoped that the latter would go on with its labours." The original object of the deputation to the Home Secretary was to confer on the subject of the Medical Act, and on the manner in which its provisions are carried out. The result of the previous interview with the Medical Council, however, rendered it unnecessary for the deputation to offer any remarks on several of the topics which they had intended to bring forward. They therefore confined themselves to conferring on the conflicting decisions of the magistrates in some recent cases; on the advisability of compelling the Medical Council to prosecute illegal practitioners; and on the due transference to the Medical Council of penalties recovered under the Medical Act. In respect of the last particular, an unexpected controversy had arisen. In the prosecution of Nunn, the self-styled "surgeon"-dentist, at Lambeth Police Court lately, a penalty of £2 was enforced, in addition to costs. The whole had been paid into court; but while the costs incurred in the prosecution had been paid over, so far as the Association was concerned, the penalty was retained by the police receiver, under clause 47 of the Police Act, in contravention of clause 42 of the new Medical Act. Dr. Ladd stated that he had called at the police office, at Lambeth, for the payment of the costs and of the penalty, for the purpose of its being handed over to the Medical Council. The costs were paid; the penalty was refused, except on condition of the case of right to the penalty being argued by a legal adviser before the magistrate. After the subject had been discussed, the Under Secretary (Mr. Clive, M.P.) who had received the deputation in the absence of Sir G. C. Lewis, said that the Secretary of State would interfere in directing to whom the penalties, recovered on account of illegal practice, ought to be paid; and he (Mr. Clive) would immediately communicate with Mr. Ray, the receiver of police, on the subject, which the deputation might consider as settled, and they should hear from him shortly on the subject.

The reports of some more prosecutions for illegal practice have reached us, in addition to those we have already noticed. One of the cases was tried at Llandisilio, at the instance of the Salopian Medico-Ethical Society, which is in course of amalgamation with the British Medical Association. The defendant, a Mr. J. F. Eyeley, was proved to have signed registrar's certificates of the cause of death in two cases, styling himself in each "assistant-surgeon." The defence set up was, that he was acting only as an assistant. On the understanding that the defendant would discontinue his practice, he was fined only 1*s.*, and 10*s.* 6*d.* costs. In another case, an action was brought by the Manchester Medico-Ethical Association against a Mr. Joseph Healey, for having on his door the word "surgeon," he being unregistered. The defendant pleaded authority to practise as a surgeon on a diploma of licentiate-accoucheur of the Dublin University. On his agreeing to remove the word "surgeon" from the door, the case was not proceeded with. In another case also brought forward by the Manchester Association, Mr. W. Andrew was charged with having the word "apothecary" over his shop-window. He pleaded that the word was there when he took the shop; and on his undertaking to remove it, the case was dismissed.

The cry of cholera, raised by our contemporary the *Lancet*, appears to have been a false alarm; at all events, we have heard nothing more of the grave visitant. It appears, however, that in the north of Germany the epidemic is spreading, and that the authorities are doing all they can to add alarm, and thus find further matter for the disease to feed upon. In Schwerin, a notification has been published to the effect that the funerals of victims are to take place as quickly as possible, early in the morning or late in the evening, without bells or hymns, and the relations are forbidden to follow, "on account of the well-known infectious nature of the exhalations from the body!" The sanitarian schoolmaster is clearly not abroad. Why do they not send round the dead-cart at once?

At the time of our going to press, the trial of Thomas Smethurst, for the murder of Isabella Banks, which has occupied four days of the present week, is being brought to a conclusion. The principal points urged in the defence have been the absence of poison in the body of the deceased; the presence of arsenic in the nitrate of bismuth, which the deceased had taken as medicine; the error of Dr. Taylor in regard to the chlorate of potash mixture; and the occasional occurrence in pregnant females of symptoms accurately resembling those which the deceased had. In our next number, we shall give an analysis of the evidence on both sides in this remarkable trial.

THE MEDICAL COUNCIL.

MINUTES OF MEETING.

Wednesday, August 10th, 1859.

Royal College of Surgeons of England, London.

Sir B. C. Brodie, Bart., *President*, took the Chair at 2 P.M.

Present:—Dr. Thomas Watson, Mr. Green, Mr. Nussey, Dr. Acland, Dr. Embleton, Dr. Bond, Dr. Storrar, Dr. Alexander Wood, Dr. Andrew Wood, Dr. James Watson, Mr. Syme, Dr. A. Smith, Dr. Williams, Dr. Leet, Dr. Apjohn, Dr. Corrigan, Sir James Clark, Bart., Sir Charles Hastings, Mr. Lawrence, Mr. Teale, Dr. Christison, Dr. Stokes; Dr. Hawkins, *Registrar*.

The minutes of the last meeting were read and confirmed.

1. The Report of the Committee on Education was taken into consideration.

Moved by Dr. Storrar, and seconded by Dr. Stokes—

"That the Report be adopted generally by the Council, and that it be discussed clause by clause."

Amendment moved by Dr. Thomas Watson, and seconded by Mr. Syme—

"That the report of the Committee be received, and that the Committee be requested to put it into such form as they consider desirable for its circulation among the bodies named in schedule (A), and to produce the report so prepared to-morrow, at the General Council."

Votes taken, and amendment carried.

2. Dr. Alexander Wood presented the following report of the Committee appointed on the case of Henry Scott, and for conference with the London Medical Registration Association.

REPORT.

I. *Case of Henry Scott.* The Committee has laid before counsel an opinion on this case for advice, but his opinion has not yet been received. The Committee beg to recommend that if the opinion comes in time it should be at once taken up by the Council; and if it does not it should be referred to the executive Committee.

II. *Conference with London Registration Association.* The Committee have to report that they received a deputation, consisting of ten members of the London Medical Registration Association; that several of the gentlemen addressed the Committee, and that they have since, on the suggestion of the Committee, handed in a written statement containing an expression of their views. This document the Committee beg leave to lay on the table, but they do not think it necessary to occupy the time of the Council by reading it, as the principal point to which it refers will be commented on in the report.

III. *Method of Entering Names in the Register.* The deputation complained of various inaccuracies in the Register. As far as the Committee can judge, these inaccuracies appear to consist chiefly of clerical or typographical errors. The Committee suggested to the deputation that a list of these should be furnished to the Registrar for the correction of the next issue. In regard to the suggestions made by the deputation for additional checks on the entrance of names on the Register, your Committee are of opinion that the Council are not entitled to exercise greater stringency than the Act of Parliament sanctions them in doing. The Act clearly affords liberty for entrance on the Register in any one of the three following ways:—1st. Production to the Registrar of the Branch Council of the document conferring or evidencing the qualification. 2nd. Transmission, by post, to such Registrar, of information of his name and address, and evidence of the qualification or qualifications in respect whereof he seeks to be registered, and of the time or times at which the same was or were obtained. 3rd. A liberty is given to the several Colleges and Bodies mentioned in schedule (A) to transmit certified lists of the persons who, in respect of qualifications granted by such Colleges, are qualified for registration under the Act; and all persons in such lists may be admitted to the Register without the production of any other evidence. The Committee are of opinion that the penalties imposed by the Act form the only check that can be looked for on registration by false pretences; but that it would facilitate the detection, and therefore the prevention of such attempts, were the Council to pass the following enactment:—That during the first week of each month, the Registrars for Scotland, England, and Ireland, be instructed to publish, from time to time, as the Branch Councils may direct, the names, addresses, and qualifications entered in their local Register during the preceding month.

IV. *Method of Keeping the Register.* The Committee are sorry to be obliged to report that there is too much reason for the complaint that the Register has not been kept as it should have been, and of this the Council were aware before it was brought under the notice of the Committee by the deputation. The Registrar explains that the hurry and bustle attendant on the first registration prevented due attention being paid to this important department. The Committee beg to recommend that the General Council do now, in conformity with section XVI of the Act, make the following Orders for Regulating the Registers:—

Orders. No. 1. That where any person entitled to be registered under the Medical Act applies to the Registrar of any of the Branch Councils for that purpose, such Registrar shall forthwith enter in a local Register, in the form set forth in schedule D to the Act, or to the like effect, to be kept by him for that purpose, the name, and place of residence, and the qualification, or several qualifications, in respect of which the person is so entitled, and shall affix to such entry in the Register the date at which it was made. No. 2. That the Registrar of each Branch Council shall, within two clear days (Sundays excepted) after he has received notice of any alteration in the addresses or qualifications of persons registered under the Act, or legal evidence of the death of any registered practitioner, cause such changes to be made in the Register, or the name of such registered practitioner who has died to be erased from the Register. No. 3. That the Registrars of the Branch Councils for Scotland and Ireland shall keep an alphabetical list of those registered, and shall, on entering a name in the local Register, enter it forthwith also in its own place in the alphabetical list. No. 4. That, as provided by the Act (section XXV), in the case of the Registrar for Scotland or Ireland, he shall, with all convenient speed, send to the Registrar of the General Council, certified under his hand, a copy of all the entries or changes so made in the local Register. No. 5. That the general Registrar shall forthwith cause such entries in the Branch Registers to be made in a list kept by him. No. 6. That the general Registrar shall also keep, as directed by the Act, the general Register in alphabetical order, and shall, on receiving any additional name, forthwith enter it in such general Register. No. 7. That each page of these Registers and lists shall be verified by the signature of the Registrar.

V. *Price of Register.* The deputation brought this subject under the attention of the Committee, and were informed of the reduction of price already decided on by the General Council.

VI. *Prosecutions by General Council.* The importance of this was strongly pressed on the attention of the Committee, who replied by directing attention to the resolutions already come to by the Council.

Moved by Dr. Smith, seconded by Sir Charles Hastings, and agreed to—

"That the foregoing report be received and adopted."

2. Moved by Dr. Alexander Wood, seconded by Sir Charles Hastings, and agreed to—

"That the Council, in conformity with clause XVI of the Medical Act, make the Orders recommended in the foregoing report, Nos. 1, 2, 3, 4, 5, 6, and 7, for regulating the Registers to be kept under the Act."

3. Dr. Corrigan presented the following report—

REPORT.

The Committee appointed to report upon the communication from the Poor-Law Board beg to report as follows:—

The communication states that the "important question" upon which the Poor-Law Board desires information is, "What is the exact extent and nature of the qualification which is obtained by the degrees or licences conferred by the several bodies which have made their application to the Board." That "the Board do not possess any authoritative information on the subject which they can act upon, and they therefore request to be informed by the General Medical Council how far the degrees or licences of the several bodies by whom memorials have been addressed to the Board confer respectively the right of practising medicine or surgery, or medicine and surgery, and an evidence that the persons to whom they are granted have obtained a competent knowledge of either, or both, of those branches of the profession." The several Bodies referred to as having presented memorials are—The University of Edinburgh, Royal College of Physicians of Edinburgh, Royal College of Surgeons of Edinburgh, University of Glasgow, Faculty of Physicians

and Surgeons of Glasgow, Marischal College and University of Aberdeen, King's College and University of Aberdeen, Royal College of Surgeons of Ireland, University of London, and Medical Protection Association of Cork; which last named body not being a licensing body, does not come within the scope of the inquiry.

The question put by the Poor-Law Board consists of two parts—1st. How far the degrees or licences of the several Bodies above enumerated confer respectively the right of practising medicine or surgery, or medicine and surgery? and 2nd. How far the above qualifications are evidence that the persons to whom they are granted have attained a competent knowledge of either, or both, of those branches of the profession?

With reference to the first part of the question, the Committee deem it only necessary to observe that in the words of clause xxxi of the Medical Act, "Every person registered under this Act shall be entitled according to his qualification or qualifications to practise medicine or surgery, or medicine and surgery, as the case may be, in any part of Her Majesty's dominions, etc.," and that the qualifications conferred by the several Bodies above enumerated, appear to the Committee to be as follows:—

University of Edinburgh	Degree in Medicine.
Royal College of Physicians of Edinburgh	Licence in Medicine.
Royal College of Surgeons of Edinburgh	Licence in Surgery.
University of Glasgow	Degree in Medicine, Master in Surgery.
Faculty of Physicians and Surgeons of Glasgow	Licence in Surgery.
Marischal College and University of Aberdeen	Degree in Medicine.
King's College, Aberdeen	Degree in Medicine.
Royal College of Surgeons of Ireland	Licence in Surgery.
University of London	Degree in Medicine.

The second part of the question is, how far the above qualifications are evidence that the persons to whom they are granted have attained a competent knowledge of either, or both, of those branches of the profession? In reference to this, the Committee desire to observe that the several Bodies above enumerated are Universities or Corporations legally entitled to grant degrees or licences in medicine or surgery, or in both; that their curricula require an education in all the important branches of the profession; and that it is the opinion of the Committee that a perfect equality of privileges should be maintained throughout the United Kingdom.

D. J. Corrigan, *Chairman.*

5. Moved by Mr. Teale, and seconded by Dr. Embleton—

"That the report of the Committee appointed to report upon the communication from the Poor-Law Board be adopted."

Amendment moved by Dr. Williams, and seconded by Dr. Alexander Wood—

"That the report be adopted, with the addition after the word 'privileges,' in the last line but one, of the words, 'among the graduates and licentiates of the bodies above enumerated, according to their several qualifications.'"

Votes taken, amendment carried.

4. Mr. Nussey presented the report of the Finance Committee.

Moved by Mr. Nussey, seconded by Dr. Smith, and agreed to—

"That the report of the Finance Committee be received, and referred respectively to the Executive Committee and Branch Council for England, for the purpose of being carried out according to the recommendations contained therein."

5. Moved by Sir Charles Hastings, seconded by Dr. Alexander Wood, and agreed to—

"That it is expedient that the proceedings of the Council be recorded in writing, in a book to be kept for that purpose."

6. Moved by Dr. Acland, seconded by Mr. Teale, and agreed to—

"That whenever a Branch Council shall refer to the General Council the name of any person which it is deemed desirable to remove from the Register, the Registrar of the General Council shall be authorised to obtain the opinion of counsel on the facts and bearings of the case before it is submitted to the General Council; and that such opinion of counsel shall accompany the statement of the case when it is brought before the General Council."

7. A copy was presented of the regulations of the Royal College of Physicians of Edinburgh, regarding its licence, with certain corrections rendered necessary by an agreement entered into by the College with the Royal College of Surgeons of Edinburgh, since the date of the passing of the regulations. The foregoing regulations were referred to the Education Committee.

8. The following paper was read, which had been presented by the Royal College of Physicians of London.

At a meeting of the Royal College of Physicians of London, held on Monday, August 8th, 1859, it was resolved—1. That any person who shall have satisfied the College touching the sufficiency of his acquirements in general science and literature, and given proof under examination of his proficiency in the science and practice of medicine and midwifery, and who shall have complied with such other regulations as are, or shall be required by the bye-laws of the corporation, may receive a license to practise physic. 2. That no person so licensed be empowered to vend, compound, or dispense any medicines except for patients under his own medical care. 3. That every candidate be required to furnish proof that he has attained the age of twenty-one years. 4. That the preceding resolutions be submitted to the Medical Council, with an expression of the desire of this College to render these resolutions available for co-operation with the College of Surgeons in the licensing of general practitioners.

9. The following letter was read, which had been referred to the General Council by the Scottish Branch Council.

"Portree House, Fence Houses, Durham, June 28th, 1859.

"Sir,—I am a licentiate of your faculty, and passed in 1852. This day I performed a *post mortem* examination, and gave evidence at an inquest, for which services the Coroner informed me I was entitled to a fee of only one guinea, instead of two, which is the usual fee, because I was not a member of the English College of Surgeons. He said, 'You are legally qualified to practise, but not to perform a *post mortem* examination, not being qualified in England'; therefore, that I was entitled only to the fee allowed a medical witness in giving ordinary evidence, viz., one guinea. On former occasions I repeatedly received two guineas for similar services. Will you have the kindness to let me know whether I can recover the full amount?

"I am, sir, yours respectfully,

Duncan Matheson.

"J. Watson, Esq., M.D."

Moved by Dr. James Watson, seconded by Dr. Embleton, and agreed to—

"That the Registrar be instructed to direct the attention of Mr. Matheson to section xxxi of the Medical Act, in reference to his letter, referred by Branch Council of Scotland to General Council."

Confirmed—James Clark.

Thursday, August 11th, 1859.

Royal College of Surgeons of England, London:

In the absence of the President, Sir James Clark, Bart., was called to the Chair at Two o'clock, P.M.

Present:—The same members as on the previous day, except Dr. Thomas Watson.

The minutes of the last meeting were read and confirmed.

The opinion of counsel was read, respecting the 27th and 29th sections of the Medical Act.

1. Moved by Mr. Teale, seconded by Dr. Alexander Wood, and agreed to—

"That the name of Richard Organ be erased from the Register, in accordance with the provisions of Clauses 26 and 29 of the Medical Act."

2. Moved by Dr. Alexander Wood, seconded by Sir Chas. Hastings, and agreed to—

"That the case of Henry Scott be deferred till further legal opinion has been taken on it."

3. Moved by Dr. Acland, seconded by Dr. Andrew Wood, and agreed to—

"That the opinion of counsel respecting Sections 27 and 29 of the Medical Act be referred, as proposed by the counsel, for consultation with one of the law officers of the Crown, as the counsel may think fit."

4. Moved by Mr. Syme, seconded by Dr. Andrew Wood, and agreed to—

"That in all cases where a division has taken place, any member of the Council may require that the names of the majority and minority shall be entered on the minutes."

5. Moved by Mr. Nussey, seconded by Dr. Christison, and agreed to—

"That the Treasurers of the General Council be empowered to pay on account (from the sum of five hundred pounds,

voted last November towards the expenses of the Pharmacopœia Committee), the sum of one hundred pounds to each of the secretaries of the sub-committees of London, Edinburgh, and Dublin, in order to meet the expenses incurred, in conformity with powers devolved upon them at a meeting this day of the General Pharmacopœia Committee."

6. Dr. Christison presented the Report of the Pharmacopœia Committee.

REPORT.

The Pharmacopœia Committee of the Medical Council have to report as follows:—The Committee commenced operations near the end of December, divided themselves into three sub-committees, meeting in London, Edinburgh, and Dublin; and requested the cooperation of the Royal Colleges of Physicians, and the Pharmaceutic Society of Great Britain, who all appointed delegates to assist the sub-committees. The Committee also appointed certain gentlemen to aid them as analytic chemists, pharmaceutic chemists, and botanical referees. Many preliminary difficulties presented themselves in settling the principles of construction of the Pharmacopœia, and it was accordingly found necessary, after frequent meetings of the different sub-committees, to have a general meeting of delegates from the three Committees, which could not be held earlier than May. At this Convocation, the subject of weights and measures to be employed in pharmacy, was settled. The principles of construction of the Materia Medica List, or first part of the Pharmacopœia, were fully gone into and settled. The extent and classification of the second part, which consists of formulæ for making the preparations and compounds of the Pharmacopœia, were likewise the subject of careful consideration; but, in some points, this last matter still remains undetermined. It was also determined, at the Convocation, how the labour of constructing the Pharmacopœia should be divided among the three sub-committees. Since the Convocation met, in the beginning of May, the sub-committees have completed a considerable amount of work of detail; the list of the various articles of the Materia Medica has been agreed on and arranged, and many of the groups of the preparations are now almost completed. R. Christison, *Chairman.*

7. Moved by Dr. Acland, seconded by Dr. Storrar, and agreed to—

"That the Report of the Pharmacopœia Committee be received, and entered on the minutes."

8. Moved by Dr. Alex. Wood, seconded by Dr. Christison, and agreed to—

"That five members, resident in London, be the Executive Committee, and that their duties be:—1. To make up the annual accounts, and compute the percentage chargeable against each Branch Council. 2. To take the necessary steps for obtaining the law opinion ordered on 11th August. 3. To re-arrange the duties and salaries of the clerks. 4. To superintend the publication of the Register for 1860, as was agreed. That the Executive Committee be instructed to keep regular written minutes of their proceedings, and that these minutes be printed, and circulated to the members of Council."

9. Moved by Dr. Alexander Wood, seconded by Dr. Stokes, and agreed to—

"That the Executive Committee consist of Sir Benjamin C. Brodie, Bart., *President;* Sir James Clark, Bart., Dr. Thomas Watson, Mr. Green, and Mr. Nussey."

10. Dr. Storrar, in conformity with the resolution of Council, dated August 10th, presented the following Report from the Education Committee, in the form they consider desirable for circulation among the bodies named in Schedule (A):—

REPORT.

The General Council of Medical Registration and Education, having considered the question of education, and having referred it to a Committee to report thereon, are in a position to express their views on certain parts of the subject. It is one of great extent, and divides itself into several heads, of which the most important may be specified as follows:—

I. The Preliminary General Education.
II. The purely Professional Education.
III. The Conditions on which the higher qualifications in Medicine and Surgery should be granted.

The Council, looking at the importance and complicated nature of the question, have determined to postpone the consideration of the second and third heads. They take this course, believing that it will tend to promote the reforms indicated by the provisions and the spirit of the Act of Parliament; for time will thereby be allowed for full consideration of such important points as the assimilation, as far as may be, of the purely medical educational systems, and the providing that the higher degrees should be distinguished by corresponding academic rank, obtained by a full, and, as nearly as possible, equivalent academic education. The Council expect that by their next meeting they will be in a position to offer their views on those questions, and on others of corresponding magnitude. With these views, the Council have resolved to recommend the adoption by the various educational bodies in the United Kingdom of the following principles; and although the present proceedings must be taken as referring to a part only of the subject, the Council do not doubt that the educational bodies and licensing corporations will lend their assistance to the carrying the spirit and intention of the recommendation into effect.

The Council do not apprehend in suggesting a minimum of education, that such will, or ever can become, the only standard sought for or attained by medical students. The varied requirements of the age, to say nothing of the probable operation of the Act of Parliament, will prevent the occurrence of any such result.

The Council are of opinion that no person should enter the medical or surgical profession who has not received an education in general knowledge such as will be equal at least to that required by the national educational bodies. They believe that with the exception of a very few, though important branches of knowledge, the education and mental training of the student destined for the medical profession ought not to differ from those adopted for other professions. And therefore they are of opinion that it would be unwise and unnecessary to create any new machinery for this purpose.

The Council, however, with the view of meeting difficulties which may arise, have recommended where it is necessary the creation of special boards of examiners in arts, in connection with the licensing corporations.

They therefore call the attention of the licensing bodies to the following report from the Education Committee:—

REPORT OF EDUCATION COMMITTEE.

In presenting their report to the General Council, your Committee beg leave to make the following remarks:—

The subject of general education has chiefly engaged their attention, inasmuch as general education naturally precedes special technical training; and also because, in the opinion of your Committee, while the system of professional instruction hitherto enforced by the general licensing bodies is, perhaps, redundant rather than deficient, the provision made for the preparatory mental cultivation of a large proportion of medical students has been confessedly imperfect. In considering the subject of general education, however, your Committee have purposely abstained from entering into minute details. They are impressed with the conviction that it would be prudent to beware of proceeding too suddenly, or of attempting too much towards the remedy of a wide-spread and long-existing evil, and they also believe that it is important to leave to the general licensing bodies the responsibility of ameliorating general education, conformably to the general principles recommended by your Committee, as speedily and as effectually as may be compatible with the various circumstances in which they are respectively placed. Your Committee have endeavoured to indicate the direction rather than the precise path in which the licensing bodies should go.

It may to some appear to be a grave omission that your Committee have not specially referred to the general education of candidates for academic medical degrees; but your Committee are of opinion that this is precisely the part of the question which may be most safely postponed. On the one hand, the general educational requirement of Universities are for the most part sufficient; and if any deficiency in this respect should anywhere exist your Committee are convinced that it will be spontaneously remedied, without any special suggestion being made to that effect.

The Education Committee of the Medical Council have taken into consideration the two following resolutions of the General Council, dated August 3rd, 1859:—1. "That for the purpose of guiding the Council in coming to a determination in conformity with section 20 of the Act, respecting the sufficiency or insufficiency of the course of study and examinations of the several bodies whose regulations for their fellowships, licences, and degrees have been communicated to the Council, a committee be appointed to prepare a report, laying down a minimum of examinations, and subjects of examinations, without which no qualification will be held by the Council (section 20) such as to secure the possession by persons obtaining such

qualifications of the requisite knowledge and skill for the efficient practice of their profession; and that it be an instruction to the committee to report on the expediency, or the reverse, of this Council recommending what in their opinion would constitute a sufficient course of general and professional education. 2. That a committee be appointed to examine the returns by the different bodies included in schedule (A) to report, in regard to each of these, as to how far the course of study and examination required by each is calculated to secure the possession by persons obtaining their respective qualifications of the requisite knowledge and skill for the efficient practice of their profession, and to report to the Council. As also in regard to the most effective machinery for superintending the examinations, so as to secure that they shall conform to a standard of examinations in general and professional education considered sufficient by the Council.

The Committee have therefore given their attention—1st. To various plans that have been suggested for ensuring and testing the general education of medical students; and 2ndly—The Committee have considered and stated what conditions appear to them proper to be observed in professional examinations, even those which test the minimum qualifications for a medical practitioner, reserving their views concerning the higher degrees and qualifications to a future report."

I. *General Education and Examination.* The Committee are of opinion that it is desirable—1. That all students shall pass an examination in General Education, before they commence their professional studies. 2. That, as far as may be practicable, testimonials of proficiency granted by the National Educational Bodies, according to the following list, be accepted, with such additions as the Medical Council may from time to time think proper to make. A Degree in Arts of any University of the United Kingdom or the Colonies, or of such other Universities as may be specially recognised from time to time by the Medical Council. Oxford Responsions or Moderations; Cambridge previous Examinations; Matriculation Examination of the University of London; Oxford Middle Class Examinations, Senior and Junior; Cambridge Middle Class Examinations, Senior and Junior; Durham Middle Class Senior Examination; Dublin University Entrance Examination; an Examination by any other University of the United Kingdom, equivalent to the Middle Class Examinations of Oxford and Cambridge. 3. That the Examination on General Education be eventually left entirely to the Examining Boards of National Educational Bodies, recognised by the Medical Council. 4. That students who cannot produce any of the Testimonials referred to in the Second Resolution, be required to pass an Examination in Arts, established by any of the Bodies named in Schedule (A) of the Medical Act, and approved by the General Council; provided that such examination shall be, in every case, conducted by a Special Board of Examiners in Arts. 5. That without professing to lay down any complete scheme of General Education for persons intending to become Members of the Medical Profession, the Committee recommend that the scheme of Examination in Arts of the Licensing Bodies be as nearly as practicable similar to that of any one of the National Educational Bodies above specified. 6. That on and after October 1st, 1860, all Medical Students be required to be Registered by one of the Bodies named in Schedule (A) of the Medical Act. 7. That the list of Students Registered be closed within a week after the commencement of each Session. 8. That no student beginning Professional Study after Sept. 1861, be registered, who has not passed an Arts Examination, in conformity with Resolutions 2 and 4. 9. That the Registrar of the General Council be directed to obtain Returns of the Courses of Study and of the Examinations of the various National Educational Bodies, referred to in Resolution 2 on General Education, and that they be printed, and transmitted to the various Licensing Bodies named in Schedule (A) of the Medical Act. 10. That the age of Twenty-one be the earliest age at which any Professional Licence shall be obtained, and that four years of Professional Study be required after the Examination in General Education.

II. *Professional Examinations.* Although the Committee at present refrain from any recommendations on the subject of Professional Education, they submit the following, in relation to Professional Examinations:—1. That the Professional Examination be divided into at least two distinct parts:—that the first be not undergone until after the termination of the Second Winter Session; and the final examination not until after the termination of the Fourth Winter Session. 2. That the first Professional Examination be conducted partly in writing, and partly *viva voce;* and that such parts of it as admit of it, be made as practical and demonstrative as may be possible. 3. That the Second Examination be conducted partly in writing, partly *viva voce;* and, as far as may be convenient and practicable, clinically. 4. That the Professional Examinations be held by the several Licensing Bodies (except in special cases), at stated periods, to be publicly notified each year. 5. That regular Returns be required from the Licensing Bodies under Schedule (A), stating the number of candidates who have passed their Examinations and of those who have been rejected, and that the Examining Bodies should be invited to express their opinion on the general character of the Examinations, as to the Qualifications of the Candidates.

The Education Committee having had referred to them the Returns of Professional Education, from the several Licensing Bodies, named in Schedule (A) of the Medical Act, have considered the question, whether it is desirable to lay down one general scheme of subjects of examination, such as should be recommended as a minimum to every examining body.

The Committee are of opinion that although no power is given under the Medical Act to the Council to dictate forms and details of examination to the Licensing Bodies as to Professional Education; yet that, by Sections 18 and 20 of the Medical Act, it is the clear duty of the Council to satisfy themselves that the Licensing Bodies do conform to the intention of the Act with respect to the examination. And the Committee therefore recommend that the Council should immediately lay before the several Licensing Bodies the report which they now submit to the General Council.

Signed, on behalf of the General Medical Council,

B. C. Brodie, *President.*

Moved by Dr. Alexander Wood, and seconded by Dr. Embleton—

"That the Report of the Committee on Education be adopted, and that twenty copies be sent to each member of the General Council."

11. Amendment moved by Dr. Corrigan, and seconded by Dr. Smith—

"That copies of the Report of the Education Committee be forwarded to the several bodies enumerated in Schedule (A), with the object of obtaining their views upon the two subjects of General and Professional Education."

Votes taken; amendment negatived. Motion put, and carried.

12. Moved by Mr. Nussey, seconded by Sir Chas. Hastings, and agreed to—

"That the best thanks of this Council are eminently due, and are hereby offered, to the Council of the Royal College of Surgeons, for their obliging and courteous accommodation during the present Session of the Medical Council."

Confirmed—Joseph Henry Green.

Mr. Green took the Chair at Six o'clock, P.M., on the same day.

Present:—The same members as at the preceding meeting.

The minutes of the last meeting were read and confirmed.

Association Intelligence.

CORNWALL MEDICAL SOCIETY: ANNUAL MEETING.

The annual meeting of the Cornwall Medical Society was held on July 19th, at the Royal Institution, Truro: Charles Barham, M.B., President, in the Chair. There were also present: R. Q. Couch, Esq. (Penzance), and T. Littleton, M.B. (Saltash), Secretaries; H. Andrew, Esq. (Truro); J. P. Berryman, Esq. (St. Austell); J. L. Clark, Esq. (Saltash); S. T. Fox, Esq. (Falmouth); James Jago, M.B. (Truro); R. W. P. Kerswill, Esq. (St. Germans); R. M'Manus, Esq. (St. Austell); A. Paull, Esq. (Truro); Charles Row, Esq. (Lostwithiel); J. M. Sellors, M.B. (Calstock); Joseph Stephens, Esq. (Grampound); P. Vincent, Esq. (Grampound); J. Way, M.B. (St. Austell); and H. T. Woodd, Esq. (Sandhill, Calstock). John Kempthorne, Esq., of Callington, the President for the past year, was prevented from attending by his duties at Bodmin, as surgeon of the Royal Cornwall Rangers militia; and letters explanatory of absence were read from the following gentlemen: A. Berryman, Esq. (Penzance); T. Hutchinson, Esq. (Camborne); J. Montgomery, M.D. (Penzance); J. B. Montgomery, M.D. (Penzance); W. Pace, Esq. (St.

Blazey); J. R. Quick, Esq. (St. Just); H. Sargent, M.D. (Lewannick); W. W. Tayler, Esq. (Tywardreath); and A. Wade, Esq. (Boscastle.)

Dr. Barham, on taking the chair, delivered an address, which is published at p. 671.

ELECTION OF OFFICERS.

R. W. P. Kerswill, Esq., of St. Germans, was chosen President-elect; and Liskeard was selected as the place for the next annual meeting. The two Secretaries were re-elected; and the appointment of a Treasurer was postponed until the result of possible arrangements with the South Western Branch be known—Dr. Littleton consenting to perform the duties of Treasurer meanwhile.

NEW MEMBERS OF THE SOCIETY.

The following gentlemen were elected members of the Cornwall Medical Society: W. H. Box, Esq. (Looe); S. T. Fox, Esq. (Falmouth); T. Hutchinson, Esq. (Camborne); R. M'Manus, Esq. (St. Austell); W. T. A. Pattison, Esq. (Looe); A. Prideaux, Esq. (Liskeard); P. Vincent, Esq. (Camborne); and J. Way, M.B. (St. Austell.)

COUNCIL.

The following gentlemen were elected members of the Council for West Cornwall: S. T. Fox, Esq. (Falmouth); J. Montgomery, M.D. (Penzance); A. Paull, Esq. (Truro); and P. Vincent, Esq. (Camborne.)

NEW MEMBERS OF THE ASSOCIATION.

The following names were included in lists, furnished by Dr. Barham and Dr. Littleton, of gentlemen duly recommended as members of the British Medical Association: viz., J. P. Berryman, Esq. (St. Austell); A. A. Davis, Esq. (Fowey); A. Gaved, Esq. (St. Mabyn, Bodmin); R. M'Manus, Esq. (St. Austell); W. P. A. Pattison, Esq. (East Looe); Wm. Pearce, Esq. (St. Judy, Bodmin); J. M. Sellors, M.B. (Calstock); P. Vincent, Esq. (Camborne); H. T. Woode, Esq. (Sandhill, Calstock).

CONNECTION OF THE SOCIETY WITH THE BRITISH MEDICAL ASSOCIATION.

Dr. Littleton read the following letter which he had received from the Secretary of the British Medical Association:—

"Worcester, April 18th, 1859.

"My dear Sir,—The amalgamation of the Cornwall Medical Society with the British Medical Association would afford the Council much pleasure, and they trust that the union may be feasible. There appears to be only one difficulty; namely, that all your members may not be willing to pay the annual guinea to the British Medical Association, in addition to their subscription to your society. This would be undesirable, inasmuch as such members would nominally belong to us and yet not be actual paying subscribers. Could you arrange that in future all who join your society shall at the same time join our Association? Will you kindly consider this proposal, and send a line to "Yours very faithfully,

"Philip H. Williams.

"Dr. Thomas Littleton, Saltash."

Dr. Barham stated that at the approaching meeting of the British Association, an alteration of the law would be proposed—that no Branch with less than twenty members should have the privilege of being represented in the General Council; and in all probability that alteration, proposed he believed by the President, would be recommended by the General Council and adopted. He might also state that, having had occasion to communicate with the General Secretary, he had suggested for consideration whether a class of members might not be admitted at a lower subscription than a guinea—persons in the position of partners, or residents in the vicinity of each other, who might not require separate copies of the Journal. But his (Dr. Barham's) own private opinion was that it was undesirable to have any but full members of the Association, and that the Journal was essential to the Association's existence; it was most ably edited by Dr. Wynter, and was every year becoming more and more valuable.

Dr. Littleton remarked that the suggestions in Dr. Williams's letter applied only to *future* members of the Society; not to gentlemen who were already associate members. Dr. Littleton proceeded to submit some remarks on the proposed connection of the Cornwall Society with the South Western Branch. He alluded to the great indignities cast upon the profession in Cornwall by Mr. Edward Daniell, in his address as President of the South Midland Branch, published in the pages of the Journal; which address, it appeared, described the people of Cornwall as a set of Bœotians. He thought that their *esprit de corps* in Cornwall should prevent their being merged as subordinates in any association, and that the profession in Cornwall might maintain a society as respectable as that in any other county. He should have no objection, however, to unite with Devon; but it was essential that the Cornwall Society should have the free choice of its own officers, etc.; and, if such conditions would be compatible, then it would be desirable to continue the connection with the South Western Branch. As matters stood, however, he thought it would be better to reply affirmatively to Dr. Williams's letter, as the Society now numbered fifty-six members, of whom twenty-eight were members of the British Medical Association.

Dr. Barham observed that by the constitution of the South Western Branch, all idea of subordination or inferiority in any particular county was precluded; and, after offering explanation of any supposed discourtesy towards members of the profession in Cornwall, he said that although there might be field enough in Cornwall for the operations of a distinct society, considering the peculiar conditions of the labouring and other population in Cornwall, yet it appeared to him that it would be disadvantageous to this Cornwall Society to sever itself from the South Western Branch. He spoke of the facilities now available to gentlemen of Cornwall for attending the meetings of the South Western Branch in Devon; and expressed doubt of the capacity of any Society in Cornwall to maintain itself on its independent energies and productive power; and this, not from lack of ability in individual members of the profession, but because there was no town in Cornwall of sufficient size to induce any considerable agglomeration of medical men; and men who were passing day and night in practice were rarely able to find time to sit down and write papers, or even make notes.

Dr. Littleton remarked that he was not aware any regulation existed which would preclude himself, or any other member of the British Medical Association, from being a member of two Branches whose limits bordered on each other, as would those of Devon and Cornwall, whereby any gentleman, situated as he found himelf, might not be members of each, and attend the meetings of both when held at a convenient distance. He would be very sorry to be severed from the membership which he now enjoyed in the South Western Branch. But it was most essential that the members in Cornwall should have the ordering of their own affairs as to where and when meetings should be held. It was through the instrumentality of this Society that the miserable number of members (fourteen) of the Association which the county before contributed had been doubled; and by the same agency the number would in due time be further increased.

Mr. Couch said if this Cornwall Society, being a section of the British Association, also belonged to the South Western Branch, the question with him was whether the annual meetings of the South Western Branch would supersede the meetings of the Cornwall Society; if that were to be the effect of connection with the South Western Branch, he should be inclined to the formation of a distinct Branch for Cornwall; but not otherwise. He should be very unwilling to give up those pleasant meetings of the profession in Cornwall.

Dr. Barham said that by becoming members of the British Association and of the South Western Branch, the profession in Cornwall need not give up their own local meetings. In further advocacy of alliance with the South Western Branch, Dr. Barham said that Branch comprised one hundred and sixty members; while an independent Society in Cornwall would not number, probably, more than thirty or forty; and with regard to what might be called a medical centre, an isolated society in Cornwall would be at very great disadvantage, comparatively.

Dr. Littleton said that by connection with the South Western Branch this county would be overruled by Devon; and he remarked that though that Branch had been in existence since 1833, it had only once held a meeting in Cornwall—twelve years since. Mr. Kempthorne, and other gentlemen who had given their assistance in organising the Cornwall section of the British Medical Association, had complained of the neglect under which their county had suffered. And though he (Dr. Littleton) had been a member of the British Medical Association since 1853, he knew nothing of the meetings of the South Western Branch until 1857, when, through the personal courtesy of Dr. Cookworthy, he received an invitation to attend a meeting of that Branch. The number of members of the Association in Cornwall had been gradually dwindling till, in 1857, it had fallen so low as fourteen, owing to the insufficiency of the existing organisation to create an interest in the Association.

The very small attendance of Cornishmen, rarely more than three, at the meetings held in Devon, even since the accommodation of the railway, proved that more frequent meetings within narrower limits were requisite. It was a mistake to suppose that the members of the Cornwall Medical Society had at any time advocated an independency of the British Medical Association. The law which required twenty members to unite for the formation of a Branch, rendered it necessary that this Society should have its separate organisation at first; but now its increased numbers no longer required this.

Dr. Jago did not happen to be a member of the Association at present; but perhaps he might be allowed to remark that, according to the programme before him, one great inducement to persons to become members of the British Medical Association was the improved quality of the Journal; yet, in one of its numbers the Editor offered, as a temptation to persons to become members, that the pages of the Journal should be open to any communications they might send.* That seemed to him to be a mistake. The great point in all journals should be to endeavour to get them to the highest point of perfection; and an announcement such as that he had referred to, must have a tendency to damage the Journal itself in the estimation of the medical public. He thought it a bad thing that a society of medical gentlemen, uniting professedly for the promotion of science, should avow that they did not intend that exactly, but simply to endeavour to puff themselves in their business. If, however, the Journal were improved to as high character as possible, it would almost compel persons to join the society in order to obtain its benefits.

It was proposed by Dr. Barham, seconded, and carried—

"That we remain, as many as are members of the British Medical Association, members of the South Western Branch."

It was proposed by Mr. Couch, seconded by Dr. Littleton, and carried unanimously—

"That the Cornwall Medical Society shall still remain as a sub-section of the British Medical Association, with a separate staff of officers and council, and the rules already in use by the Cornwall Medical Society.

ANÆMIA OF MINERS.

There were exhibited some interesting illustrations of the disease *anæmia*, in the persons of three male patients from the Royal Cornwall Infirmary. Observations on the nature of the disease and on modes of treatment for its cure were made by Dr. Barham, Dr. Jago, Mr. Couch, and Dr. Littleton; and a statement concerning the disease, prepared by Mr. Parkes and Mr. Fox, at the Infirmary, was read. There are three mines in Cuba worked by Englishmen, and one by Spaniards. The English become affected by anæmia much sooner than the Spaniards and natives; on the average, the former are unable to work longer than twelve months, and some are obliged to give up in two or three months. Only the men who work under ground appeared to suffer, and J. James, the patient whose case was the most minutely described, did not remember an instance of a surface-man getting the disease. James stated this mine—Santiago—seventy fathoms deep—was a dry mine, *i.e.*, the miners there did not stand in water to work; but in the other mines there was a great deal of water, the men standing in it; water was also continually dropping on them from above, and wherever it touched it raised a blister and caused a wound. James was in his mine fifteen months before he felt ill, and in seventeen months from the time he first worked there, he was obliged to come home; and he has been home about twelve months. There followed a description of some of the symptoms in the case of James, and in that of another of the patients, named Grangy.

Dr. Barham observed, that from the appearance of patients, the disease had sometimes been mistaken for hepatic affection, and mercurial remedies had been applied; but microscopic examination of the blood showed the true character of this disease, by the absence of red corpuscles. Preparations of steel were the most effective remedy for the disease, and sometimes it had been found desirable to prescribe iodine. He was sorry there would not be time for reading a paper Mr. Couch had written on a nearly allied subject.

Mr. Couch observed that in some mines in the neighbourhood of Cape Cornwall, which were worked under the sea, and consequently but imperfectly ventilated, the difficulty of respiration induced an exudation from the bronchial tubes; and in such cases he had not unfrequently found that the blood discs underwent partial decomposition and change of size and form. For the cure of such disease, he had found it essential to have the patient kept at surface, and to prescribe a stimulant preparation of iron and ammonia.

Dr. Jago, who had previously said he had written to the surgeon of the mines in Cuba for a more particular and scientific account of the disease as it occurred there, stated that a microscopic examination of the blood of the patients in the Infirmary, showed that the blood-discs became rough and jagged, and granulated in appearance. These patients had not suffered any bronchial affection or expectoration whatever; but they had complained of shortness of breath, and their pulse was quick.

Dr. Littleton thought the chief cause of the disease was absence of light.

Dr. Barham, in reference to Mr. Couch's remarks, thought it was strong evidence that there was something peculiar in this disease, that medical men cognizant of miners' diseases had sometimes mistaken it for hepatic affection. This was the case in some instances in France described by Chomel. Absence of light as a possible cause of the disease would apply to all miners. His own opinion was that, independently of the absence of light, or of the reduced proportion of oxygen in the mine levels, it would be found that the disease was attributable to some local cause—to some peculiar condition of the mines in which it occurred.

The attention of the meeting was directed to the inspection of a tumour which had been removed by Mr. Andrew, by means of the *écraseur;* and shortly afterwards the meeting adjourned for dinner at Pearce's Royal Hotel.

* Provided the communications were of sufficient value. Editor.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 28th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

THE CONNECTION BETWEEN THE HEAT OF THE BODY AND THE EXCRETED AMOUNTS OF UREA, CHLORIDE OF SODIUM, AND URINARY WATER, DURING A FIT OF AGUE.

BY SIDNEY RINGER, ESQ.

The object of the paper was to trace out more particularly the connection, if any, between the height of the thermometer and the excreted amount of urea, chloride of sodium, and water, and he described his method of investigation, and the precautions taken against sources of error. His observations were made on two untreated cases of ague (one of quotidian, and one of tertian) in University College Hospital, under the care of Dr. Parkes; and the following particulars were shewn:—1. The temperature of the body, as judged of by the thermometer, in the axilla (after the manner of Wunderlich) every quarter of an hour, for several hours before, during, and after the fit. 2. The hourly excretion of urea, before, during, and after the fit, in the first case; and the excretion according to stages in the second case, as determined by the method of Liebig. 3. The hourly excretion of the chloride of sodium, and of urinary water, during the same periods in the first case, and the excretion by stages in the second. 4. The quantity of fluid drank.

In the first case (quotidian) the temperature of the body commenced to rise from forty-five to ninety minutes before any change was perceived by the patient, and continued to rise during the whole of the cold stage, and during part of the hot; it fell during the latter part of the hot, and the whole of the sweating stage. The severity of the fit could be determined by the character of the rise, whether rapid or with oscillations, and by the variations of the temperature during the several stages.

The urea was found to increase during the fit, as stated by Traube. The increase commenced before the first feelings of cold, and before, indeed, the rise in the thermometer. The maximum increase of urea was at the end of the cold stage, or just at the commencement of the hot (*i.e.*, before the temperature reached its highest point), and from this point the amount fell during the hot and sweating stages. There were variations in the amount of urea, which closely corresponded to variations in temperature; but often preceded them a little. The amount of increase was considerable (from two hundred to five hundred per cent.), and was definite; that is, during five successive fits, the amount corresponding to each degree of temperature was

the same; so that the temperature might be calculated from the amount of urea, or the reverse. A greater increase corresponded to a single degree at a high than at a low temperature. The excretion of urea was not influenced by the excretion of urinary water. The chloride of sodium was also increased, and varied with the temperature; but in a much less close degree. The increase was very considerable, and was at its maximum at the same period with the urea. The excretion of chloride of sodium was evidently much more closely connected with the excretion of water than in the case of urea. The urinary water was also definitely increased; *i.e.*, a certain quantity for each degree; and this was evidently independent of the fluid drank. The amount of water drank in no way influenced the total amount of water excreted. Much more was drank than was excreted.

A scruple of quinine, given to the same patient before the fit, and just as the temperature commenced to rise, delayed the rise for an hour; but had no other effect on the temperature on that day, and none on the urea, chloride of sodium, and water. Another scruple, given at night, after the fit, completely cured the patient as far as subjective symptoms were concerned. On the following day he had no shivering, no warmth, and no sweating, and the temperature remained the whole day quite normal; yet the urea and chloride of sodium increased at the time they would have done had he had a fit. On the next day the temperature was still normal, but the urea and chloride of sodium still rose during what would have been the fever hours; but the rise on this day was much less than on the day before. The effect of quinine, then, was to dissociate those two phenomena, namely, the temperature on the one hand, and the excretion of urea and chloride of sodium on the other. The same fact has been noted by Redtenbacher. The quinine affected the temperature at once, but the urea and chloride of sodium more slowly.

In the second case (of tertian ague) the temperature followed the same laws. The urea, chloride of sodium, and water, were determined only during each stage. There was found to be an increase in all three constituents, the increase being greatest during the cold stage. The urea was more than double in amount in the cold stage that it was in the previous apyrectic hours. The pulse showed a close correspondence with the temperature.

In a case of hectic fever, in a phthisical patient of Dr. Walshe, there were well marked cold, hot, and sweating stages. The temperature followed the same rules as in ague, and there was also an increase in the urea and chloride of sodium during the cold and hot stages. There was a difference in this respect, however, that the urea fell before the rise in the temperature commenced, and that its increase afterwards was even less than in ague. It also rose again just at the end of the sweating stage. Hence, in spite of the diversity, the phenomena would appear to be very similar in ague and hectic fever.

ON THE REPARATIVE PROCESS IN HUMAN TENDONS AFTER SUBCUTANEOUS DIVISION FOR THE CURE OF DEFORMITIES.

BY W. ADAMS, ESQ.

Specimens of reunited tendons after division were exhibited from ten cases, and also drawings of the recent appearances in thirteen cases, at periods between four days and three years after the operations. These specimens had been collected by Mr. Adams during the last eight years, and were principally from patients operated upon at the Royal Orthopædic Hospital; but for two specimens he was indebted to Mr. Erichsen and Mr. Curling.

The author gave a general summary of the reparative process, describing:—1. The immediate results of the operation. 2. The commencement and nature of the reparative process. 3. The general appearance and structure of the newly-formed connective tissue, or new tendon; and 4. The junction of the new with the old tendon.

This was followed by an account of the circumstances which may interfere with the perfection of the reparative process, or entirely prevent it. Complete failure of union had been witnessed by the author only in the posterior tibial tendon; but there was considerable risk of such an occurrence whenever tendons were divided in or near to dense tubular sheaths. Imperfect union might result either from some constitutional defect in the reparative powers of the patient, or from injudicious after treatment in a variety of ways; but principally from too early and too rapid mechanical extension. It was stated that tendon is one of the few structures of the body capable of reproduction, or regeneration; and that the newly formed tissue acquires, within a few months of its formation, the structural characters of the old tendon so perfectly as that, under the microscope, it is with difficulty distinguishable from it; but it does not acquire through its substance the uniformly opaque pearly lustre of old tendon; in the mass it retains a greyish translucent appearance, so that the recent section affords an easy method of distinguishing the new from the old tendon. The greatest length of perfectly formed new tendon which the author had seen was two inches and a quarter, and this was in the tendo Achillis of an adult, and a year and a half after it had been divided by Mr. Curling. The process by which new tendon is formed is essentially similar in animals and in man; the perfection of the reparative process is in direct proportion to the absence of extravasated blood and inflammatory exudation; and the sheath of the tendons, when consisting of bone-textured areolar tissue, as in the tendo Achillis, and other tendons surrounded by soft tissues, is of importance:—1. In preserving a connection between the divided extremities of the tendon. 2. In furnishing the matrix in which the nucleated blastematous, or proper reparative material, is effused. 3. In giving definition and form to the newly developed tendinous tissue. The new tendon always remains as a permanent tissue, and as an integral portion of the tendon, the divided extremities of which it has been formed to reunite. The average length of new tendon formed in children to reunite the divided extremities of the tendo Achillis, Mr. Adams considered to be from half an inch to an inch, and in adults from one to two inches.

The author considered the facts adduced in this paper were amply sufficient to disprove the *linear-cicatrix theory*, which assumed that the newly formed tendinous structure has a disposition to undergo a process of gradual contraction, such as takes place in the cicatrices of the skin after burns; and that ultimately it becomes absorbed. The muscular structure at the same time becoming elongated by the force of the contraction of the cicatrix, so as to allow of the re-approximation of the ends of the divided tendon, and the formation of a linear cicatrix.

From the present observations it appeared that in the cure of deformities, muscles are elongated by the increased length of their tendons, obtained by means of subcutaneous division, and the development of new tendon formed for the purpose of reuniting the divided extremities of the old tendon. The mechanical and physiological effects of this increased length of the tendons were described; and lastly, the author stated that when recontraction of the foot takes place, and the deformity returns at a distant period after tenotomy, this does not depend upon absorption of the new material, or new tendinous tissue formed previously to unite the divided extremities of the old tendon, but upon structural alterations taking place in the muscular tissue. In three cases of relapsed deformity of the foot examined by the author, the new tendinous tissue formed after the previous operations remained, and could be easily distinguished from the old tendon.

Editor's Letter Box.

THE ASSOCIATION DEBT.

Letter from A. P. Stewart, M.D.

Sir,—As I observe that the few words I ventured to address to the Association, in reference to the liquidation of the debt, immediately before the close of the proceedings on the 29th of July, have not been reported, I have to request the insertion in your columns of the following suggestions, which, but for severe illness which confined me to bed from the moment of my arrival at Birkenhead on the morning of the 28th, I should have urged on the attention of the Association during the discussion which took place on the afternoon of that day.

It is a very easy matter to recommend a voluntary rate of ten shillings, spread over the next two years, and to express the conviction "that those who three years ago contributed to the ten-shilling fund will be the first to contribute to the voluntary payment now asked for." But the inquiries I have made during the last month, in consequence of a letter addressed to me by Mr. Terry of Northampton, have satisfied me that very many of those who met the call in 1856, will decidedly, and as it appears to me justly, object to making any further contribution, so long as no measures are adopted to draw forth the contributions of those who have done nothing towards clearing off the debt. They feel that, when so much tenderness is

shown towards those who have proved their interest in the Association by keeping their money in their pockets, some consideration is due to those who have promptly and cheerfully lent their aid in discharging past liabilities. The proposal of a voluntary rate of ten shillings during the next two years, to cover a debt of £300, is equivalent to an appeal to 600 members to come forward and pay the debts of 2,150. This is neither politic not just.

The suggestion I made at Liverpool was, that the Council should publish the names of those who met the former call, and appeal to the defaulters for their contributions. I have now another proposition, either alternative or supplemental, to submit. A call of *five* shillings, if generally responded to, would bring in £500. If those who have hitherto held back would now make this very moderate contribution, I should think that those who have already contributed would gladly unite with them (making no allusion to the past) in fulfilling the scriptural precept, "Render therefore to all their dues," and in securing a surplus fund to be applied towards placing the Journal in that position of commanding influence, which the organ of so important an Association ought to, but does not, fill.

I am, etc., A. P. Stewart.

74, Grosvenor Street, August 8th, 1859.

PROPOSED TESTIMONIAL TO E. DANIELL, ESQ.

Letter from W. J. Allison, Esq.

Sir,—The meritorious efforts of Mr. Daniell of Newport Pagnell, in projecting an Annuity Fund for the relief of aged members of our profession, and for their widows and orphans, must be familiar to every medical man of any standing in the profession.

A considerable time has elapsed since I last addressed you on this subject, during which period I have read some of Mr. Daniell's addresses, as well as lists of trustees, directors, local secretaries, rules, etc. From the year 1845 to 1851, the journals of the day teem with his eloquent and powerful appeals; and the success of his scheme at that time seemed scarcely problematical, as nearly all the *élite* of the Londom medical world especially were lending it a helping hand. Some hundreds of pounds were spent upon maturing this scheme; and Mr. Neison, the eminent actuary, had furnished tables, at a considerable cost, to attach it to a life insurance. "The British Medical Fund" was enrolled under an Act of Parliament, and the Rules and Regulations were printed and distributed.

It appears that but little further effort was necessary on the part of Mr. Daniell (if no impediment had arisen) to place this institution on a firm and solid basis, and to render it one of those noble and beneficent helps in the hour of difficulty and distress which the community have long recognised as a necessary adjunct in every precarious calling.

I was a subscriber to this Fund from the commencement, and was an admirer of the zeal and energy with which the untiring projector published his appeals in almost every medical journal, and uttered his heart-stirring addresses at public meetings. The one delivered at St. Mary's Hall, Coventry, and published in the local papers of that city, developes the principles of cooperation, and the necessity of it in our profession, with indisputable argument and Christian truthfulness. Dr. Powell of Coventry was so impressed by the speech as to have copies of it reprinted.

"Charity", said Mr. Daniell, "is a *casualty* upon which necessity may bid us lean—not a *principle* upon which we are privileged to fall;" and yet, with the exception of London and of a few provincial counties, we have no cooperation for self-reliance.

The apathy of the professional body is a serious impediment to individual exertion and enterprise, as was singularly marked in this undertaking; and I believe that the immediate cause of the failure of Mr. Daniell's self-supporting institution was an obstacle which proved the reverse of his doctrine—proved that "the profession regarded *charity* as the *principle* upon which the unfortunate and their dependents should fall": a mistake which to me appears the more untenable as I increase in years and experience. I have urged upon the more thoughtless or careless of my professional brethren, at their outset in life, the absolute necessity for prudence, foresight, and self-reliance; and have reminded them of the palpable though deeply to be regretted truth enforced in Mr. Daniell's doctrine (in the journals), that if all the needy ones amongst us are to trust to charity, we must expect to find that to one lucky recipient of its bounty, ten other candidates will be "sent empty away". These and such-like considerations convince me the time will come when the profession as a body will take a different view, for their own interests; and when some grand scheme like the one which Mr. Daniell advocated, with some additions, will spring up to cover the length and breadth of "the land we live in".

I am personally unacquainted with Mr. Daniell, but am quite satisfied that he has a just claim upon the members of our profession for some tribute of their regard and approbation, in return for the talent which he has displayed, and the time and money which he has sacrificed on our behalf: indeed, to me it appears disgraceful to us to leave so much labour and ability unregarded, and to allow the noble efforts of such a man to die out, without the slightest recognition of his services by those for whom he has worked so ably, so assiduously, and so disinterestedly.

We are liberal with testimonials to those who have simply done their duty, while we neglect those who have gone out of their way to render us a service; and I ask,—When the profession had been aroused by reiterated appeals to learn the wretched condition which was the lot of many of its members and their dependents, had no service been rendered? After arguments and discussions on the subject at public meetings, had no one been enlightened? had no advantage accrued to the listeners? Some of the first-rate men in London would answer in the affirmative, and the higher minded would be the first to make the acknowledgment. (Those with the most refined minds have not always the best filled purses.)

The failure of the scheme was not the fault of its projector; it was a mistake of other parties, and a result not to be anticipated, though, I think, much to be regretted.

It appears, on a reference to the journals of the day (*Provincial Journal*, No. xiv, July 9th, 1851), that nearly the last letter by Mr. Daniell on "The Fund" was published as late as 1851; so that we may say a great part of six years of this gentleman's valuable life was spent in our service.

Shall this scheme be lost to the next generation? and shall its originator go down to his grave unhonoured and unrequited? What I ask for is a public acknowledgment from members of the profession, by means of a testimonial of esteem to Mr. Daniell, for his commendable exertions and his valuable and meritorious services, during five or six years, on behalf of his less fortunate medical brethren.

I am, etc., W. Allison.

August 1859.

P.S. In an early number of this Journal, I hope to see a list of the names of those who agree with me in opinion upon this question, and who can afford to specify a sum of money as their subscriptions for a testimonal. Post-office orders to be made payable to Thomas John Honeyman, 37, Great Queen Street, London, W.C.

THE NORWICH UNION LIFE OFFICE.

Letter from J. H. Goodwin, M.D.

Sir,—In your Journal of the 23rd July, you say that you have no doubt but that Dr. Ranking was *mainly* instrumental in bringing the directors of the Norwich Union Life Office to consent to the resolution of paying the private medical attendants in applications for Insurance. Now, as I was *the* Director who first brought the subject before the Court of Directors, and strongly urged the Committee to give it their earliest attention, I think I have a right to some credit for this satisfactory result which has been arrived at, more especially as I very much doubt whether the subject would ever have been *originated* by any member of the Committee, of which Dr. Ranking is one, although I am quite willing to admit that he supported my proposition vigorously. I should have brought the subject before the Court of Directors long ago, only that the opposition to it was so strong; and it was only when we had succeeded in getting two medical men upon the Committee of Directors that I thought that the attempt might be made without risk of failure. I think it is only fair to myself to state these facts.

I am, etc., John H. Goodwin, M.D.Cantab.

Bury St. Edmund's, August 12, 1859.

[Our statement regarding Dr. Ranking was only one of belief, founded—not incorrectly—on the interest he is known to feel for the good of his profession. At the time, Dr. Goodwin's name was comparatively unknown to us; but we are now glad to accord to him the honourable preeminence which he claims. Editor.]

FATAL PERITONITIS AFTER DIVISION OF IMPERFORATE HYMEN FROM RETENTION OF MENSES.

Letter from E. J. Tilt, M.D., L.R.C.P.

Sir,—The interesting remarks of Mr. Paget, of Leicester, on the possible occurrence of fatal peritonitis, in cases of retention of menstruation, notwithstanding the division of the hymen, brings to my recollection a similar case which occurred in the practice of Sir B. Brodie, and which is briefly related in the twenty-seventh volume of the *London Medical Gazette*. Sir B. Brodie stated to the Royal Medical and Chirurgical Society, that he had punctured the hymen for retention of menses in a patient at St. George's Hospital, and that nevertheless the patient died of peritonitis. The abdomen was found to contain a large quantity of menstrual blood, without any rupture of the Fallopian tubes, or of the uterus; a circumstance which could not be explained without admitting "that the blood had passed from the uterus backwards through the Fallopian tubes." This regurgitation of the menstrual blood into the peritoneal cavity, without any rupture of the Fallopian tubes, followed by fatal peritonitis, notwithstanding the partial relief afforded by the passing of blood by the vagina, are the salient points of the sixty-ninth case related at page 255 of my work on *Diseases of Women* (Second Edition).

In this interesting case, which occurred in the hospital practice of my friend, Dr. Bernutz, of Paris, the retention of menstruation was caused, not by imperforate hymen, but by disease of the womb. I am, etc., E. J. Tilt.

11, York Street, Portman Square, August 1859.

LITHOTOMY IN THE FEMALE.

Sir,—On reading Dr. McEwen's exceedingly interesting case of Lithotomy in the Female, published in the last number of the Journal, I am left in some doubt as to the exact method adopted by him in the operation. As the case was every way so successful, and as the function of the sphincter vesicæ remains comparatively perfect, I think it would gratify other members as well as myself if Dr. McEwen would oblige us with a brief note of the tissues included in his incisions. Dr. McEwen says: "With a probe-pointed knife, I cut first a little laterally, and then downwards and outwards." Hoping that an humble inquirer may be pardoned for wishing further particulars. I am, etc., Embryo.

Liverpool, August 15th, 1859.

Parliamentary Intelligence.

HOUSE OF LORDS.—Friday, August 12th, 1859.

MEDICAL ACTS AMENDMENT BILL.

On the motion that this Bill do go into Committee—

Lord Dungannon expressed a hope that at this period of the Session the Bill would be postponed, in order that the parties interested and most affected by it might be consulted on the subject, more particularly as several petitions had been presented from the Royal College of Surgeons of London, Edinburgh, and Dublin.

The Lord Chancellor was of opinion that if any new principles or arrangements were introduced in the Bill, it should be postponed for the present.

Earl Granville thought that as there were matters in dispute, it was not desirable that they should give the Bill a second reading.

After a few words from the Duke of Leinster and Lord Kingsdown, the Bill was understood to be postponed.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

* *In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Buchanan, George, M.D., 75, Gower Street, on August 12.
Buckle, N. T., M.D., Staff-Surgeon, at Poonah, on June 16.
Emerson, W., Esq., Kentish Town, on July 30.
Griffin, R. W. W., M.D., at Southampton, on August 2.
Heelis, R., Esq., Haverstock Hill, on July 31. (Twins.)
Johnson, George, M.D., Savile Row, on July 29.
Pollard, E. W., Esq., Brompton Square, on August 14.

Of daughters, the wives of—

Sharpe, John, Esq., Waltham Cross, on August 15.
Sheehy, W. H., Esq., 4, Claremont Square, on August 3.
*Underhill, T., Esq., Great Bridge, Tipton, on July 31st.
Wood, John, Esq., 4, Montague Street, on July 31.
*Ward, Thomas, Esq., Southampton, on August 16.

MARRIAGES.

Chambers, Thos., Esq., Surgeon, Grove Road, N.W., to Elizabeth J. D'Urban, Notting Hill, on August 4th.
Evans, Usher W., Esq., Staff-Surgeon, to Caroline Fanny, third daughter of the late Captain B. Travers, Rifle Brigade, at Zante, on July 15.
Leishman, Wm., M.D., Glasgow, to Augusta Selina, eldest daughter of George Drevar, Esq., on August 3rd.
Livingstone, Charles H., Esq., Surgeon Indian Army, to Agnes, youngest daughter of William Scott, M.D., late H.E.I.C.S., on August 4th.
Meldola, Raphael, Esq., Surgeon, Gretton Terrace, Victoria Park, to Amelia, only child of the late L. Aria, Esq., Tavistock Square, on August 15.
Sharman, J., Esq., Surgeon, Montague Place, N., to Louisa, widow of the late M. Ovington, Esq., on August 4th.
Sharp, Charles K., Esq., solicitor, Circus Place, to Emma, daughter of the late E. C. W. Rowe, Esq., Surgeon, on August 3rd.
Skinner, R. V., Esq., Surgeon, Winchelsea, youngest son of *D. Skinner, Esq., Headcorn, to Maria Louisa, third daughter of T. R. Legg, Esq., Winchelsea, on August 9.
Taylor, Fredk. B., M.D., Edinburgh, to Georgina, daughter of the late Thomas Richardson, Esq., Restalrig, Edinburgh, on August 4th.
Telfer, Wm., Esq., Surgeon R.N., to Margaret I. J., youngest daughter of the late James Brown., Esq., Edinburgh, on August 3rd.
Thompson, the Rev. J. C., Calcutta, to Mary Elizabeth, eldest daughter of J. Campbell, M.D., Greenlaw, N.B., on Aug. 9.
*Whitcombe, Edmund B., Esq., Surgeon, of Cleobury Mortimer, to Maria Letitia, eldest daughter of the late Henry Warland, Esq., of Bury St. Edmunds, at Bletchingdon, Oxon, on August 10th.

DEATHS.

Ainsworth, James, M.D., at Bellewista, near Callao, on June 13.
Barnard. On July 2nd, Edward D., aged 1 year, child of J. W. Barnard, M.D., Hastings.
Besly, Francis, Esq., Royal Infirmary, Waterloo Road, on August 2nd.
Findlay, J., Esq., R.N., Boorandara, Melbourne, on April 18.
Guthrie, Charles G., Esq., at Clifton, aged 42, on Aug. 13.
Norwood, Edward, M.D., at Mersham, on July 25.
Peck. On May 1st, the wife of F. M. Peck, Esq., Grassdale, Australia.
Phipps. On July 20th, the wife of J. G. Phipps, M.D., Brixton Road.
Stevenson, W., Esq., late H.E.I.C.S., Calcutta, on July 30.
Wightman. On August 14th, at York, aged 55, Mary, wife o *John Wightman, Esq.
Vallance, Benjamin, Esq., Brighton, on July 27.
Willis, F., M.D., Market Deeping, aged 67, on July 29.
Wood. On August 12th, Mary Ann, wife of John Wood, Esq., Montague Street.

APPOINTMENTS.

*Jordan, Furneaux, Esq., appointed Assistant-Surgeon to the Queen's Hospital, Birmingham.
*Moore, Edward, Esq., Halesowen, appointed a Deputy Lieutenant for Worcestershire.

PASS LISTS.

Royal College of Surgeons. Members admitted on *Friday, July 29th*, 1859:—

Bringloe, John, Camberwell	Parsons, F. J., Bayswater
Campbell, John, Kinneff, N.B.	Piercy, William L., Dublin
Delmar, Stuart, Canterbury	Shanley, L. P., Strokestown
O'Brien, Daniel, Calcutta	Thomson, A. B., Rothes, N.B.

Monday, August 1st:—

Bossy, Alfred H., London
Bryant, Charles, Sydney
Dixon, George, Helmsley
Eardley, John, Bayswater
Earnshaw, John, Oldham
Fawthrop, John, Halifax
Harris, William, Pimlico
Kenny, J., Stoke Newington
Nicholson, John L., Hull
Palmer, Henry, East Garsten
Smith, John R., Cirencester
Smythe, H., King's Lynn
Swindell, John J., Whetstone
Turnbull, Wm., Euston Road

Apothecaries' Hall. Licentiates admitted on *Thursday, July 28th*, 1859:—

Ashby, J.F., South Newington
Daly, Michael, Ireland
Dowker, F. W., Laysthorpe
Edwards, David R. P., Newport, Monmouthshire
Harrison, Reginald, Stafford
Power, Daniel, Herleby
Roberts, Griffith W., Clynrog, North Wales
Wales, John, Downham Market
Williams, Wm. J., Uffculme

The following gentlemen, on the same day, passed their first examination:—

Brunton, L. B., Limehouse
Case, G. H., Fareham
Davey, Alexander G., Walmer
Everett, B. G., Warminster
Hall, Augustus R., Topsham
Hammond, F. J., Sherborne
Hawkins, T. H., Reading
Sutton, Henry G., Ilminster
Watkins, Walter, Brecon
Wickham, William, Tetbury

Thursday, August 4th.

Clark, G., Newcastle-on-Tyne
Evans, George Moule
Freshfield, Allen, Harwich
Hodgson, James B., Preston
James, R., Diffryn Narberth, Pembrokeshire
Lean, Henry J. B., Jersey
Lomas, H. W. F. M., Shildon
Mayou, George, Monmouth
Mordue, R. D., Newcastle-on-Tyne
Newington, R. S., Goudhurst
Provis, Wm. A., Holyhead
Torbock, R., Hawes, Yorksh.

The following gentlemen, on the same day, passed their first examination:—

Belemore, Alfred J.
Farrington, W. H., Ottery St. Mary, Devon
Fernie, Henry M., Yeldon
Ryland, T. E., Birmingham
Ward, Henry, Diss
Workman, Charles J., Reading
Young, E. Parker, Henley-on-Thames

Thursday, August 11th.

Bucknill, Ebenezer, Bedford
Freeman, William, Maldon
Green, John, Cawood
Holt, W., Horbury, Wakefield
Smith, Gordon S. R. W.
Webb, Henry J., Cheadle
White, Robert H., Leeds
Winter, William T., Bristol

The following gentlemen, on the same day, passed their first examination:—

Beddard, James, Dudley
Bell, John W., Hull School of Medicine.
Egle, G. M., Barcombe, Lewes
Lee, Fred. F., Salisbury
Orton, Richard, Baston, Notts.
Phelps, Fred. P., Reading
Warner, John, Finsbury Sq.

University and King's College, Aberdeen. The following, after examination, had the degree of M.D. conferred on them, July 29th, 1859:—

Bartlet, A. H., Ipswich
Bennett, Thomas J., Wilton
Carter, Henry F., Brighton
Evans, Maurice G., Narberth
Fuller, T., New Shoreham
Gilbertson, J. B., Preston
Guppy, Henry S., Falmouth
Hay, William B., Hull
Haynes, J. A., Lewisham
Hills, Wm. C., Maidstone
Holl, Harvey B., London
Hopton, George O., London
Jones, Alfred, Deptford
Miller, J. W. M., Southsea
Noble, Thomas, London
O'Neill, William, Lincoln
Pinchard, Benj., Cottenham
Shepperd, Wm. G., London
Speen, William, Tarland
Todd, George S., Forfarshire
Webb, John W., London

Also, the following had, after examination, the degree of M.B. conferred on them:—

Brotehie, Alexander Rainy, Aberdeenshire
Moir, William, Aberdeenshire

HEALTH OF LONDON—AUGUST 13TH, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... {Boys .. 907 / Girls .. 855}	1762 ..	1296
Average of corresponding weeks 1849-58..	1500 ..	1365

The deaths from diarrhœa were 296. Of these, 90 occurred in the east districts. In addition, 22 deaths are referred to cholera; all of which, except 8, occurred in children. Scarlatina was fatal in 49 cases; diphtheria in 18.

Barometer:
Highest (Th.) 29.90; lowest (Mon.) 29.64; mean 29.796 in.
Thermometer:
In sun—highest (Fri.) 101°; lowest (Tu.) 65°.
In shade—highest (Fri.) 81°; lowest (Fri.) 51.6.
Mean—63.9°; difference from mean of 43 yrs.+2.1°.
Range—during week, 29.5°; mean daily, 18.4°.
Mean humidity of air (*saturation*=100), 77.
Mean direction of wind, S.W.—Rain in inches, 0.28.

PUBLIC VACCINATION.

The following replies have been received by Mr. Griffin, in answer to his memorial, published in the Journal of July 30:

I. *From the Registrar-General.*

General Registrar Office, Somerset House, July 4th, 1859.

Sir,—I have to thank you for your suggestions on the subject of vaccination, contained in your letter of the 1st inst. I always entertained many objections to the Compulsory Vaccination Act, and I did not fail to make them known to Lord Lyttelton, the framer of the Act; but I was unable to make any impression on his lordship, and everything objectionable in the measure was permitted by the Government of that day to remain unaltered in that Bill in its passage through both Houses of Parliament. I have been very anxious for an amendment of this Act, but hitherto unavailingly.

I have the honour to be, sir, your obedient servant,
George Graham, *Registrar-General.*

R. Griffin, Esq., Weymouth.

II. *From the Secretary to the Privy Council.*

Privy Council Office, 20th July, 1859.

Sir,—I am directed by the Lords of the Council to acknowledge the receipt of your letter of the 1st instant, and to thank you for your suggestions upon the subject of vaccination. Without undervaluing the importance of these suggestions, their lordships desire me to remind you that they cannot be carried into effect otherwise than by Act of Parliament.

I am, sir, your obedient servant,
Wm. L. Bathurst.

Richard Griffin, Esq., 12, Royal Terrace, Weymouth.

III. *From the Secretary to the Poor-law Board.*

Poor-law Board, Whitehall, S.W., 5th July, 1859.

Sir,—I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 1st inst. (and its enclosures), respecting the alleged defective state of vaccination. I am directed to inform you that the statements and suggestions contained in the above mentioned communication will receive the consideration of the Board.

I am, sir, your obedient servant,
C. Gilpin, *Secretary.*

R. Griffin, Esq., Weymouth.

TO CORRESPONDENTS.

M. B., Liverpool. We were certainly greatly surprised to see, in the *Lancet* of the last week, an account of the proceedings of the General Council of this Association. It has always been understood that this body deliberated with closed doors, and its proceedings have never before been reported. The account given in the *Lancet* is clearly from the pen of some gentleman then present, who, in addition to abusing the confidence of the Council, has added the grave error of reporting his own view of matters, instead of giving a mere statement of facts.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Mr. Edward Lister; Dr. W. O. Markham; Dr. Jas. Williams; Mr. T. Holmes; Dr. Hyde Salter; Dr. Lionel Beale; Dr. Davey; Mr. J. C. Roope; Mr. T. M. Stone; Dr. E. Waters; Dr. Tilt; Dr. J. H. Goodwin; M.D.; Dr. Styrap; The Secretaries of the Manchester Medico-Ethical Association; Mr. J. Wightman; Embryo; Dr. T. Skinner; Mr. N. G. Moore; Mr. T. Underhill; Dr. J. Lewis; Mr. H. Rumball; and Dr. Ladd.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Spinal Cord and Medulla Oblongata, and on the Proximate Cause and Rational Treatment of Epilepsy. By J. L. Schroëder van der Kolk. Translated by *William Daniel Moore, A.B., M.B. The New Sydenham Society, London: 1859.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXXXIX.] LONDON: SATURDAY, AUGUST 27, 1859. [NEW SERIES.

Addresses and Papers

READ AT THE

TWENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LIVERPOOL, JULY 27th, 28th, and 29th*, 1859.]

ADDRESS IN PHYSIOLOGY.

BY

A. T. H. WATERS, Esq.,

LECTURER ON ANATOMY AND PHYSIOLOGY IN THE LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE, ETC.

MR. PRESIDENT AND GENTLEMEN,—When the committee of your Association did me the honour to request me to deliver an Address in Physiology at this meeting, I acceded to their wish; not, I must confess, without some feelings of my own incompetence, and with a strong conviction of the difficulties of the task I undertook. When I began to reflect on the subject, it seemed to present difficulties of no ordinary character, from the great abundance of material it afforded. I felt that to attempt to generalize on the science of physiology, in the short space of time allotted to an address, would tax powers far greater than mine; and that to endeavour to sketch the recent advances which the various cultivators of the science, in its different departments, had made, would necessarily be attended with failure.

It is true, that some of the great principles which regulate the phenomena of life admit of easy definition, and great and varied application; and no more interesting and important subject could possibly be chosen as the groundwork of an address: but yet, when we come to deal with many of the questions of the science, we often find ourselves rapidly passing from the domain of well grounded theory and recognised laws to that of hypothesis; and from our incomplete knowledge of many of the manifestations of vital action, we are compelled to rest satisfied with but an imperfect explanation of the facts we witness.

But, in making this remark, it is impossible not to rejoice at the high position which physiology now holds as a science, and at the great advances and brilliant discoveries which have marked its progress during a period comparatively recent; discoveries which have almost revolutionized the whole science of organic life—which have thrown a flood of light on the highly complex phenomena of vitality, and reduced many of them to the utmost simplicity; discoveries which have resulted in generalizations of an application so universal, and an importance so vast, as to entitle them to no lower position as established truths than that accorded to the doctrines of physical or chemical science; for what are the generalizations in physics, or what the laws of chemistry, which have a wider range, or an application more universal, than the principles of nervous action enunciated by the genius of Bell, or of cell-formation, mainly elucidated by the labours of Schwann?

To attempt to sketch the recent progress of physiology in all its varied departments would be alike impossible with an attempt at generalization, so great have been the labours of the cultivators of the science, so numerous are the details of their observations.

Unwilling, therefore, to venture on the responsible task of addressing you on the general principles of the science, and feeling the impossibility of reviewing the whole mass of the subject, I resolved to deal with it in one of its details; a determination to which I the more readily arrived, that I felt that, in addressing those who are engaged in the practical duties of their profession, I should best discharge my functions by giving the subject, as far as I was able, as practical a bearing as possible.

Following, therefore, the example of others who have delivered addresses on kindred subjects, I have felt that in selecting some topic to which more especially to direct your attention, I should be acting quite in accordance with the wishes of my audience, and with the requirements of the subject itself. Indeed, such a course is rendered absolutely necessary at the present day, for to whatever branch of science we direct our attention, we find its sub-divisions so numerous and important, that each one claims a special share of our attention.

But when, after much careful consideration, I determined to choose some special subject as the chief topic of this address, and had flattered myself that I had surmounted an important obstacle, I experienced no small difficulty, and no little trouble, in deciding which branch of the science I should select—on what series of phenomena I should venture to offer you a few observations.

On considering the various subjects which have engaged the attention of physiologists in recent years, it appeared to me that there was one which, from its importance, the labours devoted to it, and the great advances made in it, possessed undisputed claims to consideration; and, as I am not aware that it has ever been made the subject of a special address in connection with this Association, I have felt that it could not fairly be passed over.

There are no departments of physiology which possess greater interest, there are none in which there have been greater labours, as assuredly there are none which present greater difficulties, than those which relate to the investigation of the functions of the *Nervous System*; and undoubted as have been the advances which have taken place in our knowledge of the actions of the various portions of the nervous centres, during the present century especially, yet that knowledge, we are compelled to confess, is still in many respects imperfect and incomplete; and there is no subject in the whole range of organic science which opens a wider field for research, no one which promises a more abundant harvest with reference to the principles of diagnosis and treatment of disease, than that which relates to the phenomena of nervous action.

My object, to-day, will be to lay before you some observations on the functions of some portions of the nervous centres, and especially to direct your attention to the more recent and very important facts, which experimental physiology and pathological observation have brought to light with reference to the properties of the spinal cord.

The investigation of the properties of the nervous centres is undoubtedly surrounded with immense difficulty. That important clue to function which the knowledge of the minute structure of organs affords, has been hitherto in great measure denied us with reference to the nervous centres. The peculiar nature of the nervous tissue has prevented us from ascertaining exactly how certain portions are disposed of; and although some researches, to which I shall have to refer, have thrown great light on questions of this kind, and have received confirmation from subsequent physiological observations, yet there is still wanting that absolute anatomical proof, without which, as a rule, no safe theory can be built up with reference to function. But were our knowledge of the structure and arrangement of the nervous system perfect; did we know the exact mechanism by which the phenomena of nervous action are performed; were we acquainted with the processes by which nervous power is generated; or of the nature of that subtle fluid which conveys the mandates of the will, and carries impressions to the sensorial centres—there would yet remain endless subjects for inquiry? a vast mass of facts in connection with that system in which mind is so intimately blended with matter, which is the organ of the intellectual faculties, the source of man's supremacy over the rest of the organic world.

It would be interesting, did time permit, to dwell on the views which were entertained by the ancients with respect to

the subject we are considering. These views, however, almost entirely speculative in their character, have but little practical bearing. It was long an opinion, which seems to have been promulgated by Aristotle, that the brain was of no use except as a refrigerator of the hot spirits ascending from the heart, whilst we find that Plato, Galen, and, in a later age, Vesalius, considered it as the seat of the rational faculty of the mind. At an early period, a glimmering of the truth seems to have existed with reference to the functions of the different nerves; for we find Erasistratus teaching that the sensory and motor nerves had different origins; the former arising from the meninges, the latter from the cerebrum; whilst Galen, who performed some interesting experiments on the spinal cord, experiments which have been recently repeated with the most important results, considered that the soft nerves were nerves of sensation, and the hard, nerves of motion. Galen opposed the views of Aristotle with reference to the functions of the brain, the ventricles of which he considered were for the purpose of secreting the animal spirits, to be then diffused throughout the substance of the brain, and from thence transmitted to the nerves; and this opinion, with some modifications, was long entertained. By the Arabs, one of the ventricles was supposed to be the seat of sensation; another, of the imaginative faculty; a third, of the understanding; and a fourth, of memory; and Benevenius, in confirmation of this doctrine, relates the case of a certain thief, often caught stealing, who never could recollect his previous offences, and who was found after death to have no cerebellum.

Numerous authors, who flourished after the revival of learning, maintained more or less fully the opinions of Galen. Descartes asserted that the animal spirits were secreted from the brain through pores opening into the ventricles, and that when accumulated there they excited the soul through the pineal gland, from which they were distributed to the body. Caspar Bauhin was amongst the first who taught that the animal spirits were generated in the substance of the brain, and from thence were distributed to the nerves, without being collected in the ventricles, and in this view he was supported by Caspar Hoffman. These authors also taught that the ventricles were excretory organs, and their secretion was supposed to find its way through the cribriform plate into the nostrils and fauces, and thus to produce the mucus of those cavities; an opinion which it was reserved for the anatomical researches of Schneider to refute. A view which later prevailed, and which was supported by our illustrious Willis, by Malpighi, and others, was that the cortical substance of the brain was the generator of the animal spirits; a doctrine analogous to that which is conformable with all we know at the present day, with reference to the grey matter of the nervous centres as the generator of nervous power.

But I feel that I must pass from these considerations to more practical points, and more recent observations in connection with my subject.

Valuable as may have been the opinions, and true as may been the theories, of some of the distinguished physiologists who flourished during the eighteenth century, especially with regard to the functions of the spinal cord, a point on which I shall have briefly to dwell, it may be safely said that with reference to our knowledge of the functions of the roots of the spinal nerves, we owe everything to the labours of more recent investigators. Before the time of Sir Charles Bell, all was hypothetical and vague. His discovery at once placed the science of neurology on a firm and stable basis; its importance, its value, the influence it has exercised on subsequent investigations, it is impossible to overestimate. A type of all great discoveries, the result of careful observation and profound reasoning, it stands preeminent amongst the results of the labours of the present age, and marks an epoch in the history of physiological science.

It would be pleasing to dwell in the language of eulogy on the merits of him to whom science is so much indebted, and briefly to sketch the progressive steps by which he was led to his important results; to show how he saw with his mental eye the structure of those cords, the function of which he had discovered; and how, whilst unable to see that which the microscope has since demonstrated—the isolation of each nervous fibril—he yet was led to appreciate accurately the important fact—but time forbids, and I pass to other topics.

There is no subject which presents peculiarities of greater interest, there is, perhaps, no one which has led to greater controversy, in connection with the nervous system, than that which relates to the reflex, or automatic, movements of the body; and whilst it will be admitted by all that to the labours of one of our most distinguished countrymen we are mainly indebted for a more definite and accurate knowledge of these actions than formerly existed, yet we feel that justice would not be done to others, did we pass over in silence the views and the labours of physiologists of a past century, who seem to have appreciated in a very remarkable manner the nature of the phenomena to which we are alluding.

Those who have read the works of Whytt, of Unzer, and of Prochaska, cannot but have been convinced that those authors had formed very accurate views of the various involuntary movements of the body; and, although some discussion has taken place as to the exact meaning of a term used by Whytt, yet there can be but little doubt that he appreciated the fact, that an impression made on the periphery of a nerve might be carried to the nervous centre, and there, without producing sensation, give rise to a reflex action. But Unzer has enunciated, in a much more complete manner than Whytt, the doctrines of reflex action; and has clearly pointed out the distinction between acts resulting from impressions only, and true psychical actions derived from the brain. He says motions may be produced as the result of external impressions, although these impressions cannot reach the brain, even after an animal has been decapitated, so that no sensations can be felt. He calls them "nerve actions," in contradistinction to those which are the result of consciousness, which he terms "soul actions." I cannot give the quotations from Unzer's work which shew clearly his views, but he distinctly enunciated the principle, that the nervous system is not simply destined to propagate external impressions to the brain, there to produce sensation with consciousness; but that it possesses also the distinct property of giving rise to movements as the result of an external impression, which does not reach the organ of consciousness; and, in an answer to one of his reviewers, he distinctly expresses his belief in the reflex function of the spinal cord, for he says that, as nerves connected with ganglia may experience from external stimuli a *moving power*, a reflection of impressions upon other fibres which are regularly determined to action, "*just so is it with the nerves which arise in the spinal cord, and have there probably the double function: partly to transmit these impressions to the brain, that sensations may be excited, and partly, to be reflected on other nerves, so that thereby certain movements are developed which otherwise would not result from these impressions.*"

It is impossible to enter fully into the views of Unzer, many of which have received confirmation at the hands of physiologists of recent date; but I must not pass over the works of one of his successors, Prochaska, who flourished at the close of the last and the beginning of the present century, and who more accurately defined than previous physiologists the portion of the nervous centres from which reflex actions are derived. After stating that external impressions made on sensorial nerves are transmitted to the origin of the nerves, and are thence reflected on to corresponding motor nerves, he says that the part where these sensorial and motor nerves meet, *and whence motor actions are reflected*, is called the *sensorium commune*. This sensorium commune consists, not of the cerebrum proper and cerebellum, but extends through the medulla spinalis, the medulla oblongata, the crura of the cerebrum and cerebellum, and part of the thalami optici; in a word, he says it is co-extensive with the origin of the nerves. He was fully aware that reflex actions might take place independently of consciousness, and he terms them automatic actions. He is also, I believe, the first author who mentions that these reflex actions take place in obedience to a law which regulates the preservation of the individual.

These observations are sufficient to show, that the various phenomena of reflex action were well known to the physiologists I have alluded to, and that they had analysed their relations to the nervous system with great sagacity.

It has been a common impression that, up to the time of Marshall Hall, these various so-called sympathetic actions were regarded by physiologists as dependent on sensation; for, to use the words of one of the writers in the *British and Foreign Medical Review* for 1837, "The phenomena called excito-motory are precisely those which come under the old denomination of sympathetic; and which we believe have generally been thought to be dependent on sensation." Now it would not be difficult to show that, although the views of Unzer and Prochaska seem to have been but little received, there is yet abundant evidence that all physiologists did not consider these movements as dependent on sensation. Time does not permit that I should refer to the passages in the writings of such authors, in proof of this statement; but the

works of Hunter, of Sir Gilbert Blane, of Mayo, of Flourens, will furnish abundant instances.

But notwithstanding this, it must be admitted that a very imperfect notion generally prevailed of the nature of these automatic movements; and Dr. Marshall Hall was undoubtedly the first to revive the doctrines of reflex action, to establish, with greater precision than his predecessors, the laws by which its phenomena are governed, and to assign to them their proper position in physiological science. Although he was to a certain extent anticipated in some of the essential parts of his system, yet he was the first to apply that system to many important pathological phenomena, and to the elucidation of various forms of nervous affections. The physiology and pathology of the nervous system received a new impulse from his researches. His whole life was devoted to the study and investigation of the reflex or excito-motor system, which he pursued with all the perseverance and ardour which characterize the discoverer, fully convinced of the importance of his doctrines. He worked incessantly to illustrate his principles, to simplify and enlarge the basis on which they were founded; and whatever may have been the deficiencies or the imperfections of his system, the prominence he gave to his views, by the number and scientific character of his writings, and his own indefatigable exertions, had the effect of directing the attention of observers in all parts of the world to the facts of which he treated, and of establishing, as a general principle of science, that which had been previously admitted only by a few.

The special views of this distinguished physiologist, that there is a distinct set of excitor nerves and motor nerves belonging to the reflex system, independently of the ordinary sensory and voluntary nerves, as yet rests on no absolute anatomical proof, and has never been universally admitted as true. That each portion of the spinal marrow is an independent centre of nervous action, admits of indubitable proof; and that the cord is the channel of communication with the organ of consciousness, I need scarcely mention. The exact mechanism by which the automatic movements are accomplished, and by which sensitive impressions are conveyed to the brain, and motor impulses to the muscles, yet requires elucidation; but there are some facts which examination of structure, and experimental investigation, have brought to light, that have important bearings on this point, and on some of these I propose briefly to dwell.

By most anatomists, before the time of Gall and Spurzheim, the spinal cord was considered as a mere bundle of nerves, a prolongation from the brain, but those authors pointed out the untenable nature of this view. The existence of the cord in acephalous fœtuses, its size in proportion to the number of nerves derived from it, and the direction of the fibres of the nerves, led them to maintain this opinion. They further stated that the nerves arose from the grey matter of the cord, but the statement seems to have been founded on no anatomical proof. The first anatomist in this country, who appears to have investigated the relation of the roots of the nerves with the spinal cord, was Mr. Grainger; and his observations showed that these roots were in part connected with the grey matter, and he was led to believe that they were in part continuous with the longitudinal fibres of the cord, and thus passed on to the encephalon. The observations of Mr. Grainger were somewhat anticipated by those of Bellingeri, who had previously traced the anterior roots to the grey matter in the ox.

Since the time when Grainger made his observations, numerous anatomists have directed their attention to the structure of the spinal cord and the arrangement of the roots of the nerves; and, by employing various processes of preparation, have been able to make thin sections of the cord, such as they could examine with tolerably high powers under the microscope. Amongst the most important observations that have been made are those of Volkmann, Kölliker, Stilling, Lockhart Clarke, Schilling, Gratiolet, and most recently of all, Lenhossèk and Schroeder Van der Kolk. Considerable discrepancy exists between the statements of these authors. On the one hand, we find Volkmann asserting that the longitudinal columns of the cord undergo no progressive increase of size from below upwards. Now this is a very important point; for if the sensory and voluntary nerves are derived from the encephalon, and pass off from the cord in the various spinal nerves, the cord must contain a much larger number of fibres at its upper than at its lower part, and we should expect that the columns of the cord would gradually increase in size from below upwards. Volkmann further maintains that the quantity of white matter is everywhere in proportion to the quantity of grey; his observations were made on the spinal cord of the horse, and have been contradicted by Kölliker, who asserts that in man the thickness of the white columns does augment from below upwards, and that the increase in the diameter of the cord, at the ganglionic enlargements, is due to the augmentation of grey matter only. He, moreover, states that the nerve-tubes of the cord, especially in the upper part, are much smaller than those of the nerve-roots; and he asserts from actual measurement, that it is by no means impossible for the fibrous strands of the cord to contain all the nerve-tubes of the spinal nerves.

The researches of Mr. Newport into the structure of the articulata, seemed to establish a very important fact in connection with the nervous system of those animals. He stated that he had found that certain of the fibres of the nerves proceeding to the analogue of the spinal cord, passed onwards to the cephalic ganglia, whilst others passed into the ganglia of the cord.

The theory deduced from Newport's view of the structure of the nervous system, is that the nerves which proceed to the cephalic ganglia, are the agents by which sensations are conveyed to the latter, and in respondence, these ganglia direct and harmonise the general movements of the body; whilst the nerves which are simply connected with the ventral ganglia are the agents of the excito-motor actions.

This view of the structure and functions of the spinal cord has been adopted by Dr. Carpenter, who considers that the cephalic ganglia of the invertebrata are analogous to those ganglia which are found at the base of the brain in vertebrata, and which he believes to be the centres of sensation and instinctive motor action, whilst each portion of the spinal cord ministers to the automatic movements of the body. Dr. Carpenter endeavours to reconcile the structural views of Kölliker and Volkmann, on the principle that it is not at all improbable, that different animals should have different proportions of nerve-fibres terminating in their automatic and sensorial centres, according as their movements are more or less analogous to those of the invertebrata, or more or less performed in obedience to the influence of the will, and under the guidance of sensation.

Notwithstanding the high authority on which these views rest, they are not conformable with the results obtained by the observations of other investigators. From microscopical examinations of the disposition of the roots of the nerves, there can be no doubt that many of the fibres terminate in the grey matter of the cord, at or near the spot where they join it. Lockhart Clarke has shown that the posterior roots, on entering the cord, are disposed of in three ways; some of their fibres pass transversely, and enter the grey substance; others pass downwards for a short distance, and then terminate in a similar manner; whilst a third set pass obliquely upwards, but he has not been able to trace any of them continuous with the longitudinal columns of the cord, and the inference therefore is that, after a longer or shorter course, they enter the grey substance. This view of the disposition of the fibres of these roots is borne out in a remarkable manner by experiments on living animals. With regard to the anterior roots, they have been traced to the anterior cornua, and they are said to take their origin from ganglion cells, which exist in groups along the cornua. This arrangement of the anterior roots has been most recently pointed out by Schroeder Van der Kolk, who does not admit that any of their fibres are directly continued on to the brain; he differs, however, from Lockhart Clarke and others with regard to the fibres of the posterior roots, which he says consist in part of sensitive nerves, and in part of excitor nerves; the former passing up in the posterior columns to the encephalon, whilst the latter are connected with the grey matter of the cord. In support of this view, he states that the anterior columns do not increase in size from below upwards, but that the posterior columns progressively enlarge.

These views of Schroeder Van der Kolk, and the physiological inferences he deduces from them, are opposed, in a very important manner, to the results of experimental investigation into the functions of the columns of the cord, to a brief consideration of which I now pass.

Before the time of Sir Charles Bell, when the difference in function of the two roots of the spinal nerves was unknown, no attempt had been made to assign different functions to different columns of the cord. Sir C. Bell first promulgated the view that the posterior columns, like the posterior roots of the nerves, were the conductors of sensitive impressions, whilst the antero-lateral were the channels of motor influence; he, however, gave no further support to his theory than the following very incomplete experiment:—"I found," he says, "that injury to the an-

terior portions of the spinal marrow convulsed the animal more certainly than injury to the posterior portion; but I found it difficult to make the experiment without injuring both portions."

This theory of Bell, which I may here state was subsequently in great measure abandoned by him, was opposed by Bellingeri, Schœps, Rolando, Calmeil, Nasse, and others; but was strongly supported by an eminent French physiologist, M. Longet, who attempted to prove that it was as correct as that respecting the functions of the roots of the nerves.

As the views of M. Longet have been extensively received as true, both by physiologists in this country and on the Continent, and as they seem to me, especially with reference to the channels for the conduction of sensitive impressions, to have received an entire refutation at the hands of recent investigators, I feel it my duty to consider them somewhat in detail.

M. Longet is of opinion that all the sensitive nerve-fibres of the spinal nerves enter the posterior columns of the cord, and go up to the brain in these columns, and that therefore sensitive impressions are only received from these parts of the cord and their prolongations in the encephalon:

That the restiform bodies of the medulla oblongata, being the continuations of the posterior columns of the cord, are also the only channels for the transmission of sensitive impressions:

That the sensitive impressions, going to the sensorium, have to pass chiefly across the cerebellum, as the restiform bodies chiefly pass across that organ.

Dr. Todd, in this country, raised the first serious objection to this view. He pointed out, on anatomical grounds, the improbability of the theory, and detailed some pathological facts which tended to negative it.

With the exception of the researches of Schroeder Van der Kolk, recent anatomical evidence is opposed to the theory; but the most important evidence which has yet been given with reference to the question, is to be found in the results of the experimental observations and in the pathological facts detailed by Dr. Brown-Séquard.

The experiments of Dr. Brown-Séquard were made on some of the lower mammalia. They consist in laying bare a portion of the spinal cord by removing the arches of the vertebræ, and in dividing different portions of the cord. We are assured by the experimenter that the objections which have been raised against his views, on the ground that no satisfactory results can be obtained after the spinal canal is opened, are altogether untenable; for, "When the operation is done quickly, even if a considerable part of the cord be laid bare, if hæmorrhage have not been great, and if pain have been avoided by the exhibition of chloroform, there is no notable diminution of sensibility, and there is no diminution in the voluntary movements, except that depending upon the section of the muscles of the back."

The first fact pointed out by Dr. Brown-Séquard to which I shall refer, is that a transversal section of the posterior columns of the cord does not produce a loss, nor even a diminution, of sensibility; on the contrary, that it is followed by an increase in the degree of that property. The section, therefore, of the supposed only channels of transmission of sensitive impressions results, not in anæsthesia, but in hyperæsthesia in all the parts supplied with nerves behind the seat of section. Further, it appears that a complete transverse section of the restiform bodies is followed by an increase of sensibility in every part of the limbs and trunk; and that the same results, but in a less degree, follow a transversal incision into the cerebellum, the *processus cerebelli ad testes*, and the *tubercula quadrigemina;* and that if the restiform bodies be dissected from their neighbouring parts and removed, the animal operated on becomes hyperæsthetic.

These are assuredly very important facts, and they afford convincing proof, at any rate, that the posterior columns of the cord, and the restiform bodies, are not the *only* channels by which sensitive impressions are conveyed from the posterior roots of the nerves to the encephalon; but other experiments tend to show that these parts are in no way concerned in the function at all.

After the experiment I have detailed, the natural step to take is to ascertain the result of division of all the parts of the cord except the posterior columns. Such an experiment has been frequently performed. Without mentioning the results obtained by Stilling, Schiff, and others, I may state that Brown-Séquard has found that when the whole of the spinal cord, except the two posterior columns, is divided transversely, say, for instance, in the dorsal region, the posterior limbs become deprived of sensibility. This experiment affords another proof that the posterior columns are not the channels for the transmission of sensitive impressions to the brain, and other observations seem to show that the lateral columns of the cord have no part in the function.

A variety of experiments it is unnecessary to detail, which consist in dividing every part of the spinal cord except the central grey matter, tend to prove that this central grey matter is the principal conductor of sensitive impressions to the brain; but there are some facts which indicate that it is not the only portion of the cord thus employed, and that the anterior columns have a certain share in the function, for it has been found that, when the whole of the grey matter is divided, the anterior columns being left, sensibility, which disappears immediately after the operation, after a time returns to a slight extent.

A very important question arises, as to what part of the grey matter is the conductor of these sensitive impressions. Experiments seem to show that the central portion, that connecting the cornua together, is the most concerned in the function. We learn from the researches of Lockhart Clarke, Schroeder Van der Kolk, and others, that the grey matter consists in part of ganglion-cells, and in part of nerve-fibres, the latter of which form longitudinal columns, surrounded by grey substance. No proof, however, exists that they pass continuously up to the brain, and Lenhossék maintains that they are communication-fibres between different ganglion-cells. If any of the fibres are continued on to the brain, they probably take part in the function of transmitting sensitive impressions. Although the posterior columns of the cord appear to have no share in transmitting sensitive impressions to the encephalon, yet there is proof that the fibres of the posterior roots pass through them to enter the grey substance; for, when a transverse section of these columns is made, the nerve-roots attached to the inferior segment are highly sensitive, a fact which seems to be due to some of the fibres of those roots passing downwards to reach the grey matter. This experimental observation entirely accords with Lockhart Clarke's anatomical researches previously alluded to.

The general conclusions which may be deduced from experiments and observations which I cannot detail, are that the conductors of sensitive impressions, when they reach the spinal cord, either at once terminate in the grey matter, or else, passing obliquely for a short distance, some upwards, and some downwards, ultimately terminate therein.

Another important question, which seems not to have occupied much of the attention of physiologists, but which appears entirely set at rest by recent experiments, is that which relates to the decussation of the conductors of sensitive impressions in the spinal cord.

It was the universally received opinion that no such decussation took place, and therefore that the sensitive impressions must cross in the encephalon. Sir Charles Bell tried to discover the seat of decussation, and he imagined it to be above or near the crossing of the pyramids; but he gave no proof in support of his idea.

The section of a lateral half of the spinal cord is the experiment most calculated to give us proof of the decussation, or otherwise; and such an experiment has been frequently performed; but unfortunately no observations, until recently, were made as to its effects on the sensibility of parts supplied with nerves behind the section. Schœps Van Deen and Stilling found that sensibility was not destroyed on the side of section; but they did not recognise the condition of the opposite side.

We are indebted to Brown-Séquard for the solution of the question we are now considering, and for the discovery of the fact that there is a decussation in the spinal cord of the conductors of sensitive impressions. The following are the results of his observations. He has found in mammals that, when a section of a lateral half of the cord, including the posterior, the lateral, and the anterior columns, with all the grey matter of one side, is made, sensibility seems much increased on the side of section, and much diminished or entirely lost on the opposite side. In fact, there is hyperæsthesia on the side on which the division is made, anæsthesia on the other.

But another experiment may be performed to prove that decussation takes place. It is one which was performed by Galen, and was repeated by Flourens; but its effects on sensibility were entirely overlooked by both. It consists in making a careful division of the cord—say of the lumbar portion—into two lateral halves. If such an experiment be well performed, only the commissures of the cord are divided, and all the longitudinal elements are left uninjured. A striking result is then

obtained: the voluntary movements still exist in the posterior limbs, but sensibility is entirely lost in them. This loss of sensibility must depend on the section of the sensitive conductors, as they cross the median plan of the cord.

From a vast number and great variety of experiments, to the details of which I must refer all who desire to investigate this subject, it appears that we may consider it as an established fact, that the conductors of sensitive impressions make their decussation in the spinal cord, at a short distance from the point of insertion of the posterior roots of the nerves. Experimental investigation seems to show that this decussation is complete in the lower mammalia, and pathological facts appear to confirm the view with regard to man.

There are certain pathological phenomena of great importance, hitherto difficult of explanation, on which much light has been thrown by recent experiments. It is well known that considerable alteration of the spinal cord may exist without loss of sensibility ensuing. It appears that, when the spinal cord is divided transversely, and the section reaches the grey matter and divides a portion of it, sensibility becomes diminished in every part of the body behind the seat of section, and not more so in one than in another; and a partial section of one side is followed by diminution of sensibility on the opposite. From these results, it would appear that, however small be the portion of grey matter remaining, it is capable of transmitting a certain amount of sensation from all parts of the body behind it. We here have an explanation of the fact so often seen in cases of disease of the spinal cord—a persistence of sensibility, when, after death, we find a large portion of the cord destroyed.

From the consideration of the parts in the spinal cord, which are the agents for transmitting the sensitive impressions to the brain, we naturally pass to those concerned in the transmission of the orders of the will to muscles.

The theory of Sir Charles Bell, that the anterior columns were destined for this function, rests on no proof afforded by that distinguished physiologist; but many experimenters have stated that a section of these columns produces paralysis. Stilling has, however, denied this. The experiments of Brown-Séquard tend to show that a section of the posterior columns does not affect the voluntary movements, but that a division of the whole of the cord except the posterior columns produces complete paralysis. He further states, that a section of the posterior half of the cord, including the whole of the central grey matter, is followed by an almost total annihilation of voluntary movement; and if the anterior horns of the grey matter be divided as well, the loss of power seems complete. This would lead us to infer, that the anterior columns have but little or nothing to do in the transmission of the orders of the will to muscles; but then, on the other hand, it is found that a section of these columns alone is followed by an almost entire loss of power. From these observations, we are forced to the conclusion that all parts of the cord, except the posterior columns, are more or less concerned in transmitting the orders of the will; but this remark does not apply to the upper part of the cord, for it appears that, near the medulla oblongata, most of the voluntary conductors pass in the lateral columns and the grey matter between the lateral and anterior columns.

The results I have mentioned, as following the section of the anterior columns of the cord, in some measure agree with the views, founded an anatomical grounds, of Schroeder Van der Kolk, who is of opinion that the fibres of these columns terminate in the ganglion-cells of the grey matter, from which the motor nerves arise; and that they transmit the influence of the will to the ganglion-cells, which then act on the nerve-fibres.

If we compare the results obtained by vivisections of the lower animals with those which pathological changes in the spinal cord have produced in man, we find a remarkable confirmation of the theories which have been advanced. A large and very admirable selection of cases has been made by Brown-Séquard, which tend to throw much light on the functions of different portions of the cord. And first, with regard to the posterior columns, it has been found that, whether these columns are injured by a wound; whether they are submitted to pressure by a tumour or by a piece of bone; or whether their structure is to a slight extent destroyed,—the sensibility of the parts behind the seat of injury remains. Hyperæsthesia even has been known to exist, just as takes place in the lower animals after section of the columns.

These cases also prove that the grey matter is the chief channel for transmission of sensitive impressions. Several cases are recorded in which sensibility was persistent, where *post mortem* examination revealed extensive softening of the white substance, the grey matter being apparently in a normal state; and, on the other hand, cases are mentioned which show that destruction of the grey matter, the white substance being unimpaired, is attended with a diminution or loss of sensation.

Pathological facts afford abundant evidence of the decussation of the sensitive conductors in man. On this point, I shall content myself with remarking, that a careful examination of a considerable number of reported cases appears to prove that such a decussation takes place near the spot at which the fibres enter the cord; and that, having decussated, they pass upwards chiefly in the grey matter to the encephalon. Observation shows that no decussation of sensitive fibres takes place in the pons Varolii; all have decussated before reaching that spot. Disease, or injury, or pressure of the pons, medulla oblongata, or medulla spinalis, produces a loss or diminution of sensation on the side opposite the affection.

I have alluded to the circumstance that experiments seem to show that, at the upper part of the spinal cord, the anterior columns do not transmit the mandates of the will. Anatomy and pathological facts tend to confirm this. The decussating fibres of the anterior pyramids are almost entirely derived from the lateral columns of the cord; and thus there is no decussation of the anterior columns. Notwithstanding this, an alteration of one side of the medulla oblongata, above the decussation, produces paralysis of the opposite side; whilst an alteration of one side of the cord, below the decussation, produces paralysis of the same side.

Dr. Brown-Séquard has attempted to prove that the various kinds of sensitive impressions have different conductors in the spinal cord; and also that the nerve-fibres employed in transmitting to the cord the sensations of *touch*, *tickling*, *pain*, *heat*, and *cold*, and the sensation which accompanies *muscular contraction*, are as distinct one from the other as they all are from the fibres of the motor nerves. He mentions several cases in which some of the sensations were absent whilst others remained; where, for instance, there was loss of feeling of *tickling* or *contact*, persistence of feeling of *pain;* loss of *tactile sensibility*, of the faculty of feeling *pinching*, *pricking*, and the passage of a *galvanic current*, and persistence of power of feeling *cold* and *tickling*. These certainly are very remarkable cases; but, before we can admit the independence of the nervous fibres conveying these various sensations, very strong evidence is necessary. I would venture to submit, that it is not at all improbable that a single nervous fibre may have the power of transmitting the various kinds of sensations alluded to, depending upon the nature and the power of the stimulus by which it is excited, and the locality on which the stimulus acts.

And here I may, perhaps, be allowed to say a word with regard to those nerves which are supposed to be solely employed as the excitors of reflex action; the existence of which is maintained by Schroeder Van der Kolk on anatomical grounds. The great bulk of evidence which microscopical observations afford us, seems to me to show that the nerve-fibres of the roots of the spinal nerves terminate in the grey matter of the cord, and that none of them are continued on to the brain; and this view, which was originally promulgated by Dr. Todd, appears to receive confirmation from the experiments I have detailed. According to this view, the grey matter of the spinal cord receives the impression from the centripetal nerves, and either carries it to the encephalon, to produce there a sensation, or, if the communication with the encephalon be cut off from any cause, the impression does not result in sensation, but may give rise to a reflex movement, from the independent action of that part of the spinal cord which received the impression.

With respect to the existence of nerve-fibres for the special function of the excito-motor system, as I have previously stated, no absolute proof exists; and, although it may be somewhat contrary to our notions to believe that a nerve-fibre is capable of performing the double function, of conveying at one time a sensitive impression to the nervous centre, and at another, a stimulus which produces a reflex motor act: yet there seems to me to be nothing improbable in the view, for the impression made is the same, whether it result in a sensation or a motor action; the difference is in the condition of the nervous centres, which, in one instance, allow of its transmission to the sensorium, and in the other do not. The impression made on a centripetal nerve, and received by the cord, would become a sensation were there nothing to prevent its transmission to the brain; but this impediment existing, the impression results in a reflex act, which would have been controlled had the impression been felt.

A view has been advanced by a physiologist, to whose opinion

much attention is due, that the spinal cord is not only a centre of motor action, but also of sensation and volition; and that decapitated animals exhibit phenomena which are not explicable except on the supposition that sensations are perceived, and that these give rise to movements which are guided and controlled by the will. This view seems to me to be open to very serious objections; and all the phenomena to which Mr. Lewes has referred in support of his view, appear to me to be simply instances of the excito-motor action of the spinal cord.

Although it is now generally agreed amongst physiologists that the spinal cord is an independent centre of nervous action, and that one part can act without the other; yet it is still maintained by some that the reflex power, which the cord possesses after it has been separated from the encephalon, is the remainder of an influence derived from the encephalon before its separation. In opposition to this view, it has been shown that, in an animal in which the spinal cord is divided, and which has been subsequently killed by cutting the carotid artery, after the reflex action has ceased, it will return if blood be injected into the body so as to restore the circulation in the cord; thus showing that the reflex faculty is a vital property of the cord, depending on the organisation of the part. The reflex faculty often remains after considerable injury has been done to the spinal cord; for instance, when it has been crushed,—a point of some practical importance as tending to show that, although reflex action may exist after a fracture or luxation of the spine, the cord may be very far from sound.

[*To be continued.*]

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

CASES OF ABSCESS TREATED BY MEANS OF CHASSAIGNAC'S DRAINAGE-TUBES.

Under the care of W. Bowman, Esq., F.R.S.

We are indebted to Mr. Atchley, house-surgeon to the Hospital, for the notes of the following cases, which are reported, not account of any peculiarity in themselves, or any brilliancy of success, but in order to bring before our readers a plan of treatment which is now extensively pursued, especially at Middlesex and King's College Hospitals, in cases of large chronic abscesses, whether depending on diseased bones or on other causes. The method is extremely simple, and is quite devoid of pain. It consists merely in passing into the abscess a tube of India-rubber, perforated with holes at intervals, and one-sixth or one-fourth of an inch in diameter. When a counter-opening can be established, it is, of course, an advantage; and then the tube is passed from the lower to the upper opening. The advantages of this plan in the treatment of empyema was recently insisted upon in a paper by Dr. Stewart and Mr. De Morgan, read at the Royal Medical and Chirurgical Society. In M. Chassaignac's practice, we understand that the formation of a counter-opening is considered as an essential part of the treatment; but in London this is not held to be indispensable, as it is found that, in abscess depending, for example, on disease of a deep-seated bone, the presence of an agent which ensures a direct communication between the diseased bone and the surface, without blocking up the wound or opposing any obstacle to the escape of the pus (which, on the contrary, it facilitates), exercises an important influence in preventing the formation of sinuous channels amongst the muscles of the limb, and renders the subsequent operation more easy, and perhaps enables the surgeon to perform it sooner. If the pressure of the lips of the wound closes the mouth of the tube, and thus prevents the escape of the discharge, it is the practice at this Hospital to slit up the part external to the wound, and tie down the two ends in different directions, whereby the mouth of the tube is kept permanently dilated. We are informed that the foreign body in the wound does not appear to set up any irritation.

Case I. John Mercer, aged 43, was admitted on May 18th, under Mr. Bowman's care, on account of an abscess on the right side of the chest. It was situated over the lower ribs, and could not be distinctly proved to communicate with the chest. It is not necessary for our present purpose to go minutely into the history or symptoms of the case with reference to this. It is sufficient to say that, the nature of the swelling being very evident, it was punctured on May 23rd; and a probe was at first passed into its cavity every day. As, however, the matter bagged, it became necessary to enlarge the puncture by an incision about three-quarters of an inch in length, and the abscess was treated in the usual manner; but, as the pus still continued to collect, a counter-opening was made on July 11th, and a drainage-tube passed from one opening to the other. This afforded a ready exit for the discharge, which improved from a thin serous fluid to laudable pus; and he continued comfortable in respect of this abscess. Meanwhile, a few days after his admission, he was found to be labouring under pain over the upper third of the right fibula; and, on examination, considerable swelling was found in this part, consolidating all the tissues of the leg, but without distinct fluctuation. This, however, soon made its appearance (without any symptom besides pain in the part); and then (June 1st) a bag of fluid was formed in the situation of the peronæi muscles, which could be rolled upon the bone beneath them. A longitudinal incision, about three-fourths of an inch long, gave exit to some pus mixed with blood, which seemed to be infiltrated in the substance of the muscles. On June 20th, as matter was presenting below the orifice, an opening was made at this spot, four inches below the original incision, and a drainage-tube of small size was passed from one to the other. This, however, was not strong enough to resist the pressure of the parts, and consequently was liable to get closed. A thicker and stronger one was accordingly made use of. This latter, however, was also in its turn obliterated by the pressure of the parts, and matter again bagged below the lower opening. The tube was accordingly passed through at this lower level, being now split up outside the wound, and its halves bound down, so as to keep the cavity of the tube permanently open by traction on each of its sides. This was done on July 4th, and seemed quite to succeed; so that in a few days (July 13th) it was found feasible to withdraw the tube from the lower opening, as it was granulating and seemed inclined to heal, and pass it into the second. Pressure was at the same time made below this by strips of amadou plaister and a bandage, to obliterate the lower part of the cavity. When last seen (Aug. 4th), the tube had been withdrawn, the parts appeared quite consolidated, and the wounds were nearly healed. He was in much better health, and the abscess in the side seemed to be contracting.

Case II. Joseph Patrick, aged 36, was originally admitted under the physician for pain in the back, supposed to be of a rheumatic nature; and was sent down to the surgeon's ward, when it was found that this pain depended on caries of the vertebræ, and was accompanied by psoas abscess. The abscess was then of about the size of an orange, situated at the inner part of the right thigh. It was opened on June 13th, by an incision about half an inch in length, from which about four ounces of a creamy-looking pus escaped. A drainage-tube, one-sixth of an inch in diameter, was introduced, and a poultice applied. This tube was kept in without any bad symptom, being removed occasionally to be cleaned; and all connected with the abscess went on well. A probe passed upwards eight inches from the wound to a point about an inch above Poupart's ligament. It was necessary to put on pressure in the femoral triangle, as the matter had formed a pouch there, into which, as he lay with the knee raised, it used to regurgitate. The abscess has continued steadily to contract, and the probe does not now (Aug. 5th) pass above the level of Poupart's ligament. He can also now raise the limb, which he could not do before. There is now some pain and hardness in the opposite thigh.

Case III. Elizabeth Hart, aged 21, was admitted under Mr. Bowman's care on June 12th, on account of pain and effusion into the knee-joint, depending apparently on an acute attack of synovitis. By active treatment, however, the effusion in the joint was reduced; and then (June 20th) swelling showed itself on the outer side of the femur, external to the knee-joint, in which deep fluctuation could be felt. This was opened by an incision an inch and a half in depth, and led into a large suppurating cavity, reaching half-way to the trochanter. She complained of acute pain for some days after the opening, which, however, gradually decreased as the discharge continued. An elastic tube was introduced a few days afterwards, and the part soon became quite easy, so that she could flex the knee without pain. On July 11th, Mr. Bowman again ex-

amined the part, and found the cause of the mischief in a piece of necrosed bone at the back of the popliteal space of the femur, which was quite firm. A drainage-tube of small size was passed down to this, in order to obviate any more bagging of the pus; and the discharge soon became very slight in quantity. On July 27th, she was discharged, relieved for the present, to come again at a future opportunity, in order to have the dead bone removed.

UNIVERSITY COLLEGE HOSPITAL.

I. HYDRARTHROSIS OF THE KNEE: BONY PLATE FORMED IN THE SYNOVIAL MEMBRANE.

Under the care of J. Erichsen, Esq.

Wm. W., aged 50, was admitted, under Mr. Erichsen's care, on December 2nd, 1858, on account of disease of the right knee-joint. It seemed that, two years previously, his knee swelled, and in about a month's time increased to a very large size. The pain then became intense at intervals; and since that time the size of his knee has varied considerably, and there has occasionally been œdema of the leg. On admission, the joint could not be perfectly straightened. The knee measured across the patella three inches more than on the sound side, forming a fluctuating swelling, of an ovoid shape, about the size of a child's head, pretty even in outline, but projecting somewhat on its inner and under part, corresponding with the head of the tibia, and bound down by the internal lateral ligament. The patella could be felt floating at the upper surface, and rather to the outside of the tumour. On depressing the lower border of the patella, and pushing it upwards, crepitus could be felt, and smart pain was occasioned. Half an inch above and outside of the patella, a firm body could be recognised, which was freely moveable, although attached. It felt larger and thicker than the patella. This body was marked by a large and deep sulcus in the axis of the limb, across its centre. There was fluid over the lower border of this body, and in the sulcus. The skin was equally moveable over the foreign body as over the patella. There was no fluid immediately beneath it. The fluid caused the tumour to bulge at the parts where it was relieved from pressure.

The knee was painted with the caustic tincture of iodine, and his limb firmly bandaged over cotton wool as high as the knee.

He remained in the Hospital till January 20th, and was then directed to attend as an out-patient. The knee was softer and a little smaller than when he came in. His general health was at that time pretty good. He was, however, re-admitted on January 24th, with some anomalous symptoms; and was shortly afterwards transferred to the physician's charge, on account of epileptic fits, of which he soon afterwards died.

On *post mortem* examination, the foreign body was found to be a plate of bone, of the shape of the patella, quite thin in every part, apparently moulded to the outer surface of the condyle. The capsule was distended with fluid, which exhibited exudation-cells under the microscope. The articular surface of the femur was in great part covered with blood-red granulations, giving it a villous aspect. In some of the granulations, small deposits of bone were found. The bony plate exhibited the characters of true bone under the microscope. A separate and smaller one, of the same nature, was found below it.

II. HYDROCELE OF THE TUNICA VAGINALIS, RESISTING THE USUAL REMEDIES: CURE BY SETON.

Under the care of J. Erichsen, Esq.

Christopher J., aged 20, was admitted, under Mr. Erichsen's care, on February 16th, 1859. About ten years before, he received a blow upon the right testicle, which caused him to faint. He was very weak for some time afterwards, and "found that the testicle had increased to twice its natural size". About two years ago, in jumping on horseback, he again injured the same testicle. This was followed by similar symptoms. He felt weak, and there was a swelling in his scrotum, which "was at first soft, but gradually became hard". Two months before admission, he strained himself in lifting a weight; since which time he experienced a sensation of great heaviness in the testicle, and increased weakness. He had also, on admission, a discharge from the urethra; but he denied that it was gonorrhœal. The swelling in the scrotum proceeded from hydrocele.

The discharge was treated with a weak injection of chloride of zinc; and bicarbonate of potash with henbane was given.

On February 28th, a silver wire was introduced through the cavity of the tunica vaginalis, the fluid having been drawn off. The first wire was allowed to stay in a week, and then a second was put in, the first still remaining. Both were withdrawn on March 9th. They caused a good deal of inflammation in the scrotum; but on March 25th the hydrocele had refilled, and it was accordingly tapped and injected with tincture of iodine. The fluid, however, again formed; and there was no appearance of a radical cure. Accordingly, on April 13th, a silk seton was introduced. This caused great pain during the night, which was not relieved by laudanum; and the testicle became greatly inflamed. The seton was removed thirty hours after its introduction, and about eight ounces of blood were drawn from the veins of the scrotum, with much relief. The patient was also put upon tartar emetic and low diet. He went on well after this; and on May 6th it is stated that the testicle was much diminished in size, though still hard and rather painful. There was a little purulent discharge from the track of the seton-threads.

The man was soon afterwards discharged, and was seen about the latter end of June, quite well.

III. COMPOUND DISLOCATION OF THE WRIST: DISLOCATION OF THE SHOULDER.

Under the care of J. Erichsen, Esq.

William H., aged 50, was admitted on April 23rd, under Mr. Erichsen's care. He had had his right arm drawn into the machinery of a steam-engine in motion, and was brought to the Hospital shortly afterwards. On his arrival there, at 6 P.M., it was found that there was a compound dislocation of the wrist, the carpus being thrown backwards; the flexor tendons of the wrist had been ruptured, and the soft parts torn away from the front of the forearm to the extent of three or four inches, leaving a large cavity amongst the muscles, which were much lacerated, in which three or four fingers could be placed. Neither the radial nor ulnar arteries could be seen pulsating; so that it was apprehended that they were lacerated. The right shoulder-joint had been dislocated, and the head of the humerus thrown into the axilla. There was a good deal of ecchymosis along the anterior fold of the axilla, and no pulsation could be felt in the brachial artery. The limb was cold and numb. Still the patient did not appear to be suffering, and made no complaint. Slight attempts only at reduction were made on his admission by the house-surgeon; and then the limb was steadied with a splint, the patient put to bed, and Mr. Erichsen sent for. On Mr. Erichsen's arrival, he found that the patient had lost no blood from the wound, but that the ecchymosis had greatly increased. On consultation with his colleagues, Mr. Erichsen determined to administer chloroform, reduce the dislocation, and then be prepared to amputate at the shoulder-joint, should pulsation not return in the brachial artery on the reduction of the head of the bone; but if it did, then merely to remove the hand. The dislocation of the humerus was reduced accordingly, and this had the effect of immediately restoring the pulsation of the brachial artery. No bleeding, however, occurred from the wound. The forearm was then amputated by the flap operation. The operation was followed by slight symptoms of delirium tremens, and he had a slight attack of erysipelas. This yielded, however, to appropriate remedies. The shoulder was the seat of very great ecchymosis.

Nothing remarkable occurred in the further progress of this case. One of the ligatures remained on for a long while. On July 5th, it is noted that the patient is quite well, and the wound united.

Remarks. The curious feature in this case was, that the pressure caused by the dislocated head of the bone on the axillary artery—a complication probably existing frequently in dislocation of the shoulder, but not found, because not looked for—threw at first some doubt on the nature of the accident. The injury was of such a nature as might easily have resulted in a rupture of the axillary vessels; in fact, a case of rupture of the popliteal vessels from a similar cause, under Mr. Cæsar Hawkins's care, was recently reported in this Journal. Fortunately, the present injury was not of so grave a nature; and beyond the loss of the hand, which the injury of the soft parts rendered inevitable, he recovered without further mutilation.

WEST DERBY UNION HOSPITAL.

CASE OF OPIUM POISONING.

By Edward Lister, Esq., Surgeon to the Hospital.

Mary Ann G., aged 30, was admitted into the above hospital, on April 5th, 1859, suffering from the effects of an over-dose of laudanum. For some time before, she had been in an unsettled state of mind, and about half-past four o'clock on the above date, she sent a child to a neighbouring druggist for two shillings worth of laudanum; the whole of which she took about five o'clock. She then went up stairs, and was found some time afterwards lying on the floor in a state of unconsciousness. A surgeon residing in the neighbourhood was sent for at about half past seven or eight o'clock; and the stomach-pump and emetics were used, no doubt, with some benefit. On my seeing her, however, in the hospital about nine o'clock, she was in a state of total insensibility; the pupils were firmly contracted, and the retina was quite insensible to the stimulus of a lighted candle; the breathing was laboured and stertorous; the pulse slow and feeble; and all efforts to rouse her appeared useless. The stomach-pump, emetics, strong liquor ammoniæ and other stimulants, were used; the shoulders, back, palms of the hands, and soles of the feet, were flogged with wet towels; four powerful magnetic batteries were also brought into use, and applied to the spine and other sensitive parts of the body. The insensibility continued until about one o'clock A.M., when she gradually began to show signs of returning consciousness, and answered questions in monosyllables. Vomiting was occasionally excited, which appeared to be of much benefit. She was then kept constantly moving about; but if allowed to rest, she would immediately return into a lethargic condition.

At three o'clock, the sensibility had so far returned, that I considered she could be left with safety, giving strict injunctions to the nurses to keep her awake until I saw her again. She had a shower-bath given about nine o'clock, which had the effect of refreshing her considerably.

On visiting her again at ten o'clock, she was much better; and on the following day was quite well. A constipated condition of the bowels with headache were the only remaining symptoms.

The druggist who supplied the laudanum stated that there were two fluidounces. The husband saw her swallow it; but, being in a state of intoxication, he did not succeed in getting any part of it from her, nor did he give any alarm, and she was accidentally found by a woman coming into the house two hours afterwards.

The principal point in this case appears to be the length of time such a large quantity of laudanum remained on the stomach, and recovery afterwards taking place; and I am of opinion that her life was saved by the continued use of the galvanic batteries.

Original Communications.

REMARKABLE CASE OF VARICELLA IN AN ADULT.

By W. F. Cleveland, Esq.

Mrs. T., aged 35, of fair complexion, highly excitable, had been suffering for about a week from slight gastric derangement, when she was seized in the middle of the day, May 21st, 1859, with shivering, which did not entirely leave her until she went to bed at night.

Next day she presented the usual symptoms of a smart febrile attack, with severe headache and drowsiness. As the bowels were rather confined, an alterative pill and black draught were prescribed; and, after this had acted, she was to take a saline diaphoretic mixture every four or six hours. There was now redness and slight fulness of the face.

May 23rd. She complained of great itching about the chest and abdomen, for which a lotion, composed of sulphate of zinc dissolved in camphor mixture, was applied with benefit. There were now observed numerous small red protuberances on the skin. As the bowels had not been freely relieved, she was ordered to repeat the black draught.

The same evening several vesicles, filled with white transparent lymph, appeared on the chest, abdomen, and face; and the opinion that the case was one of varicella was now given. The eruption was out freely on the scalp.

May 24th. The eruption was much more copious, and consisted mostly of pustules. The eruption was now also on the tongue, gums, and lining membrane of the cheeks; also on the meatus auditorius externus of both ears. She complained of great pain in the ears and on each side of the neck. The eruptive fever was less.

May 25th. The face was so swollen and disfigured, and there were so many pustules, that some doubt whether the case was not one of variola was felt. My friend, Dr. J. Ridge, was therefore requested to meet me in consultation; and after careful examination, he confirmed my view that the patient had an unusual attack of varicella. A saline draught was continued three times a day. The eruption was now out on the arms and legs; but only slightly in comparison with the face and body. The pustules outnumbered the vesicles.

May 26th. Some of the pustules were beginning to shrink and pucker. Several on the face, chest, and abdomen, were confluent. I now counted the vesicles and pustules on the face, taking half of it at a time. On one side there were a hundred and twenty of these eruptive spots, and on the other side eighty.

May 27th. There were some fresh vesicles on the arms and legs; but the eruption generally was beginning to scab. She complained of feeling very weak. She was ordered to take wine and beef-tea freely, and a fourth part of a mixture, containing sesquicarbonate of ammonia and chloric ether, three times a day.

June 21st. There are six or seven rather deep pits on the face where the pustules were confluent. In all other respects she is quite recovered.

She had been vaccinated in infancy, and the ordinary cicatrices were apparent.

Remarks. Chicken-pox is by no means common in the adult. Dr. Watson writes, "The disorder is almost peculiar to infants and children of tender years. Willan has, however, described one unambiguous example in a gentleman thirty years old; and another genuine instance was seen by Dr. Gregory at the Small-pox Hospital, in the person of an adult female."

Some may entertain a doubt, as I did myself on the third day, whether the case was not one of modified small-pox (varioloid?); but when we regard the rapidity with which the pimples were converted into vesicles; the presence throughout the eruption of vesicles containing clear transparent lymph, which is said never to be the case in varioloid; the early period at which the pustules began to pucker and scab; the absence of the depressed centre so characteristic of the variolous vesicle; together with the entire absence of pain in the loins, and the disproportionate amount of constitutional disturbance prior to the development of such a copious eruption, as well as the subsequent progress and termination of the case, the evidence in favour of varicella seems to preponderate.

It is generally laid down by authors that chicken-pox differs so greatly from small-pox in not attacking the face. Dr. Heberden is said never to have been able to count more than twelve eruptive spots; but in the case I have detailed there were at the least two hundred. It may be mentioned that at the time this case occurred small-pox prevailed in the neighbourhood; but I had not attended any cases myself, nor had this lady been in communication with anyone suffering from the disease. It may also be worthy of note that there had been an offensive smell from a drain for some weeks past in the room chiefly inhabited by my patient, and as the temperature of the weather had increased, she was obliged to go into another house while the necessary repairs were progressing. It was just after removing into lodgings that she was taken ill.

Now, for those who hold the opinion that varicella is a perfectly distinct disease from variola, and who look upon this case as being a genuine, albeit a severe, instance of a mixed variety of the former malady; it may be a question of interest whether a specific miasm may have been included in the offensive emanation from the drain.

23, Beaufoy Terrace, W.

ON SOME OF THE PRINCIPAL EVENTS IN THE CLINICAL HISTORY OF ASTHMA.

By HYDE SALTER, M.D., F.R.S., Fellow of the Royal College of Physicians, and Assistant-Physician to Charing Cross Hospital.

VIII.—The Asthmatic Physique; its Distinctiveness; its Characteristic Gait, Physiognomy, and Configuration; Rationale of the Asthmatic Spinal Curvature; Peculiar Chest of young Asthmatics.

Asthma is a disease that stamps on the body its own indelible marks. So characteristic and unmistakeable is the physique of asthma, so plainly, so legibly does the asthmatic bear about with him the impress of his disease, that any one who has once observed it will never fail to recognise it, and would be safe in basing a diagnosis on its unaided testimony. In confirmation of this, I may mention a circumstance or two that have occurred to myself.

I frequently meet in the streets of this city a distinguished savant, who is a great sufferer from asthma, and if I were to meet him at Pekin I should know him to be an asthmatic. The first time I saw him, I was walking behind him, but immediately recognised the characteristic configuration. So certain did I feel of it, and so curious was I to see if I could derive from his face any confirmation of my impression, that I overtook him, and as I passed, saw at once who he was, from his resemblance to a photograph I had seen of him; and then I remembered what I had heard about his malady. This previous knowledge, however, could have had nothing to do with my impression, as at first I had no idea who he was, in fact had never seen him before.

On another occasion, I was going down to Brixton in an omnibus, and sitting next to me was a gentleman, whose figure and appearance very much struck me. He looked well in the face, was breathing without the slightest difficulty, and was engaged in animated conversation with his next neighbour. But I felt sure he was an asthmatic; he was exceedingly thin, his shoulders very high, and his back so rounded, that though quite a tall man, he sat lower, a good deal, than I did. He left the omnibus before me, and in walking his stooping gait and rounded back were still more conspicuous. When I left the omnibus, I asked the conductor "If he knew that tall, thin, stooping gentleman" that got out at such and such a place. "Oh yes, he said," it is Mr. — of —. "Do you know," I asked, "if he is subject to a complaint in his chest, that gives him fits of difficult breathing?" "Oh! yes," he replied, "and has been for a long time—for years; sometimes he can hardly walk to the omnibus."

Here then are two cases in which I recognised the presence of asthma, merely by the changes in the physiognomy and configuration which it produces. I have done the same thing in several other instances. I often say to myself as I pass an individual in the street with the characteristic configuration—"You are an asthmatic."

What then is this unmistakeable impress of asthma? How is it to be described? In what peculiarities does it consist? Partly those of the figure, partly those of the face. In configuration, the asthmatic is round-backed, high-shouldered, and stooping; but while the body is bent forwards the head is thrown back, and buried, as it were, between the elevated shoulders. There is no movement or pliancy in the body, but the chest is fixed and rigid, like a box, and from it the arms depend, hanging motionless, or swinging like two pump-handles, rather thrown back, and bent at the elbows. In walking, the legs seem the only part of the body that moves. From the roundness of the back, the asthmatic, for his height, always sits low. Those who have suffered from asthma long, are almost invariably thin, often to a degree amounting to emaciation; their limbs are attenuated and bony, every rib can be counted, and their clothes hang loosely on them. From the entire absence of subcutaneous fat, the superficial veins are very conspicuous; though it is possible that venous obstruction, from impeded circulation through the lungs, may have something to do with their prominence,—that it may be, in fact, slight general varix. The prominence and tortuousness of the veins is sometimes remarkable, especially in old asthmatics. The hands of an asthmatic are very characteristic; they are cold, blue, thin, and veiny. This blueness and coldness of the extremities is partly due, no doubt, to the feebleness of the circulation in them, but in part, especially if there is some permanent dyspnœa, or the patient is at the time suffering from an attack, to imperfect decarbonisation of the blood.

But this blueness of surface is not confined to the extremities; the complexion of the asthmatic is often distinctly cyanotic—a slight but perceptible duskiness. Where, however, there is no dyspnœa between the attacks, and the intervals are long, especially in young subjects, I do not think the complexion is perceptibly affected.

The face has generally rather an anxious expression, and often bears an aspect of age greater than the real age of the patient; even if not dusky, it is always pale, and like the rest of the body, is thin—the cheeks are hollow, and the lines of the face are deeply marked. The mouth is generally open, and the jaw rather hanging. There is a peculiarity about the eyes to which I would call particular attention, to which I often *have* directed attention among the patients at the hospital, and on the strength of which alone I have frequently diagnosed asthma; they are turgid, watery, and prominent. I believe this to depend, like the enlargement of the superficial veins, upon venous obstruction; the turgidity is that of the veins of the conjunctiva; the wateriness is due to an unusual amount of mucus and tears, which the engorged mucous membrane and lacrymal gland pour out, while the prominence is due to the turgidity of the veins of the orbit. Wherever I find this appearance of the eyes in connexion with chronic asthma, I look out for dilated right heart.

The asthmatic's voice is often very peculiar; it is feeble, and slightly hoarse and rough; he speaks as a healthy person would speak, if he were to expire as long as he could and then begin to speak,—as if he were making use of the last breath in his lungs; and it is indeed to the small respiratory resource that he has for speech that this feebleness and roughness of the voice is due. His sentences are short, and frequently interrupted by a single dry cough.

Many of the external characteristics of asthma that I have enumerated, such as the gait, the dusky complexion, the eyes, the voice, will be seen at once to be those rather of chronic dyspnœa than of asthma, and I would so far qualify their value as diagnostic signs. Indeed, their value is rather generic than specific. In the purest cases of spasmodic asthma, in which there is no trace of dyspnœa in the intervals, they are the least marked, and are the most conspicuous in those which are complicated with some chronic bronchitis or bronchial congestion, so that I look upon their absence as a good sign, as a sign that the lungs are sound and unscathed; and it is because asthma seldom exists long without producing such changes as permanently embarrass the breathing, that these changes in the physiognomy and configuration come to be signs of asthma; they are just as much a part of its clinical history as those internal changes in the lungs and heart, of which they are the sure sign and accompaniment. I have, however, seen the asthmatic physique very strongly marked in some cases where the lungs were organically sound; but these were always cases where the paroxsyms were very long, lasting for days or weeks, so that the efficient cause was in continued operation for a long time; or else they were cases in which the asthma had been very severe in childhood, when the figure was forming, so that it got *set* in the asthmatic shape, and, although the disease afterwards quite disappeared, the figure never recovered itself. Such cases carry a certain highness of shoulders and roundness of back with them to the end of their days.

The degree of deformity of the back is, in some cases, truly remarkable; and (although I have not examined any of the spines of these cases after death) such as I cannot but think must involve some anatomical change in the bones or intervertebral discs. The curvature is always direct antero-posterior, never lateral, and involves the middle or lower dorsal vertebræ. In one case, I have seen the angle made by the curvature almost as considerable as an angle of a hundred degrees. Now, it is certain that such a change in direction as this, almost a right angle, effected within the length of a few vertebræ, could only be produced by a great shortening of the anterior aspect of the column, involving a vertical shortening of the anterior part of its separate elements—vertebræ, or intervertebral discs, or both—converting the bodies of the

vertebræ, or the discs of fibro-cartilage between them, into wedges, as shown in the accompanying diagram.

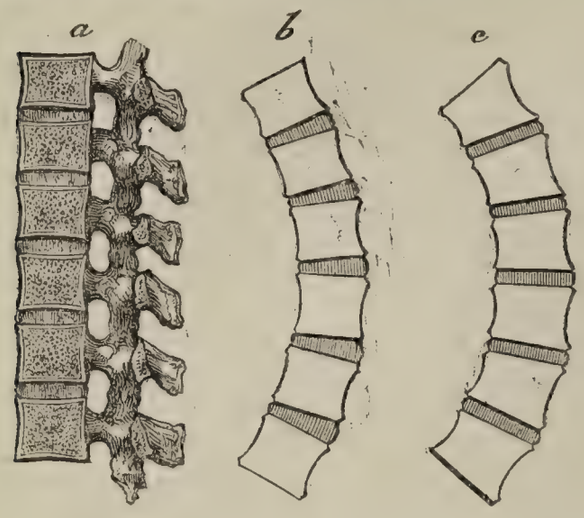


Fig. 1.
a. Vertical Section of the Spinal Column.
b and *c*. Anterior Spinal Curvature produced by absorption from pressure in the anterior parts, in the one, of the intervertebral discs, in the other, of the bodies of the vertebræ.

Now, the agency by which a disease affecting the air-passages produces this curvature of the spinal column was not very clear to me, and it was long before I arrived at what I believe to be its true explanation. It certainly was not a change of form having for its object the enlargement of the thoracic cavity, like the barrel-chest of emphysema; it was manifest that such a deformity must materially prejudice the size, the shape, and the movements of the thorax. It was equally certain that there was no spinal disease; that the curvature was the result of repeated attacks of asthma; that it was the permanent retention and constant aggravation of the asthmatic stoop which always exists during the paroxysms. But, beyond this, its nature and causation did not appear intelligible. At length I was guided to what appears to me to be its true *rationale* by the following considerations.

1. Pressure produces absorption of the part pressed on; *e.g.*, the absorption of the sternum and ribs in aneurism.

2. In stooping—*i.e.*, in forward curvature—there is vertical pressure along the anterior face of the spinal column; *i.e.*, its elements exercise vertical pressure upon one another in their anterior portions.

3. The unsupported spine tends to fall forward—*i.e.*, to anterior curvature; the whole array of the muscles of the back are erectors of it.

4. When the muscles of extraordinary respiration are engaged in extraordinary respiratory efforts, they cease to play their ordinary *rôle*: *e.g.*, the omo-hyoid muscle is ordinarily a depressor of the hyoid bone, but in asthma it is an elevator of the scapula, and powerless to depress the hyoid bone: the sterno-mastoid is ordinarily a rotator and anterior flexor of the head; in asthma, it is an elevator of the sternum, and powerless to move the head.

I infer, therefore, that the muscles of the back, being engrossed during the asthmatic paroxysm with their violent respiratory labour, cease to act as erectors of the spine. The back is, therefore, unsupported, and obeys its natural tendency to fall forward. This, I am sure, is the true explanation of the asthmatic stoop; and we see, consistently with this view, that any effort to straighten the back is immediately attended with additional distress, because the muscles are temporarily withdrawn from their respiratory exertions; and that the stooping is always in proportion to the dyspnœa—that is, in proportion to the degree in which the muscles of the back are engrossed by the breathing. The back being, therefore, left thus to itself, and falling thus forward, the anterior parts of the bodies of the vertebræ and intervertebral discs are pressed together; and if the asthmatic state is continued long, and occurs frequently, this pressure is so protracted that it produces absorption of this part of the bodies of the vertebræ, or the intervertebral fibro-cartilages, or both; they become wedge-shaped, and the temporary stoop becomes a permanent curvature.

Now, I admit that I have never examined, *post mortem*, the spine in cases of this asthmatic deformity; and I merely offer this hypothesis as a reasonable explanation. In cases in which I have seen it, there has not existed the slightest ground for believing that there was any spinal disease. In the case of William Burr, before the asthma came on, the back was straight, the patient tall; but as the asthma became worse and the attacks longer and more frequent, the stoop, which he always had during the attacks, went off less and less in the intervals, and gradually became more and more considerable, till it settled into the permanent deformity which now exists, and which, though his legs are long, has made him quite a short man. No pain is experienced in the back in these cases (except an aching of the dorsal muscles during the asthma, from their violent respiratory exertion). Moreover, the curvature is never confined to a single vertebra, or to two or three, and is never angular; it is rounded and gradual, and involves a considerable portion of the back. In such an absence of all evidence of spinal disease, and with an amount of curvature in some cases making some change of form in the elements of the spine a physical necessity, I do not see what explanation can be offered other than that I have given. If correct, it is certainly interesting; it has the interest of all facts which elucidate a *modus operandi*, and furnish the connecting links between associated, but apparently diverse phenomena.

When my mind was engaged in thinking on this subject, a case of another nature occurred to me which confirmed my ideas, and seemed to show that mere loss of power on the part of the muscles of the back was adequate to the production of anterior spinal curvature. A man in the prime of life, with an erect figure, who had never had anything the matter with his spine in any way, was seized with severe rheumatism in the muscles of the back, and the pain was so aggravated and rendered so intense by attempting to stand upright, that the muscles refused to perform their office; the unsupported spine bent forward as far as its elasticity would permit, and the back became round and the gait stooping, like that of an old man. This went on for some months, without any decided curvature appearing; at length, distinct and gradually increasing curvature manifested itself, involving the seventh and eighth dorsal vertebræ, and to such an extent as to show that their bodies must have undergone some change of shape. The patient recovered from his rheumatism, regained the power of supporting his back, and the curvature was arrested; but it has never disappeared.

If, then, loss of power of the spinal muscles, paralysed by rheumatic pain, is adequate to the production of organic curvature in the way that I have supposed, why should not their paralysis, as erectors of the spine, from their being engrossed in their respiratory action, be attended with the same result?

In young asthmatics who have suffered from their disease in infancy, I have observed a configuration of chest which I have seen, to a certain extent, in cachectic rickety children who have not suffered from asthma, but which I am not sure I have ever seen in children who have not suffered from any chest-affection. I am not sure, therefore, what share in the production of the deformity ought to be assigned to the asthma, or what to the deficient strength of the bony parietes of the chest; or whether imperfect ossification and chest-mischief are both necessary for its production. What inclines me to think that the latter cause is the chief one (or, at least, an essential one), is, that the deformity is just such as would be produced where there was an impediment to inspiration, and where violent but ineffectual inspiratory efforts were made by weak parietes—just such, in fact, as one sees in the inspiration of atelectasis or laryngitis.

In these cases, the upper part of the chest—above the fourth or fifth rib—is naturally shaped; but below that level, on each side of the sternum and along the margin of the false ribs, corresponding to the cartilages of the seventh, eighth, ninth, and tenth, the surface, instead of being convex and full, is excavated in two hollows. These hollows are bounded internally by the lower part of the sternum, which stands forward between them in a ridge, and externally, by the extremities of the ossified portions of the rib, which form a ridge on the outside. (Fig. 2.) The situation of this flattening in the thoracic parietes—its coincidence with the cartilages of the ribs—suggests the way in which it is produced, and explains how asthma might cause it. I take the method of its production to be this:—When there is any impediment to the ingress of air into the lungs—from narrowed bronchial tubes, as in asthma, or any other way—the air cannot rush in so fast as the thoracic parietes are expanded, a partial vacuum is therefore formed in the chest, and the pressure of the air within it no longer balances that of the air without. This unbalanced external atmospheric pressure

presses on the whole of the thoracic parietes equally, and drives in the most yielding; in other words, the bony ribs, raised against it by the respiratory muscles, are able to resist it, but the soft cartilaginous portions are not. It must be remembered, too, that the diaphragm is attached along the margins of all the

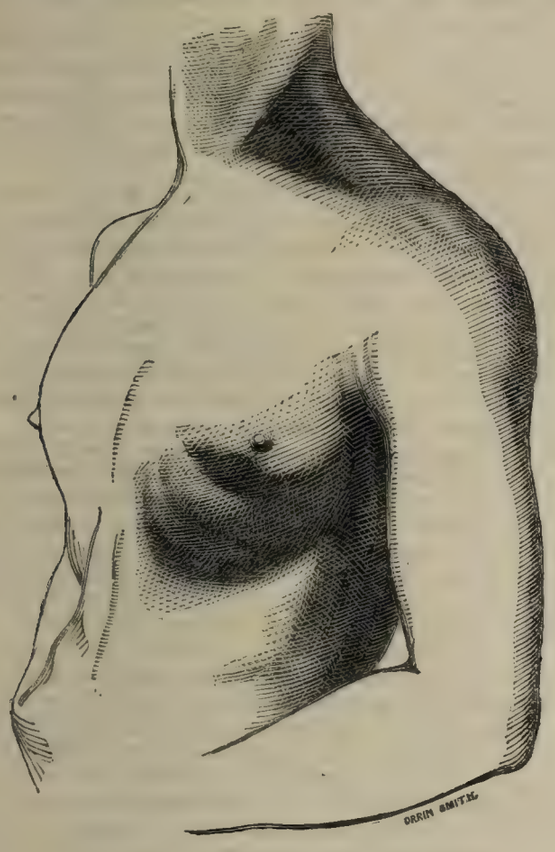


Fig. 2.
Pigeon-chest in Asthma dating from infancy.

ribs below the fifth; its strong contractions during the asthmatic paroxysms would tend therefore to draw them in, and being less opposed by their yielding cartilaginous portions, would concur in the production of this change of shape. This condition would, of course, at first only last as long as the paroxysm; but if the attacks were frequent and severe at a time when the cartilaginous portion of the ribs was considerable and the figure forming, one can easily understand how the deformity would become permanent, and how asthma would in this way produce such a change in the form of the chest as I have been describing. Still more easily could we explain its production by asthma, if we suppose asthma capable of giving rise to pulmonary collapse, in the way I have suggested.

But the actual event to which I think this form of chest directly points—the particular morbid change that it immediately implies—is pulmonary collapse. One cannot but be struck, on looking at such chests, with their exact resemblance (except in the absence of what one may call the diaphragmatic stricture—the drawing in of the attachment of the diaphragm at each inspiration, as if a ligature were put round the body) to the shape of the chest in the inspiration of infants suffering from bronchial plugging, or its established result, atelectasis, or croup, or laryngitis, or any affection that, preventing the ingress of air and the expansion of the lung, refuses to allow the parietes to follow the movements of the inspiratory muscles.* Pulmonary collapse would certainly be a more potent cause of this deformity than unaided asthma, because it is a more permanent condition and involves a more complete inexpansibility of lung, and therefore would more effectually resist the inspiration-movement of the softer parts of the parietes.

In as far, then, as this heteromorphism points to atelectasis, its occurrence in cases of asthma tends to confirm what I have already said of the tendency and sufficiency of that disease to produce this condition of lung. But remembering that it is only in cases that have become asthmatic young that this state of chest is well marked, and remembering how commonly asthma dates in the young from catarrhal bronchitis, from the bronchitis of measles, or from what has been called "whooping cough with bronchitis", which is nothing more than whooping cough in which the bronchitic portion of the malady has extended far and severely into the bronchial tree—remembering this, I say, one cannot but see it possible that, at least in many cases, the pulmonary collapse may have been produced in the ordinary way, by mucous plugging of the bronchial tubes from the primary bronchitis, and not from the consequential asthma, in the way I have suggested. I have seen this deformity strongly marked in cases where ordinary bronchitis had never occurred, and where the patient was entirely free from bronchitic complication or tendency; but then the asthma dated from whooping cough in infancy—and, in my opinion, no form of bronchitis has so great tendency to generate collapse as that of whooping cough.

Dr. Gairdner, of Edinburgh, in his excellent papers on the "Pathological Anatomy of Bronchitis", alludes to this deformity of chest as an occasional permanent result of pulmonary collapse. "In rickety individuals," he says, "it is not only more marked, but apt to become permanent, especially when such subjects are affected with any considerable or persistent bronchitic affection. In such cases, the reversed movement of the ribs is stereotyped, as it were, in the form of chest, called *pigeon-chest*, in which the sternum is protruded, particularly below, and the whole lateral region, including also the lower costal cartilages in front, flattened, or even at some points rendered irregularly concave."

One result of this collapse of the cartilages of the ribs is that they do not stand out from the sternum as they should; but decline from it at too acute an angle, narrowing and elongating the scrobiculus cordis.

Fig 2, a very good example of this configuration, is taken from a photograph of an asthmatic who suffered from his disease from the age of three months. The condition has existed from his earliest recollection, and during his childhood was much more considerable, for since he has grown up his disease has left him, and the shape of his chest has much improved.

* I have seen it strongly marked in the inspiration of laryngitis, even in adults.

ILLUSTRATIONS OF THE USE OF THE OPHTHALMOSCOPE.

By William Martin, F.R.C.S., late Professor of Ophthalmic Surgery in the Calcutta Medical College.

[*Continued from page* 624.]

Retina.

The affections called *amaurosis* and *amblyopia* will be noted together. Although these are not accurate scientific terms, they do well enough, in the present state of our knowledge, to indicate the physical symptoms and the derangement of vision attendant upon a well known condition, involving local and constitutional changes, the causes of which are, in the very large majority of cases, not ascertainable. It is only now that, since the introduction of examination by the ophthalmoscope, we are beginning to discover the local conditions upon which the derangements depend. In time, we shall be able to know something of the efficient and proximate causes of these conditions. We may even at present classify, in most instances, amaurosis as being organic or incurable, or only functional or curable; as being caused by disease of the brain or of the optic nerve, retina, or choroid, principally; and this we do chiefly by our observation of the state of the fundus, and of the condition of the optic papilla and its vicinity. If the disease, however, lie somewhere between the optic nerve and the brain, it will not be discoverable by the ophthalmoscope; and if we find changes in the optic nerve, we may not know whether this is the essential disease, or whether it may be only symptomatic of diseased brain. It may be observed, that where we find the papilla compressed and atrophied, we have one indication for concluding that the efficient cause of the disease is external to the globe. The great practical utility of this improved means of diagnosis is, that whereas formerly, in a very large number of cases of amaurosis, various heroic measures were resorted to, in the way both of depletion and stimulation, where we find a state of organic amaurosis, or have seen strong reason to suspect that such a state exists, we shall avoid any such heroic remedies. On the other hand, whereas in many cases of amaurosis, they were set down from the first as incurable, and

treatment was considered absolutely useless, we shall now find a certain proportion in which we have every reason to conclude that the cause is of a functional or curable nature, and that appropriate treatment, sometimes of an active character, in the way of depletion or stimulation, will be likely to be attended with the best results.

Amaurosis in connexion with Albuminuria. We shall see portions of the retina, generally near the papilla, covered with small patches of a vivid red colour; and in these, again, small white spots, as in retinal apoplexies. These spots enlarge as the red patch diminishes, and seem to be due to absorption of pigment at the same time with that of effused blood; and concurrently we may have signs of œdema with infiltration of the papilla, white tracts in the course of the retinal vessels; and this may end in fatty transformation of the retina. Vision will become deteriorated according as the macula lutea becomes encroached upon, and will be gradually lost altogether. Desmarres figures a case in vol. iii, p. 520. Hogg, at p. 70, notices some observations of Quadri, who found, in some cases, the retina almost entirely detached, with œdema; in other cases, great hyperæmia, sanguineous effusion, fatty deposits, etc.

Amaurosis with Glycosuria or Diabetes Mellitus. Observers have found the fundus of a pale grey colour; turbid vitreous humour; patches, the result of old ecchymoses which have become absorbed; patches of accumulated pigment; maceration of pigment. Cases are figured at pages 524 and 526, Desmarres, vol. iii.

Amaurosis with Syphilis. Two things are generally observable in eye diseases, where the constitution has become affected by a syphilitic taint. First, there are flocculi floating in the vitreous humour; secondly, a disorganised state of the retinal circulation. One or the other, or both these, in combination with other morbid changes, were observed in the following cases:—In a case of Mr. Poland's, May 31st, 1858 (see Bader, in *Ophthalmic Hospital Reports*, October 1858), there was primary syphilis. The right eye was affected with frequent inflammation; the left suddenly failed lately; there was no pain or inflammation. The fundus in both was lighted up naturally. The retina was hazy; there were no flocculi in the vitreous body. The papilla was ill defined, surrounded by a yellow halo; its surface was grey, with a greyish white centre. The vessels were irregularly dilated; at certain parts of the fundus, in the left eye, chiefly at and near the macula lutea, were brilliant yellow white and brown patches. Dr. Bader remarks, that the brilliant cherry red œdematous appearance of the fundus, with well defined optic papilla, are often met with in syphilitic persons, particularly if they have taken much mercury or quinine. Vision in this case was very bad. In a case of Mr. Wordsworth's, January 27th, 1857 (see Plates 4 and 5, *Ophthalmic Hospital Reports*, October 1858)—inflammation had existed in both eyes—the right had recovered. In the left there was, during the intervals between the attacks, only perception of shadows. The general appearances were those of hereditary syphilis. In both, the papillæ were unusually distinct; they could be seen without the convex lens. The right one was normal, but was surrounded by a brilliant white patch, well defined by a line of pigment between it and the choroidal red: in the left, the same patches appeared; the vessels were tortuous. Further from the papilla were many small patches, some with a dot in the centre. The macula lutea was normal in both eyes. It is remarked, that the patches round the papilla in the left eye were not enough to account for the bad sight. It is probable that some change has taken place in the optic nerve; and it is unusual to see the larger choroidal vessels next to the white patches. In normal eyes, it is only uniformly red. There are no positive evidences of syphilis, but many indirect signs.

Cerebral Amaurosis. The ophthalmoscopical signs are by no means satisfactory.

Acute or Inflammatory Amaurosis. Mr. Hogg, at page 117, notices a case related by Ruete, in which the amaurosis was sudden; the papilla was hazy, and there was over the centre a black spot with a grey ring; there were retinal exudations, with anæmia of the optic-nerve vessels. And, at page 123, he gives a case of amaurosis complicated with inflammation of the posterior tunics, in which the papilla in the left eye was covered by a dark spot which extended as far as the macula lutea; there was also excessive vascularity of the choroid and retina.

Traumatic Amaurosis. Mr. Hogg, at page 117, relates a case of amaurosis from injury; there were found, besides lenticular opacity and some floating bodies in the vitreous, serous effusion on the retina, and beneath it irregular white patches.

Amaurosis with Congestion. Mr. Hogg, at page 57, relates a case in which the patient had lost the faculty of seeing any but large letters, and a bright star seemed to be constantly floating before the eyes; there was no pain or inflammation. The principal appearances in both were great congestion of the retinal vessels; and the centre of the fundus, over the macula lutea, was covered by a small black spot.

Amaurosis with Effusion. Mr. Hogg, at page 58, relates a case where, with symptoms somewhat like those of glaucoma, in the right eye, the papilla was surrounded by an irregular margin and dark lines of pigment; in the left, the portion of the fundus in which most vessels were conspicuous was covered by a grey film.

Amaurosis with Hemiopia. Mr. Hogg, at page 39, notices a case in which this was the most prominent symptom. There was cupping of the papilla; a black patch over the fundus, partly covering the papilla; floating pigmental masses, etc. And, at page 40, he describes another case, in which the retina had become partly detached. At page 41, he quotes one from Anagnostakis, in which floating flocculi were observed in the vitreous humour; and a mass which sank to the bottom when the eye was at rest, which he suggests was the remains, probably, of an old hæmorrhagic clot.

Amaurosis with Anæmia. Mr. Hogg, at page 59, gives a case from Anagnostakis, in which an amaurotic state supervened upon attacks of dysentery. An examination showed much congestion of the retina, with many hæmorrhagic patches.

Amaurosis with Exudation. Mr. Hogg, at page 122, relates a case of amaurosis, partial or temporary, where he found the fundus covered in certain spots with irregular white patches. A pinkish cloud looked as if suspended before the papillæ, which were quite undefined at the margins.

Amaurosis Congenital. Mr. Hogg relates a case at page 141, in which, with congenital defect of sight, there were many signs of want of development of parts, a very pale fundus, and general want of pigment. The papilla looked unusually distinct and white. The vessels were very small.

Amaurosis with Nyctalopia. Mr. Hogg, at page 115, notices a case given by Anagnostakis, where, as a result of injury, nyctalopia came on. He found the vessels of the fundus much congested, and haziness of the tunics from effusion. Near the papillæ were three cretaceous scales, slightly raising the surface.

Myopia, Presbyopia, etc. The defective power of adjustment of the eye to distances, including the affection called asthenopia, may generally be distinguished from amaurosis by negative signs. If we find the fundus and papilla and media in a natural condition, we may conclude that the derangement of vision is caused by loss of this power. Myopia may generally be detected by the ophthalmoscope, by two signs principally: firstly, an unnatural distinctness of the choroid, as well as the retinal circulation, which enables us to see the fundus, often even to trace the papilla, the macula lutea, etc., without the aid of the convex lens; secondly, the myopic arch or crescent, which consists of a bluish white crescent, describing the half or more of a circle, concentric with the margin of the papilla, comprising, at the thickest, about two lines in breadth, often irregular at the margin, and surrounded by a black line or mark, showing accumulation of the pigment. The cause of this appearance in myopic subjects is at present involved in obscurity; but the appearance seems to answer in great measure to that described above, from Desmarres, under the head of "sclero-choroiditis". In both cases, there must be change in the choroidal circulation, and in the distribution of the pigmental elements. The above may be the only ophthalmoscopical signs observable; but, in aggravated cases of myopia, we have others superadded. Dr. Bader, in *Ophthalmic Hospital Reports* for April 1858, states that he has known this crescent, as well as the myopia, disappear in a woman after her bearing a third child; and, in another case, observed it disappearing gradually, losing its crescentic shape, and normal and choroidal red appearing in its place. The fundus seems to become pale red before the spreading of the crescent. In some cases he states that great myopia is present without the crescent, and the only peculiarity is that we can see the fundus, etc., quite clearly without the convex lens, and sometimes we find cases of weak sight with patches similar to those above described, but without myopia, concave glasses giving no benefit.

Asthenopia is the disease, the essential nature of which is inability to keep the attention fixed long on letters, etc., with loss of adjusting power. We commonly find no signs, but Mr. Hogg, at page 110, relates a case where he found the fundus pale. The retinal vessels covered by a greyish web; the vessels

few; anæmic retina, as shown by an unnaturally white papilla.

Glaucoma. There are three principal signs by which we diagnose this affection as regards the ophthalmoscopical characters. Firstly, the optic papilla is altered and cupped. Secondly, the vessels are altered in direction. Thirdly, there is spontaneous pulsation of the arteries. First, cupped papilla. There is a clearer distinction between the papilla and the rest of the fundus than usual; the outer border looks prominent, like a picture frame, and has a yellowish appearance, while the interior has a greenish hue. The choroid in the vicinity shows some maceration of pigment. The vessels at the border are seen to curve over and disappear, and to reappear in a position differing from what they would have if they had proceeded in a straight direction. This is best seen as regards the veins. Then the vessels are seen to have a pulsation isochronous with that of the heart. All, or any one of these signs may be present. As regards the pulsation, it is to be observed that spontaneous pulsation is observable in some other eye affections, of which amaurosis is the result; and even in the healthy eye of persons in whom general pulsation and muscular action are unusually strong. We can also often produce it by pressing upon the globe while we are observing with the ophthalmoscope. If we press the globe until we distinctly see the arteries pulsate, we shall find the patient's vision diminish from the circumference inwards, until it ceases altogether. This fact may give us some measure of the amount of deterioration of vision following the changes which occur from pressure in glaucoma; but in some cases, where we find a great amount of compression exerted, the vision is not proportionately affected. Mr. Hogg, at page 59, notices a case of glaucoma in which the principal appearances were great congestion of the fundus, with œdema of the retina; the papilla was discoloured by pigment deposit. Also he mentions other cases in which there were signs of bloody effusion, or simply hyperæmia of the retina. For information on the subject of glaucoma, the reader is referred to articles in the *Ophthalmic Hospital Reports*, by Critchett, Bader, etc.; in the *Medical Times and Gazette*, by Hulke; also reports of a paper on the subject read by Mr. Hulke before the Royal Medical and Chirurgical Society; etc., etc.

[*To be continued.*]

Transactions of Branches.

BATH AND BRISTOL BRANCH.

PRESIDENT'S ADDRESS.

By James George Davey, M.D., Northwoods.

[*Delivered July 14th*, 1859.]

Gentlemen,—When seven years since I became a member of the Bath and Bristol Branch of the British Medical Association, I did not anticipate—nor had I any right so to do—the proud position I have the honour to hold this day. My best thanks are due to you for having elected me your President during this present year. It will be my endeavour to deserve the confidence you have, to all appearance, reposed in me; and not the less to promote, during my year of office, the interests of medical science, and those especially of our own important Branch. I confess to you I feel not a little diffident of myself, and of my abilities to do credit to the office you have elected me to fill. I am aware that I succeed many excellent and accomplished men, and that comparisons may be looked for as between them and myself; comparisons which may not unlikely reflect indifferently on my own endeavours to gain your satisfaction: however, I promise you to do my best, at all times, and under all circumstances; and in doing this, I doubt not I may rely on your kindly sympathies and support.

Gentlemen, within the walls of this institution you have listened to addresses from many with whom I may not venture to compete; you will, therefore, not expect to find in my address this day anything startling or original, such as has emanated, in times now gone by, from such men as the late Dr. Prichard and Dr. Carpenter. These walls have, as you are aware, echoed their thoughts, resounded the force and beauty of their sentiments; thoughts and sentiments which have, doubtless, not been without their good effects on the youthful and painstaking among the audience occupying the benches whereon you now sit. The lessons here taught by Drs. Prichard and Carpenter have, in all probability, borne fruit; their labours in the great cause of truth have not been without good results.

Standing thus in the area once occupied by these illustrious men, I will do my best to imitate the means whereby their successes were achieved; and to follow on this occasion in their footsteps.

The present is an opportunity of which I will avail myself to make a few remarks on the medical calling, on our duties to ourselves, and to the public generally. It occurs to me that our profession is, at length, taking a start in the right direction; that individually we are beginning to appreciate the position we occupy as members of a learned body; that our universities, and colleges, and halls, are opening their senses to a new and brighter view of things, and that the public sympathy is more than ever inclined to go with us. Experience seems to have done much for us and for our institutions; it would appear to have led us to perceive the real character of our mission, as members of the social body; it has taught us to realize the fact of our having duties to perform, both towards ourselves and towards our neighbours, *i.e.*, society. Truly this experience has been dearly bought; but, on this account, is it not the more valuable? I think so. How recently have we had evidence of the beneficial results of this same experience! Within the space of a year or two, we have seen the Colleges of Physicians and of Surgeons, both of London and of Edinburgh, acknowledge the error of their past ways, and adopt a better system—one of a liberal and progressive character. We have seen, too, the Provincial Medical and Surgical Association struggle through its brief and abnormal being, and come out of its chronic and almost fatal asphyxia—an asphyxia at the heart-core; the result, mind you, of an attempt to fasten the old and the obsolete to the last new fashion; in other words, to amalgamate the conservative tendencies of a bygone day with the newest inventions and the most modern requirements. The existence of the British Medical Association, as we see it now, demonstrates to us, though on a small and *medical* scale, the fact that no mere party or exclusive government of a body of men, be they doctors or what not, provided they are of the Anglo-Saxon race, can at this day prevail; and for this simple reason, that exclusive government strikes at the root of all justice and self-respect; it excites an unnatural or morbid relationship between the governing and the governed.

On these grounds, I say, let a part of our mission be to well organise ourselves; to place ourselves in the most favourable position as members of a learned and honourable calling.

Young men of good acquirements, and of honourable views of life, are more than likely to be well disposed and attracted towards a profession like ours, when they hear and perceive that our corporate bodies, or colleges, and associations, rank high—*i.e.*, embrace in their forms of government whatever is just and reasonable, and take no cognisance of *cliqueism*. Such young men it is who will do honour to the medical profession, both in a moral and in an intellectual sense; and such young men it is on whom we must depend for our Harveys, and Jenners, our Thompsons, Livingstones, and Owens;—names these, never to be forgotten; names these, the mention of any one of which is sufficient to assure us that both science and humanity, even religion, are more than safe in our keeping. Each one of the five named was or is a *hero*, in Carlyle's acceptation of the word; each one had or has the fire of genius within, prompting him to the leadership among even the able and the good.

Whether we contemplate the learning of the great Harvey, or the patient research of the immortal Jenner, or the heroism of Thompson on the battle field, or the enthusiasm and courage of Livingstone in the wilds of Africa, or the very able and successful investigations of Owen, we are led, as it were, irresistibly to realise this plain matter of fact so well embodied by the poet—

> "'Tis in the advance of individual minds
> That the slow crowd should ground their expectation
> Eventually to follow—as the sea
> Waits ages in its bed, till some one wave
> Out of the multitude aspires, extends
> The empire of the whole, some feet perhaps,
> Over the strip of sand which could confine
> Its fellows so long time: thenceforth the rest,
> Even to the meanest, hurry in at once,
> And so much is clear gained."

Here is good reason then why we should do what in us lies to render our calling attractive to the youthful and ardent, who are seeking a position of usefulness and honour in the world.

The alterations and improvements which have, of late, grown into existence, in the constitution and government of

our Colleges of Physicians and Surgeons, and of the British Medical Association, the recent acceptance by the profession and the public of a Medical Reform Act, etc., will, it is to be hoped, have the effect of diminishing, if not of removing, the jealousies and disunions occurring among us. Let us hope that the more liberal spirit which pervades the amended laws and regulations of our corporate bodies will not be without its good effects on individual members of the medical profession. Let us hope that *unity* will now more than ever pervade the several ranks of medical practitioners, as it does the various departments of medical science, which we together pursue.

Now I have suggested that *our mission may be said to be two-fold.* The first part of it involves the recognition of certain duties as concerns ourselves. If any one man would discharge his responsibilities to the public satisfactorily, and with advantage alike to himself and to them, he must not fail to do what will preserve his own health intact. The fear is, that now-a-days, in too many instances, medical men are led on too far with the ambition of being useful to their fellow man. On the eve of life, full of hope and confident of success, with apparently sound health, a vigorous body, and an active mind, what has not the future promised to some of us? Many an aspirant for public honours, many a zealous and warm heart, many a bright and glorious intellect, have been wrecked, stranded on the fatal beach, ere they had well floated on the deep waters. Ardent in the pursuit of truth, eager in doing good, never resting in the pursuit of medical knowledge and bed-side experience; many a good man heeds not the small and oft-repeated indications of functional derangement, of indigestion or nervous irritability; on, on he goes; work, work. His calls are unceasing; his duties endless; day by day he draws freely and yet more freely on his overstrained nervous system. There must be and is an end to this perpetual infringement of the organic laws. He leaves home for a short period; but is soon at work again. It is the old story over and over again. An immense practice, great success, unbounded popularity, have been the *rewards* (if such, under the circumstances, they can be called) for exertions as untiring as they were honourably and successfully directed towards the relief of bodily suffering, the alleviation of human woe, and the cultivation of science and knowledge. Apart from all mere *self* in this matter of worldly progress, the "rewards" here glanced at, however ill-timed, are as nothing in comparison with the public good effected, in comparison with the great results of intellect trained to purposes of utility and progress, and of principles of virtue, otherwise innate, drawn into activity, and made to diffuse their blessings through the family circle.

But herein lies the pity: the "hero of my tale," though he may have originated the most unexceptionable local *hygiene*—though he may have created the most desirable sanitary schemes, and improved the minds and bodies of his townspeople, and taught them the wherewithal to honour nature and love her behests—succumbs, ere long to his self-imposed labours: his mental powers decline, and his scenes of usefulness become but a myth. The "nervous irritability," of which mention was just now made, robs him of all normal volition; and, as a consequence, he—in pity be it said—no longer realises the *mens sana in corpore sano.* Gentlemen, I am sorry to say I am drawing no imaginary picture: I am alluding to a dear and departed friend, for many years a honoured and honourable member of our profession: I mean the late Dr. Engledue, of Portsmouth; one cast in the best mould, combining in himself the best qualities of our common nature, and, despite of certain peculiarities, realising all the requisites of a good man. His career should not be without its advantages to us living; he, in the ardour of his feelings, and the earnestness of his pursuits, day by day, seemed to forget that—

> ——— "Knowledge is as food, and needs no less
> Her temperance over appetite, to know
> In measure what the mind may well contain;
> Oppresses else with surfeit, and soon turns
> Wisdom to folly, as nourishment to wind."

One word more—the gentleman named to you, after a confinement of more than two or three weeks to his house—and whilst suffering from what was supposed to be "hypochondriasis," was found lying on his bed in the struggles of death, and close beside him was found a small bottle labelled "prussic acid." The fact here stated I would have you bear well in mind, because it would appear probable that a valuable life might, in this instance, have been saved, had the necessary precautions been observed. The death, however, of this "public benefactor" diminishes our number by one, and of this one we are advised, by an elegant writer in the *Portsmouth Times* of December last, to—

> "Look not coldly on his clay,
> Turn not shudderingly away;
> Though about it hangs the gloom,
> Of a sad, a self sought doom.
>
> "Think on all the gifts and grace
> That had here a dwelling place:
> The large heart, the spirit brave,
> All that he to others gave.
> Think upon the life that's gone,
> Crowded with its work well done;
> Precious life—too freely spent,
> Till the o'erwrought spirit bent
> 'Neath its weight of toil and care,
> Yielding darkly to despair.
>
> "As ye gaze upon the face,
> And the spirit anguish trace,
> Of a life, though bravely past,
> Wreck'd and blighted at the last,
> Weep—for life may pass from thee,
> Ere his fellow thou shalt see."

The observations already made relate to ourselves, either in a corporate or in an individual sense; the most important part of our mission remains to be considered. The relations of the medical profession to society at large have, within a comparatively short time, become much modified. Our functions were, at one time, bounded within much narrower limits than now. Doctors were expected only to cure disease; or, if not to cure it, to relieve or mitigate the sufferings consequent on the same. At this day, however, our relations to society have assumed a more practical and imposing aspect. The legislature and the public demand from us the means whereby disease can be prevented. The growing intelligence of the age has removed a very considerable amount of that mere superstitious feeling, which led pretty nearly all classes of the human family to refer the occurrence of a fever, or an attack of dysentery, or other disease, to the direct interposition of the Divine Will, as if nature governed not by general, but by vain and partial laws; and the consequence has been that, throughout the length and breadth of the land, in high and in low places, among ministers, members of parliament, poor-law boards, and even the commonest parish officials, there is manifested an earnest desire to get at a knowledge of hygienic medicine. The Registrar-General and his coadjutors, the various health-officers, demonstrate in their reports to how great an extent the lives and the health of mankind depend on the due observance of the organic laws, and in what manner the prevalence of endemic and epidemic disorders results from the neglect, among us, of either an efficient drainage, a due ventilation, or the habits of cleanliness, etc. Thanks to the labours of Dr. Southwood Smith, Arnott, Mayo, Caldwell, and others, sanitary science has become an integral part of medicine; its practical recognition by the state, and in our large towns, will result in the improvement of the dwellings of the poor, and in the realisation of the best endeavours of that excellent man, the Earl of Carlisle, to obtain the enactment of the Nuisances Removal and Diseases Prevention Acts. If ever mankind shall live in the obedience of the natural laws, if that time ever arrives when man shall be found harmonising his daily routine with the requirements of his organism, adapting himself, to use the words of the late George Combe, to "external objects," *i.e.*, to the physical, intellectual, and moral laws, then will our profession have brought to a successful and honourable issue its all-wise endeavours to civilise man, to encourage him forwards in the course of his amelioration, or, if you prefer it, to realise its second, or, as I have termed it, the most important part of its high mission, as it concerns our fellow man. I would impress this "sanitary question" on your consideration; I would ask you as men and philanthropists, to give it your best attentions. Mr. Edwin James, and even Lord Shaftesbury, and Mr. Walpole too, good, but in some respects deluded men, may sneer as they will at us, may doubt our intentions, misconstrue our motives, and make the very best of every opportunity to throw doubt and suspicion on us; but, as a body, we are proof against their attacks. I hesitate not to say, that we fear not their invectives; and, what is more, that we are prepared at any time to bear the issue of a fair comparison in the matter, of not only intellect, but of high moral worth and integrity, with either lawyers, courtiers, or statesmen.

I have just now mentioned the names of S. Smith, Mayo, and Caldwell, as foremost among those of us who have led the public to appreciate hygienic medicine; it would be unjust in me were I not to add the name of Simon to the above. With his able writings on this subject, you are all familiar; but you

will, perhaps, permit me to illustrate Mr. Simon's earnestness in this good cause, by quoting the following lines from a late report of his; their force, eloquence, and practical bearing will, I doubt not, render them especially acceptable to you.

"It is, indeed, only by very gradual increase that legislation and Government may succeed in giving to human life the same security against the infliction of preventible disease as against the infliction of wilful violence; and millions will have died before this public carefulness for individual safety can have become co-extensive with even the present certainties of preventive medicine. But growing knowledge must bear its fruit. It has now been fully recognised that within the very centres of civilisation controllable influences are working against human life more cruelly than brute violence ever worked in the first discordant beginnings of society. It has been shown that in certain districts of England, the operation of those controllable causes is vastly more powerful than in others; that, within the rule of certain sanitary authorities, particular forms of disease undergo a multiplication—a fivefold and tenfold and hundredfold multiplication—of their lowest familiar fatality. To suppose that such sanitary authorities could permanently disavow an interest in this knowledge, or that public opinion could long hold them irresponsible for so monstrous a waste of life, would be to misunderstand the meaning of civilisation, or to belie the humanity of England."

But it is not the prevention of disease only that constitutes the claims of the medical profession on the public sympathy and consideration. Need I add that "the sanitary question," so called, takes an especial cognisance of matters educational; that it recognises the principles whereby both the intellectual and moral qualities of our being are developed and brought into a normal activity; that it embraces the means necessary to foster and encourage, in the youth of both sexes, each latent knowledge, and virtue, and good quality of mind—and without which means such in great part must stagnate, and so die in the rising generation. Need I remind you that, whatever may be the physical superiority and prowess of the Anglo-Saxon race, whatever may be the physique and great bodily endurance of our fellow man, however square his shoulders, and rounded his form, and plump his muscles—these several requisites of brave men and true are but the effects of a sufficient physical education—of, in point of fact, good food, cleanliness, pure air, sufficient clothing, and temperance in all things mental and corporeal.

On these grounds, then, we are led to perceive the basis on which we, as a profession, stand, and to understand how it is that we are really the pioneers of a sound and enduring civilisation.

If the facts of medical science be ever appreciated as they deserve in the matter of education; if the individual peculiarities of thought, and feeling, and desire, in children and youth, receive the attention they demand; and if then the vicious routine which at this time obtains is consigned to the oblivion which even now "looms in the future",—then will certain of our medical brothers come in for a share of their deserts. Gall and Spurzheim will one day have their rewards: to these especially will all honour be given. The late Dr. Andrew Combe and Dr. Caldwell, Dr. Elliotson, Dr. Conolly, not forgetting the late Dr. Engledue, and the eminent professor of medicine at Edinburgh, Dr. Laycock, have each of them taught the psychology which Gall originated, and to which Spurzheim devoted the best energies of an active and noble mind. Phrenology is not agitated now-a-days; it is an accepted fact by all who have cared to investigate it. It is of no avail that a few good men, not understanding the thing, decline to accept the revelations of Gall. The fact is, the objectors alluded to have theories of their own: their "self-esteem", then, is in the way of the great truth insisted on. Drs. Carpenter and Bennett are the authors of certain speculations concerning mind and matter which, I hesitate not to affirm, are altogether unsound, and unworthy of their high and well deserved reputations. Now that I am on this subject, permit me to recommend to your attention a well written article in the April number of the *Psychological Journal* of Dr. Forbes Winslow; it is called, "On the Artificial Production of Stupidity in Schools". Whilst giving its author credit for the best intentions, it occurs to me that even *he* has much to learn of the "nervous centres". He commends very properly the "painstaking researches of Bell and M. Hall"; but he says not a word of Gall, the very foremost man of all who have ever written on these same "nervous centres". It was Gall who started the late Sir C. Bell into being, so to speak; it was Gall, if it was not Walker and Johnstone, who gave the late Dr. M. Hall his first ideas respecting the excito-motory system. Moreover, it was Gall who, in the words of the author of the paper above named, demonstrated for the first time in 1810, that "*the sensational and intellectual functions of the human brain are not only distinct, but also in some degree antagonistic, through the application of the ordinary law of nutrition to their respective organs*". Lest you might conceive that I am straining the point, I will read to you Mr. Grainger's opinion of Gall, as expressed in the following few words at p. 22 of his work *On the Spinal Cord*:—"The true anatomy of the cerebrum was perfectly unknown till the researches of Gall; and it is due to the character of this eminent man, and of his pupil, Spurzheim, to state that all our knowledge of the anatomy of both the brain and the spinal cord has resulted from their inspections; and, even with respect to those splendid discoveries" [Mr. Grainger is here alluding to those of Gilbert Blane, Mayo, Müller, and Marshall Hall] "which have thrown so much light on the functions of the nervous system, I believe that most, if not all of them, may be traced to the same source." Yes; Gall it was who demonstrated how and in what manner "the character of man is formed for him, and not by him"; how it comes "that minds *are* different even at birth, and require, therefore, as different a treatment as Iceland moss from cactuses, or bull-dogs from bull-finches", to quote the telling remark of Martin F. Tupper. (See *The Twins: A Domestic Tale.*) It was Gall who demonstrated for the first time this great fact—that the moral qualities of our being, and our several passions, whether good, bad, or indifferent, are found in direct connexion with, and strictly dependent on, our material or physical nature. He was thus prepared to understand the real motives to action in man, and thus to get at the fallacies of our criminal laws. The means of prevention of crime, the treatment of criminals, and gaol discipline and government, became in his hands a *system;* the empiricism which had so long governed these several matters was rendered obsolete by him. Gall deserves, doubtless, to be regarded a pioneer of a sound and enduring civilisation, as one among our body who has failed not to realise his high mission, and not the less to prove that the medical profession has a strong claim on the public sympathy.

You are aware that Hippocrates was once sent for by the people of Abdera to visit Democritus. His "exuberance of good", we are told, "had caused a disease"; and this so excited the sympathies and alarms of the Abderites that they sought the advice of the most famous physician of that day, fearing lest he who so "elevated the city" should become mad; and thus, said the Abderites, "our good city of Abdera will be desolate". As an encouragement to Hippocrates to come quickly, the fellow-citizens of Democritus promised the most abundant reward. They told Hippocrates, "If our city were all gold, we would give it you to restore this most excellent person to health." "Thou wilt not, oh Hippocrates, cure a man, but a city, a languishing senate, and prevent its dissolution; thus becoming our lawgiver, judge, magistrate, and preserver." Is it not refreshing to learn this much of Democritus and the Abderites? That he laboured well and successfully for the public weal, cannot well be doubted. When, some two months since, I strolled through Trafalgar Square, and was led to admire the statue of Jenner, and to contemplate the circumstances attending his bright career, my thoughts reverted to Democritus and the senate and people of Abdera. That both Democritus and Jenner were public benefactors, is certain; that they well earned their celebrity, cannot be denied. Now comparisons, they say, are odious; but the locality was suggestive. I asked myself what the generations yet to come would think of Jenner side by side with Nelson and Napier—the medical philosopher, the public benefactor, side by side with fighting men—with the heroes of Trafalgar and Scinde. Is not the one for all time—the others named but for a period? The name of Jenner will, in the long time yet to come, be associated only with a sound and progressive civilisation; the names of Nelson and Napier, with but blood and rapine. Our hearts are, I doubt not, in the right place. The presence of the statue of Jenner in a metropolitan square indicates the direction to which the sympathies and earnestness of the great public tend. As Democritus was to the Abderites, so, it may be said, is the memory of Jenner to the British public. Time will doubtless multiply cases parallel to these.

I had intended to dwell on two or three other topics; but time so presses, that their mere mention must suffice.

The medical profession should be well represented in the British Parliament. The public would have benefited, long years since, by the Vaccination Act, the Health of Towns Act, and the Medical Act, etc., and ourselves would have

profited thereby, had those two ominous letters—M.P.—appeared less seldom among the honours of our class. Let me ask, Ought not the British Medical Association, now that it is really a national affair, to claim to return at least two of its members to Parliament? If it should ever fall to my lot to hold a seat on its Council, I will most assuredly agitate this question. If antiquated Colleges, with a fixed locality, should have their especial M.P.'s, surely modern and national associations may claim as much. I would ask you, gentlemen, to remember this suggestion.

Another important item I would offer to your consideration. The curiosities of medical literature are neither few nor far between, and these not infrequently involve more or less personal feeling and dispute. It is not a little difficult sometimes to name a writer in whom has originated a certain and recognised fact in medical science. Now, it has occurred to me that a sub-committee of the British Medical Association could be well employed in compiling a registration-table, wherein the names of discoverers, the dates of their labours, and the specifications or descriptions of such labours, with their results, etc., should be set down and chronicled with all accuracy and good faith. My reasons for offering this suggestion shall be as brief as possible. Hardly one year before the death of Dr. M. Hall, he addressed, in 1857, a letter to the editor of the *Lancet*, in which he announced, as a recent discovery of his own, the existence of the "excito-secretory system". "Henceforth," writes Dr. M. Hall, "the diastaltic nervous system must be divided into two sub-systems—1. The excito-motor; 2. The excito-secretory." But, gentlemen, it is a matter of fact that Dr. Campbell, of the United States, not only taught this same doctrine, but gave it the same name as Dr. Marshall Hall; and this so long back as 1853. Dr. Campbell, then, anticipated Dr. M. Hall by four years. (See Dr. Campbell's *Contributions*, 1857.) Nor is this all, as concerns the excito-secretory system. I am sorry, in some respects, to do or say what might tend to disappointment in one so accomplished and original as Dr. Campbell; but truth will out, in some way and at some time. At pages 138–143 of Mr. Grainger's work *On the Spinal Cord*, you will find the excito-secretory system explained in detail, and its integrity referred to certain "incident" and "reflex" filaments of the sympathetic nerve. Mr. Grainger refers, for confirmation of this doctrine, to "the flow of saliva during mastication", to the action of "sialogogues", and to the "regulation of the supply of the gastric juice." One word more. In the January number of the *Encyclopædia Britannica*, in the article "Physiology", from the pen of Dr. J. Hughes Bennett, Dr. Campbell, of the United States, is mentioned in such a way as to lead the reader to infer that the idea of the "excito-secretory system" of nerves originated in him (Dr. Campbell). The same gentleman has given to the world certain views of the pathology of "typhoidal fever"; and these, too, he conceives original. In the columns of the *Lancet* for 1836, he will perceive how much he has been anticipated by myself.

Gentlemen, it is possible to multiply facts of the above nature to an extent well calculated to astonish those who have not sought for such. A comprehensive arrangement of the chief successes of medical writers would be attended with much good. The fact is admitted, and on good authority, in so far as sheer practice is concerned. Those of you who enjoyed, as I did last year, the high privilege of listening to the able and eloquent Address in Surgery by Professor Miller of Edinburgh, will remember what he said in reference to this point. His words are:—"Arrange as you will, it may be said, there will be jostling. Not necessarily. The lines may converge and meet, but need not cross; and as they meet, the contact need be none other than friendly; proving, indeed, the source of mutual help and encouragement. In such a crowded fleet as ours, there is, no doubt, some risk of confusion and entanglement, more especially if it come on to *blow*. But let each several ship sail *straight* in all weathers, keeping its defined course; let the compass be true, and the steering steady; there will be no collision. Or if, notwithstanding all our care, there be now and then a fouling, yet, with good temper and skilful seamanship, we may boom off and make all clear again, the golden rule working thereto with an almost mathematical exactitude. 'Let A. do to B. as he would have B. to do to him, and the product will give the rule of conduct required.'" To fix so "golden" a rule on the mind; to realise so heavenward a thought; to give, as it were, emphasis to a "rule of conduct" so much beyond all praise,—permit me to conclude this address with the following few and highly appropriate lines:—

"Self-love but serves the virtuous mind to wake,
As the small pebble stirs the peaceful lake;
The centre moved, a circle straight succeeds,
Another still, and still another spreads;
Friend, parent, neighbour, first it will embrace;
His country next; and next all human race;
Wide and more wide th' o'erflowings of the mind
Take ev'ry creature in of every kind;
Earth smiles around, with boundless bounty blest;
And heav'n beholds its image in his breast."

MIDLAND BRANCH.

CASE OF PNEUMOTHORAX, SUCCESSFULLY TREATED BY PARACENTESIS THORACIS.

By S. H. Evans, Esq., Derby.

[*Read June 23rd*, 1859.]

Miss E. L., of delicate constitution and marked tubercular diathesis, eleven years ago had repeated attacks of hæmoptysis and cough, followed by expectoration of thick mucus, with the usual physical signs of a small vomica in the apex of the right lung. After some months, the pulmonary symptoms subsided; the health was much improved; and there seemed to be an arrest of the progress of the disease for a long time. She did not, however, recover her usual strength. During the seven years which followed, she enjoyed moderate health, with the exception of occasional attacks of cough, especially during the winter months.

On July 20th, 1856, she walked about five miles, and felt more than usually well on the evening of that day. She retired to bed in her usual health; but, soon after lying down, she felt a sense of choking, and could not breathe freely. She had no pain, and slept tolerably; but the next two days the breathing became gradually more difficult.

July 23rd. The oppression of breathing had so much increased, that she could not lie down; and, on attempting to do so, she experienced a sense of impending suffocation. When I was called to her at midnight, the respiration was laborious, short, and frequent, forty and upwards in a minute. Pulse 120. On the slightest movement of the body, she was threatened with suffocation. The sudden occurrence of these symptoms led me to suspect perforation of the lung. I examined the chest, and found the right side much distended and larger than the left; the sound on percussion on the right side was tympanitic; respiratory sounds were absent; there was no amphoric breathing nor metallic tinkling. On the left side the breathing was normal. The conclusion I arrived at was, that there existed a large accumulation of air in the pleura. Palliative means were used, but without much benefit. Being unable to lie down, she remained in the sitting posture night and day, but could not sleep.

The symptoms became gradually aggravated, until July 28th, when she appeared *in extremis;* the distress and labour of breathing were almost indescribable; at each breath she uttered a plaintive wail. She was greatly exhausted, not having lain down or obtained more than a few minutes sleep at a time since the 23rd. Her legs, hands, and face, were swollen, and of a livid colour. She was incoherent most of the night. I proposed paracentesis thoracis, as the only means of saving her from immediate death; and, after consultation with Mr. W. Johnson, who agreed with me as to the propriety of the measure, I passed a trocar between the sixth and seventh ribs into the right pleural cavity, and there escaped through the cannula a large quantity of air, which afforded immediate and very great relief. The air issued with great force at first; but as soon as the inspirations became more free, I removed the cannula, lest air should be drawn into the chest from without. I closed the wound with plaster; and my patient was placed in bed in a half recumbent posture. Her breathing was still quick and short, but comparatively easy; and she complained only of a slight soreness in her side.

July 29th. She remained in the half recumbent posture; breathed more freely. The side was stiff and sore, and there was extensive subcutaneous emphysema over the whole of the right side and back. Percussion of the side was clear, but no longer tympanitic; respiratory sounds could be freely heard over the whole lung. Pulse 100.

From this time her recovery progressed without interruption. The return of vesicular breathing in the collapsed lung was gradual; it improved daily, but it was nearly a fortnight before it could be said to be in a normal state. The recumbent posture was not attempted for several days after the operation, and it was some weeks before the patient could lie

comfortably on the right side. The subcutaneous emphysema slowly subsided, and disappeared in about ten days. About a month after the operation, there remained no unfavourable symptoms; and she thought herself better than she had been for some months.

It is nearly three years since the operation was performed, and nothing has occurred to invalidate its success. Her health, always delicate, is now as good as it has been for years. She has slight cough, and sometimes expectorates blood; the symptoms are of a very chronic kind, yet they sufficiently mark the presence of tubercular mischief in the lungs; the physical signs also indicate circumscribed disease in the upper and anterior part of the right lung, at which part percussion is dull, respiration bronchial, and with slight mucous *râle*. Posteriorly, respiration and percussion are equally good on both sides. There is no collapse of the thoracic parietes on the right side of the chest; admeasurement being the same on both sides.

Remarks. The rational and physical signs were well marked in this case, and afforded strong presumptive proofs of the presence of a large accumulation of air in the right pleural cavity. The slow and gradual increase of the symptoms of pneumathorax, which commenced rather insidiously on July 20th, and advanced slowly without occasioning urgent dyspnœa until the evening of the 23rd, favoured the supposition that the opening through which the air escaped was of small size, and it is probable that the aperture became obliterated by lymph previous to the operation of tapping the chest, and possibly prior to my visit on the 23rd, as no respiratory sounds could be heard either at that time or afterwards, until the 29th.

The successful termination of this case clearly proves the advantage of tapping the chest in pneumothorax, when the accumulation is so great as to cause threatening suffocation.

Two similar cases are mentioned by Dr. Copland; and I shall conclude these remarks by quoting the following, which he relates at page 311 of his *Dictionary*, and which, in respect to the severity of the symptoms, bears a strong resemblance to this case.

"In 1833, a case of pneumothorax occurred in my practice, at an early stage of phthisis, the patient being young and robust, and not having lost flesh or strength. The nature of the mischief was prominently characterised; the heart was pushed remarkably far to the right side, and the rational and physical signs were all marked and extreme. The dyspnœa and distress were great. I advised that an opening should be made for the exit of the air, and the friends of the patient desired that Sir A. Cooper should make it. We met a few hours afterwards; he admitted his ignorance of the nature of the lesion. I fully explained the cause of the symptoms and of their extreme urgency; but he refused to perform the operation, stated that he never had performed it with the view of letting out air, and that he would not now do anything so novel, although he would have been ready to undertake it when he was a much younger man. Having heard Sir A. Cooper's determination, the patient's friends would not allow the operation to be resorted to by any one else, and the patient died asphyxied a few hours afterwards. The operation, if it had been resorted to in this case, might have prolonged life for a very considerable period."

CASE OF WOUND OF THE CORNEA, SCLEROTIC, AND IRIS, FROM WHICH AN IRON SCREW WAS SUBSEQUENTLY EXTRACTED.

By J. Wright Baker, Esq., Derby.

[*Read June 23rd*, 1859.]

On the evening of March 18th, 1858, a deaf and dumb lad, aged 18, was brought to me, having sustained a severe injury to the left eye. Whilst working at a screw-cutting machine, in a manufactory in this town, he had been struck on the eye with great force by a fragment of iron, which produced a large wound and instant blindness. On examining the eye, the wound was found to extend through the lower segment of the cornea and a portion of the sclerotic, and measured from four to five lines in length. The aqueous humour freely escaped, and with it a little of the vitreous humour. The iris also was wounded and protruding, the pupil being no longer visible; a free extravasation of blood having taken place, so as to obscure the anterior chamber.

I at once applied the extract of belladonna freely all round the orbit, prescribed two grains of calomel and half a grain of opium in the form of pill, every four hours, together with a saline mixture; and ordered cold water dressing to be kept constantly applied.

Notwithstanding the violence of the injury inflicted, comparatively little inflammatory action followed. This, I think, must be accounted for partly by prompt and active treatment, and partly by the fact that the lad, whose parents were in great poverty, had a half-starved appearance, and a frame debilitated by severe small-pox in childhood. A very short time sufficed to show that further antiphlogistic measures would not be required, and therefore the treatment was changed for quinine and steel, with good diet so far as it could be procured.

In a few days from the time of the accident, the body of the patient became covered with the ecchymosed spots of purpura hæmorrhagica; and, the general cachectic state of the constitution now giving cause for as much anxiety as the eye itself, I yielded to the request of Josiah Lewis, Esq., of this town (who had always taken an active interest in the boy), to have him removed to the ophthalmic wards of St. Mary's Hospital, London, and placed under the care of Mr. White Cooper; feeling assured that, in addition to the professional treatment of so eminent a surgeon, no small advantage would be gained by the patient from the superior comfort and good diet he would there receive. Nor in this was I disappointed; for in the course of time, as I was informed by Mr. Cooper, who kindly wrote to me twice, and to whose courtesy I am indebted for the further history of the case, the health greatly improved, the eye went on favourably, pain subsided, and the wound steadily progressed towards cicatrisation.

At the time the patient left me for London, the globe was considerably diminished in size; the wound had an ulcerated appearance, and was covered with pus of an unhealthy kind. The iris was diminished in circumference, and of a dull green cast; the pupil closed, and firmly adherent to the wound. The surface of the sclerotic was of a dull red colour.

On Saturday, May 8th, six weeks from the time of the accident, and three weeks after the patient's removal to London, Mr. Cooper observed that a dark brown point had made its appearance in the wound, and expressed his opinion that it was metallic, which a touch with the probe proved to be the case. He tried to remove it with forceps, but, finding it to be firmly impacted in the eye, proceeded to extract it under chloroform. Having made an incision through the cornea and iris in their whole breadth, he seized the foreign body, and with some difficulty withdrew it. It proved to be a piece of iron screw, four lines in length by three in breadth, and weighing twelve grains. Its edges were extremely jagged and sharp, and the surface irregular. Although some violence was inflicted on the eye by the withdrawal of this mass, scarcely any irritation followed; and in four days the patient was able to leave his bed and walk about the ward.

When he returned to Derby, I found the globe greatly diminished in size, much collapsed, and with a somewhat irregular surface. The cornea was considerably diminished in size, and showed but little opacity. The general health was much improved.

Remarks. It is evident that, at the time of the accident, the fragment of iron cut through the cornea and iris, and buried itself out of sight in the posterior part of the eyeball. It is indeed remarkable that such a rough irregular mass, so calculated to excite irritation, should have caused so little disturbance that even pain should have subsided, and the wound cicatrised. There can, I think, be no doubt that it would subsequently have made its presence known there; and sympathetic inflammation and destruction of the other eye would have been the probable consequence.

This case points out very distinctly how impossible it often is to ascertain the full extent of injuries to the eye in the first instance; how necessary it is to watch the progress of symptoms, and to seize the earliest opportunity of removing any foreign body from the globe as soon as detected; at the same time abstaining from any premature attempt at the discovery of such body. It also well shows the importance of constitutional tonic remedies in the treatment even of traumatic inflammation of the eye, when judiciously applied; as also of other forms of inflammation in debilitated constitutions.

In conclusion, I will briefly allude to an interesting case described by Mr. Critchett, for a more fully detailed account of which I must refer my readers to the *Lancet* of April 1st, 1854.

In Mr. Critchett's case, an engineer was struck on the eye by a piece of metal, which penetrated far enough to be found lying on the hyaloid membrane, as ascertained during the pro-

cess of extraction. The crystalline lens had been wounded, producing an incipient traumatic cataract. The operator scooped away the greater part of the lens by the scoop of a curette, until the foreign body was brought into view, and by the same instrument removed. Here a good result followed, the inflammatory symptoms being slight, and a tolerable amount of useful vision being ultimately obtained.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

A List of the Members of the British Medical Association will shortly be published in the Journal. Gentlemen whose designations or addresses, as given in the lists published on July 24th and October 9th, 1858, and June 18th, 1859, are inaccurate, will oblige by at once forwarding the necessary corrections to Dr. Williams, Worcester, or Dr. Henry, 37, Great Queen Street, London, W.C.

British Medical Journal.

SATURDAY, AUGUST 27th, 1859.

THE TRIAL OF THOMAS SMETHURST.

We question if even the trial of Palmer so profoundly moved the public, as that of the unhappy man who now awaits his fate in Horsemonger Lane gaol. Within four years no fewer than four persons in the middle rank of life have stood at the bar, charged with procuring the death of their victims by the subtle introduction of poison into the medicines and food given by direction of the regular medical adviser. Palmer, in 1856, was found guilty of substituting pills containing strychnine for those of a harmless character, and thus bringing about the death of his intimate friend. Dove, shortly afterwards, following his subtle teaching, slowly poisoned his wife in the same diabolical manner, and shared a like fate. Wooler barely escaped with his life from the charge of putting arsenic into the medicines administered to his wife; and here is a fourth case, in which all the skill of medicine was presumed to have been brought to bear, not to save what should have been a very dear life, but so to destroy it that the blame should fall upon nature alone. It was not to be wondered at that, under such circumstances, the prisoner should have entered upon his trial with an extraordinary amount of prejudice against him; and this prejudice was to a certain extent aggravated by his very vile antecedents, which unquestionably prove that he is a man with whom no honest mind can feel the least sympathy—a liar, a cheat, a scoundrel of the blackest dye in every relation of life. Can it be wondered at, that there was a proclivity in the public mind to find him guilty of the still heavier charge of murder?

Whether the verdict pronounced against him be a just one or not, the Great Judge alone knows. The doubt in the public mind on this point is so great, that no one has a right to speak dogmatically; but we do not think we err in stating that, as far as the medical evidence goes, the profession have made up their minds that it is not sufficient to prove the charge against him. If it can be shewn, as we think it reasonably can, that natural causes may have brought about a similar train of symptoms to those which the unfortunate Isabella Bankes suffered, and if it can be proved that death from such causes is far from an extraordinary circumstance, we think the medical public have a right to demand that the proofs of poisoning be so clear that no reasonable man can have a doubt about the matter.

Yet how do we find that the case really stands? Of the medical witnesses examined upon the trial, ten were of opinion that the woman was poisoned, and seven that her death might be accounted for by natural causes. Here, at least, is a division of opinion in the skilled evidence, which should make us pause. Was it an irritant poison, or an irritable uterus, or the ulcerated bowel of dysentery, which did the poor lady to death? We confess that, as far as we can judge, her pregnant condition was quite sufficient to account for the symptoms under which she laboured.

There is one very remarkable circumstance which has not, we believe, been noticed: namely, that the commencement of the fatal illness of Isabella Bankes tallies very exactly with the commencement of her pregnancy. We have it in evidence that the vomiting and diarrhœa commenced about the 23rd of March, when Dr. Smethurst and the deceased were residing in Old Palace Gardens, Richmond; and that it continued until she died at Alma Villas on the 2nd of May—or about six weeks. We have it also in evidence that a fœtus of between five and seven weeks old was discovered by Mr. Barwell at the *post mortem* examination. This, to say the least of it, is a very singular coincidence, and one which should fairly tell in Dr. Smethurst's favour, inasmuch as he could not certainly be supposed to have so accurately timed the administration of deadly drugs from the day of her conception, which, of course, he could not have known.

But, it may be asked, how was it that the existence of pregnancy was never seriously inquired after, or even suspected? One would have thought that the symptoms were such that the possibility of the circumstance would have been immediately suspected by Drs. Julius and Bird, knowing, as they must have, that the parties were newly married. Yet we have no evidence whatever that any steps were taken to ascertain the fact by digital examination, which, in a woman of her age, labouring under a first pregnancy, would in all probability have cleared up the point, and possibly have suggested another cause than poison for the symptoms. Dr. Julius in his evidence dwells upon the fact, that no medicines appeared to him to have any effect in checking the distressing sickness and diarrhœa. Doubtless this circumstance must have appeared a very mysterious one, the fact of pregnancy not having been ascertained; but, viewed by this new light, the mystery does not seem so great. Dr. Herbert Barker, in a communication to this Journal, so late as the 30th of July last, gives a case which is pretty nearly a counterpart of that of the unfortunate Miss Bankes, with the exception that there was ultimate recovery. His patient, singularly enough, was of exactly the same age—forty-two; she became pregnant at the end of May 1857, and immediately after conception she was attacked with the vomiting of pregnancy, which continued with increasing violence for months, notwithstanding the administration of every known counteracting medicine. Early in August, diar-

rhœa supervened; and dysenteric stools, sometimes to the number of eight in a day, were passed. There were the same loathing of food and vomiting immediately on taking it; and the poor creature was reduced almost to death's door, when the sudden expulsion of a fœtus at once removed the more urgent symptoms, and opened out the path to recovery. In another case, similar to this, the patient died fourteen days after abortion, from the exhausting action of an intractable diarrhœa.

Dr. Tyler Smith, who speaks with authority in such cases, in his evidence stated not only that he had seen several cases in which death had resulted from the vomiting and purging of pregnancy, but that the burning sensation in the throat and the soreness of mouth in one case so exactly resembled the symptoms that would have resulted from the administration of poison, that he actually had the evacuations submitted to examination by a chemist. The terrified look, which Dr. Todd thought so diagnostic of poisoning, Dr. Smith had also seen in cases of the kind to which he referred; and Paul Dubois, the celebrated *accoucheur* of the French Empress, states that he has met with twenty instances of death from this cause in thirteen years.

It may be urged, however, that the mere simulation of symptoms of poisoning, which arise in some cases of pregnancy, afford no proof whatever that this was not a genuine case of poison. Here toxicology comes in to continue and complete the inquiry. In nearly every case of poisoning of late years, one of two things has been clearly proved; either poison has been found in unmistakeable quantities in the body, or it has been traced to the possession of the supposed murderer. Even in the case of Wooler, who was acquitted, arsenic was found in his possession. In the present case, however, no poison whatever was traced to the prisoner; no arsenic whatever was found in the viscera of the deceased, and but a very small proportion—less than a quarter of a grain—in four ounces of evacuated matter: a trace of antimony was also found in the large intestines.

In dealing with such minute quantities, if they are to be considered sufficient to weigh down the life of a human being, we ought to be very certain that no possible source of error could arise in the method of their detection. We are very far from having reduced Chemistry to an exact science. This trial, indeed, proves how far. Dr. Taylor swore before the magistrates at Richmond that he found arsenic in a bottle of solution of chlorate of potass in the possession of the prisoner; and it was inferred that the action of the last named drug upon the kidneys tended to eliminate the poison from the system; thus accounting for its absence from the tissues of the body. Here was an example of a false fact and a false inference, which must have told with terrible effect upon the prisoner. Had Smethurst been tried on this evidence directly after his committal by the Richmond magistrates, his life would have fallen through this illusive gauze wire; and Dr. Taylor might possibly, when too late, have discovered his lamentable error. This fact should, we think, act as a terrible warning to him; and we hope that he will not persist, as he said he should, in using the impure copper gauze in future experiments where human life is at stake.

If "traces" of irritant poisons, less than a quarter of a grain of arsenic (how much less?) in four ounces of evacuation are to be sufficient to hang a man, we feel that the public have a right to ask if there may not be many oxidising agents, even in the contents of the intestines, sufficient to set free the arsenic in impure copper? If so, and the man who holds in his hands the keys of life and death will not insist upon purity in his tests, then we say that the horrors which flourished in the days of witchcraft, when human life hung upon the lips of any old crone, will be but too faithfully represented by the horrors which will flow from the pseudo-scientific evidence of the present day.

But, strangely enough, Dr. Taylor, in his evidence before the magistrates, stated that he should attribute the symptoms exhibited by Miss Bankes to antimony rather than to arsenic; and certainly her symptoms did not tally with those seen in arsenical poisoning, even as described by himself. Possibly, then, antimony was the agent. But only a trace of antimony was found in the body, and none in the evacuations. Bismuth, however, which Mr. Rodgers asserts to contain antimony, was one of the drugs given to the deceased. How, then, shall we venture to say that the "trace" found was not attributable to the medicine given?

We confess that, in our opinion, the chemical evidence for the prosecution breaks down; and no manner of importance is to be attributed to it. Even if it were trustworthy, we do not think that such exceedingly nice scientific points as it involved could possibly be properly weighed by the "twelve good and true" but under-educated dull-brained Englishmen who compose an ordinary jury. We should not dream of weighing diamonds with a common steelyard: how much the more careful should we then be of allowing life and death to balance in the hands of twelve tradesmen, when the highest scientific attainments are scarcely equal to test the evidence in such a case!

The judge, indeed, seemed to think that it was of no possible consequence to the jury to dwell at all upon the scientific evidence. For instance, when the foreman of the jury fainted at the details of the *post mortem* examination, the judge said that "it appeared to him that it was quite unnecessary to go into these matters with such minuteness, particularly as the jury probably would understand very little of the matter." A more extraordinary statement than this never emanated from the judgment-seat. Why, the *post mortem* appearances of the intestines were of the utmost importance in enabling the jury to come to a proper conclusion, as to whether death arose from poisoning or from any other cause. It may be all very well for jurymen to faint under such an ordeal; but the judge should have at least remembered that the life of a human being was at stake, to whom these appearances were of the most vital importance. The conduct of the judge, however, in various parts of the trial, and especially in the summing up, was rather that of an advocate for the prosecution than of the occupant of the bench, holding fairly the trembling balance of justice.

Considering all these matters, we trust that execution will at least be stayed: and that, in accordance with the universally recognised principles of English justice, the unhappy prisoner will be allowed the benefit of those doubts which most men, who are competent to judge, feel with respect to the cause of the death of Miss Bankes.

Association Intelligence.

THE COLLEGE OF PHYSICIANS OF EDINBURGH.

The following resolution, proposed by Dr. Radclyffe Hall, and seconded by Mr. Wolstenholme, was adopted at the Annual Meeting of Council held in Liverpool:—

"That the recent proceeding of the Edinburgh College of Physicians, in the sale of their Licence without examination to gentlemen not already physicians, was not called for to meet any want in the profession; and that, inasmuch as it tends to lower the *status* of the physician, without elevating that of the general practitioner, it is calculated in every way to prove injurious to the body of the profession."

Philip H. Williams, M.D., *General Secretary.*

August 1859.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 28th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

DIFFERENT FORMS OF SYPHILITIC INOCULATION.

BY HENRY LEE, ESQ.

The object of this paper was to show that primary syphilis does not always commence in the same way. The "specific pustule," in which all syphilitic diseases were formerly said to originate, is produced by one kind of syphilitic inoculation only, and that form was one which does not give rise to constitutional or secondary symptoms. As nearly all the experiments on syphilisation had been performed so as to produce this pustular variety of the disease, it follows that no fresh constitutional syphilitic disease can be engendered by syphilisation so practised. The kind of syphilitic sore which infects the system commences in a different way, and when not artificially irritated, it gives rise rather to the adhesive than to the suppurative form of inflammation. This form of disease Mr. Lee had shown, in 1856, to be, as a rule, not inoculable upon the person who had it. This view had more recently been confirmed by the researches of French surgeons. But although not ordinarily inoculable like the suppurating form of the disease; yet it was capable of being rendered inoculable by artificial irritation. The results of the inoculation, were, however, then uncertain in their results, producing little local irritation, and capable of being transmitted by successive inoculations a very limited number of times. These observations applied only to inoculations performed upon the individuals who had at the time, or had previously had, infecting sores. The author described one kind of suppurating sore which was surrounded by induration, which could not always be distinguished from the induration of the infecting sore. The induration could not, therefore, always be taken as the diagnostic mark of a sore which would infect the patient's system. The character of the secretion, however, gave the information which the induration did not always give. If care were taken to prevent any accidental cause of irritation, the secretion from an infecting sore would soon cease to be purulent, whereas, in the suppurating sore surrounded by induration (the phlegmonoid variety of suppurating sore) the secretion would continue, as in other forms of suppurating sores, puriform to the last. The number of cases of indurated sores which had been said to have been inoculated by Dr. Sperino and others, led to the conclusion that the two forms of disease now described had not been distinguished from each other. It was now ascertained that the infecting sore could not, as a rule, be inoculated upon the patient having it, whereas the phlegmonoid variety of the suppurating sore was of all kinds the most readily inoculated. When inoculated artificially, it produced a pustule containing well formed pus within forty-eight hours, and it was occasionally followed by an eruption of brick-red colour, confined to one part of the body, disappearing spontaneously, and not recurring. This eruption was, therefore, certainly not syphilitic.

ON THE ADMINISTRATION OF BELLADONNA, AND ON CERTAIN CAUSES WHICH MODIFY ITS ACTION.

BY HENRY WM. FULLER, M.D.CANTAB., F.R.C.P.L.

Dr. Fuller was led to the inquiries which form the subject of this paper, by observing the remarkable tolerance of belladonna exhibited by a child, a patient in St. George's Hospital, to whom he was administering it as a remedy for chorea. Fancying that the tolerance of the drug observed in the case in question might be attributable either to imperfection of the extract, or to the modifying influence of the choreic spasms, he obtained other extract of belladonna from Apothecaries' Hall, from Squire's, and from Jacob Bell's, in Oxford Street, and administered it, dissolved in water, to ten other choreic patients in the hospital. In a twelfth case he administered atropine, obtained from Morson's, in Southampton Row. The result was in all cases the same; namely, extraordinary tolerance of the remedy, with a varying, but not very satisfactory, effect as regards the subjugation of the choreic spasm—the tolerance of the drug being so great that one girl, aged ten, took seventy grains of the extract of belladonna daily, and a total amount of 1,019 grains, or rather more than two ounces, in twenty-six days; whilst the child, aged fourteen, to whom the atropine was administered, took no less than thirty-seven grains in eighteen days.

1. The patients were all pale whilst taking the larger doses of the drug; and in no instance was there any feverish heat, or any rash, or erythematous blush on the skin. 2. There was great weakness of the pulse in all the cases, and in some, considerable quickness. 3. The urine was generally clear and acid, but scanty, and of high specific gravity, varying from 1,024 to 1,036. In three cases it frequently contained a copious deposit of crystallized lithic acid; and, in three other cases, it was usually loaded with lithates. In one case, for the space of a few hours, whilst the patient was under the toxical influence of the drug, it became ammoniacal almost as soon as voided. 4. In one case some difficulty was experienced in voiding the urine; but this was not observed in any other case. This difficulty passed off when the belladonna was omitted. 5. The tongue was always moist, but unusually red whilst the larger doses of belladonna were being taken, and the redness passed off when the drug was omitted. 6. The remedy did not, in any instance, exert a constipating effect; on the contrary, it appeared to prove aperient. An occasional purge was required in three cases only. 7. In five cases it ultimately gave rise to sickness and diarrhœa; but in every instance save one, the choreic spasms had almost wholly ceased, and in the exceptional case alluded to, had greatly subsided before those symptoms were produced. Whenever bowel symptoms occurred, mere omission of the medicine sufficed to cause their cessation. Did the existence of spasm counteract the influence of the drug, and prevent their occurrence? 8. Dilatation of the pupils was very uncertain. In almost every instance the pupils were large before the administration of the medicine was commenced, and they invariably became dilated soon after a dose of the medicine was taken. The dilatation, however, was not to the degree observed when a solution of belladonna is dropped into the eye, and, in most of the cases, it passed off before another dose of the medicine was due. Its ordinary duration was about two hours and a half. In one case, excessive dilatation occurred for a few hours coincidently with the occurrence of sickness and purging. In two cases, considerable dilation was pretty constant; in one case it was seldom great. 9. In two instances only did the slightest indistinctness of vision occur. In one of these it was observed only on three occasions, and then only to a slight degree, and was not accompanied by dryness of the throat, headache, or any impairment of the mental faculties; in the other it took place more frequently, and strange to say, was most complained of when the pupils were of their natural size, and were contracting freely under the stimulus of light. It was not attended by delirium, nor by any indication of the action of belladonna, and the administration of an additional quantity of the drug was almost invariably followed by its removal. 10. The drug did not in any case produce the slightest narcotic effect; and in one case it failed utterly as an anodyne. 11. In no instance was there any evidence of its accumulation in the system. 12. The tolerance of the drug was not in proportion to the severity of the choreic spasms. In Case 2, in which fourteen grains of the extract, daily, occasioned sickness and purging; the spasms were more severe than in Case 11, in which seventy grains were taken daily without disturbance of the stomach and bowels. 13. The curative effect of the drug was very uncertain. In seven cases its action ap-

peared to be decidedly curative, but in two cases it failed to exercise the slightest control over the spasms; and in the other three cases it is doubtful whether the improvement ought to be attributed to its action.

Being desirous of ascertaining whether the tolerance of the drug was due to its decomposition in the stomach, or to its non-absorption, the author submitted to Dr. Marcet and Mr. Kesteven, for examination, some of the urine voided by a patient who at the time was taking sixty-four grains of the extract of belladonna daily. The former extracted atropine enough from three ounces of the urine to kill two white mice, and narcotise several others. The latter, from two ounces of the urine, obtained sufficient to produce dilatation of a cat's eye, to afford filamentous crystals of atropine, and to give the reactions which atropine yields with iodine water, tannic acid, chloride of gold, and sulphuric acid, and bichromate of potash. The fæces also, on being analyzed by Dr. Marcet, yielded abundance of atropine.

Thus, then, up to this point, five facts appeared proved; viz.: 1. In cases of chorea extraordinary large doses of belladonna and atropine are tolerated. 2. The drug is absorbed into the blood, and therefore that the tolerance of it is not attributable to its non-absorption, nor to its being decomposed in the stomach. 3. It does not accumulate in the blood, but passes out of the system with the urine and fæces, and probably with the other excretions. 4. It does not exercise that amount of control over the choreic spasms which would have been expected from the readiness with which it is tolerated by the system. 5. The tolerance of the remedy is not in proportion to the severity of the choreic symptoms.

The question therefore arose as to whether the existence of chorea had any part in producing tolerance of the drug, or whether that tolerance may not have been due to some other circumstances? With the view of determining this point, the author administered the extract of belladonna to two convalescent children, whom he kept in the hospital for the purpose. To the one, aged seven, he ultimately gave thirteen grains of the extract daily; and to the other, aged ten, twenty-eight grains daily; without producing dryness of the tongue or fauces, or any symptom indicative of the action of belladonna beyond some temporary dilatation of the pupils.

With the view of having the matter tested with children on a larger scale than is possible at St. George's Hospital, the author requested a friend who is attached to a large public institution for children, to administer it cautiously, in gradually increasing doses. Accordingly, to eleven children, varying in age from three to six, one-eighth of a grain of the extract, in solution, was administered three times a day, and the dose was increased, in the course of six days, to half a grain thrice daily. These children were all in good health. The dose was gradually increased, and dilatation of the pupil was the only effect produced. To seven other children, between five and seven years of age, he began by giving one-third of a grain twice a day, and continued it for three days without perceiving any effect from its administration beyond slight dilatation of the pupil. He then prescribed two-thirds of a grain, twice a day; but, by mistake, one grain and a third was given at a dose. The result of this large and sudden increase was that the children were all seized with sickness and vomiting; some of them had diarrhœa, and one of them had the violent uncontrollable delirium characteristic of belladonna. Stimulants were at once administered, the belladonna was omitted, and on the following day the toxical effects of the drug had passed off, and the children were perfectly well. To adults the author administered the drug in pills and in solution, and he found that, however given, very small doses usually produce dryness of the tongue and fauces; that two grains daily will often excite vertigo and dizziness, and that it is not possible to establish a tolerance of the larger doses, as in children.

He was thus led to the conclusions that:—1. The tolerance of belladonna is not attributable to the counteracting influence of choreic spasms, but is in some way connected with the age of the patient. 2. A much larger dose than is usually prescribed is well borne from the first by children of tender years. 3. In children, though not so in adults, a tolerance of the remedy is speedily established, so that the dose may be safely increased, rapidly, but gradually. 4. Special care should be taken in apportioning the dose to the age of the patient, and in not increasing the dose too rapidly, inasmuch as the usual toxical effects of the drug will be produced if too large a dose be given before a sufficient tolerance of the drug has been established. 5. The milder toxical effects produced by the drug are of little importance, and subside without remedies as soon as the administration of the medicine is discontinued. 6. Adults cannot tolerate the doses of the drug which can be taken with impunity by children.

The extraordinary difference in the tolerance of the drug observed at different periods of life might be explicable by the medicine passing off with the urine, as also, probably, with the other excretions, more rapidly in childhood than in adult life. The author concluded his paper by the following suggestions:—1. Inasmuch as belladonna is admitted to be productive of signal benefit in whooping cough, even in the minute doses in which it has been hitherto administered, it is probable that a corresponding increase of benefit would result from the larger doses, which it is now proved may be safely prescribed under certain restrictions. 2. It deserves a trial in epilepsy, laryngismus stridulus, and other spasmodic affections. 3. Combining as it does antispasmodic, sedative, and slightly purgative properties, it may be productive of relief in certain cases of dyspepsia connected with inframammary pain, flatus, and spasms in the abdomen. 4. Inasmuch as it exercises a remarkable power in controlling spermatorrhœa and incontinence of urine, and the experiments recorded in this paper prove that it is excreted with the urine, it is highly probable that its curative action in such cases may be due in great measure to its topical effect, and if so, that it might be applied locally with advantage.

EXTENSIVE ADHESION OF THE INFERIOR MARGIN OF THE SOFT PALATE TO THE POSTERIOR WALL OF THE FAUCES.

BY WM. TURNER, M.B.LOND.

[*Communicated by* James Paget, Esq., F.R.S.]

The author described a curious case of palato-pharyngeal adhesion, which came under his notice in the dissecting-rooms of the University of Edinburgh. There was a complete absence of the uvula, and there was no communication between the back of the mouth and the nasal part of the pharynx, except through a small rounded hole situated immediately on the left side of the middle line, and corresponding apparently with the upper part of the arched orifice usually found at the base of the uvula. This separation of the nasal from the buccal parts of the pharynx was due to the adhesion of the inferior margin of the soft palate to the interior of the pharyngeal wall, apparently along the folds of mucous membrane containing the palato-pharyngei muscles. The mucous membrane, especially about the line of junction, presented a cicatrised appearance. The pharynx was very much contracted laterally, being not more than half an inch across immediately opposite the hamular processes; this contraction corresponded exactly with the line of union of the soft palate to the interior of the pharyngeal wall. The upper part of the pharynx consequently presented a funnel shape. The greater part of the fibres of the superior constrictor muscles had their place occupied by a thickened fibrous membrane; the right stylo-pharyngeus muscle was also greatly altered at its lower part by fibrous thickening. The other pharyngeal muscles, and those portions of the tensores and levatores palati which were situated outside the pharynx, presented their normal appearance. By removing the roof of the nasal part of the pharynx, the interior of this portion of the tube was observed to be shaped like a funnel or inverted cone, the floor being formed of the obliquely inclined soft palate; and at the most depending part, the small rounded aperture of communication with the buccal part of the pharynx was seen. The mucous membrane on the upper surface of the soft palate exhibited the same roughened appearance as on the under. No history of the case could be obtained; but the author inferred that, from the cicatrised appearance of the pharyngeal and palatal mucous membrane, the thickened and roughened condition of the posterior pharyngeal wall, the replacement of muscular fibres by fibrous tissue, and the constriction of the part, that the change from the normal state must have been produced by severe inflammation at some former period.

The author then referred to the only two recorded cases of a similar nature he has been able to meet with—one by Rudtorffer, in his *Abhandlung;* the other by Otto, in his *Handbuch der Pathologischen Anatomie.*

SEQUEL OF A CASE OF A CALCULUS IN THE BLADDER REMOVED BY LITHOTRITY: COMMUNICATION BETWEEN THE BLADDER AND INTESTINE. BY CHARLES HAWKINS, ESQ.

The patient, whose case is related in the last volume of the *Medico-Chirurgical Transactions* (see also British Medical Journal, August 26th, 1858, p. 734), died on April 19th, 1859, a year after the operation. On a *post mortem* examination,

no stone was discovered in the bladder. The kidneys were somewhat congested, but in other respects healthy in appearance. There was an opening in the bladder at the lower part of the posterior wall, of the diameter of a goose-quill, evidently not of recent date. The bladder, corresponding to this aperture, was intimately united by old adhesions to that part of the circumference of the sigmoid flexure of the colon that lies nearest it. The aperture in the bladder communicated with the sigmoid flexure opposite their point of union. Above the point of communication of these two viscera, for the extent of about an inch, the canal of the sigmoid flexure was somewhat constricted; but this constriction was apparently due to the adhesion and subsequent contraction of these viscera, as beyond the point where adhesion between them existed, the calibre of the sigmoid flexure appeared normal. Below the orifice of communication between the bladder and colon, the canal of the intestine was greatly constricted to the extent of an inch and a half in length; this stricture appeared to depend upon great condensation and subsequent cicatrisation of the submucous and muscular tissues of the bowel at that point. The mucous membrane of the intestine above the seat of stricture presented in many places pouches varying in size from that of a pea to that of a filbert, and formed by the protrusion of this coat externally. Opposite to the stricture it appeared to be in every respect quite healthy, but very densely convoluted. Below the seat of stricture the bowel was considerably dilated, and had during life apparently acted the part of a second bladder, as, from the symptoms described by the patient, the urine used to accumulate there in considerable quantities, being passed *per anum*.

Editor's Letter Box.

SUSPECTED ARSENICAL POISONING: FALLACY OF THE COPPER-TEST.

Letter from J. C. S. Jennings, Esq.

Sir,—About two years since (July 1857), I was in attendance on a married woman whose symptoms so closely resembled those of slow arsenical poisoning, that I at once administered an antidote, after having tested the evacuations, and obtained, as I conceived, arsenic by the copper gauze test. The fæces were peculiarly sloughy and offensive, quite unlike those of diarrhœa or dysentery; and medicines failed to relieve the patient. Moreover, on communicating my suspicions to the wife, I found that she had frequently suspected her husband of intending to poison her, and remembered being very sick after having taken ale administered by him. Besides this, I had the opinion of an intelligent physician, who visited her with me, and thought the symptoms very suspicious, and not to be accounted for in any other way; there was the remarkable anxiety of countenance, and pinched expression attributed to such cases; and, moreover, during the following night and day spent in analysis, I had the assistance of an experimental chemist.

I subsequently sent the evacuations, fæces and urine, napkins, etc., together with herb-tea given her by her husband, to Mr. Herapath, of Bristol, who declared that he could find no trace of mercury, antimony, or arsenic. The case shortly afterwards was placed by the husband under the care of another medical man, and soon terminated fatally. The husband took possession of the furniture, and even wearing apparel of his mother-in-law, who resided with them during his wife's lifetime, and turned her out of doors.

Here, then, was a motive for bringing about the death of his wife, whom he had frequently treated harshly during life; and yet I doubt not that the arsenic obtained by me was contained in the copper used as a test, and many reasons lead to this conclusion. I am, etc., J. C. S. Jennings.

Abbey House, Malmesbury, August 24th, 1859.

OPERATION FOR STONE IN THE FEMALE.

Letter from W. McEwen, M.D.

Sir,—In answer to "Embryo's" note, inserted in your last Journal, regarding the operation for stone in the female, I have to observe that the urethra and neck of the bladder were cut through; the knife was then carried with the edge directed to the ramus of the os pubis for a little way, then obliquely outwards and downwards. Perhaps the word *laterally* might be apt to mislead; but it was used in reference to the position of the patient. I am, etc.,

W. McEwen.

27, Nicholas Street, Chester, August 24th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

*Berney, Edward, Esq., Croydon, on August 23.
*Chevallier, B., M.D., Ipswich, on August 12. (Stillborn.)
Corner, Matthew, M.D., Mile End Road, on August 16.
*Pemberton, Oliver, Esq., Birmingham, on August 18.

Of daughters, the wives of—

Fuller, Henry W., M.D., Manchester Square, on August 11.
*Tuke, Harrington, M.D., Chiswick, on August 19.

MARRIAGES.

Daniell, Wm. C., Esq., Surgeon, of Stoney Stratford, son of *E. Daniell, Esq., of Newport Pagnell, to Sarah Bland, daughter of G. Battams, Esq., of Curlton, Bedfordshire, on August 18.

Duncan, Thomas, M.D., of Richmond, to Fanny E., only daughter of the late A. Morpeth, Esq., of Bishop Wearmouth, on August 23.

Home, William, M.D., Surgeon-Major, to Charlotte, daughter of F. Grome, Esq., Mount Tallant, Dublin, on August 17.

Hudson, John, Esq., Assistant-Surgeon R.N., to Marian Sinclair, only daughter of Alexander Watson, Esq., late 1st Dragoon Guards, lately.

Knight, Wm., Esq., 90th Light Infantry, to Cornelia Mary, elder daughter of *George Bury, Esq., of Whetstone, on August 17.

Moberly, Wm. H., Esq., Southampton, to Mary Arnoth, eldest daughter of the late Robert Knox, Esq., Surgeon R.N., on August 20.

Morgan, Allen B., Esq., Surgeon, of Wagga Wagga, New South Wales, to Emma Louisa, third daughter of Francis R. Hume, Esq., Castlesteads, Australia, on May 4th.

DEATHS.

Bennett, F. D., Esq., Old Kent Road, aged 51, on Aug. 22.
Burns. On August 20th, John R., son of *J. J. D. Burns, M.D. R.N., Brompton, Chatham, aged 11 months.
Tilsley, H. N., Esq., North Petherton, aged 60, on Aug. 21.
Wilkinson. On August 16th, at Manchester, aged 2½, Roger A. E., only son of *M. A. Eason Wilkinson, M.D.
Yell, William H., M.D., aged 54, on August 18.

HEALTH OF LONDON—AUGUST 20TH, 1859.

[From the Registrar-General's Report.]

		Births.	Deaths.
During week	Boys .. 917 / Girls .. 864	1781	.. 1188
Average of corresponding weeks 1849-58		.. 1555	.. 1185

Among the causes of death in the week were—diarrhœa, 240; cholera, 10 (8 children and 2 men); small-pox, 20 (including 14 children under 5); measles, 14; scarlatina, 51; diphtheria, 17; whooping-cough, 23; fever, 37; consumption, 140; accident or negligence, 28; murder, 1; suicide, 1; sudden deaths without stated cause, 3.

Barometer:

Highest (Sat.) 30.021; lowest (Mon.) 29.66; mean 29.902 in.

Thermometer:

In sun—highest (Sat.) 106°; lowest (Wed.) 72°.
In shade—highest (Sat.) 85°; lowest (Tu.) 47.5°.
Mean—63.9°; difference from mean of 43 yrs. +2.7°.
Range—during week, 37.5°; mean daily, 21°.

Mean humidity of air (*saturation*=100), 77.
Mean direction of wind, variable.—Rain in inches, 0.22.

TRIAL OF THOMAS SMETHURST.

The trial of Thomas Smethurst for the murder of Isabella Bankes, after having been interrupted at the July sessions of the Central Criminal Court by the sudden illness of a juror, was recommenced at the same court on Monday, August 15th, and terminated on the following Friday. The prisoner pleaded "Not Guilty" to the indictment charging him with murder. The Lord Chief Baron Pollock presided at the trial. Mr. Sergeant Ballantine (specially retained), Mr. Bodkin, Mr. Clark, and Mr. Merewether were counsel for the Crown; Mr. Sergeant Parry was specially retained, with Mr. Giffard, to defend the prisoner.

On the part of the prosecution, the following facts were alleged:—The prisoner was a member of the medical profession. He had been married in 1828 to a wife about 28 years older than himself, and who was now living, at the age of 74. The prisoner first comes under notice as lodging with his wife at No. 4, Rifle Terrace, Bayswater. While they were living there, Miss Isabella Bankes also came there to reside. She was a lady, aged 42, of respectable family, and was possessed of property under her own control to the extent of £1,700 or £1,800; and in June 1858, she became possessed of a life interest in £5,000, which at her death went to the other members of her family. In the autumn of 1858, after her father's death, she appeared to have been living at this lodging-house, although she had relatives living in the neighbourhood. An intimacy soon sprang up between her and Dr. Smethurst and his wife. In November, the landlady, considering the intimacy between Dr. Smethurst and Miss Bankes too great, spoke to her about it, and that lady left the house on November 29th. The prisoner also quitted on December 12th, leaving his wife, whom he visited once or twice afterwards. The landlady of the lodging house, Mrs. Mary Smith, stated that the deceased appeared to be in very delicate health. On two occasions she was very sick, and she repeatedly said that when she attempted to take food she had nausea. On one or two occasions she was obliged to leave the dinner table, and appeared unable to take her regular food. After leaving this place the deceased lodged at a house in Kildare Terrace, Bayswater, from the 29th of November to the 9th of December. During this interval she went out to walk every day. When the deceased left this house she said she was going to Clifton for change of air. On December 9th (or 12th?) Smethurst and Miss Bankes were married at the parish church of Battersea. Nothing more seems to have been heard of them until January 28th, when Miss Louisa Bankes, the sister of the deceased, received a letter from her. On February 4th, the prisoner and the deceased, under the name of Mr. and Mrs. Smethurst, took apartments in the house of Mrs. Anne Robinson, Old Palace Gardens, Richmond, and remained there until April, when they left in consequence of an increase of rent being demanded. This witness stated that the deceased seemed to be in good health when she first came to the house; but about three weeks before she left she suffered from diarrhœa and sickness. The prisoner said he should call in a medical man, and witness advised him to employ Dr. Julius, of Richmond, who attended upon the deceased until she left. The vomiting and sickness continued all the time the deceased remained in the witness's house. The prisoner supplied the deceased with all her food. Witness used to hear the deceased retching early in the morning. As soon as she began to move it appeared to bring on the sickness. The deceased frequently complained of want of appetite. The daughter of the last witness confirmed her testimony, and said that once she gave the deceased an egg, and she ate it, and said she enjoyed it. This witness never noticed that the deceased vomited without taking anything; and the vomiting happened while the prisoner was absent as well as when he was with her. The prisoner and deceased, on April 15th, went to lodge at the house of Mrs. Susannah Wheatley, in Alma Villas, Richmond. The deceased appeared very ill, and went to bed immediately. The prisoner always took her food, and he used to place the bedroom utensils on the landing, and witness emptied them. The witness said she once suggested that she should act as nurse to the deceased, and sit up with her; but Smethurst said that he could not afford it, and that no one would wait upon her so well as he could. The bedroom of the deceased was never thoroughly cleaned. There was a secretary on the landing which had two keys, and the prisoner kept them both. The prisoner told witness to keep one evacuation for Dr. Julius to see it. Witness once made some tapioca for the deceased, and the prisoner told her afterwards that the deceased said it was very nice. She made some another time, and the prisoner said that Mrs. Smethurst told him it was bitter.

The evidence of Miss Louisa Bankes, sister of the deceased, was to the effect that she and the deceased had formerly lived together; but last year the deceased went to live at Mrs. Smith's, and witness visited her there. She saw nothing of her after she left Kildare Terrace until April following. On the 20th of that month, she received a letter from the prisoner, requesting her to see her sister at No. 10, Alma Villas, Richmond. The deceased appeared rather agitated when she saw her, and said that if witness would be quiet it would be all right. Witness remained with the deceased for several hours; but the prisoner was present all the time except for a minute or two. Witness suggested that a medical gentleman, named Lane, a relation of the family, should see the deceased; and she said she would rather not see him, and the prisoner said he thought it would be better not. There was some tapioca in the room, and her sister said it had a nasty taste, and witness proposed to make some; but the prisoner said the milk had not come. She then said she would make the deceased some blanc-mange, but the prisoner objected. The prisoner shortly after this gave the deceased a saline draught, and she was very sick immediately. When witness left, the deceased expressed herself very anxious to see her again, and she promised to come again in the next week. The prisoner afterwards wrote to her, requesting her not to come, as her sister could not bear the excitement of seeing her, and the doctors had forbidden it. In consequence of another letter she received from the prisoner on the 30th of April, she went again to Richmond, and saw the prisoner. He did not say anything to her about her sister having made a will that morning. Upon going into her room the deceased recognised her, and held out her hand; but she was unable to speak. The prisoner was present all the time, and he asked her to go downstairs; and she went down with him, and he left her downstairs and went up to the deceased's bedroom. She had brought some soup with her in a jelly, and the prisoner put some warm water to a portion of it, and then took it out of the room, for the purpose, as he said, of cooling it; and she heard him stirring it. Very soon afterwards he gave the soup to the deceased, and she brought it up immediately. The prisoner then told her that her sister was so ill she had better not remain, and he also told her that some pills Dr. Todd had prescribed for her had given her great pain, and had caused her burning sensations all over the body. On the Monday (May 2nd) after this occurred, the prisoner was taken into custody; but he returned in two or three hours very much excited, and he said that Dr. Julius had charged him with poisoning her sister, and that they (Dr. Julius and the other doctors) were killing her. Witness and a nurse attended upon the deceased after this until her death, and they gave her arrowroot and other things of that description, and she did not vomit on any one occasion. She also asked for some tea, and that was also retained on her stomach. The deceased died on the 3rd of May, at eleven o'clock. After the prisoner returned, witness asked him to give out something for the nurse; but he refused, and said that witness had taken the responsibility upon herself. The health of the deceased was generally very good. The deceased used to suffer occasionally from bilious attacks and sickness, and if she rode in a carriage it made her vomit. The deceased always represented that the prisoner was very kind to her. A nurse who had been engaged to attend on the deceased on May 2nd (the day preceding her death), stated that on the first two occasions when she gave medicine to the deceased it was vomited; but that food and medicine afterwards given was retained. At the request of the prisoner she placed some of the vomited matters in a jar, which was sealed by the prisoner and given to a policeman. Mr. Senior, a solicitor of Richmond, said that on the 30th of April he made a will, by which the deceased left the whole of her property, with the exception of a brooch, to the prisoner, whom she described as "her sincere and beloved friend." The prisoner was appointed sole executor of the will. The document, with the exception of the signatures, was in the handwriting of the prisoner. The deceased was described in the will as a spinster. Mr. W. Tarte proved that the deceased lady was possessed of a sum of £1,740, which was lent out on mortgage. She also had a life interest in the sum of £5,000. On May 2nd the prisoner wrote a letter to his wife, stating that he had not been able to leave Richmond in consequence of his professional aid being required; but that

he would see her as soon as possible. If anything should prevent his coming to town he would send her some money.

The professional evidence for the prosecution commenced with the examination of Dr. Julius, who attended upon the deceased lady from the 3rd of April until her death. The prisoner told him that she had been suffering from diarrhœa and vomiting for a week. Dr. Julius believed it was a case of simple diarrhœa, and prescribed some chalk medicine. The following morning he was shown a vomit of a grassy green colour. He saw the deceased again on the 5th of April, when she appeared to be much worse. The sickness was very constant and distressing, and the prisoner complained that she could not take any food. The prisoner proposed that a mixture containing prussic acid should be administered. Witness did not think it would do any good, but upon the prisoner saying that he would watch its effects the mixture was made up and given; but it did not appear to have any effect. The sickness and retching continued unabated, and the deceased complained of burning pains in the mouth and throat, and all down the stomach; and said that even the act of swallowing caused her to vomit. There was no appearance of bile in the evacuations of the deceased after the fourth or fifth day that he saw her. On the 8th of April more serious symptoms exhibited themselves, and the deceased appeared to be fast sinking. The same symptoms continued after taking every one of the medicines given. The witness said that, in consequence of the suspicions aroused in his mind, he requested his partner, Dr. Bird, to see her, but he did not give him any hint of his suspicions. Witness was satisfied that some irritant was being administered which counteracted the effects of the medicine and kept up the symptoms. Dr. Bird attended upon the deceased from the 18th of April to the 21st, when witness saw her again, and she then appeared very much worse. The prisoner suggested that other medical advice should be called in, and on the 28th of April Dr. Todd saw the deceased. Witness did not communicate his suspicions to Dr. Todd. Dr. Todd prescribed a pill of sulphate of copper and opium. Witness had previously recommended the same description of pill; but the prisoner objected to sulphate of copper. The witness procured one of the evacuations of the deceased: at this time the pills prescribed by Dr. Todd had not been taken by her. In consequence of what he afterwards heard from Dr. Taylor, the witness applied to a magistrate, and the prisoner was taken into custody on Monday, the 2nd of May. The witness said he was not aware of the deceased having been visited by her sister until the 30th of April, and that such a subject was never alluded to, and he was never told that the deceased had made a will. Dr. Julius believed that small doses of an irritant poison would have produced all the symptoms, and said that no such ingredients were contained in any of the medicines sent for her by him. On the prisoner's application, after he had been taken into custody upon the present charge, he gave him full information of everything that had been prescribed. The prisoner always appeared to make a frank statement of the symptoms, and he described them correctly according to witness's observations. To the best of his recollection he was only twice alone with the deceased; but he would not swear that he was not alone with her oftener. The prisoner first suggested that further medical assistance should be obtained. The medicines witness administered to the deceased were chalk mixture and catechu, compound tincture of camphor, grey powder, and pills of compound powder of ipecacuanha; also quinine, diluted sulphuric acid, diluted prussic acid, ether, and gentian. He never prescribed bismuth or nitrate of silver, or acetate of lead. Until the *post mortem* examination he had no means of ascertaining that the deceased was pregnant, and it would have made no difference in her treatment if he had been aware of it. Vomiting was a very common symptom of pregnancy, and it was sometimes accompanied by diarrhœa. Witness had never heard of a pregnant woman suffering from severe vomiting and diarrhœa which would not yield to any ordinary remedies. He had never made the *post mortem* examination of a body that had died from arsenic or antimony. On the 8th of April the deceased could not have been pregnant longer than a few days, and at that early period witness never heard of pregnancy being accompanied by diarrhœa. The symptoms were totally different from those generally exhibited by pregnant women. The burning sensation in the throat and soreness of the mouth were quite unusual in the vomiting of pregnancy.

Dr. S. D. Bird, the partner of Dr. Julius, visited the deceased lady on or about the 18th April. Dr. Julius did not tell him before he went that he entertained any suspicion in reference to the illness. The prisoner told him he thought the deceased had neglected her bowels, and that they were unloading themselves by diarrhœa and vomiting. Witness continued Dr. Julius's prescription for two or three days, and he then changed the treatment. The symptoms went on increasing in violence. Bismuth, acetate of lead and opium, and nitrate of silver, were afterwards administered; and the prisoner said that the nitrate of silver had occasioned a burning pain all through the bowels. After witness had been in attendance for three days, he formed an opinion that something was being administered which had the effect of counteracting the medicine, and he communicated this opinion to Dr. Julius. On the 30th of April he asked for a portion of one of the evacuations of the deceased, and the prisoner gave him about four ounces, which was placed in a jar and sealed, and he then gave it to his assistant, Mr. Caudle. Another evacuation was afterwards procured, and they were numbered one and two, and were both sent to Mr. Buzzard, of Great Marlborough Street, to be examined. On Monday, May 2nd, prisoner showed witness an evacuation, a portion of which witness took away with him, and it was sealed, labelled, and numbered three. The prisoner was taken into custody on that day, and was admitted to bail on his own recognisance. M'Intyre, the officer, accompanied witness to the prisoner's residence, and he handed him some bottles and pill-boxes that he found there. Witness on this day several times gave the deceased arrowroot and brandy, and beef-tea and brandy, and they always remained on the stomach. On the following morning, witness was sent for suddenly to the house, and found the deceased evidently dying; but there was no vomiting or diarrhœa. Witness believed that death was occasioned by the irritation produced by the constant administration, in small doses, of some mineral poison: arsenic or antimony would be calculated to produce all the symptoms exhibited by the deceased. Antimony would have been a most improper thing to administer to the deceased; and witness never administered any in the medicines he prescribed. The symptoms were not attributable to any known natural disease: he had seen much dysentery in the Crimea, but never saw such a case as this. He had never been present at a *post mortem* examination in slow poisoning by arsenic. Corrosive sublimate would have produced the same results and symptoms as appeared in this case: salivation would not necessarily be produced by it.

Mr. Caudle, the assistant of Dr. Julius, gave evidence as to the fact of the medicine prescribed having been made up by him; none of them contained arsenic or antimony. The son of Dr. Julius stated that he had, on April 30th, taken two sealed bottles, given him by Dr. Bird, to Mr. Buzzard, in Great Marlborough Street, and Mr. Buzzard gave evidence of having received the bottles and given them to Dr. Taylor, with a letter from Dr. Bird.

Mr. Richard Barwell on the 4th of May made a *post mortem* examination of the deceased, assisted by Mr. Palmer. Dr. Julius, Dr. Bird, and Mr. Bird were present, but they took no part in the examination. The arms were flexible, but the legs were very rigid. The face was of a dull earthy colour, and very emaciated, and the lips were drawn in. The brain was perfectly healthy, and so were the lungs; the liver was hard and of full size. (It was stated by Mr. Palmer to be enlarged and hardened, and in an incipient state of fatty degeneration.) The deceased appeared to be between five and seven weeks advanced in pregnancy. The heart was healthy. Upon examining the stomach externally, he found at one end a large black patch, but there were no ulcers nor any appearance of acute inflammation. He had never made a *post mortem* examination in any case where death was the result of slow poisoning.

Dr. Wilkes said that, in his opinion, the death of the deceased was most probably to be accounted for by some irritant. Excluding dysentery, he was not acquainted with any form of disease that would present similar symptoms.

Dr. Todd, physician to King's College Hospital, said that when he saw the deceased, he noticed a peculiar expression of countenance,—an expression of terror. The abdomen was very hard; and he was at once under the impression that she was suffering from the influence of some irritant poison. By witness's desire an evacuation was obtained, and he directed Dr. Julius to make up the sulphate of copper and opium pills. Witness had never known any bad effect produced by this medicine, and he did not think it possible it could produce a burning sensation in the throat or the stomach. If the disease had been diarrhœa and bowel complaint, the medicines administered by Dr. Julius were proper. He had never been present at the *post mortem* examination of a body where death arose from slow irritant poisoning. Vomiting and diarrhœa

might occur in early pregnancy, but he did not believe that in any stage of pregnancy there could be such an extensive ulceration of the intestines as existed in this case. The only disease that could in any way account for the symptoms of the deceased would be what is called acute dysentery; but he believed her death was caused by the administration of an irritant poison.

Dr. Metcalfe Babington, Dr. L. Bowerbank, and Dr. Copland, stated that they had seen many cases of acute dysentery, and that the symptoms were not reconcileable with that form of disease. They believed death to have been the result of the administration of an irritant poison.

Dr. A. S. Taylor said that, on Sunday, the 1st of May, Mr. Buzzard brought him two bottles, containing matters to be examined. From an examination of one of these, containing about four ounces of an evacuation, he became satisfied of the presence of arsenic by the copper test. His calculation was that there must have been less than a quarter of a grain mixed with the four ounces of matter in the bottle. There was no trace of mercury, or antimony, or bismuth, but he discovered the presence of copper by a subsequent test. He recommended that hydrate of magnesia should be administered to the patient. He afterwards examined the contents of the other bottle, and found that it did not contain any poison or any metallic matter whatever. On the 5th and 7th of May, Inspector M'Intyre brought him a portion of human viscera: also a number of bottles, and several pill-boxes. There were altogether twenty-eight articles; he examined the whole of them for arsenic and other poisons, but did not discover any. Dr. Taylor said that he discovered antimony in the lower intestines, and also in the cæcum, and upon one of the kidneys. There were also traces of antimony in some blood that was said to have been taken from the heart. Dr. Odling and himself came to the conclusion that the quantity of antimony present was about half a grain. The intestines presented appearances of excessive inflammation, and the lining membrane was almost entirely destroyed. There was likewise blood in the stomach. The medicines that had been supplied by Dr. Julius contained the ingredients of which they were represented to be composed. In one of the bottles, found in possession of the prisoner, there were 355 grains of chlorate of potass. Another bottle appeared to contain a clear saline liquid. He tested a portion of the contents by Reinsch's test, and, upon first trying the copper, it was entirely consumed. He made a further test, which led him to suppose that there was arsenic present in the solution, but it turned out that it did not contain either arsenic or antimony, and that the arsenical appearances came from the copper gauze. By the destruction of the copper the arsenic contained in it was set free. The chlorate of potass destroyed the copper. Dr. Odling also came to the conclusion that the bottle contained arsenic, and they both stated that fact in their examination before the magistrates and the coroner. He had used the same description of copper gauze for a great many years, and never before discovered arsenic in it. He should certainly continue to use it, but not with chlorate of potass. Chlorate of potass would act upon the kidneys and carry off any matters contained in them. He could ascribe the death to no other cause than the administration of some irritant poison. The (supposed) finding of the arsenic in the bottle did not have any effect on the opinion he subsequently formed in reference to the case. The moment he discovered the mistake that had been made, he gave information to Sergeant Ballantine. Dr. Odling and Dr. Brande also analysed portions of the contents of the bottle, and they all came to the conclusion that there had been a mistake in the first instance. If no chlorate of potass or other ingredient had been used to carry off the arsenic in a case of poisoning, he should generally expect to find arsenic in the tissues of the body. No arsenic was found in the body of the deceased. In slow arsenical poisoning the vessels of the stomach might be gorged with blood. There were a variety of symptoms attending slow poisoning by arsenic. Sometimes it caused eruptions on the arms and hands, excoriation of the nostrils, and a hacking cough. A clammy sweating would be one of the consequences of antimonial poisoning, unless there was diarrhœa and vomiting. The action of small doses of antimony upon the liver would be to enlarge the liver and cause a deposit of fat on that organ. Dr. Taylor did not think antimony would have the effect of softening the liver.

Dr. Odling gave evidence agreeing with that of Dr. Taylor. Mr. Brande stated that he examined the bottle of chlorate of potass, and found that it did not contain arsenic.

Mr. Serjeant Parry addressed the jury for the defence. He would not deny that the prisoner had violated the moral, if not a higher law, by committing bigamy: but he contended that none of the circumstantial evidence brought forward tended to fix the guilt of murder on him. He believed the will made by the deceased was the entire foundation for the charge. It might be said that this supplied the motive; but, if the other evidence were insufficient to support the charge of wilful murder, the existence of the will ought not to be allowed to operate in any way upon their judgment. It was said that the prisoner had perpetrated the crime to obtain possession of about £1,700 or £1,800; but he would equally have come into possession of it if the deceased had lived; for she had handed over to him the dividend that she received in April. While she lived, also, she was entitled to a life interest in £5,000, and the prisoner would have had the benefit of that also, and therefore he had a much stronger motive for her to live than he had to destroy her. He was certain they would not forget the uniform kindness and affection with which he had been proved to have treated the deceased, although it was suggested on the part of the prosecution that this conduct was merely practised to deceive and to throw off suspicion. The suggestion was that the prisoner was poisoning this lady, but there could be no doubt that he was the first to propose that additional medical assistance should be called in, and everything he did must have been done under the very eyes of several medical men of the greatest skill and experience. The conduct of the prisoner was extraordinary and unaccountable upon the supposition of his guilt; but it was clear, straightforward, and simple, upon the supposition of his innocence. The evidence by which it was sought to make out that a crime had been committed, was nothing but a theory. It was said that the death arose from the administration of some irritant poison, such as arsenic or antimony. Had any arsenic or antimony, or any other poison been shown to have been, either indirectly or directly, in the possession of the prisoner, or to have been within his reach or under his control? As to the stupid theory that the poison had been carried off by chlorate of potass, it was merely the offspring of a fertile brain, to account for what was felt to be an almost overwhelming difficulty, namely, the absence of any poison in the body of the deceased. Had a conviction for murder by poison ever been heard of without some evidence being adduced that the prisoner had poison in his possession, or that he was in a condition to obtain it? The prisoner was taken suddenly into custody; he was searched, and he had no opportunity of concealing the poison if there ever had been any in his possession. Dr. Taylor, when he was examined originally, stated, without the least reservation, that he had discovered arsenic in a vessel that was in the possession of the prisor .. If this had been the fact it would have been almost conclusive evidence, and if the mistake had never been found out, upon that fact alone the prisoner would have gone to the scaffold, probably perfectly innocent. Dr. Taylor no doubt believed that he was right, but was it not clear that he was wrong? and what reliance ought to be placed upon evidence of this description in a case where the life of a fellow creature was at stake? The same test was applied to the evacuation that was applied to the chlorate of potass, and might there not have been some mistake with the one as with the other? In the common grey powder there was frequently antimony; bismuth also frequently contained arsenic; and Dr. Taylor himself admitted that in the sulphate of copper that came from the surgery of Dr. Julius he discovered slight traces of arsenic. The evacuation which was said to have contained arsenic was handed to Dr. Julius by the prisoner himself. Dr. Julius stood in a very peculiar position. He admitted that on the 18th of April he suspected that poison was being administered; and yet, from that time down to the day before the death of the unhappy lady, he took no steps to obtain a nurse, or to put a stop to the wicked proceeding which he believed to be going on.

The following evidence was then called for the defence:—

Dr. B. W. Richardson deposed that he was a doctor of medicine, a licentiate of the College of Physicians, and lecturer on Physiology at Grosvenor Place School. The symptoms of the deceased, and the *post mortem* appearances, in his opinion, were not reconcileable with slow arsenical poisoning. There was an absence of several symptoms which he should expect to find. The inflammation appeared more developed in that portion of the intestines which, in poisoning by arsenic, generally received the least injury. He should expect, in poisoning by arsenic, that arsenic would be found in the tissues of the body. He had administered arsenic in small doses, with chlorate of potass, to a dog; and, after the dog was destroyed, he discovered

arsenic in the liver, lungs, heart, and spleen. He gave eighteen grains of arsenic in sixteen days: he could not say how much he found in the body—there might have been half a grain. He tried experiments upon two other dogs, with antimony and arsenic given alternately, one in conjunction with chlorate of potass, and the other without. One of these dogs died at the expiration of eleven, and the other of twelve days; and in both cases a portion of the poison passed away in the urine. In slow poisoning by antimony, he should expect to find softening of the liver and congestion of the lungs, and some poison in the liver. The liver was generally the great *depôt* for arsenic or antimony. He had seen many cases of acute and ordinary dysentery; and the symptoms exhibited by the deceased more resembled those of the former malady than the result of slow arsenical or antimonial poisoning. He was acquainted with many cases of pregnancy where the patient suffered from vomiting and diarrhœa. From the description that had been given of the deceased lady, he considered she was a very likely subject for dysentery. He had analysed ordinary bismuth, and had discovered arsenic in many instances; the largest quantity was half a grain in an ounce of bismuth. He had prescribed bismuth to a patient; and, after taking it several days, a certain quantity of arsenic passed from him. Antimony would undoubtedly cause sickness, and sometimes purging; and it would also be calculated to produce a sensation of burning heat in the stomach. He did not believe that sulphate of copper was likely to produce such a sensation. Heat in the abdomen, and the other symptoms he had mentioned, were symptoms of irritant poison having been taken, but they were slso symptoms of violent diarrhœa; and whenever there was an excess of acid in the stomach, it was likely to produce a burning sensation. If a patient was suffering from violent irritation of the stomach, from any cause, sulphate of copper would be likely to increase that irritation.

Mr. J. E. D. Rodgers, formerly lecturer on Chemistry at the Grosvenor Place School, had given chlorate of potass, as an experiment, with arsenic and antimony; and it had no effect whatever. Chlorate of potass was very much used as a wash for the mouth, to sweeten the breath. Supposing arsenic and antimony to have been administered to any one for five or six weeks, he should certainly expect to find both substances in the tissues of the body, particularly in the liver, and in the kidneys and spleen; and if he did not find any poison, he should believe that none had been administered. He did not believe it possible to find antimony in the blood without also finding it in the liver. He could state positively from his own experience, that nearly all the bismuth that was sold contained arsenic, he should say to the extent of half a grain to an ounce. Grey powder frequently contained antimony, and he should say more than bismuth would contain of arsenic. The condition of the intestines of the deceased was not consistent with slow arsenical poisoning. There was a peculiar appearance of the conjunctiva that he should always look for in slow poisoning by arsenic, which was absent in this case. In slow poisoning by antimony, he should expect to find a clammy sweat all over the body, and a deathy coldness; and that the liver would be softened. Supposing the sixth of a grain of arsenic to be found in an evacuation, he should think that a large portion still remained in the system. If under such circumstances he did not find arsenic, he should be inclined to doubt whether the experiment on the evacuation had been correct. There were means of obtaining copper perfectly pure; and he considered it a most dangerous thing to use copper of any other description, particularly where a man's life was at stake.

Dr. Thudichum deposed that he was a doctor of medicine, and lecturer on Practical and Experimental Chemistry at the Grosvenor Place School; and he was also a pupil of Professor Liebig. He believed that all the symptoms were consistent with a natural death; and, in his opinion, she died of dysentery. The diphtheritic symptoms were not consistent with death from slow arsenical or antimonial poisoning. In such cases, the poison would be found in the tissues. He had found that grey powder contained arsenic and antimony, and a larger portion of the latter than the former. He had also analysed bismuth, and found it contained both arsenic and antimony. In one inttance, in 120 grains of bismuth he found about half a grain of arsenic. He could not say the quantity of grey powder he had analysed. The mercury the deceased took might have produced the aphthous spots in the mouth; but he did not think the arsenic or the antimony had anything to do with her death. He thought that the quantity of arsenic and antimony contained in the bismuth and the grey powder would account for a small portion of arsenic being found in an evacuation.

Dr. F. C. Webb, lecturer on Medical Jurisprudence at the Grosvenor Place School of Medicine, and a physician of the Great Northern Hospital, gave similar evidence to the last witness as to the cause of death; and said it was his opinion, from the symptoms, that the deceased died a natural death. The pregnancy of the deceased was a material ingredient in the case, and it would have accounted for many of the symptoms that presented themselves. He considered the administration of sulphate of copper to the deceased, in her condition of pregnancy, as very improper; and that bismuth ought not to have been given to her, unless it was pure. He considered the deceased died of dysentery, aggravated by her pregnancy; and he had read of many such cases that had altogether baffled medical skill. If he was called in to attend the wife of a medical man, and her husband told him that she was not in the family way, if he found that the medicines he prescribed did not have their proper effect, he should still feel it his duty to make further inquiries to ascertain whether she was pregnant or not. He should not expect that any medicines would check such a disease as that to which he attributed the death of the deceased. He should not have dreamed of poison if he had attended upon the deceased, and had seen all the symptoms that presented themselves. Fifteen thousand persons died of dysentery in this country from the year 1848 to the year 1854.

Dr. G. F. Girdwood deposed that he had had great experience in midwifery, and he had seen many cases in which pregnancy was combined with dysentery, and in one case the dysentery was very severe.

Mr. James Edmunds, surgeon to the H division of police and to the Royal Maternity Charity, said that in his experience purging and vomiting were very common in the early stages of pregnancy, and the former was frequently as violent as almost to exhaust the patient; and he knew of one fatal case of this kind. This patient was a woman, about forty years old; she was married, and had had several children. The illness continued for several weeks, and she frequently complained of burning pain in the stomach. The witness made a *post mortem* examination. The cæcum and the lower intestines were violently inflamed, and there were ulcers as large as a shilling. The patient was in the seventh month of her pregnancy. He administered bismuth, and it relieved the vomiting for the time, but it came on again. Witness was in attendance to give evidence in another case, but he felt it his duty to communicate with the solicitors for the prisoner, and he was then subpœnaed to attend.

Dr. Tyler Smith, physician-accoucheur to St. Mary's Hospital, deposed that he had devoted great attention to midwifery, and was the author of a work upon the subject. Excessive vomiting was very often a symptom in the early stages of pregnancy, and he had known instances in which it had caused death, baffling all medical treatment. In the case of a patient who was suffering from purging and vomiting, he should consider it very important to ascertain whether the patient was pregnant or not; and this, in his opinion, should always be done in such cases. In pregnancy accompanied by purging and vomiting, it was very common for the patient to feel a burning sensation in the stomach, and the mouth would become sore; and he had seen cases where the symptoms had been so similar to those that would have resulted from the administration of poison, that the evacuations of the patient were submitted to examination by a chemist. In cases of excessive vomiting in pregnancy, prussic acid was a most valuable medicine. It was a very common thing in such cases shortly before death that the patient should cease vomiting, and even be able to take food, and this was the case with the celebrated Charlotte Bronte, who died of vomiting in pregnancy. The death, in point of fact, was the result of starvation; under such cases the countenance of the patient always presented a most peculiar appearance. Any irritating medicine would keep up dysentery.

Mr. Pedley, a dentist in George Street, Hanover Square, deposed that in February last Dr. Smethurst applied to him to give him something for foulness of breath, and he mentioned chlorate of potass as an ingredient that might be used with good effect.

Mr. Sergeant Ballantyne then replied for the prosecution. After commenting on the various points in the general evidence to show that they pointed to guilt on the part of the prisoner, he noticed the medical evidence. Cases of slow poisoning were very rare; there were a great many difficulties to contend with in making out such a case, and it could only be done by circumstantial evidence. If it would be required that positive

evidence should be given of the commission of the offence, this terrible crime of secret poisoning would in almost every case go unpunished. With reference to the mistake that had been committed by Dr. Taylor, he said in his opening that this mistake had been committed; but the jury would recollect that it it had been proved by competent persons that the test he made use of was a perfect test under ordinary circumstances, and it was only defeated by the presence of the chlorate of potass. He then called the attention of the jury to the fact of a certain quantity of arsenic being found in one of the evacuations of the deceased, and he said that one of the medical men who had been examined on behalf of the prisoner had admitted that under such circumstances he should have expected that a large quantity of arsenic had been in the body. A good many fanciful theories had been suggested on the part of the defence; and an endeavour was made to account for the presence of the poison by saying that it was contained in the bismuth that was prescribed by Dr. Julius. But the bismuth which came from the surgery of Dr. Julius was proved to be entirely free from arsenic; and in that which had been analysed by the witnesses for the prisoner, the quantity was quite infinitesimal, and could hardly be appreciated.

The Lord Chief Baron then summed up. After going through the general history of the case, he came to the medical testimony. He observed that the whole of the medical men who had been examined, who were all men of experience in their profession, concurred in expressing their opinion that the symptoms exhibited by this unhappy lady were unlike those of any known disease, and were more ascribable to the administration of an irritant poison than to any natural disorder. The counsel for the prisoner had made a great deal of the mistake made by Dr. Taylor, and he had a perfect right to do so. It appeared, however, that it was clearly a mistake; and that it was owing to a new discovery in science that chlorate of potass would dissolve copper. They must, therefore, give to this fact no more effect than it really deserved; and he certainly considered that the learned counsel for the prisoner had no right to ask them to dismiss Dr. Taylor's evidence altogether, in consequence of this mistake. Dr. Taylor had frankly admitted his mistake; and if it really arose from a new fact in science, he thought it would be rather too much to say that upon such a ground Dr. Taylor's evidence should be altogether rejected. His Lordship then proceeded to comment upon the evidence for the prisoner. Many witnesses, he said, were called, and their evidence appeared to be to the effect that according to their opinion and experience the symptoms were not consistent with a case of slow arsenical poisoning, and that a great many symptoms which were almost invariably exhibited in such cases, were absent. A good deal of their testimony also went to show that chlorate of potass would not have the effect of eliminating the arsenic from the system more rapidly. With regard to this latter portion of evidence, after the discovery that no arsenic was contained in the bottle No. 21, it appeared to him that it was of no value whatever, except so far as the learned counsel had a perfect right to use it to attack the evidence of Dr. Taylor. Another portion of the evidence went to show that the deceased might have died of some natural disease; but none of the witnesses went so far as to say that she actually did die of such disease. Those witnesses also expressed their opinion that in death from arsenic or antimony some portions of these substances would be found in the body, and particularly in the liver. All the evidence, however, the jury would recollect, was merely the evidence of scientific men, the result of reading and study; and, although such evidence was undoubtedly receivable, still the jury must consider how far it ought to weigh against that given by witnesses who saw the patient while living, and who had the opportunity of personally observing all the symptoms. One of the witnesses called on behalf of the prisoner for the purpose of casting a doubt upon the existence of poison, admitted that he had not taken the measures that were necessary to arrive at a correct result, and the only reason he gave for this was that he had not the time. It appeared that no answer whatever had been given to the main point in the prosecution—that no medicine whatever had the slightest effect upon the malady under which the deceased was suffering. The medical evidence was, of course, very important; but the jury must, in addition, look at all the other facts in the case, and particularly to the conduct of the prisoner, and his motives for committing the crime. Even supposing that there were no medical testimony at all in the case, they would still have a very grave question to decide with reference to the guilt or innocence of the prisoner.

The jury, after an absence of forty minutes, returned a verdict of "Guilty."

The prisoner, on being asked in the usual form whether he had anything to say why judgment of death should not be passed upon him, addressed the court for about twenty-five minutes. He admitted that he had acted illegally in marrying the deceased; but swore that he was perfectly innocent of having administered anything wrong to her. He said his wife was aware of the attachment between him and Miss Banks, and that it was arranged that she should never trouble him nor make any inquiries after him, and he was to visit her when he pleased. With regard to the letter addressed to his wife that was found in his possession, he had written to her every week since they had been separated. During Miss Banks's illness, he was always anxious to have additional medical advice; and he declared before God, that it was himself who advised that Dr. Todd should be sent for. The doctors deceived him with regard to the state of the lady, and they always said that she would recover. Dr. Todd had no opportunity of examining the state of the lady, for he was not in her bed-room more than four or five minutes, and as to the extraordinary expression of countenance that he has spoken of, it was very likely occasioned by her seeing three men, one of them a strange doctor, in her bed-room. With regard to the finding of half a grain of arsenic in the motion, all he could say was, that she had fifteen motions on that day, and if there was nearly half a grain in that one evacuation, there must have been at least four grains of pure arsenic in her body, and yet none whatever was discovered. It had been urged against him that no one knew what became of the food that was not consumed by the patient. He used to eat what she left. He denied entirely that there was any secrecy or concealment; the bed-room door at both the lodgings was constantly open, and the landlady, or any one else, could see what was going on in the room. Besides this, he used to go out six days out of seven, and he always went two or three miles to post his letters. He declared most solemnly before God, that he never desired to prevent Miss Louisa Banks from seeing her sister, and as to the supposed motive for committing the offence being to get the deceased's money, he could have had that at any time. She gave him her dividend, and she had such confidence and affection for him, that if he had asked her for the money, she would have let him have it immediately. Besides this, he had no want of money. He had £400 in his possession, besides the amount at his banker's, when he was taken into custody. He also wished to state, with regard to his wife, that he had no property with her, and that they had lived together happily a great many years, travelling about and living in Paris, and also at different places in Germany. He had always acted honourably, and paid everybody, and although his conduct had been raked up for thirty years, nothing had been found out against him, and this singular charge would never have been made but for the ill-feeling that Dr. Julius entertained towards him.

The Lord Chief Baron then pronounced sentence of death: upon which the prisoner exclaimed in a firm voice, "I declare Dr. Julius to be my murderer. I declare I am innocent before God."

The trial lasted five days.

TO CORRESPONDENTS.

Communications have been received from:—Mr. E. Daniell; Dr. W. B. Mushet; Dr. E. Waters; Mr. S. H. Evans; Dr. J. H. Goodwin; Mr. W. Gillibrand; Mr. T. Morris; Dr. T. Skinner; Dr. D. Thomson; Dr. G. D. Gibb; Dr. J. G. Croker; Mr. J. Lucas; Messrs. Savory & Moore; Dr. O. Ward; Dr. F. H. Woodforde; Mr. Spens; Dr. Hyde Salter; Mr. T. Holmes; Dr. Davey; Mr. Edward Lister; Mr. A. T. H. Waters; Dr. James Russell; The Registrar of the Medical Council; Mr. Thompson; Mr. William Martin; Mr. W. F. Cleveland; Dr. P. H. Williams; Mr. J. C. Davie; Mr. J. H. Spencer; and Mr. J. C. S. Jennings.

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Descriptive and Surgical Anatomy—Dr. Halford and Mr. Lawson.
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The Lecturer on Chemistry has a Private Laboratory, where Students are instructed in Analytical and Physiological Chemistry.

Instruction in Pathological Anatomy is given by the Lecturer on Physiology.

Further information may be obtained at the School, 1, Grosvenor Place; of Dr. RICHARDSON, 12, Hinde Street, Manchester Square, W.; or at the Residences of the different Lecturers.

St. George's Hospital Medical School.

SESSION 1859-60.—The WINTER COURSE of INSTRUCTION will commence on SATURDAY, October 1st, with an INTRODUCTORY ADDRESS by Mr. H. C. JOHNSON, at 2 p.m., at the Hospital.

Physicians—Dr. Page, Dr. Bence Jones, F.R.S., Dr. Pitman, and Dr. Fuller.
Assistant-Physicians—Dr. Barclay and Dr. John W. Ogle.
Obstetric Physician—Dr. Robert Lee, F.R.S.
Surgeons—Mr. Cæsar Hawkins, F.R.S., Mr. Cutler, Mr. Tatum, and Mr. H. C. Johnson.
Assistant-Surgeons—Mr. Prescott Hewett and Mr. George D. Pollock.
Dentist—Mr. Vasey.

Lecturers—Medicine—Dr. Pitman.
" Surgery—Mr. Tatum.
" Anatomy—Mr. Pollock and Mr. Gray.
" Physiology—Mr. A. Johnson.
" Chymistry—Dr. H. M. Noad.

The Hospital contains 350 beds.

Clinical Lectures are given by the Physicians and Surgeons of the Hospital during the Winter and Summer Sessions, and Clinical Instruction is given in the Wards by the Physicians and Surgeons, and on the Diseases peculiar to women by the Obstetric Physician.

A Maternity Department, for the delivery of married lying-in women at their own homes, is established at the Hospital, under the superintendence of the Obstetric Physician.

The Surgeons' Perpetual Pupils are eligible to be Assistant House-Surgeon for Six Months, and House-Surgeon for Twelve Months (without additional Fee), when properly qualified for the Office. Pupils of the Hospital are eligible to the office of Obstetric-Assistant, when duly qualified, at a salary of £100 per annum.

Pupils entering to St. George's Hospital Medical School are free to all Lectures and Hospital Practice necessary for the Examination of the College of Surgeons and Society of Apothecaries, by the payment of FORTY GUINEAS the first year, FORTY GUINEAS the second year, and TWELVE GUINEAS the third year. But Pupils have the option of entering to the different courses of Lectures and Hospital Practice by separate payments.

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"The William Brown Exhibition," of Forty Pounds per Annum, tenable for Three Years, may be held by any Pupil, perpetual to the Medical or Surgical Practice, who has commenced his third, but not completed his fourth Winter Session. Pupils entering to the Hospital Medical School in the Session 1859-60 will be entitled to compete for this Exhibition.

A Prize of Twenty Guineas, for general proficiency in Medical Studies, will be offered to Students who enter to the Hospital Medical School for the Session 1859-60. The Examination will take place in July.

Also, for the encouragement of Clinical Study—

A Prize of Twenty Guineas, for Surgeons' Pupils in their second year; a Prize of Twenty Guineas, for Physicians' Pupils in their second year; Sir Benjamin Brodie's Clinical Prize in Surgery; the Thompson Medal; the Lewis Powell Clinical Prize in Medicine; and Sir Charles Clarke's Prize for Good Conduct.

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Addresses and Papers

READ AT THE

TWENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LIVERPOOL, JULY 27th, 28th, and 29th*, 1859.]

ADDRESS IN PHYSIOLOGY.

BY

A. T. H. WATERS, Esq.,

LECTURER ON ANATOMY AND PHYSIOLOGY IN THE LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE, ETC.

[*Concluded from page* 690.]

I NOW pass to consider briefly some of the results of recent experiments and observations with reference to the functions of the sympathetic nerve, and the influence it exercises over the processes of nutrition and secretion.

As long ago as 1727, Pourfour du Petit had ascertained, that a division of the cervical portion of the sympathetic was followed by contraction of the pupil and increased vascularity of the conjunctiva. Dupuy in 1816, Brachet in 1837, and Reid in 1838, confirmed these observations.

The researches of Claude Bernard, Dr. Augustus Waller, Dr. Budge, Dr. Brown-Séquard, and others, have proved that section of the cervical portion of the sympathetic and galvanization of the same, produce exactly opposite effects. The investigation of the phenomena resulting from experiments on this nerve, promises to throw considerable light on the various processes of healthy and morbid action.

The results of section of the sympathetic in the neck may be briefly summed up as follows:—

Contraction of the pupil; dilatation of the blood-vessels, and increased vascularization, of the parts to which the divided nerve is distributed; an increase in those actions which are considered the result of the vital properties of the parts.

On the other hand, galvanization of the divided nerve is followed by—dilatation of the pupil; contraction of the blood-vessels; diminished vascularity; and a decrease in those actions considered as the result of vital properties.

These results are now established by a vast number of experiments, and are admitted as true by all physiologists.

I may here briefly consider an important question, which has occupied much attention of late years, viz.: What is the origin of the sympathetic nerve? The experiments of Dr. Waller and of Professor Budge seem to prove that the nerve-fibres of the sympathetic going to the iris originate in the spinal cord, between the sixth cervical and the fourth dorsal vertebræ. Dr. Brown-Séquard states that the origin of these fibres is more extended still, for a section of the lateral half of the spinal cord, at the level of the fifth, sixth, and even the ninth dorsal vertebra, affects the iris in the same way as section of the sympathetic, only to a less degree. And he further mentions, in accordance with the observations of Schiff, that some of the fibres animating the iris ascend the cervical part of the cord, and most likely go up to the medulla oblongata. Observations tend to show that the nerves which supply the blood-vessels are derived, chiefly, if not entirely, from the cerebro-spinal centre. With regard to those which pass to the blood-vessels of the face, as long ago as 1852, Brown-Séquard stated that they arose from the upper part of the spinal cord, and the neighbourhood of the medulla oblongata, and that, after passing down the cord, they emerged with the last cervical and upper dorsal nerves. He has also shown that a section of the lateral half of the cord, in the dorsal region, produces in the lower limbs most of the effects produced in the head by section of the cervical sympathetic, viz.: dilatation of blood-vessels, elevation of temperature, hyperæsthesia. We have here an explanation of the increased sensibility which I have before alluded to, as following section of the white portion of the cord, on the side of section. The increased sensibility is caused by the influence of the operation on the nerves of the blood-vessels.

These results are analogous to those obtained by Mr. Lister, to whose valuable paper on the subject, in the *Philosophical Transactions*, I beg leave to refer my hearers. His experiments were made on frogs; and they afford convincing proof that the cerebro-spinal axis is the nervous centre which regulates the contraction of the blood vessels, and that this function is exercised by the whole length of the cord and the posterior part of the brain, operating through fibres which arise from the axis and pass off with the sensory and motor nerves.

I might relate numerous experiments showing the influence of section of the sympathetic in the neck on the structures of the head and face; but I must refer you to the works of M. Claude Bernard, and others, for the details of them. Nothing is more remarkable than the rapid dilatation of the blood-vessels and the increase in the temperature of the parts, which take place after such section. The increase in temperature is persistent, and in one animal operated on by Claude Bernard, it was found to exist a year and a half after the operation. Equally remarkable with the results just mentioned is that which follows galvanization, for no sooner is the cephalic segment of the divided sympathetic submitted to the influence of galvanic action, than the increased vascularity of the parts disappears, and the temperature falls below the natural standard.

The effects which follow the section of the sympathetic seem to be in great measure due to paralysis of the blood-vessels; but yet the phenomena are not altogether explicable on this supposition. The increased vascularity, no doubt, results from the dilated condition of the vessels, and the increased temperature may depend on the increased vascularity; but we are told by Claude Bernard, that the vascularity may diminish, without a corresponding diminution of temperature taking place.

The changes produced on the blood-vessels, by a section of the sympathetic, although they resemble, in some measure, those which accompany inflammatory action, yet differ from them in many important respects. No serous, or other effusions occur, unless some accidental circumstance give rise to inflammation, which may then run its ordinary course, and the parts recover their previous condition. There is further, a remarkable power possessed by these parts of resisting the influence of cold; for if an animal, the cervical sympathetic of which has been divided on one side, be placed in a temperature much below that of its own, the temperature of the sound side will sink much more rapidly than that of the injured one; and again, under the depressing influence of slow death, the same phenomena are witnessed; the parts on the side of section preserve their vitality for a longer period than those of the opposite side.

The nerves of blood-vessels are capable of being influenced by indirect, as well as direct, means; and they exhibit, under different circumstances, all the phenomena of reflex action. It has been found, by Drs. Tholozan and Brown-Séquard, that if one hand be dipped into water of a very low temperature, the vessels of the opposite hand will contract; and the more pain is felt the greater will be the contraction. It has also been shown, that excitation of the cutaneous nerves of the neck will produce a contraction of the blood-vessels of the ear. These effects must be the result of reflex action, and seem to point out the spinal origin of the vaso-motor nerves. It has also been shown that a spasm of the blood-vessels may be produced just in the same way as a spasm of muscles. A section of one-half of the spinal cord, near the medulla oblongata, is followed by the singular result of paralysis of the blood-vessels of the extremities of its own side, and a spasm of those of the opposite side—a spasm which may be so great that circulation becomes almost entirely suspended.

The various experiments which have been performed on the sympathetic nerve, tend to show the influence the spinal por-

tion of it exercises on the functions of organic life. It was long ago shown that the various processes of nutrition, secretion, and repair, might go on in an organ, when the influence it derived from the nervous centres was cut off; and there is very strong evidence that animal life can exist without the endowment of a nervous system.

But in making observations on the sympathetic nerve, we must not forget that it contains another element besides its spinal one, and we have yet to learn the exact nature of the influence which this portion exercises, and the manner in which it is effected by the various processes employed in experimenting on the nerve.

I have alluded to the fact that, by a reflex act, blood-vessels may be made to contract; and it is no less true that, by a similar act, an influence may be produced on the secretion of an organ, and on the nutrition of a part. I need scarcely give instances to prove these points. One or two familiar ones may suffice: the secretion of saliva when the stomach is irritated by food; of gastric juice when the nerves of taste are excited; the production of tears from irritation of the branches of the fifth. These are sufficient to prove the fact with regard to secretion; and of the influence of reflex action on nutrition, abundant evidence exists; but no part affords so good an opportunity of witnessing it as the eye. We know that injury to the branches of the fifth nerve, about the eye, often results in inflammation of the eye itself; and that the inflammation of one eye, especially if it be of a traumatic character, is very liable to produce inflammation of the opposite one. These results must be produced by the irritation being carried to the nervous centres, and thence reflected back.

Again, take the instance of neuralgia. How often does it cause congestion of the eye, and photophobia? M. Notta mentions that of one hundred and twenty-eight cases of neuralgia of the trigeminal nerve, the eye was congested in thirty-four, there was photophobia in eighteen, whilst a real opthalmia existed in some. We must all be familiar with instances of a similar character. Other, and even more striking examples, might be mentioned; but I must pass on. We are all aware that sudden death has sometimes occurred from drinking cold water on a hot day: from a blow on the abdomen; or any severe irritation of the abdominal sympathetic nerve. This seems to result from reflex action arresting the movements of the heart. The influence travels to the spinal cord, and is reflected along the par vagum. That this is the true explanation appears to be proved by the experiments of Brown-Séquard, who states that if the par vagum, or the spinal cord, or the splanchnic nerves, are divided, any kind of irritation may be made on the sympathetic in the abdomen, without an arrest of the heart taking place.

Again, I may instance, as the results of the reflex actions of vaso-motor nerves, the remarkable pathological changes in the internal organs, which so frequently follow extensive burns of the skin; results analogous to that so often produced by irritation of the sensitive nerves of the eye, from a prolonged use of the microscope, an inflammation attacking the eye opposite to the one used.

I might relate other examples, which show the effect of irritation of a centripetal nerve, in producing alterations in distant parts. I mention one other, and that a striking one. An operation is performed on the *cervix uteri*—a polypus is extirpated—and some days after, the actual cautery is applied to the pedicle which remains. Intense peritonitis supervenes, and the patient dies in three days. The autopsy reveals no perforation; a simple reddening of the mucous membrane of the uterus; the Fallopian tubes healthy; the spot cauterized is far from the peritoneal cavity; but yet the intestines are found covered with pus. This case, the details of which are probably familiar to most of my hearers, is a most remarkable and instructive one; not a case of inflammation, reaching the peritoneum by extension; but clearly commencing there. And to what can it be attributed, except to the irritation of the nerves of the *cervix uteri* being propagated to the spinal cord, and from thence reflected by other nerves to the peritoneum.

The influence of impressions on peripheral nerves in producing changes in the nutrition or secretion of a part, by reflex action, was long ago pointed out by one of our associates, Dr. Radclyffe Hall, in his able work on the sympathetic nerve. He there endeavoured to show that such impressions may produce reflex action of the ganglia, resulting in changes in the organic processes, over which the sympathetic presides; and further, that when the impressions reach the spinal cord, the reaction may produce every variety of spinal phenomena, and influence the organic actions of any or every organ of the body. In the inferences, deduced from his experiments, he has anticipated views of more recent investigators, to which attention of late has been much directed.

I have dwelt somewhat at length on this subject, both on account of its great practical importance, and that I believe the mechanism, by which these results are produced, is not generally admitted to be the same as that by which the reflex action of muscles is produced. And yet the researches of Müller, Stilling, Radclyffe Hall, Claude Bernard, and others, as well as those of Brown-Séquard, seem to leave no doubt of the fact. The latter author has attempted to show, by various experiments, the influence which the spinal cord exercises on these actions.

I have alluded to the internal inflammations which follow large burns, and their supposed production, by reflex action, on the vaso-motor nerves. Dr. Brown-Séquard has found that if an animal, in which the spinal cord has been divided at the level of the third or fourth lumbar vertebra, so that no irritation can be propagated from below to the viscera of the head, chest, and upper part of abdomen, have its legs burnt, and be killed two or three days after, no appearances similar to those so frequently found in man, are found in any of the viscera except the bladder and rectum; but that if the cord be divided as high as the third dorsal vertebra, and the animal be similarly treated, the abdominal viscera are found in a state of congestion, with serous infiltration, and ecchymosis in different parts.

But I feel that I am wandering somewhat from the purely physiological questions to which I ought to confine myself, and that I am trespassing on the domain of pathological inquiry. I have insensibly dwelt longer than I perhaps should have done on this subject, from its great interest, and the important practical bearings it presents.

Having thus briefly alluded to some points related to the spinal cord and the sympathetic nerve, numerous subjects at once offer themselves to me, in connexion with the encephalic portions of the nervous centres. In offering a few remarks on the present views of the functions of some of these parts, I feel somewhat relieved when I reflect that I have already occupied so much of your time, that I must rapidly bring these observations to a conclusion. I must, however, apologize for the very cursory and incomplete manner, in which I shall be compelled to treat so important a branch of my subject.

I need scarcely remind my hearers that, at the upper part of the spinal cord, and lying along the base of the brain, a series of ganglionic structures is found, completely hidden in man by the two hemispheres; but, as we trace the arrangement which exists in the various classes of animals, we find these ganglia, in some, without the superaddition of the cerebral masses. In some of the lowest vertebrata, the mere rudiments only of the hemispheres exist; and amongst the whole of the invertebrata, with but a very few exceptions, these rudiments even are entirely absent: whereas, on the other hand, as we ascend towards the higher vertebrata, we find they become more and more developed, till they attain their largest size in man. No physiologist of the present day has paid more attention to this subject than Dr. Carpenter; and the views he has been mainly instrumental in developing, with respect to the relation of the ganglia I have spoken of, to the organ of consciousness and the seat of the intelligent mind, have been most ably advanced, and have received very strong confirmation from numerous sources.

Amongst the most important points which have been advanced with respect to these encephalic ganglia, are, that they constitute not only the centres of the various organs of special sense, but of common sensation also; that they are, in fact, the seat of sensational consciousness, and the source of those consensual or instinctive actions which result from sensation, and are performed without the influence of a guiding or controlling will. Numerous facts have been brought forward, and arguments adduced, in support of the view that the *thalami optici* constitute the centres of sensation, and the *corpora striata* the centres of instinctive or sensori-motor action.

The peripheric expansion of the grey matter of the hemispheres is connected with these ganglia by means of commissural white fibres, which, on the one hand, are supposed to convey the impressions received by the sensorial centres, upwards to the grey matter, so as to give rise to perception; and, on the other hand, to carry downwards the mandates of the will to the motor apparatus, which, obeying the injunction, brings into play the particular set of muscles required for the performance of the designed movement.

There is no principle of neurological science which has

received more general assent, or is more firmly established, than that the grey matter of the nervous centres is the source of all nervous action; and, considering the hemispheres with the light of this principle, we cannot but look upon the convolutions of the cerebrum as the seat of the mental functions, the source of all psychical action and voluntary power; and the white matter as the medium by which impressions are received which, giving rise to thoughts and ideas, may eventuate in acts of the will; but when the hemispheres are absent, when there is no peripheral expansion of grey matter—no true cerebrum, in fact—mental acts do not take place, and the life of the animal is restricted to the manifestation of functions of a sensori-motor or instinctive character.

We may thus observe, from the few observations I have made, that the tendency of recent researches in the nervous system has been to separate its different portions, and to assign to each its peculiar properties and functions. There can be no doubt that the labours of Marshall Hall had a great influence in this respect, in determining the true centre of the excito-motor system; and the investigations of Dr. Carpenter and others have had a no less important effect, in throwing light on the functions of the different portions of the encephalon, in separating the psychical from the sensori-motor or consensual actions, and in assigning the seat of the former in the cerebral masses, and of the latter in the ganglionic structures I have spoken of.

There are no physiological phenomena which show more than do those of the nervous system, the importance of a wide basis of research, and the danger of hasty generalization. Had the observations of physiologists been confined to the higher forms of mammalia, to explain the phenomena witnessed in man; had they even been restricted to the vertebrata—our views of the functions of the nervous system would be much less precise and accurate than they now are. But an extensive observation of "the living experiments", to use the words of Cuvier, "which Nature has presented to us in an ascending series, in the various forms of animal existence," has demonstrated the functions of the various portions of the nervous system, and the progressive development of faculty, which attends the progressive development of structure. A careful investigation of these cases has enabled the physiologist to analyze the actions of the higher organisms, to dissect, as it were, the different portions of the nervous centres, and to apply to each its particular function. Observation seems to show that animal life is not dependent on nervous influence; that, as in the plant, nutrition, growth, and secretion, may go on without the intervention of nervous power, so, in some of the lower animals, these processes may be performed without its existence; and it has long ago been proved that, in the higher forms of animals, these acts will continue when the influence of the nervous centres is withdrawn. We cannot, therefore, look upon a nervous system as a necessary part of animal existence, but as something superadded, when definite actions are to be carried on. And we therefore find that, in those animals in which such movements are to be performed, in respondence to impressions, to sensations, or in obedience to the will, a nervous system exists, and part after part is added, or increased, in accordance with the endowments of the animal itself. An automatic apparatus is that which we first find; to it, in other animals, certain cephalic ganglia are added, which constitute, apparently, the centres of sensation, and of control over the movements of the body. But when the influence of the will is to be brought to bear on these movements, certain hemispherical masses are superadded, which are at once the organs of volition and the seat of the intellectual faculty; and a progressive increase in their development takes place, according as the animal possesses a greater power of volition, or is endowed with intelligence and reason of a higher order.

Of the connexion of this portion of the nervous system with the intelligent mind, it would be vain for us to speculate; it is sufficient for the physiologist to know the laws by which it is governed, and the machinery by which it acts. We shall probably never ascertain the process by which an idea is conceived, or by which a thought is elaborated; as we shall probably never know the steps by which an act of the will is produced; and we can scarcely expect that our researches will demonstrate the nature of that nervous force, which has occupied so much of the attention of philosophers in all ages. Nor need we be surprised at this. What do we know of the proximate causes of gravitation, of magnetic attraction and repulsion—of the essential nature of light, of heat, of electricity? We recognise these as *forces;* and we have ascertained something of their correlation to each other; and we must be content to look upon the nervous force as one of the demonstrations of vitality—a force undoubtedly related to those to which I have alluded, but differing in its essential nature from each and all.

Interesting as must ever be, to physiological psychologists, the investigation of these questions, we, as practitioners of medicine, may safely yield them to their consideration; but, whilst we leave these subtle speculations, it becomes us to pursue the path which is already opened in the domain of cerebral physiology, and, from a wide, extensive, and careful examination of structure, to develope a more accurate knowledge of function. We know nothing of function apart from structure; we know nothing of mind apart from its material agent. To use the words of one of our most eloquent associates (Dr. Cowan, *Physiology of the Brain—Transactions of the Provincial Medical and Surgical Association*, vol. vii): "To obtain a philosophical insight into the modes of acting of our different organs, it is indispensable not only to study functions, but also the instruments of those functions; and, what is of nearly equal importance, to trace both the one and the other through every grade of organization where their presence can be recognized, to discover their essential elementary character, and to view them apart from those various combinations which obscure their manifestations in the higher orders of created beings..... We must not foolishly hope to penetrate the mystery of how mind is associated with matter. That there exists an intimate connexion between mental phenomena and organization, is perhaps most satisfactorily proved by referring to the daily and hourly experience of each individual. It might indeed with justice be asked, What do we know of mind apart from organization? Every manifestation of its presence is conveyed through material agencies; and we are not in possession of a single function by which we can perceive other than physical existences. The highest flights of creative genius fail to disrobe of a material covering the fairest beings it can fashion; and our conception of spirit is nothing more, when analysed, than indefinitely attenuated matter. The natural history of mind intimately links itself with corporeal conditions. It is as infantine as the body; it grows with its growth, and strengthens with its strength; it becomes enfeebled by age, and falters with its declining powers. There is not a vibration of the frame with which it does not sympathise, and from all antiquity bodily and mental health have been indissolubly associated. The horrors of the dyspeptic, the delicious reveries of the opium-eater, the frightful ravings of the maniac—what are they but the consequences of certain bodily conditions? And if terror may be assuaged by a narcotic, if fancy may be stimulated by the grape, if intellect may be arrested by a blow, can we for a moment hesitate as to the close union which exists between our mental acts and our bodily organization?"

The right path to the development of a scientific psychology is already entered on, and we may hope that the researches of the physiologist will pave the way for the formation of a true science of mind. Abandoning the vain speculations which characterized a former epoch, the spirit of the Baconian system has been infused into the inquiries of psychologists. To these results, the labours of some of those who are still amongst us—of Carpenter, of Noble, of Brodie, and of Dunn—have contributed; and, as a greater accumulation of facts takes place, let us hope that some subtle genius may arise, who shall unite together the scattered links of the chain of this vast inquiry, and establish the great doctrines of mind on a sound and immutable basis.

In considering the progress which neuro-physiology has made, it is impossible not to see that the present century, in this as in other departments of science, has indeed been prolific of results; nor can we contemplate the advances that have been made, or the principles and important generalizations which have been established, without experiencing feelings of satisfaction and of pride, at the distinguished part which our own countrymen have taken in the labours and researches which have led to results, so vast, and so valuable. The names of Bell, of Mayo, of Marshall Hall, of Todd, of Newport, of Carpenter, of Lockhart Clarke, are familiar to us all; and a host of other names, not less worthy of honourable mention, might be enumerated, did time permit. The works of these men have tended to place the British school of physiology in the high position it now holds; their researches have removed from the chaos of doubt and the region of uncertainty many of the most important facts of neurological science, and have given us clearer and more definite notions of the mechanism by

which the automatic and instinctive actions of animal life are performed, of the mode in which sensations are perceived, and in which voluntary impulses act.

But the labours of British physiologists have not been confined to, nor do the honours to which they are entitled rest alone upon, their observations of any one particular set of vital phenomena; and whether we look to the investigation of the elementary tissues of the body, of the structure, or the functions of individual organs; whether we look to the researches into the vascular system, or the nature of the fluid which it circulates; whether we look to the examination of the anatomical characteristics of the blood, or of those subtle processes which accompany its coagulation—in fine, whether we contemplate the physiologist as investigating the nature and properties of each atomic portion of the body, or taking in, in the vast comprehensiveness of his genius, the whole range of animated nature, classifying and arranging the facts which other labourers have assisted to accumulate, deducing from them the great principles which regulate the processes of organic life, and demonstrating the unity of design, and the adaptation of means to end, which characterise the works of our beneficent Creator,—we find in each the representative and the type in the British school of physiology; we find that each subject has had its special inquirers, each field its special labourers; and we have no fear for the onward progress of the science; no doubt that the honour reflected from our illustrious countrymen, whose discoveries have formed epochs in physiological history—from Harvey, Hunter, and Bell—will be worthily maintained by those who are now treading in the same paths, accumulating facts, and building up theories, in the same scientific departments. And I am sure I shall but express the feelings, and echo the sentiments of all, when I say with what satisfaction and pleasure we have regarded the recent effort that has been made, to do justice to the genius of one, whose name is indelibly associated, no less with the development and progress of surgery, than with the great generalizations of the science; one branch of which has formed the subject of these remarks. But, whilst we rejoice in the approaching realization of an object too long deferred, which has been earnestly desired by all the admirers of John Hunter, and by none more than by him who presides over this meeting, let us not forget that the claims of another of England's greatest physiologists, and greatest men, are yet unrecognised by any public memorial; that the remains of Harvey still lie in their obscure resting-place; and that no monument marks our admiration of his genius, or our appreciation of his labours.

But I feel, sir, that in paying the tribute of respect to the illustrious men, who have contributed so much to the advancement of physiology in our own country, I should be wanting in my duty, did I not tender our meed of praise to the distinguished labourers of continental schools, by whom the science has been so much enriched. Where so many have contributed to the progress and development of all the branches of the science, it would indeed be an invidious task to particularize names. In the course of this address, I have brought prominently before you the name and the works of one of the most distinguished of living physiologists, and I shall venture to mention another name, feeling sure that I may safely do so, in justice to the memory of him who bore it, and considering him as at once the representative and the type of the school to which he belonged.

Fifteen months ago, our science lost one of its brightest ornaments, and Germany one of her most distinguished sons. Those who have watched the progress of physiology during any portion of the last twenty or thirty years, are familiar with the name of Johann Müller; and probably many of those present are acquainted with the most important circumstances of his life, from the perusal of an eloquent oration, delivered in honour of his memory by one of his most renowned pupils.

An ardent worker, a profound thinker, entirely devoted to the objects of his pursuit, which he followed with unabated earnestness to the period of his death, his researches and his writings have exercised a powerful influence on the progress of physiology and physiological anatomy. His views are well known in this country, from the translation of his great work by Dr. Baly; a work which forms probably a more complete handbook of the science of which it treats, than any that has been written since the time of Haller.

Müller's was not the speculative genius, which astounds us by the brilliancy of its discoveries, or the boldness of its flights; but in him we see the careful investigator, the pains-taking observer; he built up no hypotheses, unsupported by proof, and destined to fall under the scrutiny of subsequent researches; but his was a gradual working out of results, from facts which his own indefatigable labours had accumulated, and his own mind had analysed.

No one could more highly appreciate the great discoveries of science than he, and no one knew better, how few are those which change its entire aspect; and there is a passage in one of his writings which, at the same time, is so honourable to him, and so creditable to two of the illustrious men whose names I have mentioned, that I cannot refrain from quoting it. Writing in 1833, he says:—"Great discoveries have hitherto been extraordinarily rare in the history of physiological science, and, if we reckon those which have brought about a total reform in our previous notions of physiology and pathology, we shall find that two only can be regarded as of primary importance, viz., the discovery of the circulation, and of the different functions of the anterior and posterior roots of the spinal nerves; which is the greatest honour of modern times."

Gentlemen, I feel that I have trespassed too long on your time. On the important general bearings of physiology on practical medicine, it is altogether unnecessary that I should dwell. One of the ground-works of medical science, one of the pillars which support the fabric which has been so nobly reared, we believe it will receive, year by year, fresh impulse and development; and more and more approach to that degree of perfection, to which we all desire it may attain; and we may rest assured, that in proportion as, upon the basis of structural knowledge, a correct appreciation of experimental inquiry, and a careful interpretation of pathological phenomena, we shall build up a sound physiology, and, on this, a rational pathology—so will the great principles of medical science advance—so will the diagnosis of disease become more easy, and its treatment more simple,—and so will the strongholds of empiricism be undermined, and the unsubstantial hypotheses of the day yield before the irresistible evidence of truth, and the power of demonstrated facts.

Let us, then, each pursue the path of legitimate inquiry, and endeavour to contribute our quota to the general stock of knowledge; bearing in mind the labours of those who have worked before us, and are working around us; and, although we may not hope to attain to their eminence, let us, at any rate, strive to imitate their example.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

I. EXCISION OF THE UPPER JAW.

Under the care of Cæsar Hawkins, Esq., and Prescott Hewett, Esq.

Richard L., aged 50, was admitted under Mr. Hawkins's care on October 27th, 1858. Two years and a half ago, he felt some obstruction in the right nostril, so that he could not breathe through it as he had been able to do; and one year and a half ago, a polypus formed there, which was removed, but shortly afterwards it formed again, and about ten months ago was removed. This, like the other operation, cured him for a time, but it was very short, as the passage became again obstructed, and for the last few months he had noticed a swelling in the right cheek at the lower border of the malar bone; this had been accompanied with a good deal of pain in the same side of the cheek. A week before admission, an abscess formed in the lacrymal sac, which was opened. There was, on admission, much swelling about the sac, which discharged pus.

On looking into the right nostril, a tumour could be seen, rather high up, exactly analogous to a polypus; and on the right cheek a tumour could be felt at the upper part of the superior maxillary bone, which to the touch was soft; and bone could not be felt beneath it, as if some had been absorbed. There was a muco-purulent discharge into the mouth by the side of the alveolar process of the bicuspid teeth.

Nov. 1st. The lacrymal sac was opened yesterday, and consequently there is a diminution in size of the tumour on the cheek. A probe being passed through the opening above the alveolar process, passed easily through the antrum to the

orbital plate. The probe was also passed through the front part of the nasal growth to the bone above.

Nov. 5th. The swelling of the cheek was less; the antrum comparatively free; the inferior spongy bone more distinct. The probe passed easily into the nose from the fistula. He was ordered to have a solution of sulphate of zinc injected.

Nov. 8th. A style was passed into the lacrymal fistula.

Nov. 12th. The thickening in the nostrils was undiminished. Solution of sulphate of zinc (gr. ij ad ℥i) was ordered.

Nov. 19th. Some small masses of a soft gelatinous appearance were removed from the lower spongy bone. Under the microscope these were found to consist merely of ordinary fibres and cells of mucous membrane; much hæmorrhage followed this. The tissue was soon reproduced, and in a short time the passage of air through the nostril was quite impeded, and the antrum appeared to be gradually filling with the growth. Mr. Hawkins, therefore, proposed to excise the upper jaw; but as the man would not consent, he left the Hospital on January 12th.

On April 6th, he was readmitted. He had suffered from giddiness and difficulty in breathing through the nostrils to such an extent, that he had made up his mind to the operation. The swelling had increased, although not to a very great extent. The operation was, however, postponed, in consequence of his having some cough, for which the opinion of the physician was requested, who pronounced his chest free from disease. Another cause of delay, however, was the formation in the cheek, over the diseased bone, of a small hard moveable lump, which felt very like a portion of the morbid growth. It was noticed, however, that some of the teeth were carious, and it was soon discovered that the hard lump was merely an abscess in connexion with these decayed teeth, so that, on the extraction of the teeth and the bursting of the abscess, the parts were soon in a condition for operation. This was accordingly performed, on May 19th, by Mr. Prescott Hewett in Mr. Hawkins's absence. In performing the operation, the bone was necessarily removed in three or four pieces, in consequence of several parts of it having been absorbed. In removing the portion of the tumour by the pterygoid fossa, the internal maxillary artery was divided. This was tied directly, and there was no hæmorrhage of consequence from any other source. The tumour, which almost filled up the antrum, much resembled a collection of small polypi, consisting of a number of villous processes, arranged several on a single stalk. There was no microscopic evidence of malignant disease. Chloroform was given previously to the operation, but he did not remain under its effects more than a third of the time.

In the afternoon, there was a little secondary hæmorrhage, which was soon arrested by ice. The wound in the cheek united readily, for the most part by first intention; but on the 24th, the cornea on the side operated on became inflamed, and this inflammation progressed steadily to the destruction of the organ, the cornea having sloughed and the contents of the eye escaped. The movements of the lower jaw also were very limited on his recovery, in consequence of some low inflammation in its neighbourhood, by which the motions of the joint were confined to a space of from one quarter to half an inch. This, however, was somewhat improving when he left. About a month before his discharge, Mr. Prescott Hewett extracted from the nostril a small polypus exactly resembling the original tumour. There seemed to be no return of it before his discharge. He left the house in very good health towards the latter end of August.

II. DISEASE OF THE SUPRARENAL BODIES.

Under the care of W. E. Page, M.D.

William S., aged 17, was admitted, under Dr. Page's care, on July 9th, 1859. He was a tall lad, who had the appearance of having outgrown his strength. For the last four months he was noticed to have been weakly and ill, and to have been losing flesh; but he would not admit having had anything the matter with him, and he went on with his work (at a saddler's) until ten days before admission, when vomiting came on, accompanied by some degree of mental wandering. When he came into the Hospital, he was extremely thin, and he had a general slight taint of jaundice upon the skin; but the conjunctivæ were perfectly white. There was frequent vomiting. The belly was depressed, and no enlargement could be felt in the hepatic region. The lungs were carefully examined, but nothing unnatural could be detected. When he was questioned, he displayed a hesitating, uncertain manner. He complained of pain across the loins, and of a burning pain at the lower part of the sternum. The skin was cool, or rather cold; the pulse 96, very feeble; the tongue clean. He was ordered an ammoniated saline draught, and six ounces of wine. The bowels being confined, a mild purge of grey powder and rhubarb was given; but, as this did not act, on July 11th blue pill and colocynth were administered, and produced a motion, apparently quite natural. Prussic acid with soda was also given, to check the vomiting, which still continued. Brandy was substituted for the wine. The urine was obtained, and found to be natural. By July 13th, the vomiting had subsided; the yellow tint of the skin remained. He was more emaciated and hollow-eyed. The skin was cold; the pulse 100, and very weak. He complained of feeling "awfully low". At times he was a little delirious; so that, a blister having been put on the sternum, to relieve the pain there, he fancied his whole body covered with blisters. Both pupils were dilated, and had been so, more or less, from the first. The same treatment was continued, alcoholic and ammoniacal stimulants being given freely. Next day, he was found usually lying with half-shut eyes, regardless of all that was going on, but now and then rousing himself to answer a question. He was quite cold, and had no pulse. In the afternoon he died.

The *post mortem* examination was made twenty-three hours after death. The body was emaciated. The skin was universally somewhat discoloured, of a dirty yellowish hue, approaching to bronze only on the parts exposed to the sun. On microscopical examination of the skin, the whole of the epidermis was found loaded with pigment, which in many places was collected in greater quantity in the deeper layers of the epithelium, in others was equally distributed throughout it. The brain was healthy, as was the heart. The right side of the heart contained white clot. The left lung was healthy. At the apex of the right lung was a single very small collection of crude tubercles. The liver, spleen, and kidneys, were healthy. The gall-bladder contained a large quantity of bile. The suprarenal bodies, particularly the left, were of large size, and were occupied by a mass of tubercular deposit to such an extent that no portion of the healthy gland appeared to be left. The mesenteric glands were enlarged by tubercular deposit. Both the solitary and agminate glands in the lower part of the ileum were much enlarged. No ulceration or inflammation existed.

Remarks. The above was an unquestionable case of fatal cachexia from disease of the suprarenal bodies, and, in that sense, an instance of "Addison's disease", although the peculiar condition of the skin, which first attracted the notice of Dr. Addison in this disease, could not be clearly recognised. In fact, it appears not improbable that the bronzed condition of the skin, by which the disease was originally characterised, is only one of the symptoms of a malady of which perhaps too few cases have hitherto been observed to allow of any definite conclusion as to its pathognomonic character. In the case of the poor lad before us, the colour of the skin was not sufficiently well marked during life to assist in any manner in the diagnosis, although the existence of disease of the suprarenal capsules was suspected, on the authority of analogous cases which have occurred at this Hospital, and which we have had the opportunity of reporting. The progress of the symptoms sufficiently proves that the fatal result was in no way connected with the disease found in the mesenteric glands and intestines, and which, indeed, was in so early a condition as probably to be hardly announced by any symptoms.

KING'S COLLEGE HOSPITAL.

CYST CONNECTED WITH THE THYROID BODY.

Under the care of W. Fergusson, Esq.

Mary Allen, aged 34, a native of Hertfordshire, was admitted, under the care of Mr. Fergusson, on May 16th. She had been living for the last five years at Blackheath. It appeared that she had noticed a swelling over the thyroid cartilage about fifteen years ago, which had continued to increase ever since. It was about the size of an orange, moved during deglutition, and gave little inconvenience except by its bulk. She complained, however, of slight pain and dyspnœa after exertion. Her aunt was similarly affected.

On May 21st, she was put under the influence of chloroform. The tumour was carefully cut down upon, and an opening about an inch in length made into it in the middle line. A large quantity of dark coloured fœtid fluid escaped, which Mr. Fergusson pronounced to be serum coloured with blood, and called the attention of his class to the peculiar odour found in

the fluid of cysts connected with the thyroid body. Immediately after the escape of the fluid, the cyst filled with blood of an arterial colour. This hæmorrhage appeared to proceed from the vessels of the cyst, the pressure upon which had been withdrawn by the removal of the fluid, and not from any vessel having been divided. On placing the finger in the cyst, the innominate artery could plainly be felt, and was so isolated that a ligature could easily have been carried round it. The wound was stuffed with lint, and a pad strapped on it, which controlled the hæmorrhage. A poultice was substituted for the pad on the 23rd, but on the following day it was found necessary to renew the pressure, in consequence of bleeding following the removal of some of the lint.

On the 28th, however, it was found feasible to remove the lint, as bleeding no longer occurred. The cyst became filled with granulations, which were so abundant as to require repressing with the nitrate of silver; and on June 11th, she was well enough to be made an out-patient.

On the 26th, however, she was readmitted, in consequence of bleeding, which had occurred from the wound during her sleep. She had lost, it was said, half a pint of blood before being brought to the hospital. Pressure was now again made upon the wound, by stuffing it with lint and covering it with a compress as before, and no further bleeding has occurred. The cyst was daily emptied of its serous contents, and pressure reapplied, until she was again well enough to be discharged, when she occasionally attended as an out-patient. She was last seen on August 4th, when the wound had contracted to a minute sinus, and recovery seemed almost complete.

Remarks. The above was an instance of a not very common form of bronchocele, viz., a sanguineous cyst in connexion with the thyroid body existing singly, and giving rise to some trouble in consequence of the vascularity of its lining membrane. The case also illustrates the important relations which such cysts in the neck assume in consequence of the facility with which they make their way among the great vessels. The peculiar odour of the fluid contained in these cysts of the thyroid body is a point worth bearing in mind.

KENT AND CANTERBURY HOSPITAL.

CASE OF CHOREA TERMINATING FATALLY: GENERAL REMARKS.

By Alfred Lochée, M.D., F.R.C.P., Senior Physician to the Hospital.

[*Communicated to the East Kent and Canterbury Medical Society.*]

I propose to call the attention of the Society to a few practical points connected with the malady known familiarly as the dance of St. Vitus, with the special object of relating the details of a fatal case of that disorder.

Such an event as death actually from simple chorea—*i. e.*, a fair wearing out of the powers of life under the exhaustion consequent upon the continued convulsive movements which characterise the disorder—is, I apprehend, a very rare one in the present day, whatever may have been the case in former times, and under those peculiar circumstances which generated those remarkable nervous derangements marked by *increased efficiency* but *depraved direction* of the will, known as tarantism, leaping ague, etc. Such an issue to such a malady is, in fact, the only instance of the kind of which I have any personal knowledge; and I have, therefore, thought it worthy of being brought to your notice.

Ordinary cases of chorea Sancti Viti are of frequent occurrence in this locality, and the wards of our Hospital are seldom for many weeks together without one or more of them. They occur almost exclusively in young females between the ages of 8 and 20; they are usually attributed to, and probably are actually produced by, some sudden shock of the nervous sensibilities, as fright, etc.; whilst they are universally found to be connected with deranged uterine functions, with some kind of intestinal irritation, or with a morbidly excitable imagination. Those cases which come on after an attack of acute rheumatism I do not include in the present category.

These common cases are very amenable to treatment; the great majority of them being readily cured by any of the preparations of iron or zinc, preceded and accompanied by mild though active aperients, which last I hold to be a very essential part of the treatment. Probably, indeed, these ordinary cases of chorea, and especially those which occur in susceptible young children, from mental emotions, have a natural limit of their own, and would get well of themselves in a reasonable time, under the influence of the change of association and the repose which are found in a place like this hospital; for I hold it to be a principle, that anything which makes a decided alterative impression upon the system, without impairing the strength, exerts a curative action in chorea.

On the other hand, some few of the cases we receive here are very rebellious to treatment; and that, too, without any apparent reason or appreciable cause for the difference. In these, the disorder seems to become habitual from the mere lapse of time; such patients always presenting more or less of the appearances of imbecility. As a rule, the muscular disorder is general in them; whilst a direct cause for the attack can seldom be assigned. In all of them, however, it will be found that the menstrual function has not been established, even when the age is sufficiently advanced for it to be so; whilst they present a flushed florid face, capillary congestion of the skin, with a weak pulse or feeble heart—all indicative of want of tone in the circulating and muscular systems. These cases, also, in my experience, for the most part do well, under combination of purgatives, tonics, and antispasmodics, long ago recommended by Sydenham for their treatment; or else they gradually recover, as it were, spontaneously, as the catamenial age comes on, and the menstrual discharge appears.

Such is the ordinary run of our chorea patients; but now and then, as rare exceptions, I believe, to the rule, we do meet with cases which are accompanied by a far graver train of symptoms—declaratory, in fact, of a large amount of irritation of the cerebro-spinal axis, and attended with that peculiar state of brain-excitement and nervous exhaustion which is so remarkable in the malady known as delirium tremens. I will give you a sketch of two such cases, which turned out well, as introductory to a third, which ended fatally.

Case i. A young girl, aged 15, was brought to the Hospital on April 6th, 1858, from Ramsgate. The convulsive movements were general, and rather severe; she was said to have had no sleep for a week; she was pale and exhausted from her journey. The pulse was very low; the bowels were confined; the catamenia had not appeared. The attack had come on nine days before, without any known or apparent cause. She was ordered turpentine enema, and a combination of saline aperients with iron. As she was sleepless, and even at first disposed at times to talk wildly, she had an opiate at night. Things went on as usual with such cases, except that she very early showed signs of prostration, until the 24th, when she became wildly maniacal, and so violent as to render it necessary to secure her in bed, by means of a sheet folded across the body. This frenzical condition gradually merged in four days, under the influence of opium and blisters, into a state exactly resembling the middle stage of typhus; low faltering pulse; dull sensorium; sordes on mouth and teeth; muttering delirium when left to herself, and a tympanitic belly, the chorea also continuing. Ammonia, camphor, opium, wine, and counterirritants to the head and spine remedied this condition in about a fortnight; so that, by May 10th, oxide of zinc was given for the chorea, which was still nearly as bad as at first. Citrate of iron was given on the 31st; and she left as convalescent on June 23rd; which, albeit being the eve of St. John's day, is not supposed to have had any influence in her recovery.

Case ii occurred in a young woman, aged 18, a servant of "*all work*", which means always of very hard work. In her the chorea came on after she had been in the Hospital some weeks, she having been admitted in August with the customary train of nervo-hysterical symptoms, of which hyperæsthesia was the most prominent. The chorea came on gradually. We watched its advent, and prescribed accordingly; nevertheless, on October 3rd, it broke out into a violent frenzy, which necessitated removal into a separate ward, and the application of all sorts of contrivances to prevent her from injuring herself during her gesticulations, by striking her head and limbs against the wall and bedstead. As it was, she got several severe bruises. She ran on into the same state of typhoid prostration and low delirium as in the former case. The treatment was the same, and by October 26th, she was restored to simple chorea again. She took a combination of iron and zinc for a fortnight, and was made an out-patient at her own request November 30th, since which time I have heard nothing of her.

Case iii did not furnish the same pleasing result, and has induced me to lay this history before you. It occurred also in the person of a young girl, aged 14, who was admitted October 19th from one of our city parishes. At first sight, and for a day or two, it looked like an ordinary case of chorea; for, on

her first examination, nothing unusual was noted about her, except that she was "rather dull and heavy". The disorder was general, but not very violent. She had had it for three months; it was her second attack, the former one having taken place two years prior. She had never menstruated; the pulse was low; the bowels had been confined for some days; they were always torpid; the jactitations were said to continue during sleep, which was subsequently proved to be the fact.

In accordance with my usual plan of treatment, she was duly purged with our compound magnesia draught, had a turpentine enema, and then some form of iron.

On the 25th, she became much more violent in her muscular contortions, and talked wildly, though perfectly sensible to questions and making rational answers. This state, with the addition of pervigilance, continued with little variation for nearly a fortnight, during which time came gradually on those typhus-like appearances noted in the other cases; the prostration being, however, far greater in this one. So incessant were the involuntary muscular movements, that at the bend of the elbows the cuticle got chafed and abraded, and from this extended a bright superficial erysipelatous redness as high as the armpits. Nothing controlled for a moment the violence of the symptoms; night and day she writhed and jerked and twisted about. By November 5th, it was quite evident that she would sink from exhaustion, for up to that time she took stimulants and nourishment more easily than I was at all prepared for or can readily explain, since the muscles of the throat were affected with the rest. The low state of her vitality was further evidenced now by the appearance of a large slough on the sacrum, and a gangrenous hue on the abrasions at the elbows; and so her powers of endurance gradually wore out, and she died on the 12th. There was no stupor, nor other sign of cerebral effusion, until a few hours before her death.

Remarks. It is apparent to me from the issue of this case, that both of the other ones I have related were much nearer to a similar ending than I at all supposed; and I am still at a loss to see how they escaped from it. As a matter of fact, until within a week or two of the end, this fatal case did not wear so threatening an aspect in some particulars as either of the other two, especially the first I alluded to.

The pathology of this case, and of all similar ones, is a point of great interest; for what are the structural changes, if any, or the morbid appearances, discoverable in the cerebro-spinal axis from such a disorder? I cannot say what they were in the case before us, as a *post mortem* examination was peremptorily refused. I do not imagine, however, that we should have found anything more than serous effusion into the arachnoid, and possibly into the ventricles of the brain; and even that most probably merely as the result of disordered vascular action a few hours prior to death. We shall have no right, I think, to assign to any particular portion of the nervous centres any particular lesion or structural change as the exciting cause of the symptoms; whilst seeing what the symptoms were from first to last, we shall have still less right to expect to find any of the products of pure inflammatory action. The important practical fact which I deduce from the case is, that simple brain-irritation, prolonged, it may be, to the spinal marrow, apart from any inflammatory action either in themselves or their meninges, may induce some of the same physical results, and that exhaustion consequent upon long-continued nervous excitement and spasmodic muscular actions may kill a patient with St. Vitus' dance, just as it does in hydrophobia, or some of the forms of tetanus.

Original Communications.

ANOMALOUS CASE OF TYPHOID FEVER.

By T. Ogier Ward, M.D., Winkfield, near Windsor.

On August 7th, I was requested to see a delicate female child, about 2 years old, one of a family of six children, four of which, boys, had died from teething at about the same age. I was told she had had a bad cold for a week, attended with cough and violent running from the eyes and nose, and slight sore-throat. She had lost her appetite, was feverish, and disinclined to quit the arms of her mother or the nurse. She slept badly, with slight occasional delirium; but this was only evinced by her striking her mother on one or two occasions when disturbed at night. Her bowels were rather confined. I found her shy and fretful, with a quick pulse, a little more heat of skin than in health, only eight teeth fully cut, but no redness or tenderness of the gums nor flushed cheeks. The tongue was rather white at the back, moist and clean at the tip. She had slight thirst. The abdomen was not distended, nor very hot. Profuse discharge of puro-mucus flowed from both nostrils, which, as she tried to breathe through them, her throat being obstructed by enlarged tonsils, caused her to respire with difficulty, but not rapidly. This difficulty was much increased during sleep.

Thinking I had to treat a mere feverish cold, I prescribed a mercurial aperient and a saline pectoral mixture, which was continued for five days. The cough and fever had at the end of this time subsided, though the discharge from the nose was rather worse, and there was a complete disgust to food of every kind. I ordered iron wine, with infusion of orange peel, which, after three days, was discontinued, as her mother thought it did her no good, and confined her bowels. I then, finding that she still took no food, urged the use of wine, which she took in very small quantities, and with great reluctance after the first day; and, thinking it was possible that the discharge from the nose (which had now become decidedly purulent and very offensive, and had caused small pustules outside the nostrils) might be a cause of the anorexia, I had the nostrils injected with a solution of the nitrate of zinc, which in two days completely stopped the discharge and dried up the pustules, but without any improvement to the appetite. This was on August 19th, and I advised the resumption of the iron wine. On the 20th, I found the hands and feet swollen and cold, and the child restless, rubbing its head with its hands; the abdomen, however, being quite contracted. I then inquired whether it had passed urine, and learnt that for some days it had only passed it once in twelve hours. I therefore ordered it a stimulant saline diuretic, of which it took a portion, but without any effect, and died, rather suddenly, at 5, A.M., on the 20th.

As the symptoms described above, viz., the fever, attended with discharge from the nose and sorethroat—the former persisting after the cessation of the fever and being followed by retention or diminution of urine—with swelling of the hands and feet, seemed to resemble the course of scarlatina, I inquired whether any eruption had been observed at first; but this being denied, I thought it might still be a case of scarlatina without eruption; but a *post mortem* examination cleared up the mystery by shewing that it was a case of typhoid fever. No other organs than the Peyerian glands of the ileum, and the mesentery, were affected; the former being ulcerated, and the latter greatly enlarged.

As to the origin of the complaint, as the child never went off the premises previously to her illness, and there are no houses within forty yards, the only causes I can suspect are that the child would often stand with her nurse near the sink in the scullery, which is often offensive, and that there is a muddy pond on the same side of the road, about sixty yards distant. The occurrence of a purulent discharge from the nostrils is certainly to me a novel feature of typhoid fever; and, together with the absence of fever after the first fortnight, rendered the case so obscure, that I think it may be fairly placed among the instances of latent typhoid fever.

CASE OF POISONING BY POTATOE-BERRIES.

By Thomas Morris, Esq., Merford, Gresford.

On Tuesday, the 7th of August, about six, P.M., I was summoned to attend Miss M. E. H., aged 14, the messenger stating she had eaten the berries of the potatoe plant, portions of which she showed me.

On arriving at the bedside of my patient, I found her labouring under the effects of a narcotico-acrid poison. She was tossing to and fro in bed; the skin was bedewed with a cold clammy perspiration, and of a rather livid colour; respiration was hurried; the pulse was exceedingly quick and feeble; the teeth for the most part were closed, and she was constantly spitting, through the closed teeth, a viscid frothy phlegm. She was speechless. She would, after repeated asking, put out her tongue, which was covered with a brown, moist fur. She occasionally asked for drink, and begged her mother not to leave her. The eyes for the most part were open, and the pupils were not very much dilated. The expression was anxious. She occasionally slumbered for a few minutes, and again was restless.

From the history of the case, it appeared she had been slightly indisposed the week before; but was better on the

Sunday, and in the afternoon went into the garden and partook of the berries. In the evening she complained of pain in the bowels, and the nurse took her a glass of gin and water and rhubarb pills. On Monday there was a good deal of sickness; but none of the crude vegetable appeared in the ejected matter. On Tuesday the sickness continued, and the matter ejected was of a greenish cast (it may have been bile, or assimilated vegetable matter). An emetic of ipecacuanha was now given by her parent, and the crude vegetable ejected which was shown to me by the messenger when I was hastily sent for.

Considering the length of time that had elapsed since the poison had been taken, together with the fact that a considerable quantity of the vegetable matter had been ejected, I felt it my duty to attend to the depressed vital powers; and, with this object in view, I directed her to take strong coffee, and brandy, and arrowroot, and prepared a mixture consisting of carbonate of ammonia and aromatic spirit of ammonia, in mint water, a dessertspoonful to be taken every half hour, in arrowroot. Brandy and arrowroot were given in the intervals, and I administered a turpentine enema occasionally, which would soon come away, bringing some feculent matter, mixed with portions of the seed.

I remained in attendance all night, and thought the pulse in the morning more firm; but as there still remained much doubt about the case, a desire was shown to have Dr. Williams, of Wrexham, called in, which was at once agreed to. I left about half-past six, A.M., for two hours, and returned in time to meet Dr. Williams (in whose absence Mr. Eyton Jones attended).

There were now more decided symptoms of sinking; the pulse was scarcely perceptible at the wrist, and it was deemed necessary to make an impression on the system. With this view, a mustard plaster was applied over the abdomen, which acted. A dose of turpentine in gruel was administered, and the enema was increased in strength; but she gradually sank, and expired about twelve at noon on Wednesday. There was no *post mortem* examination.

Remarks. The hurried respiration and bluish cast of the skin, arose, probably, from the air-cells at the base of the lungs being impervious, through an accumulation of viscid secretion. Would small bleedings, by diminishing the volume of blood and enabling the heart to act more perfectly, have been of any utility, considering the depressed state of the circulation and nervous energy? Would such practice be safe? We often find small bleeding, when the system is recovering from a state of collapse, to be of great advantage.

ILLUSTRATIONS OF THE USE OF THE OPHTHALMOSCOPE.

By William Martin, F.R.C.S., late Professor of Ophthalmic Surgery in the Calcutta Medical College.

[*Concluded from p. 697.*]

Parasitic Bodies in the Eye.

By means of the ophthalmoscope, we are able occasionally to detect parasites, animal and vegetable; and these are by no means confined to the anterior parts of the globe. An interesting case is described and figured in Desmarres (vol. iii, pp. 757-8) of cysticercus in the retina. There were signs of turbid vitreous humour—floating false membranes; the greater portion of the fundus, including the papilla, entirely hid; but, by making the patient look a little below and to the inside, there was discovered a cysticercus thus described. The neck is of a bluish white, evidently agitated at the slightest movement. Once M. Desmarres saw it become shorter, and the head hide itself almost entirely in the body of the tumour. The body is of a brilliant yellow-white colour, seven or eight times the size of the optic papilla.

Injuries of the Eye from Foreign Bodies.

Mr. White Cooper, in his recently published and beautifully illustrated work on *Wounds and Injuries of the Eye*, remarks, at page 41, that the ophthalmoscope, in doubtful cases, may render us valuable assistance. If a chip of metal, for instance, has lodged in the vitreous humour, without traversing or wounding the lens or its capsule, it will readily be discovered by the ophthalmoscope, unless buried in such a position as not to admit of its being brought into view. If the lens has been wounded, it will become opaque, and of course prevents the use of this apparatus. And he gives extracts from the works of Jaeger, illustrative of this subject; also, at page 233, he gives instances of the value of this means of observation, in a case in which, after a wound from a cricket-ball on the globe, sight became extinct; and, on close examination, there were found a number of brownish flakes floating on the vitreous humour; and effusion, varying in parts from pink to a chocolate hue, pervaded the retina, covering the entrance of the optic nerve. A distinct dark clot of blood was discernible near the lower and outer portion of the retina. In another case, by means of this mode of examination, he was enabled to speak of the nature of an injury with confidence and precision, where, without it, he could only have hazarded an opinion of what was probable. The eye of a farmer having been struck by a missile, sight was lost. Externally, nothing abnormal, but a dilated and motionless pupil, was seen. The ophthalmoscope showed the seat of a rent in the retina, as an opaque irregular line, nearly in the axis of vision; and there were many small spots around this, evidently the remains of the coagulum of blood (detected previously by Mr. Dixon) which had not been entirely absorbed. "In our report, we were enabled to state with confidence that, though Mr. J. might retain a certain amount of sight in the injured organ, we were of opinion that it would never be restored to its former perfection."

Among many interesting examples Mr. W. Cooper's book contains of the value of this instrument in the elucidation of injuries of the eyes and their effects, are the following:—At page 140 is related a case, in the practice of Gräfe, of a student in whom, after recovery from injury, the ophthalmoscope showed detachment of the retina in the lower half. The upper half was normal, and the lens and vitreous humour remained transparent. The patient only lost the sight in the upper half of the visual field. At page 163, he gives an instance in his own practice, in which he was enabled to detect by this means the changes which had taken place in the posterior part of the eye, from an injury, causing retinal effusions, etc. He also relates a case at page 176, where he was enabled to trace double vision, after a blow, to an opaque line on the posterior surface of the capsule; the media otherwise transparent. At page 178, he gives an instance of a man rendered almost totally amaurotic in consequence of a blow near the eyebrow. In former days, this would have been attributed simply to injury of the frontal nerve and its branches; but Mr. Cooper was enabled to detect partial detachment of the retina, bloody coagula, and other changes much more likely than any injury of the external nerves to cause the amaurosis; in fact, such organic alterations as must be to a great extent incompatible with the due performance of the functions of the retina. At page 180, he gives a case of Mr. Bowman's, in which there were detected, after concussion of the brain, abnormal appearances of the retina and choroid, with numerous black spots both before and behind the retina; another case, under Dr. Williams, in which he found the "retina elevated by a turbid liquid, such as is often observed in pericarditis and other serous inflammations". At page 181, he gives a case, under the care of Dr. Van Dommellen, in which, after concussion of the brain, the ophthalmoscope showed the papilla replaced by a reddish disc; veins alternately raised and depressed; arteries very small and pale. At page 235, in a case in which, after a blow, the patient saw a dark cloud before his sight, Mr. Cooper detected a greenish grey mass at the posterior part of the vitreous humour, obscuring the retina. As the eye moved, this was jerked up, and then settled slowly down—evidently a coagulum of blood, intercepting the rays of light.

In concluding these notes, we may remark, that formerly it was one of the most rare things to have an opportunity of verifying by subsequent or *post mortem* examination any morbid changes which had been supposed to have taken place in the eye, with the exception of cases of malignant tumours for which the globe had been extirpated. Now that it is the practice of ophthalmic surgeons to remove diseased globes more often than formerly, instead of leaving them in the orbit, to create irritation and endanger the existence of the sound eye; and that more pains are taken to form collections of the diseased globes which are removed,—the facilities of comparing diseased appearances with the revelations of the ophthalmoscope have become vastly increased, and thus a wide field is opened for improvement of our knowledge of this branch of science, and particularly in the minute anatomy and pathology of the regions; and, as a result, for more decisive and more certain methods of practice.

24, George Street, Hanover Square, August 1859.

Transactions of Branches.

LANCASHIRE AND CHESHIRE BRANCH.

THE TREATMENT OF SINUS BY THE INJECTION OF IODINE, PARTICULARLY FISTULA IN ANO.

By Thomas Skinner, M.D., Liverpool.

[*Read in Abstract, June 8th*, 1859.]

I am well aware that the treatment of sinus by the injection of iodine is no new discovery; yet I fear that, from want of supporters, or from some equally efficient cause, the practice has not obtained that universality of adoption it so well deserves.

History. In 1830, M. Lugol, physician of the Hôpital Saint-Louis, was the first, I believe, who introduced the practice of injections of iodine for the cure of various affections, as scrofulous abscess, sinuses connected with disease of the hip and other joints, and caries of the bones. (*Mémoire sur l'Emploi de l'Iode*, 1830-1831.) Dr. Clay of Manchester, our well known pioneer in ovariotomy, was also the pioneer of the treatment of fistula *in ano* by injections of iodine. In 1843, he published a very interesting case successfully treated by such means. I am not aware that he has published any more of his experience. (*Medical Gazette*, September, 1843.) Ten years later, M. Boinet, in the *Gazette Médicale de Paris*, December, 1853, as also in his extensive treatise on *Iodo-Therapeutics*, has spoken in its praise in almost unmeasured terms. He says, "It is less inconvenient and less dangerous; it does not necessitate a long confinement to bed and daily dressings; it is comparatively free from pain, and it is easy to carry into effect. It is applicable in all cases, whatever the form of the sinus or sinuses; and particularly in those cases in which the knife cannot be used without difficulty or danger. It does not prejudice the position of the patient even where it does him no good. For these reasons, M. Boinet concludes that it ought always to be tried before having recourse to the knife." (*Ranking's Abstract*, vol. xix, p. 168.)

Cases. During the month of Nov. 1856, I was initiated into the practice by my esteemed master, Professor Simpson. The first case I injected was one of fistula *in ano*, and it is referred to by Dr. Simpson in the *Medical Times and Gazette* of 16th April last. The patient came from the north of Ireland, and had suffered for many years from the disease. By Dr. Simpson's direction, I attempted to inject the fistula; but from the extreme smallness of the orifice, I failed to do it justice. On informing him of this, he suggested the nozzle to the syringe represented in the accompanying woodcut, which I will describe immediately. The patient being again prepared by an aperient and an enema, I injected the fistula, and this time I caused the injection to appear at the internal or rectal orifice. The strength I then used was two drachms to an ounce of spirit (No. 3, as opposite), and the quantity I injected was under thirty minims. There was scarcely any pain complained of, and in three days the fistula was entirely and permanently cured. Within a week of the operation, it withstood the powerful test of the hydraulic pressure of one pint of tepid water injected into the rectum, not one drop of which passed through, or in the slightest degree distended the cicatrised cutaneous orifice of the fistula. This case was seen again three months afterwards, and there was no sign of the disease beyond the sunk cutaneous cicatrix; and some months after that, Dr. Simpson received information that the patient was in the enjoyment of the best health and spirits, the old enemy being perfectly quiescent. I have taken the liberty of detailing this case of Professor Simpson's, as it was my first attempt at the practice; and I do so with less hesitation, as he has already associated my name with it. I have permanently cured other three cases in the female, one of which is fully detailed at page 499 of the Journal for this year, and which is especially interesting, as showing, that fistula *in ano* may be an efficient cause of sterility. It also shows, that a formidable fistula with three cutaneous sinuses and apertures communicating by fistula with an ulcer in the rectum, may be cured with little or no inconvenience and without any danger, in the short space of three days. The means adopted were a simple longitudinal incision through the mucous membrane including the ulcer, and a single injection with tincture of iodine through the fistula. The details of the other cases would only occupy unnecessary space; so I will content myself with offering a few practical observations.

Practical Remarks. Dr. Clay took three weeks to effect a cure in his case; I suspect this was owing to the weakness of the tincture he used, and the plan he adopted. He injected the fistula every day for the first three days, and then every other day for the next twelve; in all, nine injections or dressings. Now, I cannot but think that this does harm, as it tears up the adhesions of the previous day, and leaves little chance of consolidation. Dr. Clay says: "The tincture could not be detected in the rectum after the second injection." (*Medical Gazette*, September 1843.) I am inclined to believe that, if the injections had then been discontinued, the treatment would not have extended to three weeks. We must remember that the force of an hydraulic instrument, like a syringe, is very great: the stream is a most insinuating and powerful wedge, particularly when the bore of the nozzle is very fine.

M. Boinet and Dr. Clay inject one or two teaspoonfuls of their tinctures. I have never used more than thirty minims of any of my own, and I have often succeeded with less. M. Boinet uses a "knobbed cannula", which is objectionable, unless the orifice is dilated. He recommends a finger to be placed on the internal opening in the rectum, and the injection to be retained for five or six minutes. But, in my opinion, the finger on the internal orifice will not prevent the injection from passing into the rectum; and, if the injection is strong enough, retention of it is unnecessary.

Preparations and their Strengths. In regard to the strength of the solution for injection, it varies with each observer. M. Lugol's solutions are as follow:—

	No. 1.	No. 2.	No. 3.
Iodine	gr. ii	gr. iii	gr. iv
Iodide of potassium	gr. v	gr. vi	gr. viii
Distilled water .	lb. i	lb. i	lb. i

These were intended for injecting the fistulous tracks leading to carious joints; and, although these strengths are said to be attended with danger, "causing occasionally intense inflammation and sloughing of the soft parts" (*Manual of Therapeutics*, Waring, sect. 1465); yet, I am certain they will be found almost inert in fistula *in ano*. I rather incline to think, that the damage done to the soft parts by such injections is owing to the injury first done to the diseased joint. M. Lugol used No. 2 in fistulæ connected with *morbus coxarius*.

Dr. Clay used the ordinary officinal tincture of the Pharmacopœia, full strength, which is very good for some cases, but it rarely succeeds by one injection, so far as fistula *in ano* is concerned.

M. Boinet's injection solutions are of two strengths:—

	No. 1.	No. 2.
Iodine	℥ss	℥i
Iodide of potassium	gr. xv	gr. xv
Distilled water .	ʒii	℥x

I object to the iodide of potassium and water. I believe that the less there is of water, and the purer the iodine, the greater certainty there is of success. I use three strengths, as follow:

	No. 1.	No. 2.	No. 3.
Iodine . . .	℥ss	℥i	℥ii
Sulphuric ether	q. s.	q. s.	q. s.
Spirit of wine	ʒi	ʒi	ʒi

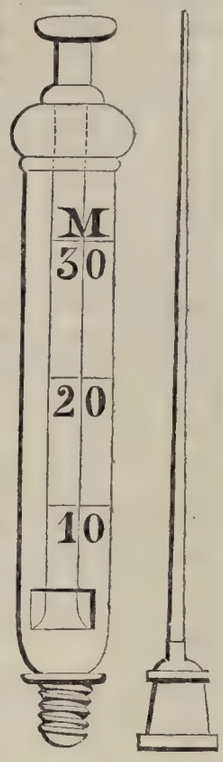
The sulphuric ether is added simply as a quick solvent instead of iodide of potassium. I find that a tincture composed purely of sulphuric ether and iodine is best, but it will not keep at the same strength for one day. I have, in consequence, lately been in the habit of extemporising such tinctures at the moment, for various purposes to which I apply them. They are as follow:—

	No. 1.	No. 2.	No. 3.
Iodine . . .	gr. iiiss	gr. viiss	gr. xv
Sulphuric ether	℥i	℥i	℥i

In preparing these tinctures, the following facts must be borne in mind. The iodine should be dry and resublimed. The ether should not be of less specific gravity than ·750; of density ·725 it is useless, as it cannot be drawn into, far less retained in the syringe. It should be prepared in a test-tube with a well fitting cork. By using such tinctures, the ether evaporates at once, and leaves a perfect coating of pure iodine on the walls of the fistula or sinus.

Description of Syringe. My own method is little different

from the plan first suggested to me by Professor Simpson. I will first describe the syringe; the accompanying woodcut will assist. The cylinder and piston are such as belong to Dr. Alexander Wood's syringe for hypodermic injection; the nozzle is the important part. It is composed of a very fine gold tube, so as to resist the corrosive action of the iodine; the tube is about one-sixteenth of an inch in external diameter, so as to pass into the finest fistula the same as a delicate probe. The tubular portion ought to be, at least, two and a half inches long, fixed into a silver socket with *hard* solder, as iodine destroys soft solder. The silver socket has a female screw in it adjusted to the male screw of Dr. Wood's syringe. Any one possessing Dr. Wood's syringe may have the extra nozzle supplied by Mr. Young, cutler, Princes Street, Edinburgh. After using it for this purpose, it should always be cleaned by pumping dilute liquor potassæ through it; and before using the piston for narcotic injection, fresh cotton should always be applied.



Operation. Prepare the patient with an aperient and enema. If it is a *complete* internal fistula, which may be easily diagnosed by dilating the rectum with Weiss's female dilator, or with the bivalve anal speculum of Mr. Ferguson, of Giltspur Street, and injecting from the external opening a little sweet milk. (There is no probe for this purpose like a hydraulic one.) If the fistula is *complete*, place the fenestrum of the speculum over the rectal orifice. Clear out the sinuses by injecting them with plain tepid water. Insert a little loose cotton wool into the speculum to absorb any excess of injection, as also to protect the mucous surface of the rectum and anus. The stain on the wool, if any, will witness to the passage of the injection. Fill the syringe with the iodine solution of the selected strength, expel all air from it, pass the point of the nozzle a little way into the fistula, and force the injection through it. If there are any cutaneous sinuses, with a little dexterity, they may also be injected at the same time: or, the instrument may be refilled, and every sinus injected, although this is not always absolutely necessary. Previous to the operation, or as soon as convenient, I introduce a suppository into the rectum containing half a grain of morphia.

If the fistula is *incomplete*, or blind external, no speculum is required, but it is necessary to attend to the following particulars:—Dilate the external orifice if necessary, and sound the sinus delicately with a blunt pointed probe, avoiding to make false passages. Having found the "bearings" of the sinus, clean it out with tepid water, pass in the gold tube of the nozzle as far as possible and inject. If this is not attended to, and a portion of the pyogenic surface or membrane is left untouched at the cæcal extremity, failure may result. It is not necessary that the injection should be retained; I generally press the parts immediately, so as to expel as much as possible; it seems sufficient that the surfaces are touched.

Where the internal aperture of a complete fistula opens into an ulcer, the ulcer should be incised immediately before injecting. It will certainly heighten the pain, but I believe such incision to be essential. Or, it may be more conveniently accomplished by two operations; first, incise the ulcer, which will be healed in three days or so, and as soon thereafter as is thought desirable, inject the fistula. I followed this plan lately, in a case where I was kindly assisted by my friend Dr. Taylor, of Walton Lodge, who first suggested the idea of dividing the operation.

Regarding the repetition of the injection, I would remark, that, if the first is properly performed, and of the proper strength, a second operation ought not to be required. In the event of failure, I do not repeat the injection before the expiration of the third day; and I am convinced, that, if such is necessary, on each occasion the solution ought generally to be increased in strength. I have only once known No. 3 fail in producing adhesive inflammation in cases of fistula *in ano*, by a single injection, the cause of failure seemed to be over action; and I have not met with a single bad consequence, pain excepted. To judge of the proper strength to inject, I am guided by the age of the fistula and by the pain produced while probing.

Subsequent effects: Pain, and the Stains of Iodine. Although in many patients pain is little complained of, in others it may be so great as to require the immediate administration of chloroform, which may be given without fear, so long as the patient suffers pain, notwithstanding the previous half grain of morphia. Suppositories and poultices of ice will also be found useful. Water, or a weak solution of liquor potassæ, is a good antidote, the latter converting the iodine into the iodide of potassium. A still better may be found in an emulsion of starch, which has the power of resolving the free iodine into the perfectly inert iodide of starch.

In the event of any stains of iodine getting on the linen, whether blue from the presence of starch, or brown from its absence, a solution of liquor potassæ in the proportion of one part to eight or ten of water will speedily and safely remove them. For this useful information, I am also indebted to my friend Dr. Taylor. It is much safer than the cyanide of potassium, as any stains on the skin of the patient may also be safely removed by it.

Contraindications. If the patient's health is in a low condition, or if the sinus or fistula is of recent date, or if there is a pouch-like cavity on introducing the probe and sounding, I do not operate. In such cases, the patient should be placed on good diet, with change of air and sea-bathing if possible, or the cold sitz-bath with alum, the cold douche, or cold sponging. At the same time, the fistula should be injected occasionally with a solution of tannin or of tincture of steel. In short, all means, constitutional and local, which are calculated to improve the health and produce contraction and consolidation of the cavity, ought first to be adopted; the injection of iodine may then be used with effect. If any local or constitutional irritation, or more than usual inflammatory action is present, it must first be subdued by proper means.

The after-treatment need scarcely be mentioned. A little opium, to allay pain and keep the bowels quiet, with ordinary diet, and keeping the patient at rest for a day or so, are about the only directions necessary.

I have been thus minute in details, in order that there may be as little excuse as possible for reports of failure by those who may try their prentice hand at the operation.

Possibility of its return. In the case I recorded in the Journal, the fistula was closed upwards of nine months. The cause of the return was a fresh phlegmon, established in the site of the old fistula during the course of an attack of scarlatina. It ought not to be wondered at, if the fistula should also return in cases where the mucous membrane is perforated extensively by ulceration. In these cases, there are often hæmorrhoids, accompanied with dilatation of the rectum, and, possibly, ball-valve obstruction—these conditions being very common in the female. In such patients, and those who suffer from habitual constipation, the mucous membrane becomes jammed and lacerated by the undue pressure it is exposed to between the hardened fæces and the point of the coccyx, more especially during the act of defecation. Under such circumstances, perforation of the mucous membrane again takes place, fæcal matter gets into the cellular tissue, fresh abscess and fistula result, and we feel disappointed. Why? because we do not consider that similar causes will always produce similar effects, whether we incise or inject, or whatever method we may adopt for the purpose of cure. Measures should be adopted to obviate the above conditions, if they exist, otherwise disappointment will certainly follow.

Advantages. I am not so enthusiastic as to suppose that injection with iodine is at all likely to supersede the knife; no one can possibly have greater confidence in the knife than myself; but it is a difficult matter sometimes to inspire our patients with the same amount of confidence and love for it. I advocate the claims of iodine as being next in certainty to the knife, and as being infinitely less dreaded by the patient. When we contrast the perfect innocuousness of injection (barring pain), its simplicity, and its wonderful efficiency, with the possible and not at all improbable dangers of incised wounds of the anus and rectum, and as "we ought to do unto others as we would be done by", I cannot help suggesting, that injection with iodine ought, in the majority of cases, to take precedence of the knife.

Concluding Remarks. I will only add in conclusion, that it has been very successful in my hands; in fact, it has rarely failed. I have injected sinuses of many months standing, following bubo in the groin, with No. 1 or No. 2, and I have always been successful at the first injection. In one such case, a

gentleman had been most carefully treated by a skilful practitioner with cod-liver oil, syrup of the iodide of iron, and other tonics, sea-bathing with change of air, cold sponging, and such measures, but all to little purpose; the sinus kept on discharging. One single injection of No. 1, without the slightest pain or inconvenience, did all that was requisite. I gave him no prescription, which seemed to discourage him; but next day he reported himself cured. He has since been to Montreal and back on mercantile business, and the sinus remains perfectly healed. Sinuses about the nipple, mamma, axilla, and vulva, I have treated with similar success; also sinus in the gums following gumboil.

About a month ago I had a case, where I had good reason to suspect a carious condition of the root of a tooth or rather of the alveolus; I requested the lady to see a dentist, but she declined. I injected the cloaca once with No. 3; the *fœtid-sanious* discharge ceased, and the mucous surface closed over the opening. I would here remark, that whether this was a case of genuine caries or not, considering the success obtained by M. Lugol in the use of iodine in this disease, it deserves a further trial. M. Lugol used baths and frictions of iodine, at the same time that he injected the fistulæ with his solution No. 2. I would not recommend injection in the caries of joints, or where the disease is deep-seated, nor in the immediate neighbourhood of serous or synovial membranes. If it is to be at all successful, I think it should be limited to superficial caries, where the disease is not extensive or very far advanced, and in those cases only which are likely to be benefited by a stimulating and caustic treatment. Caries of the bones of the tarsus would probably be the most favourable for the treatment. I would first clear out the diseased part with tepid water, and then inject from five to ten minims or more of the *ethereal* solution No. 3, and I would not repeat it until the effect of the first injection had passed off. Constitutional treatment, as a matter of course, must precede, accompany and follow the local means. I have, however, had no experience of injection of iodine in caries beyond what I have stated. Lastly, I was asked by a lady to see her servant, whose appearance was disfigured by scrofulous enlargement of the glands of the neck, with two of them discharging slightly. I injected them with No. 1; they have ceased to discharge, but how long they will continue so, I cannot say.

EAST ANGLIAN BRANCH.

ULCERATION OF THE DUODENUM, CAUSING DEATH BY EROSION OF THE PYLORIC ARTERY.

By W. H. Ranking, M.D.Cantab., Physician to the Norfolk and Norwich Hospital, Norwich.

[*Read July 8th*, 1859.]

In May of last year, I was first consulted by a gentleman, aged about 50, residing in Lowestoft. He was an emaciated man, with a sallow complexion, but enjoying a fair amount of physical power. His only complaint was one which had tormented him for years, viz., pain and flatulence after eating, which would be relieved by carbonate of soda, which he was in the habit of taking largely, with the effect of eructation of gas, followed by immediate relief.

Seeing nothing more formidable in these symptoms than irritative dyspepsia, for which a mere palliative treatment had been adopted rather than any curative measures, I prescribed a somewhat inelegant, but in most such cases a very efficient, mixture of bismuth and nitro-hydrochloric acid, in infusion of calumba, with the result of very considerable amendment. The last occasion on which I saw the patient at this time was that of a long country walk, which he accomplished with less fatigue than myself.

I lost sight of him from this period till the 2nd of September last, when he called upon me in a very much deteriorated condition. His history of himself was that he had gained much in general health and strength for some time after I had seen him at Lowestoft; but, relapsing, he had placed himself under the care of my friend, Mr. Worthington, from whom I learned that he had been seized with great gastric derangement, accompanied by slight jaundice and frequent bilious vomiting, with epigastric pain, from which, however, he rallied sufficiently to travel into a distant county. But from this time he appears never to have regained his strength, and it was this fact which induced him to see me on the day last referred to.

At this time he had manifestly lost ground in appearance and strength; but still his complaints were solely such as might be referred to long continued functional dyspepsia, and such I should still have considered it to be had not his peculiarly sallow complexion led me to apprehend some malignant degeneration. I wrote to Mr. Worthington on the subject, without any misgiving as to immediate danger; but next morning I received a telegram to visit him by the next train, as he was in imminent peril.

The account I now obtained from him was, that after leaving my house he had taken a light luncheon, and returned to Lowestoft by an evening train; that on arriving at home he was observed to look extremely pallid and faint, and, on going to the water-closet, passed, *per anum*, a large quantity of blood, after which he became collapsed and apparently in a sinking state.

On meeting Mr. Worthington, and Mr. De Morgan of London, who happened to be visiting Lowestoft, we found the patient in bed, blanched to an extraordinary degree, with jactitation, and all the well known effects of severe loss of blood. No farther action of the bowels had at this time occurred; but he had lost his epigastric pain entirely, and was himself assured that he had derived benefit from the spontaneous loss of blood.

A most careful examination was made of the abdominal region, and we came to the conclusion that there was no abdominal tenderness, no pyloric tumour, and as far as we could determine microscopically, from the examination of some grumous matter ejected from the stomach, that there was no evidence of cancerous degeneration of that organ. The patient was clearly at this time labouring under the effects of loss of blood, and the question discussed was whether the loss of blood was due to simple portal obstruction, or to ulceration of the intestines. The only point we could feel any conviction upon was that there was no evidence of cancerous degeneration. Under these circumstances our efforts were limited to the endeavour to check the intestinal hæmorrhage, and to maintain the vital powers under the loss already sustained.

He, however, derived little or no benefit from the medicines prescribed; but he lay continuously in a state of extreme anæmia, with nausea, violent action of the heart, loud systolic *bruit*, and other signs of serious loss of the vital fluid. I met Mr. Worthington three or four times after this, but nothing we could devise succeeded in rallying to an extent which could be considered satisfactory. The result was that after several transient attacks of fainting, the patient was seized with one of more than common severity, and before Mr. Worthington, who was hastily summoned, could arrive, he expired.

The *post mortem* examination fully explained the inefficacy of treatment, and the inevitably fatal termination. The body was exsanguine to the last degree, and emaciated. The lungs, heart, liver, and abdominal viscera were bloodless; but otherwise healthy to all appearance. The stomach was thin, and contained some grumous fluid; but there was no cancerous degeneration or other organic change. The explanation of the symptoms was found in the duodenum, in the presence of a rounded ulceration just below the pyloric orifice, in which was an eroded opening into the pyloric artery, large enough readily to admit a large probe.

Remarks. The points worthy of remark in this case, are the comparative rarity of the presence of an isolated ulcer in the duodenum, and the fortuitous accident of its occurring over a vessel of so much importance as the pyloric artery. It is easy to see that the actual giving way of the vessel took place in the train, on his journey home; the effusion of blood into the bowels fully accounting for his sudden faintness. The passing of blood immediately on his arrival home made the history complete.

The case also affords another instance of the difficulty, if not impossibility, of diagnosing, in the early stages, mere functional dyspepsia from the symptoms of organic change.

ELATERIUM IN CHRONIC ASCITES. TREATMENT OF BOILS.

By C. M. Durrant, M.D., Physician to the East Suffolk Hospital, Ipswich.

[*Read July 8th*, 1859.]

The following two cases, which I shall have the honour of bringing before your notice, are not characterised by any peculiarity of symptoms or rarity of occurrence, but are simply interesting in a practical point of view, as illustrating the very valuable effect resulting from the administration of elaterium, after the complete failure of other active remedies.

Case I. *Chronic Ascites from Fœcal Impaction.* A. B., aged about thirty, was brought to my house by her mother with the

following history. It was stated that she had enjoyed good health until between two and three years prior to my seeing her, when she had become habitually dyspeptic, obliging her to be extremely guarded in diet; to which was added considerable enlargement of the body. She had been under medical treatment from time to time, and during the intervals the body had resumed its natural size. These symptoms having recurred, and having now existed (especially the enlargement of the abdomen) for some months, she was brought to me.

Her complexion was sallow; the tongue tolerably clean; the pulse feeble, but of natural frequency. She had no pain beyond slight inframammary pain, save some occasional dyspeptic uneasiness between the scapulæ; the bowels were torpid; the urine clear and fairly abundant; the catamenia were regular. The heart and lungs were healthy. There was no œdema of the ankles. She had habituated herself to taking much exercise, with a view (as she expressed it) to walk off these symptoms. Her mother stated her fear that dropsy might exist, although on a previous occasion she had been assured that such did not obtain. On pressing the body through the clothes, no indication of that affection was apparent; but, on examining *after* the removal of the stays, and in the recumbent posture, the body was found to be fully distended, percussion eliciting a universally dull sound, and palpation giving rise to the most unequivocal sense of fluctuation. In consultation with her usual medical attendant, mercury, iodide of potassium, with salines, and occasional purgatives were prescribed. A large blister was also applied to the abdomen. These remedies were persevered in for some time without relief; the general health being tolerably good, but the ascites remaining unchanged. The mercury, which had not affected the gums, was continued, and the abdomen rubbed night and morning with mercurial and compound iodine ointments. The iodide of potassium was exchanged for saline diuretics with ammonia. The urine became now perceptibly diminished in quantity and deposited lithates; but still the general health was very slightly affected.

These measures failing to effect the slightest good, she was ordered to take from a third to half a grain of the extract of elaterium on alternate mornings. This medicine, with the exception of producing great temporary sickness and depression, acted from the first more satisfactorily. The evacuations were very copious, dark, in scybalous balls of the size of marbles, and very offensive. It was not until the medicine had been continued uninterruptedly for many weeks, that an improved condition in the alvine excreta was perceptible. The fluid in the body, however, gradually diminished; and with a corresponding increase of the urinary secretion, the case ultimately quite recovered.

On examining the body after the removal of the ascites, not the slightest enlargement of the liver was perceptible; and throughout the treatment (which extended over a period of three months), the patient expressed herself, on the intermediate days of taking the elaterium, as feeling quite well. The mercurial pills and friction were continued, together with equable compression of the abdomen by a flannel bandage, but without producing any perceptible effect either upon the gums or the system in general.

Remarks. The chief points of interest in this case are: 1. The chronicity of the dropsy, its having apparently existed in a passive form for many months; 2. Its pathological cause, it being clearly attributable to fæcal impaction, producing, in addition to some probable compression of the vena porta, mechanical capillary hyperæmia, and consequent retardation of blood in the veins, with its resulting serous effusion; and 3. The happy effect obtained by a persistent exhibition of the extract of elaterium.

So great was the personal relief felt by the patient, that, despite the sickness and depression which were invariably caused by the remedy, she begged repeatedly that its use might not be suspended "until she was quite well".

As a practical hint, I would caution the examiner against hazarding an opinion relative to abdominal disease from an investigation made through the medium of a female's dress. In the foregoing case, the indications of dropsy, prior to the removal of the stays, was so slight, and the body *apparently* so yielding, that a mistake in the diagnosis, and a consequent incorrect opinion, might very readily have been given.

Case II. *Chronic Ascites, cured by Elaterium: Recurrence: permanent Cure by the same Remedy.* A married woman, aged 28, the mother of one child, applied as an out-patient of the Ipswich Hospital for a swelling of the body. On examination, the abdomen was found to be uniformly distended, slightly tender on firm pressure at the upper part, dull on percussion, and with distinct, well marked fluctuation. She stated that her body had been enlarged for fifteen months, and she herself attributed it to her previous confinement. On application, her health was good; tongue clean; the bowels and catamenia regular; urine diminished in quantity, but in other respects healthy. Her only complaint was a feeling of abdominal weight, and a sense of dypsnœa on exertion. Nothing abnormal presented in reference either to the heart or lungs.

As in the previous case, a blister was ordered to be applied to the abdomen, and mercury with the iodide of potassium in salines was administered. At first, she improved under this treatment; the fluctuation became less evident, and the abdomen considerably diminished in size. The gums were affected by the mercury. The improvement, however, did not continue; and a second blister, and subsequently the mercurial with the compound iodine ointments, were rubbed into the abdomen. No benefit following this treatment, she was admitted as an in-patient of the Hospital.

The ointment was directed to be continued; acetate of potash with spirit of nitric ether, as a diuretic, was prescribed, and the elaterium, in doses of one-third of a grain, was directed to be taken every or on alternate mornings, according to the effect produced. As in the other case, great sickness and depression attended the operation of this medicine, but equally satisfactory results obtained. The abdomen soon became completely emptied of its serum; but on now examining the body, the right lobe of the liver was found to be slightly enlarged, extending about an inch below the ribs. This condition of the liver had been masked by the dropsy on the previous examinations.

The patient left the hospital apparently cured, and feeling quite well. She reapplied, however, at the end of three weeks with some reaccumulation of fluid. The same treatment was at once resorted to; and although the elaterium acted less powerfully as a purgative than on the former occasion, the same satisfactory results obtained, and the patient has remained free from any return of the disease.

Remarks. This case, although of less duration than the former, tends equally to indicate the utility of the treatment. Prior to the exhibition of the elaterium, the ascites remained stationary, despite repeated blistering, and mercury given to the extent of producing very considerable tenderness of the gums. With similar cases before us, we may perhaps ask the question, whether, in the present day, we have not too much laid aside the Abernethian mode of treatment, and adopted too sparingly the more general use of free purgation. I confess that I think such to be the case; and, while making these somewhat desultory remarks upon the use of elaterium in simple ascites, I would briefly, in conclusion, call the attention of the meeting to the use of purgatives in the treatment of boils.

The very general prevalence of boils during the past few years has directed the attention of the profession more particularly to the treatment. In the earlier stages, or unless the disease be very severe in its character, the patient too generally is satisfied to leave the case to nature, submitting to a large amount of pain and inconvenience, rather than apply for medical advice. The cases that have presented themselves to my notice have been very severe in character, very chronic in duration, and more or less disabling the patient from following his usual avocations.

The treatment which I have generally found to have been previously advised (for these patients have sought a variety of opinions) has been a full nutritious diet of meat, with port wine and quinine, with other tonics as much as could be borne, followed by change of air and the seaside. This treatment having failed, and viewing the existence of boils as the result of an impure condition of the blood, the result of faulty assimilation, I have commenced the treatment at once with purgatives, and, I must confess, with the happiest results. The patient has been directed to take the compound extract of colocynth, blue pill, and acetous extract of colchicum, on alternate nights, followed, if necessary, by a warm aperient draught on the following morning. During the day, the acetate of potash, with small doses of the tincture of colchicum, and the aromatic spirit of ammonia. He has at the same time been directed, on the slightest appearance of a fresh boil, to paint the spot immediately with a strong solution of the nitrate of silver (ʒij to the ʒi). If the boil be already formed and indolent, the conjoint application of the nitrate of silver with poultices will be proper. I have used the strong tincture of iodine, but with far less satisfactory result in stopping the

formation and progress of the boil than from the nitrate. Should debility remain after the subsidence of the boil, the cod-liver oil and sulphuric acid, as recommended by Dr. Watson, is the best tonic.

All malt liquors should be debarred; but sherry wine, to the extent of two or three glasses in water daily, may generally be allowed. The best diet is meat on alternate days with fish; but this, during the attack, must always be unstimulating and easily assimilable.

I must apologise for introducing so apparently trivial a subject to the meeting; but, as we all know by daily experience that the most common diseases are by no means invariably the most easy to cure, so we may perhaps be thankful to glean from any source a passing hint, which may, sooner or later, be of use in assisting us in the high vocation of our profession, viz., the aid of a fellow-creature suffering from disease.

British Medical Journal.

SATURDAY, SEPTEMBER 3rd, 1859.

THE TRIAL OF THOMAS SMETHURST.

The letters that have appeared in the *Times* since our last, with reference to the Smethurst trial, have only tended to confirm more strongly the general opinion that there is not sufficient proof that Miss Bankes was poisoned, and that the execution of Smethurst, under these circumstances, would be nothing less than a judicial murder. The medical press and medical men generally have done their duty towards the condemned man, and his fate now lies in the hands of the Home Secretary. There remains, however, a higher duty to be performed by our profession than the rescuing of this individual life. This trial has, without doubt, left upon the public mind a very painful impression of the inadequacy of medical and scientific evidence, as at present conducted, in courts of justice. If every fresh suspected criminal is to drag medicine into the pillory, there to exhibit itself as it has done of late, we need not be surprised to find public faith in us rapidly departing. And if toxicology is to be represented to the world at large by two or three gentlemen who seem bent upon throwing as much polite mud at each other as they think will stick, very little dependence will be placed on their science as a handmaid of justice. If medicine, and its sister chemistry, are to hold that place which they deserve to have in criminal trials of this nature, we feel convinced that they must become state engines of a much more dependable character than we can at present accord to them. At the present moment, the life of a human being is often placed at the mercy of mere hap-hazard examinations. At the coroner's inquest, the fees are often so insignificant as to be beneath contempt, as far as remunerative payment is concerned. For instance, a case of obscure death takes place, as in the instance of Miss Bankes; a *post mortem* examination is called for; and the medical man desired to perform it must do so at the call of the coroner, under a penalty of five pounds. In the course of his inquiry, he may find it necessary to pursue a most careful analysis; yet the whole remuneration he gets for his labour is a couple of guineas, or less than the value of the chemical tests he uses! If the case goes to a commitment, he may be further rewarded; but we hold, with Dr. Letheby, that it is disgraceful of the law to make the interests of the scientific witness and those of the accused directly antagonistic in this manner. Temptation to strain evidence should not be thus thrown in the way of any man.

And what security, we may ask, is there in the secret proceedings of any one man in investigations of this nature? A chemist receives a jar—it may have been upset on its transit, as in Palmer's case—and he forthwith sets to work in the seclusion of his laboratory to eliminate from it infinitesimal portions of poison; his instincts as a hunting animal are, perhaps, called forth. Be that as it may, however, what guarantee have we that some fatal error has not been made in the course of his long distillations? that his tests are pure? The matter subjected to analysis having been destroyed, the power of verifying his results no longer exists, and his bare word is often enough to send the accused to his long account. It is impossible that life can much longer be at the mercy of such hap-hazards as these. If test-tubes and wire-gauze are to be the fatal instruments of justice, the public should at least be convinced that no error has arisen in their application.

The farce must no longer be exhibited to the world of the three most celebrated toxicologists of the country contradicting each other in matters where there should be no possibility of doubt. Dr. Taylor, throughout his ample volume on *Poisons*, never allows an opportunity to escape of sneering at the scientific attainments of Mr. Herapath; and the latter gentleman, we must confess, is not behindhand in returning the compliment. Dr. Letheby is equally complimentary to Dr. Taylor. A sort of triangular duel goes on between these three toxicologists, whenever occasion arises. The public at large are scandalised, and ask in amazement, whether there can be anything in poison-hunting which breeds these unnatural storms in regions where the calm atmosphere of science should alone prevail. The public should no longer have exhibited to them the spectacle of professional men stabbing each other's reputations over the bodies of malefactors; and the medical profession, if it is wise, will strain every nerve to put an end to such suicidal proceedings.

We believe that, sooner or later, the necessity of submitting analyses in criminal trials to two or three eminent toxicologists, selected by the Crown, will be adopted. The very differences of professors, when acting together, would only tend to call forth the truth. They would watch each other, and thereby watch for the accused person; we should have no disputes in court about impure tests; and their finding would silence the cavils of mere outsiders, anxious to hear their own voices, and to puff themselves. The institution of a State engine of this kind would clear the ground of much of the conflicting testimony which at present so perplexes juries.

But, it may be asked, is a jury of twelve tradesmen a sufficiently nice instrument to weigh the conflicting medical evidence that may be always expected in such cases as that of Isabella Bankes? We think not. Indeed, the judge in Smethurst's case expressly stated that details of *post mortem* appearances would probably not be understood by the jury. Here is a confession of weakness, ill calculated to give the public confidence in the verdicts of our juries when life and death are concerned. In the ordinary disputes between man and man, twelve tradesmen are as likely to give a good verdict as any other persons in the country; but we question their ability to thread the deli-

cate paths of such a case as Smethurst's; and we fear that in their bewilderment they are but too apt to give fatal weight to the summing up of the judge, impartial or partial as that may be. In the present case, it seems to be universally admitted that the judge allowed his own impressions to tinge far too deeply his summing up, inasmuch as he prominently set forth the points that told most strongly against the prisoner, and ignored those which were most in his favour. With ill informed men, this one-sided leaning would tell with much greater effect than with persons of a higher stamp, accustomed to think for themselves. It seems extraordinary that the grand jury, which does the comparatively light work of roughly sifting the cases brought before them, should be composed of gentlemen, while all the more subtle labour of examining evidence in its utmost ramifications, requiring the finest mental organisation, should be allowed to devolve on a class far below in the social scale. We feel convinced that a few more trials, such as that which has just passed, in which the verdict of the jury has been universally called in question, will shake the faith of the public in the capabilities of butchers, bakers, tailors, and grocers, to sift delicate scientific evidence in trials where life and death are concerned.

THE WEEK.

It is rarely that an event occurs which calls forth such an universal expression of opinion as has been elicited by the trial of Thomas Smethurst. The daily papers, ever since the event, have been inundated with letters, the writers of which are all but unanimous in support of the view that the evidence adduced was utterly inadequate to prove the commission of the alleged crime. Among the correspondents, several write with the object of confirming, from their own observation, the statement of the occasional occurrence of severe gastro-intestinal disturbance during pregnancy. Dr. Tyler Smith has addressed a letter to the *Times*, in which he examines in detail several of the symptoms referred to as having been present in the case of Isabella Bankes, and shows, from his own experience and study, that all these are to be fully accounted for by the fact of pregnancy. As to the circumstance of pregnancy having been overlooked by the medical attendants on the deceased, he observes that

"It cannot but be considered as remarkable that three medical men should have been in attendance upon a woman forty-two years of age, living for the first time as a married person, who had been suddenly seized with an illness of which vomiting was a prominent symptom, without detecting pregnancy. They appear to have been misled by the information given to them by Smethurst as to the absence of one of the common symptoms of pregnancy, and they made no examination. Smethurst himself appears not to have suspected pregnancy. As regards Dr. Todd, it may be accounted for by the circumstance that, however undisputed his great eminence as a pure physician may be, he is not accustomed to treat the disorders of pregnancy. However the fact may be, the medical attendants certainly formed a conclusion while they were without the knowledge of a very important element of the case."

This straightforward letter of such an authority in obstetric matters as Dr. Tyler Smith, must have great weight with the public in guiding and strengthening their opinion on the case of Smethurst. We have also before us, in the form of a pamphlet, a letter to the Home Secretary, from Drs. Richardson, Thudichum, and Webb, three of the witnesses for the defence, a part of which is occupied with a still more elaborate examination of the question of the possibility of accounting for the symptoms in the case of Isabella Bankes by pregnancy, than could be entered on in the columns of a public paper. The object of the writers has been to place before Sir G. C. Lewis a simple history of the grounds of their evidence. They confine themselves altogether to scientific details, medical and chemical, leaving the circumstantial evidence as foreign to their object. In the letter, which is written throughout in a temperate style, they examine the following questions:—

"Was the death of Isabella Bankes compatible with natural disease as the producing cause?

"Was the death of Isabella Bankes compatible with the hypothesis of poisoning by arsenic, antimony, or both?"

For the arguments by which the writers of the letter strengthen their answers to these questions—to the former in the affirmative, and to the latter in the negative—we must refer our readers to the letter itself, which is published by Mr. Baillière of Regent Street. The summary of their argument is thus given by them:—

"1. The symptoms and pathology of Isabella Bankes were consistent with dysentery occurring in a pregnant and previously unhealthy woman; and her death is fairly ascribable to such producing cause.

"2. The symptoms and pathology of Isabella Bankes are *not* consistent with the hypothesis of poisoning by arsenic, by antimony, or by both these poisons; nor is death fairly ascribable to them.

"3. There is no chemical proof whatever that either antimony, arsenic, or any other irritant poison was ever feloniously administered to Isabella Bankes."

The following is a copy of one of the clauses of an Act which was passed at the end of the last session of Parliament:—

"The Stamp of Fifteen Pounds for and in respect of the Admission or Licence of any Person by the College of Physicians in *England* or *Scotland* to exercise the Faculty of Physic, or practise as a Licentiate, granted by the said Act passed in the Fifty-fifth Year of the Reign of King *George* the Third, Chapter One hundred and eighty-four, and the like Duty now payable in *Ireland* by and under an Act passed in the Fifth and Sixth Years of the Reign of Her present Majesty, to assimilate the Stamp Duties in *Great Britain* and *Ireland*, shall from and after the passing of this Act be and the same are hereby repealed."

This is the only clause in the Act which refers to the subject of stamp duties on medical diplomas. It will be seen that the only stamp duty repealed is that on the license of the Colleges of Physicians; and that the stamp duty will still have to be paid for the diplomas of the Universities or of the Colleges of Surgeons. The Act will relieve from the tax those graduates who will henceforth be admitted under the provisions of the "year of grace": and it will also remove any liability to the payment of a double stamp duty in the case of practitioners who may, in the time to come, be admitted under the contemplated co-operation of the Colleges of Physicians and Surgeons.

We have had great pleasure in learning that the medical men of Birmingham have taken the initiatory steps towards the formtion of a Medical Registration Association for that town and the Midland Counties. A meeting for the purpose was held in Birmingham, on August 20th, Dr. Bell Fletcher in the Chair; and among the members present were Drs. Melson, Heslop, Anthony, F. Elkington, and Keyworth; with Messrs. Bartleet,

T. Taylor, Tarleton, Chesshire, G. Elkington, W. Underhill (Tipton), W. E. Johnson (Dudley), etc. Mr. Moore (Halesowen), President-elect of the Birmingham and Midland Counties Branch, and Mr. Pemberton, one of the Secretaries of the Branch, sent letters expressing their desire to co-operate. The following resolutions were passed:—

"1. That a Medical Registration Association be formed, to be called the 'Birmingham and Midland Counties Registration Association,' for the purpose of assisting the Registrar in securing a complete registration of duly qualified practitioners, and for protecting the profession and public against illegal practice; and, when necessary, for watching the working of the new Medical Act.

"2. That all *orthodox* practitioners of medicine and surgery, residing in Birmingham and the surrounding districts, who are entitled to be registered under the new Medical Act shall be eligible as members.

"3. That a Provisional Committee be, and is hereby formed, of those gentlemen who may signify their willingness to act. That such provisional Committee be requested to consider the best mode of carrying out the objects of the Association, in order that a report upon the same may be presented to a general meeting of the profession."

Mr. Samuel Spratly was requested to accept the office of Honorary Secretary *pro tempore*.

Mr. R. Gillard, the Secretary to the Thorne and Goole Medical Registration Association, has furnished us with the particulars of a prosecution recently instituted by that Society against an unlicensed practitioner. The case was tried at the Snaith Petty Sessions, on August 25th. The defendant, one Thomas Firth Dewhirst, has been in the habit of styling himself "Dr. Firth and Co.," and of placarding the country for miles round Goole with handbills of a more or less filthy character. In some of the bills, the device of erasing the letter "r" from "Dr." had been cunningly resorted to. The special charge on which the defendant was tried was that of having falsely assumed the name and title of a Doctor of Medicine, in June last: another similar charge, dating the offence in August, was not entered into, in consequence of the absence of a material witness. It was proved that the defendant's name was not in the Register; and several witnesses gave evidence in proof of the defendant's assumption of medical titles, and of his having practised. The magistrates found the charge fully proved, and fined the defendant £5, with £1 : 17 costs. This is the largest fine which, to our knowledge, has been inflicted in a similar case. We cannot conclude this notice without commending the energy which has been thus shown by the practitioners of a comparatively small country district in Yorkshire. Their example is worthy of being followed by others in like situations.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

A List of the Members of the British Medical Association will shortly be published in the Journal. Gentlemen whose designations or addresses, as given in the lists published on July 24th and October 9th, 1858, and June 18th, 1859, are inaccurate, will oblige by at once forwarding the necessary corrections to Dr. Williams, Worcester, or Dr. Henry, 37, Great Queen Street, London, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, September 1859.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 28th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

TRACHEOTOMY IN CROUP. BY CONWAY EVANS, M.D.

The author commenced by remarking upon the frequency and fatality of croup as a disease of early life, in illustration of which he observed that out of every thousand deaths of children between the ages of one and ten years, which occurred in England and Wales during the year 1856, sixty were due to this malady. He then proceeded to examine into the rate of mortality from croup, and pointed out the very slight measure of success which has hitherto attended the methods of treatment usually employed in this disease. Six cases—four of croup and two of diphtheria (?)—in which tracheotomy was performed, were then narrated. The author then inquired into the reasons why tracheotomy is so rarely resorted to for the relief of this malady in Great Britain, and traced this mainly to the influence of the strong opinions against the operation which have from time to time been pronounced by many great authorities. The objects to be gained by the performance of tracheotomy in croup were next pointed out, stress being laid upon the fact that the operation affords time for the disease to run its course (which would frequently not involve the destruction of life, except for the occurrence of asphyxia), and for the administration of remedies. The principal objections which have been urged against the performance of tracheotomy in croup were then considered. The results of tracheotomy for the removal of foreign bodies from the air-passages were investigated, as well as those of the performance of this operation for the relief of other maladies than croup; and several illustrative cases were related. The conclusion deduced was that tracheotomy, though frequently a difficult operation, is by no means so dangerous a proceeding as is commonly supposed. The want of success which has attended the performance of tracheotomy in croup in this country was attributed chiefly to the following circumstances; 1. Tracheotomy has been very rarely indeed resorted to in croup in Great Britain, except as a last resort, when other methods of treatment have been found unavailing, and when the patient has become nearly asphyxiated; 2. The treatment employed prior to the performance of the operation has almost always been of a more or less depressing kind; 3. The after treatment has generally not been of that supporting character which nature requires for the due upholding of the patient's strength until the phenomena of croup shall have had time to run their course; and

to the difficulty experienced in commanding constant attention in the way of nursing and watching for some days after the performance of the operation. The author strongly urged the propriety of having recourse to tracheotomy for the relief of croup early in the disease, and immediately that the existence of false membrane in the windpipe can be satisfactorily determined, and emetics have been fairly tried. *a.* Because tracheotomy tends to prevent death by asphyxia. (*b.*) It facilitates the ejection and removal of portions of false membrane from the windpipe. (*c.*) It tends to prevent the exhaustion due to the extraordinary efforts of breathing almost always made by the patient. (*d.*) It affords time both for the phenomena of the disease to run their course, and for the administration of remedies and of means of support. (*e.*) It facilitates the employment of topical applications to the interior of the windpipe. (*f.*) The early performance of tracheotomy in France has been attended with results which are admitted, even by the opponents of the operation, to have been far more favourable than when recourse has been had to this procedure as an ultimate expedient. The cause of death in those cases of croup in which a fatal termination ensues, notwithstanding the performance of tracheotomy, was stated to depend upon one or more of the following conditions: 1. Some accidental circumstance, such as hæmorrhage into the windpipe, obstruction of the tube, etc. 2. Asphyxia dependent on the extension of the croupous exudation into the lungs, or on the re-formation of the false membrane after it has been once ejected. 3. Complicating diseases arising in the course of the croup, such as bronchitis or pneumonia. 4. Exhaustion—death by asthenia. The author believed that croup, when it proves fatal, always tends to destroy life by exhaustion; and that this would be its ordinary mode of termination, were it not that the mechanical obstruction, as well as the spasmodic closure of the larynx, tend to destroy life by suffocation before the disease has had time to run its full course. And he, therefore, strongly advocated the propriety of adopting a supporting plan of treatment in this malady. The value of alcohol, as a remedial agent in the treatment of disease, was then examined, and the method in which it should be given—viz., in small doses, at short but regular intervals—was pointed out. Alcohol should be regarded not as a specific remedy, but simply as a kind of food. The *modus operandi* of the remedies usually employed in croup was then discussed, and their real value indicated; and the error of supposing this disease to consist in ordinary inflammation of the windpipe was alluded to. The value of emetics was also examined, and the danger which frequently results from the employment of tartar emetic was dwelt upon. The circumstances which tend to diminish the chances of success from tracheotomy were referred to under the following heads:—*a.* The age of the patient; *b.* The existence of pneumonia or bronchitis; *c.* The presence of other diseases, such as measles, whooping-cough, etc.; *d.* The employment of depressing remedies prior to the operation; *e.* The postponement of tracheotomy until the patient is *in extremis*; *f.* The extension of the croupous exudation into the lungs. After suggesting a few practical hints in connexion with the operation itself, and in regard to the inhalation of chloroform, and briefly glancing at the various points which had been examined in detail, the author concluded.

Calculus of unusual size removed by the recto-vesical operation. By George Southam, Esq.

The patient, aged 21, was admitted into the Manchester Royal Infirmary with symptoms of vesical calculus, from which he had been suffering about sixteen years. On sounding him the stone was found to be of large size. He was emaciated almost to the lowest point compatible with life, unable to leave his bed, and suffering from a constant desire to empty the bladder, with severe pains in the loins and the lower part of the abdomen. The urine was loaded with pus, which, on standing, formed a thick white viscid sediment. It was highly ammoniacal, and a very considerable quantity of albumen was precipitated by boiling and the addition of nitric acid. Operative procedures were deemed unadvisable until the hectic fever and great debility under which he was labouring were relieved. He was therefore placed on nutritious diet, with eight ounces of wine daily, and the bicarbonate of potash with opium, and large dilution with water, were given to allay the irritation of the mucous coat of the bladder. Under this treatment, the patient's strength so much improved that in a month the question of operation had to be entertained. Judging from the long period of sixteen years, during which the stone had been growing, the grave effects it was producing on the health of the patient, and from the more certain evidence of examination by the sound and the finger introduced into the rectum, Mr. Southam was convinced that the concretion was large. The bladder had become so contracted by long inflammation that only a few ounces of fluid could be injected into it. The general health was still precarious, and, to crown the embarrassment, there was still a copious deposit of albumen in the urine. Did this indicate degeneration of the kidneys? If so, any thought of operation must be renounced. To the solution of this difficulty the microscope now afforded valuable assistance, and by this instrument the urine was repeatedly examined to discover whether any fibrinous casts of the uriniferous tubes were present. None, however, were found; nor any reliable indications of renal epithelia. And, on the more accurate comparison of the quantity of pus and blood in the urine with the amount of albumen precipitated by nitric acid and heat, the conclusion was come to that the albumen came from no higher source than the bladder itself, and was simply deposited from the liquor puris and small quantity of blood always present in the urine. As the kidneys were considered not to be implicated, on the 17th of December the calculus was removed by the recto-vesical section. Chloroform having been administered, and about half a teacupful of warm water injected into the bladder; a scalpel, guarded by the finger, was introduced into the rectum, and the sphincter and lower part of the anus completely divided. The urethra was opened anteriorly to the prostatic portion, and the finger passed through the wound into the bladder. As was suspected, the calculus proved to be of large dimensions. Accordingly, the wound in the prostate was enlarged. By means of the finger the rest of the prostate and neck of the bladder were sufficiently dilated to admit a pair of forceps. On the introduction of the forceps it was found to be impossible to grasp with them so large a stone, as the contracted and indurated state of the bladder prevented the divergence of the blades. A scoop was now used, but with no better success: the stone could not be disturbed from its original position. Finding it difficult to lay hold of the calculus in the usual way, Mr. Southam had the screw of a straight-bladed forceps removed, that the blades should be separately introduced, one over, and the other below, the stone. The handles having been brought together, and the screw re-inserted, the calculus was grasped and slowly extracted; the operation occupying from ten minutes to a quarter of an hour. The calculus measured eight inches in circumference in one direction, and seven in the other. It consisted principally of triple and earthy phosphates, with a nucleus of lithic acid. It weighed four ounces, six drams, and twenty-five grains. The patient had an excellent recovery; no constitutional disturbance of any amount followed the operation. The bowels were restrained in their action for a week by the administration of opium. Up to the 31st of December, all the urine passed by the rectum; it now commenced to come by the urethra. No inconvenience was at any time experienced from the passage of fæcal matter through the urethra. The pus and albumen gradually diminished in quantity. The fistula was not interfered with until the 18th of February, when, as some of the urine continued to pass through the rectum, it was examined. It appeared to be in the membranous portion of the urethra, and about a quarter of an inch long. It was touched once with nitrate of silver, and subsequently, on two occasions, the electric cautery was applied. He left the hospital on the 28th of April, cured, having for three weeks previously been free from all signs of the fistula, during which time he was engaged in assisting the nurses in the wards.

Mr. Southam did not advocate this operation except in especial cases, considering that the lateral method is the safest in the majority of instances. He was induced to resort to it in the above mentioned patient on account of the presumed large size of the stone, the indurated and contracted state of the bladder, and the unsatisfactory state of the general health. After referring to the risks which attend the lateral method, where the calculus is of large dimensions, he alluded to the objections urged against the recto-vesical operation, the principal of which is its liability to the formation of a permanent fistula. This, he believed, might to a great extent be avoided, if the incision into the urethra were limited to only a part of the prostatic portion. He considered it would be seldom necessary to extend the incision through the neck of the bladder, experience having convinced him that the obstacle to the extraction of large calculi by the lateral method existed more in the surrounding structures than in the prostate, which readily yields to steady and cautious dilatation. In the case now related, there was abundant proof of this: indeed, a cal-

culus of much larger dimensions than the one described could have been extracted without difficulty by the same incision. He proposed to call the operation the recto-urethral.

Editor's Letter Box.

DR. MARSHALL HALL'S READY METHOD.

Letter from Luke D. Smyth, M.D.

Sir,—As one fact is worth one hundred theories, I beg you will give this a place in our Journal.

Mrs. W. was delivered of an eight months child in the usual way, stillborn, and as there was no pulsation in the funis, I tied and cut it, and after a few minutes easily withdrew the placenta, which I observed was remarkably small. I put the child into warm water, and tried other usual means towards resuscitation, but in vain. Having placed the child in flannel, and pronounced it dead, I desired the nurses to put the woman to bed. The thought then occurred to me that I would try Dr. Marshall Hall's ready method: and accordingly I placed the child on its face and gently rolled it on one side, then on the other, for a few minutes; then I placed my right hand under its chest, and my left under its forehead, and commenced elevating and depressing my right hand. In a very few minutes the babe sneezed, the respiratory muscles began to act, I felt the heart pulsating at the point of my fingers, the skin lost its pallor and became ruddy, respiration was complete, and the child cried aloud, to my very great surprise and that of the women; and now I have the pleasure of stating that mother and child are doing well.

If my professional brethren would bear this in mind, and under similar circumstances, try "the ready method", I venture to predict that a large proportion of the stillborn children would be restored to life. I am, etc.,

L. D. Smyth.

Bingham, Notts, August 26th, 1859.

CHAMPAGNE A REMEDY IN DIPHTHERIA.

Letter from Edward Pritchard, M.D.

Sir,—During two years experience of diphtheria, I have found champagne of such service, that I feel it incumbent upon me to give my professional brethren the full benefit of trying its influence in the treatment of this terrible complaint. In the spring of the present year, I had the misfortune to be attacked myself, and shall reserve to some future period an account of its horrible nature. I give the wine in small doses, repeated at intervals of every three hours, beginning on the eve of each day. I am so confident of the specific character of this remedy, that where I have had cases occurring amongst the poor, I feel assured death has resulted from its being out of my power to employ it.

At present, I am too fully engaged to do more than ask a place in your columns in drawing the attention of the faculty to the subject. I am, etc.,

Edward Pritchard.

TREATMENT OF ABSCESS BY DRAINAGE-TUBES.

Sir,—In your last week's report of cases of abscess treated by means of Chassaignac's drainage-tube, under the care of Mr. Bowman, I observe the following remark: "The advantages of this plan in the treatment of empyema was recently insisted upon in a paper, by Dr. Stewart and Mr. De Morgan, read at the Royal Medical and Chirurgical Society." Since the above plan is only pursued by Dr. Goodfellow amongst the physicians of this hospital, and since the paper was read by him, with remarks on the operation by Mr. De Morgan, I think it is only fair to Dr. Goodfellow to have the full benefit of the credit for the complete success which followed the use of the drainage-tubes in all his cases.

I am, etc., Third Year's Student.

Middlesex Hospital, August 29th, 1859.

[The error to which our correspondent alludes occurred at p. 690, vol. I, line 23 from bottom. The name of Dr. Goodfellow should have been inserted in place of that of Dr. Stewart.—Ed.]

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

*Boodle, Robert H., Esq., Chilcompton, on August 29.
Burton, E. J., M.D., Cavalry Staff, Canterbury, on August 12.
Ellis, Robert, Esq., 63, Sloane street, on August 26.
*Lipscomb, Richard N., Esq., at Tring, on August 27.
Logan, T. G., M.D., Deputy Inspector-General, Army, on August 28. (Infant died same day.)
*Martin, Peter, Esq., at Reigate, on August 18th.
Martin, R. E., Esq., Surgeon, at Brighton, on August 25.
Parker, T. R. B., Esq., Abbotsbury, on August 22.
Shillingford, J. S., Esq., Peckham, on August 25.

Of daughters, the wives of—

*Brodhurst, B. E., Esq., Grosvenor Street, on August 22.
Masters, Maxwell T., Esq., at Peckham, on August 28.

MARRIAGES.

*Franklin, I. A., Esq., to Miss Theresa Segré, both of Manchester, on August 24.
*Hodgson, G. F., Esq., Brighton, to Elizabeth, daughter of R. M. Channey, Esq., Folkestone, on August 24.
Pryor, Rev. John E., of Baldock, to Mary Gertrude, daughter of R. Pett, M.D., Regent's Park, on August 23.
Shepherd, J. G., Esq., Paymaster H.M.S. *Cornwallis*, to Mary Ann, only daughter of E. Des Forges, Esq., Surgeon, South Cave, Hull, on August 13.
Shine, William L., Esq., Surgeon, to Eliza, youngest daughter of the late Fergus L. Graham, Esq., of Greenwich, on August 13.
*Swinhoe, G. M., Esq., of Charlton, to Diana M., second daughter of the Rev. T. M. Wrench, rector of St. Michael's, Cornhill, on August 13.

DEATHS.

Armstrong. On August 19th, at Dublin, Lancelot, infant son of L. Armstrong, M.D., 13th Light Dragoons.
Burnett. On August 22nd, at Chichester, aged 76, Maria, wife of Sir W. Burnett, M.D., K.C.B., R.N.
Butler. On August 25th, at Guildford, the wife of *W. H. Butler, Esq.
Fyffe. On August 21, at Notting Hill, aged 24, Catherine E. M., wife of W. J. Fyffe, M.D., Surgeon 5th Dragoon Guards.
Nesbitt. On August 30th, at Northampton, aged 14, Arabella Matilda, youngest daughter of *P. R. Nesbitt, M.D.
Taylor, Arthur H., Esq., Staff-Assistant-Surgeon, at Chelsea, on August 20.
Thompson, Wm., L.R.C.P., late of Newark, at Bath, aged 69, on August 19.

APPOINTMENTS.

*Swinhoe, G. M., Esq., appointed Surgeon to the Great Western Railway Company's Works at Swindon, in the room of C. W. Hind, Esq.

PASS LISTS.

Royal College of Surgeons. Members admitted at a special meeting, on *Wednesday, August 31st*, 1859:—

Bellamy, George, H.M. steamship *Hydra*, Plymouth
Cox, Richard, Aldermaston, near Reading, Berkshire

University of London. M.B. First Examination, 1859.

First Division.

Bankart, James, Guy's Hospital
Bastian, Henry Charlton, University College
Beddard, James, Guy's Hospital
Bird, John Durham, Royal Manchester School of Medicine
Buszard, Frank, Guy's Hospital
Chard, Octavius Edw. Peddle, University College
Evans, Alfred Wm. Armour, Guy's Hospital
Fagge, Charles Hilton, Guy's Hospital
Fortescue, George, King's College

Galton, John Henry, Guy's Hospital
Gee, Samuel Jones, University College
Grabham, Charles, St. Thomas's Hospital
Hewlett, Richard Whitfield, King's College
Holland, Edmund, University College
Huxley, James Usher, King's College
Jeaffreson, Horace, St. Bartholomew's Hospital
Miller, John Nicholas, University College
Ryland, Thomas Edmund, Sydenham College, Birmingham
Smith, William John, University College
Watts, Robert, Bengal Medical College, and University College

Second Division.

Barter, Clement Smith, St. Bartholomew's Hospital
Booth, Samuel, Royal Manchester and University
Brown, John Barr, King's College
Brown, Robert Charles, King's College
Ferguson, George, St. Bartholomew's Hospital
Hicks, George Augustus, King's College
Michell, Thomas, London Hospital
Stockwell, Frederick, St. George's Hospital
Taaffe, Richd. Patrick Burke, St. Bartholomew's Hospital

Apothecaries' Hall. Licentiates admitted on *Thursday, August 18th*, 1859:—

Chapman, E. G., Lingfield
Fernie, H. M., Yelden, Beds.
Heelas, Newton, Wokingham
Jardine, James B., Chatham
Love, J. H., Wolverhampton
Marsh, Henry T., Upton-on-Severn
Miller, T., Boyton, Suffolk

The following gentlemen, on the same day, passed their first examination:—

Booth, Samuel, jun., Huddersfield
Cronin, Eugene F., Brixton
Ellis, Thomas S., Upton-on-Severn
Grabham, C., Lonsdale Sq., N.
Hamerton, E., Elland, Yorks.
Huxley, J. U., Hart St., W.C.
Manning, Fredk. N., Milton, Northampton
Parker, Geo. F., Henley-on-Thames
Seaton, Daniel, Dorset Square
Travers, Wm., Poole

Thursday, August 25th.

Bird, John D., Stretford
Falwasser, Francis, Sherborne
Fennell, E. H., Ramsgate
Hayes, Robert H., Longton
Herbert, B. H., Edgbaston
Hicks, Robert
Kirby, T. C., Bodicott
Knight, Thomas, Brill
Llewellyn, David H., Malmesbury
Millard, W. J., Whitchurch, Hereford
Platt, Thomas, Oldham
Van, Arthur F., Northfleet

HEALTH OF LONDON—AUGUST 27th, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... {Boys .. 840 / Girls .. 870}	1710	.. 1217
Average of corresponding weeks 1849-58 ..	1523	.. 1120

Among the causes of death were—small-pox, 22; measles, 12; scarlatina, 78; diphtheria, 13; croup, 6; whooping-cough, 16; typhus, 46; diarrhœa, 215; cholera, 10; cancer, 31; consumption, 148; accident or negligence, 25; murder or manslaughter, 3; suicide, 5. The deaths from diarrhœa, in six weeks, have fallen from 415 in the week to 215.

Barometer:

Highest (Mon.) 30.139; lowest (Fri.) 29.615; mean 29.861 in.

Thermometer:

In sun—highest (Th.) 108°; lowest (Fri.) 80°.
In shade—highest (Th.) 91.3°; lowest (Mon.) 47.5°.
Mean—66.6°; difference from mean of 43 yrs. +6.4°.
Range—during week, 43.8°; mean daily, 26.4°.

Mean humidity of air (*saturation*=100), 67.
Mean direction of wind, N.W. & S.W.—Rain in inches, 0.25.

Another of the Bennett Gang. William Charles Allen was placed at the bar before Mr. Elliott, at the Lambeth Police Court, for final examination, on the charge of being concerned with Watters and Edwards in defrauding Mr. Benjamin Thos. Jones and others, by representing themselves as qualified medical practitioners, and undertaking to cure deafness and all other diseases. The prisoner's companions in guilt were tried at the Old Bailey, on the 4th of July last, for the offence, found guilty, and sentenced to eighteen months hard labour. The prisoner at the time managed to keep out of the way; but, having been brought here on another charge, he was recognised as the person against whom the grand jury had returned a true bill of indictment, as well as against his associates, Watters and Edwards. Inspector Young produced a certified copy of the indictment. Mr. Jones was sworn to identify the prisoner, and did so. Mr. Smith, the resident surgeon at the National Institution for the Cure of the Ear, etc., and who had been a witness on the former prosecution, addressing the magistrate, said he had been requested by Mr. Jones to ask his worship whether he, Mr. Jones, should be bound over and compelled to prosecute the prisoner. The reason Mr. Jones was anxious on the subject was this, that being a prosecutor in the former case, he was put to an expense of upwards of £60, which expense had nearly ruined himself and his family; and, if bound over in the present case, he must decline, as he could not afford it. Mr. Elliott observed that Mr. Jones must be bound over in the usual way to attend at the Old Bailey and give evidence in support of the bill of indictment, but not to employ counsel or go to any expense. A solicitor for the prisoner, in applying that his client might be admitted to bail, said he should be able to show on the trial that the two persons who had been convicted were the principals, and the prisoner the subordinate in the concern—in fact, merely the paid servant of the other two whose names had been mentioned. Mr. Elliott agreed to accept bail, two sureties in £200 each, with twenty-four hours notice, so that inquiries should be made as to their solvency and competency.

National Association for the Promotion of Social Science. The third annual meeting will be held in the West Riding of Yorkshire, at Bradford, on Monday, October 10th, and five following days. An influential local committee, presided over by the Mayor Bradford, has been formed in that town, to support the objects of the meeting; and steps have been taken in Leeds, Huddersfield, Sheffield, Wakefield, Doncaster, and other places, to secure the cooperation of the whole riding, and to bring before the Association the social condition, in its various aspects, of that extensive and populous district. Lord Brougham, at the request of the Council, has accepted the office of permanent President of the Council; and his lordship will, in that capacity, deliver an address at the Bradford meeting, reviewing the progress of the Association, and the leading questions of social interest that have arisen during the past year. The Earl of Shaftesbury has been chosen President of the Association. The Presidents of Departments are—for Jurisprudence, Vice-Chancellor Sir William Page Wood; for Education, the Right Hon. C. B. Adderley, M.P.; for Punishment and Reformation of Criminals, R. Monckton Milnes, Esq., M.P.; for Public Health, the Right Hon. William Cowper, M.P.; and for Social Economy, Sir James Kay Shuttleworth, Bart. The Department of Public Health is thus organised:—*President:* The Right Hon. W. Cowper, M.P. *Vice-Presidents:* H. W. Wickham, Esq., M.P.; J. Simon, Esq., F.R.S.; T. Southwood Smith, M.D. *Secretaries:* W. Farr, M.D., F.R.S.; Philip H. Holland, Esq. *Local Secretaries:* Dr. Macturk; H. F. Lockwood, Esq. Papers may be classed under the following heads:—1. *Condition of the Public Health.* The subjects, chiefly statistical, referred to this head, will comprise everything that relates to the past or present state of the public health. Papers descriptive of the general state of health of particular districts, or of the same districts at different periods or under different circumstances, and of persons engaged in the several industrial occupations, as well as of the special diseases to which particular localities and modes of life or of occupation are most liable, will be classed under this division. 2. *Causes which modify the Public Health.* To this head will be referred papers that treat of the causes which, whether favourably or injuriously, affect the public health; and the mode in which these causes act. This division will thus include the consideration of the production of disease by external causes to which persons, either individually or collectively, are liable to be exposed; such as climate, soil, locality, habitation, diet, occupation, station, or habit. 3. *Improvement of the Public Health.* Communications that suggest plans for the amendment of the public health, whether these have reference to legislative enactments, and the machinery requisite for the administration of sanitary law; to the removal of causes of disease by engineering or other mechanical appliances; or to the prevention of disease by hygienic precautions,—will be classed under this head. 4. *Social and Economical Aspects of Public Health.* This division will include inquiry into the effect of diminished death-rates upon the population—the effect of sanitary improvement on the national wealth, the diminution of pauperism, and the general moral and physical elevation of the community.

BRITISH MEDICAL JOURNAL:

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Addresses and Papers

READ AT THE

TWENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LIVERPOOL, JULY 27th, 28th, and 29th*, 1859.]

ON A PECULIAR FORM OF SCLEROTITIS.

By R. HIBBERT TAYLOR, M.D., Surgeon to the Liverpool Eye and Ear Infirmary; and Lecturer on Ophthalmic Medicine and Surgery in the Royal Infirmary School of Medicine.

In the first volume of the *Edinburgh Medical Journal*, I published an account of a peculiar form of sclerotitis which during the few preceding years had occasionally come under my observation. My attention was first drawn to it by some remarks of Mr. Dalrymple upon the subject, in his beautiful and artistic work upon the *Pathology of the Human Eye*. The disease is remarkable in many respects; and from its slow and insidious approach, obstinate character, tendency to return, and the detriment which it inflicts upon the powers of vision, not devoid either of interest or importance, especially to those who make diseases of the eye a special subject of study. The disease in question does not appear hitherto to have attracted much attention among ophthalmologists, in this country at least; and I have not met with any notice of it in the systematic treatises which seemed to give a true and faithful description of its appearance and progress. Under the head of "Scrofulous Sclerotitis," Dr. Mackenzie gives the details of an inflammatory affection, which in its early stages bears a considerable resemblance to the disease we are about to consider, but in its further progress it differs widely from it, being attended with staphyloma of the choroid, and an amount of disorganisation of the internal tissues of the eyeball, to which I have never seen any approach in this milder though still formidable complaint.

Since the publication of the paper above alluded to, several additional examples of the disease have fallen under my notice, and I am therefore induced to lay before the profession a short *resumé* of the sum of our knowledge as to its symptoms, pathology, and treatment.

In sketching this outline, I cannot, of course, altogether avoid repeating myself to a certain extent; as to many of the remarks already made, I have nothing to add, but this is, perhaps, of less consequence, as comparatively few are likely to be familiar with the subject; and, on the other hand, the additional experience which has been subsequently gained, will enable me either to confirm or modify opinions formerly advanced.

The disease seems to consist, as I think Mr. Dalrymple correctly observes, in a primary circumscribed inflammation of the sclerotica, which tends to spread *outwardly* to the subconjunctival cellular tissue, and *inwardly* to the structure of the choroid and corpus ciliare. It is attended with the deposition of a whitish matter, probably tubercular, in the tissues above named; and at a more advanced stage of the disease, the cornea is apt to become the seat of opacities varying in size and density. The attendant vascularity occurs in detached patches, assuming somewhat of the fascicular form observed in pustular conjunctivitis, and is generally seated on the upper and outer side of the cornea towards the external canthus.

The larger trunks subdivide into numerous smaller twigs at a short distance from the margin of the cornea, enclosing an area of a circular or ovoid figure; within this space several conical-shaped bodies are seated, separate from each other, of reddish colour at the base, and white or yellowish-white at the apex. They are of firm consistence, and evidently connected with the subjacent tissues, as they cannot be moved with the finger. The textures surrounding them are generally somewhat thickened and elevated; and the appearance is not unlike what we might suppose to arise from the deposition of some solid matter in the substance of the sclerotica and subconjunctival cellular tissue. The cornea is usually, though not always, the seat of some opacity. These opaque patches vary in form, extent, and density. They generally occupy the side of the cornea nearest to the thickened sclerotica, and are either separated from it by a clear strip of cornea, or, as more frequently happens, are united to it; presenting the appearance as if the opaque texture of the sclerotica had advanced upon the cornea. In some instances, where this union was only partially developed, minute red vessels could be distinguished, running apparently upon the internal surface of the cornea, and extending from the thickened portions of the sclerotica and corpus ciliare towards the corneal opacity.

In one instance, and only one, I have observed the cone-shaped bodies ulcerate upon the apex and discharge their contents through the aperture there formed. This process was followed by rapid sinking of the elevations, and a marked decrease in the surrounding vascularity.

The movements of the *pupil* are usually sluggish, or almost wholly suspended, in the early stage of the disease; and at a more advanced period, it is apt to become irregular, and displaced from its central position toward the seat of the disease in the sclerotica.

Pain is of a variable character, being usually slight in degree, sometimes amounting only to a sensation of tenderness on pressing the eyeball, or a feeling of stiffness on rolling it from side to side, or in exercising the eye much by artificial light. In other instances, again, the pain is more marked, consisting of a darting sensation in the eyeball itself, with sharp lancinating flashes extending upwards to the eyebrow and side of the head, and down along the side of the nose to the chin.

Vision, in general, is impaired to a greater or less degree. Where opacities to any extent exist upon the cornea, it must, of course, be imperfect; but independently of this, it is usually defective, and liable to become more so when the eye is used for any length of time. In one case recently seen, the patient stated that all objects appeared for a time of a bluish cast, which was followed by the sudden appearance of flashes of light of a reddish colour.

Watering of the eye generally accompanies this defective state of vision, and is increased by anything which tends to promote vascular congestion, as walking against a wind, or exerting the eye in looking at minute objects.

With regard to the persons most liable to attacks of this disease, it seems to affect females more frequently than males, usually young adults, and those especially of a strumous habit. One eye is usually attacked rather than both, although it may appear alternately in each; and when one is the seat of the disease, it may affect both sides of the eyeball simultaneously, or commencing on one side of the cornea, may gradually travel round its entire circumference, disappearing in one spot as it is developed in another.

One of the most characteristic features of the disease is its chronic obstinacy. Its first development is generally slow and insidious. Commencing with slight redness in one portion of the eyeball, which is at first intermittent, moderate lacrymation, and some uneasiness occasionally amounting to pain, and varying dimness of sight, it gradually steals on, till at length the patient becomes conscious that there is something materially wrong with his eye, from observing an opaque spot upon the cornea, or finding that he can no longer use the organ as before.

So much is this the usual subtle course of the disease, that

we not unfrequently find, on close examination, that its commencement dates several months previous to the time when the patient first applied for medical advice. Of eleven cases, minute details of which I have preserved, three occurred in males, and eight in females. Their ages ranged from fifteen to sixty years, seven out of the eleven being under thirty-one. In all of these instances, with a single exception, the disease was confined to one eye only; affecting the right eye in six cases, and the left in four. In eight instances, it was confined to one side only of the eye attacked, and that generally the inner; and in three, it affected both sides of the cornea. The disease attacked the eye for the first time in eight cases, for the second time in one, for the third in one, and for the fourth in one; while the duration of the attacks in these different instances varied from three weeks to four years.

With regard to the intervals of time which elapsed between the different accessions of the disease in those who suffered more than one attack, and the season of the year when they occurred, it may be observed that, in the person who suffered two attacks, the first occurred in April, and the second in November of the same year. In the case of the three attacks, the first occurred in the winter of 1854, the second in the winter of 1855, and the third in the autumn of 1858; while the patient who suffered four attacks was affected first in March, and second in October, 1853; for the third time, in July 1858, and finally in May 1859.

As regards the immediate cause of this disease, I have nothing very definite to state. Seven out of the eleven cases occurred in persons whose general health was more or less disordered at the period of the attack, and one of these suffered likewise from otorrhœa. In one instance, it was attributed to exposure to cold; and, in another, the symptoms were said to have been aggravated from a similar cause; while in two examples no cause was apparent, or could be assigned. Upon the whole, I think we may regard this disease as furnishing another example of those many and various local affections which date their origin from constitutional causes, and which must be looked upon as indicating an unhealthy condition of the system at large.

The only other ophthalmia with which this form of disease may be confounded, and it is a mistake not likely to be made by any one familiar with the pathology of the eye, is pustular inflammation of the conjunctiva. Both occur in young adults, and both are characterised by a fascicular arrangement of blood-vessels occurring in detached bundles, and running towards and subdividing around a common centre. In pustular ophthalmia, however, the point of attraction is a pustule or vesicle, seated in the conjunctiva, and in some degree moveable with this membrane; generally of a rounded figure, with a flattened apex, and either filled with a semi-opaque fluid, or, at a more advanced stage, forming a shallow ulcer. These appearances are very unlike the firm, immoveable cone-shaped body, seated upon a dense thickened base, and described as characteristic of the disease under consideration. Pustular ophthalmia, in addition, is rarely accompanied with dense opacities upon the cornea, or with any indication of inflammatory action in the tissues of the sclerotica, iris, and choroid, such as we see in the other form of disease.

From what has been already said with regard to the development and progress of this affection, it will readily be understood that the prognosis is not likely to be of a very cheerful or encouraging character. In any case, the improvement is likely to be slow, and the more so in proportion as the disease has existed for a longer period. When the disease is limited mainly to the sclerotica, and to the tissues immediately above and beneath it, we may anticipate a return to health under appropriate treatment; but, should the cornea have become the seat of large and dense opacities, and if, as may be anticipated in such circumstances, the textures of the choroid and corpus ciliare are also implicated, the result, under any treatment, is not likely to be so favourable; and, should we succeed in arresting the progress of the disease, the eye will probably remain permanently altered* in structure, and vision more or less impaired.

With a few remarks upon the mode of treatment which I have found most successful, I shall conclude this paper. Judging from the inflammatory character of the disease, and the congested condition of certain tissues of the eyeball which usually exists, we might naturally anticipate benefit from the abstraction of blood, at least locally. I have not, however, seen it do any good even when apparently most indicated; but, on the contrary, the practice seemed rather to be injurious. General depletion would not be thought of, as the tone of the patient's system is more frequently below than even at the level of sound health.

Mercury exercises a decided control over the disease; it should be given in small doses, and cautiously introduced, so as gradually and mildly to affect the mouth. From the extremely chronic and obstinate character of the inflammation, it may be necessary to keep up the action of the remedy for some time; and, in so doing, we must take care that the patient's system does not sink too low, as is apt to occur. Any indication of this nature must be met by a more nutritious diet, and the addition of a tonic to the mercurial. Counter-irritation by blistering is of the greatest service; and additional experience has only tended to increase my estimate of its value. In severe cases, it is better to delay its employment till the inflammatory symptoms have been somewhat mitigated by the action of mercury, when it may be commenced with good effect. In milder instances, I have found the operation of the blister alone sufficient to cause the gradual disappearance of the disease. The most convenient place to apply it is the temple, especially in females, where it is concealed by the hair; and I think, besides, that it is more efficacious in this situation than when put behind the ear. In size it need not exceed that of a penny-piece. A free discharge should be maintained from it during several weeks, if necessary (and it generally is so); and, to effect this, I have found Albespeyre's blistering-paper, No. 2, the most effectual, the cleanest, and most convenient application. After the cuticle has been raised by a fly-blister, and carefully removed, the raw surface should be dressed with the paper at least twice daily.

Stimulating collyria of all kinds are injurious, while those of a milder character are productive of little if any good. Poppy decoction, used tepid, or tepid water alone, will answer every purpose to be gained by a local application of this kind. If the pupil inclines to contract unduly, or if we apprehend any risk of the iris adhering to the capsule of the lens, the extract of belladonna may be added to the lotion with which the eye is bathed.

Pain in the eyeball, or in the surrounding bony parts, if much complained of, will probably be relieved by rubbing the extract of belladonna into the temple and eyebrow, or by a similar use of strong mercurial ointment combined with powdered opium, in the proportion of three parts of the former to one of the latter. The last named preparation I have found to be of much service in giving relief from circumorbital pain.

Entire rest of the eyes—of both eyes, I may remark—is quite indispensable when the disease is at all severe; and they should be defended from the glare of light by the use of a broad green or blue shade, or by glasses of a pale blue or neutral tint. In milder cases, we must enjoin a cautious and not prolonged employment of the eyes—a restriction which it will be found difficult to enforce in many instances; and, to obviate in some measure the injury which imprudence is likely to occasion, we may recommend the use of coloured glasses of a large size, and, in females, the addition of a thin blue veil on going out of doors.

Attention to the general health is a point never to be lost sight of in the treatment of this disease, for it will be found almost invariably to be more or less deranged; and the constitutional indications of this disorder must not be overlooked. Regulation of the diet, and of the general habits of the patient, is of much importance. The exhibition of tonics, as iron or quinine, will often be required, especially if the disease continues to linger; and, in any circumstances, I have generally found a sustaining and nutritious diet to be of service, rather than one of an opposite character.

Finally, the entire duration of treatment in these cases was as follows: in one, two weeks; in one, four weeks; in two, six weeks; in one, two months; in two, four months; in one, five months; in three, the period of treatment is not recorded; and one, when last seen, at the expiration of four months from the commencement of the disease, was still far from well.

In conclusion, I may add, that instances of this disease are occasionally to be met with, which will baffle all our efforts for their removal. In such circumstances, probably more benefit will be derived from frequent change of air by land travelling, than from any other treatment which we could recommend. I have met with at least one case in which a cure was effected by this means.

* In seven out of eight cases, vision was not ultimately impaired beyond slight dimness, accompanied with irritability of the eye, and inability to use it in reading or writing, except for very short periods. In the other case, the sight was never very defective, and ultimately became good.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

CASE OF ACUTE PHTHISIS.

Under the care of James Russell, M.D.

[*Clinical Clerk*—Charles Walls, Esq.]

John Smith, aged 28, axle-forger, was admitted July 11th, 1859. He states that he has not been a "drinking man"; he has never had short breath, and has not been subject to coughs; he has never had rheumatism, nor swelling of the feet. His parents are both dead, his mother of dropsy; he does not know that any of his relations have died of consumption. He has usually worked about twelve hours in the day. He was ill six or eight weeks ago with a rash, and was very sore in the mouth. His present illness commenced on June 28th, when he caught cold, occasioned, as he believes, from working in wet clothes. He complained of cold and shivering, and was very sick; his breathing was "very bad" from the first. He made a great deal of water, and it was of a very high colour. He had expectoration, very tenacious, "whitish, reddish, and yellowish"; it contained some blood. He has not had any pain in his side.

Present State. He is much exhausted with his ride of three or four miles. Pulse 105; respiration 46. There is small crepitation over the entire right side of the chest, especially over the right lower lobe; some prolonged expiration on the left side posteriorly. He was ordered to have a turpentine stupe applied to the right side.

℞ Misturæ salinæ ℥viij; tinctur. opii ℥j; antimon. potassio-tart. gr. ½. M. Fiat mistura: sumat ℥j 4tis horis.

July 12th. Pulse 112; respirations 46. He is much prostrated, but his intellect is perfectly clear. The tongue is clean and moist. He has sweated considerably. His urine is abundant; it is deep coloured, acid, of specific gravity 1014. It is merely dimmed by nitric acid, and contains a few epithelial casts. There has been a very little "white" expectoration. There is dulness in the right subclavian space; but, with this exception, there is no marked dulness in any part of the chest. Coarse crepitation is universal throughout the right lung; on the left side in front, there is rhoncus; posteriorly, the respiration is nearly pure. The stupe was repeated.

July 13th. Pulse 150, very soft; respirations 48. He has no cough nor expectoration. He is much exhausted; his skin is hot, and he perspires much. The urine is copious, clear, and light coloured. The bowels were moved yesterday afternoon. Bronchial breathing, to a small amount, is audible beneath the right clavicle; there is creaking and some crepitation throughout the left chest. The sounds of the heart are perfectly masked by the respiratory murmurs.

℞ Ammoniæ sesquicarbonatis ℈ij; ætheris chlorici ℥iij; mucilaginis ℥ij; aquæ puræ ℥vj. M. Sumat ℥j 3tis horis.

℞ Pulv. ipecac. co. ℈ss. Ft. pulvis nocte maneque sumendus.

A blister, six inches by five, was ordered to be applied to the right side. Three glasses of wine were ordered to be given daily.

July 14th. The pulse varies between 108 and 116; respirations 48. The tongue is moist. He has some sordes on his teeth. The hands are tremulous. He has slept, but moaned much. He has taken beef-tea. He has slight cough, with scanty expectoration of grey mucus. The result of the examination of the urine did not vary from that reported on the 12th. There is decided dulness under the right clavicle to the upper edge of the fourth rib; posteriorly, the right side is rather more dull than the left. Bronchial expiration is heard over the dull space in front. There is crepitation throughout the entire right chest, particularly coarse at the base; to a much less extent throughout the left chest also.

July 15th. He is much prostrated, and dull; he has twice thrown over his pot, and broken it. The arms are tremulous; the voice feeble and tremulous; but he takes his food. He wanders somewhat in his talk. There is no expectoration. Respirations 40.

Sumat pulveris ipecac. comp. ℈ss omni nocte.

A blister, three inches by four, was applied to the infraclavicular region.

[The subsequent notes were dictated by Dr. Maxwell, the house-physician, in Dr. Russell's absence from town.]

July 18th. The dulness on the right side has much extended. Diarrhœa is present.

℞ Mist. cretæ cum opio ℥viij. Sumat ℥j 4tis horis.

July 21st. He talks much in his sleep, but is quite rational when awake. Diarrhœa continues. He takes his food well.

July 22nd. Pulse 132. There is absolute dulness over the whole right side; the breathing, from apex to base, is intensely bronchial, with crackling and crepitation. On the left side, there is absence of dulness, but sibilus and crepitation over the apex of the lung.

℞ Vini antimon. tartrat. ♏xx; tinct. comphoræ comp. ʒj; spiritûs æther. nitr. ʒss; liquoris ammoniæ acet. ʒj; aquæ ℥j. M. Fiat haustus 3tiis horis sumendus.

He gradually sank, and died on the 26th.

Sectio Cadaveris twenty-four hours after death. The right side of the chest contained a pint and a half of fluid; the pleural surfaces were covered at many points with very recent plastic exudation. The right lung was of enormous volume, and was divided into five distinct lobes; it had the characters of a lung distended with firm injection, and crepitated nowhere from apex to base. The entire organ was occupied with grey tubercular matter, arranged in masses of about one sixth of an inch in diameter, surrounded with a rim of reddish tissue. In some parts the tubercular matter constituted masses an inch in diameter. At one or two points near the apex softening had commenced. No fluid exuded on compressing the lung. The left lung was extremely congested and œdematous throughout, with patches of tubercular deposit scattered very sparingly through its tissue. The kidneys were large; they weighed, together, fifteen ounces. The spleen and liver were large; but free from tubercle.

Remarks. This case is interesting from the rapidity with with which so copious a deposit of tubercular matter was effected. The entire duration of the disease, from the period of the initiatory rigor, was twenty-nine days, and yet the whole of one lung was filled to distension with tubercular matter.

Dr. Blakiston (*Diseases of the Chest*, p. 315) states that in three only of twenty cases of acute phthisis did death take place in less than five weeks from the appearance of the first symptoms.

As we were able to trace the progress of the disease by means of physical examination, there is every reason to believe that the greater part, if not the whole, of the deposit took place during the month preceding the patient's death. Unfortunately, it was impossible to obtain a full report of his previous health; but his own account, so far as it went, rather tended to exclude the idea of pre-existent disease in the chest.

The deposit was almost exclusively confined to one lung, a circumstance particularly noteworthy in connection with its great abundance.

The very subordinate character of the ordinary symptoms of cough and expectoration is worthy of especial observation; the more so as abundant crepitation was present throughout the duration of the illness; this circumstance partly explains a similar occurrence in certain cases of asthenic pneumonia.

Possibly, the very dull and prostrate condition of the patient may afford some explanation. This symptom was so prominent as to create an uncertainty whether he was not the subject of fever.

WEST DERBY UNION HOSPITAL.

CASE OF EXCISION OF THE PATELLA.

Under the care of Edward Lister, Esq.

Michael Small, aged 59, a sailor, was admitted into the above Hospital on February 10th, 1859, suffering from caries of the patella. In December 1858, he fell against a brass plate in the fore-hatch of a vessel; the skin was broken, but the bone was not laid bare. About a week after the accident, he unfortunately got it burnt when sitting before the fire and falling asleep.

On his admission, there was a large wound extending, about five inches in circumference, around the patella, accompanied with great pain; the whole of the bone being in a carious condition, the capsular ligament of the joint was opened, so that a

probe could be passed with ease into the joint, there being at the same time an extensive puriform discharge mixed with synovia.

On March 4th, with the assistance of my friend Mr. Waters, I excised the bone, the patient being under chloroform. The interior of the joint was found to be extensively exposed. The leg was placed on a double inclined plane slightly flexed; water dressing was applied. The wound granulated rapidly; the discharge became healthy; the synovial effusion gradually diminished; and what slight pain existed, had on the 18th entirely ceased. His general health rapidly improved; and on June 7th, the wound had quite healed.

The splint which he had worn was discontinued on July 1st, when he had a very partial use of the joint, which improved; and on the date of his discharge (July 4th), he was able to walk, comparatively speaking, well, without the assistance of a stick; the only support afterwards used was an elastic knee bandage.

MIDDLESEX HOSPITAL.

TWO CASES OF INJURY OF THE HEAD: RECOVERY.

Under the care of A. Shaw, Esq.

The notes of the following cases were taken by Mr. Brend, a pupil of the Hospital.

Case I. *Depressed Fracture of the Skull, with Concussion.* Sarah Copping, aged 16, a remarkably strong, healthy, and well developed girl, was brought to the Hospital at half-past eleven o'clock on the night of January 3rd, 1859. She had sustained injuries from the falling of a large stone staircase, crowded with people, at the Polytechnic Institution, the accident having just happened. Her condition was as follows. She was quite insensible, and in a state of collapse; the general surface was cold and pale. The pulse was 58, feeble; the pupils were contracted, and nearly motionless; the limbs flaccid. She did not reply to questions, and lay as if unconscious. There was rather free hæmorrhage from both ears. On examination, the skull was found to be fractured in the situation of the posterior superior angle of the left parietal bone, a portion of which, of about the size of a florin, was depressed; and there was a small wound of the scalp at the same spot, from which blood flowed rather freely. Immediately after admission, she vomited a considerable quantity of dark coloured clotted blood. Her hair was ordered to be cut close; the wound to be covered with lint; and a turpentine injection to be given immediately.

Jan. 4th, 9 A.M. Vomiting has been frequent during the night, and continues at longer intervals this morning. More blood was ejected with the first two or three vomitings, but none latterly. The turpentine injection came away soon, bringing very little fæcal matter and no blood. The hæmorrhage from the ears has ceased. The skin has recovered its warmth; the breathing is calm, without stertor; the pupils are still contracted. Pulse 65, slowly regaining its strength. She lies in a quiet condition in the intervals of the vomiting, apparently unable to speak, but evidently not unconscious, for she moves when touched, and manifests some discomfort on exposure of the body. She was ordered to have six grains of calomel immediately, and to have a spirit lotion applied over the whole head.

1 P.M. The general symptoms continue much the same. She has passed no urine since admission. There is no action of the bowels. A compound senna draught was prescribed, to be taken immediately; and two grains of calomel, with one-sixth of a grain of tartar emetic, every four hours. The lotion was continued to the head.

10 P.M. She passed in the afternoon about two pints of dark amber-coloured urine. She was apparently sensible of the distension of the bladder, but emptied it only on being asked to do so. The degree of insensibility is but little diminished, but there is more restlessness. She makes no attempt to reply to questions. The pulse has risen to 70, somewhat fuller, but still weak and easily compressed. There is no undue heat about the scalp. She has had no vomiting for the last four hours.

Jan. 5th, 9.30 A.M. She has been restless during the night, and vomited slightly once. She is quiet this morning. She answers questions slowly, but is still much confused. When asked, she says she has pain, and puts her hand to the forehead. There is no preternatural heat of the scalp; the general surface is warm and soft. Pulse 80, moderately full, and readily compressed. The tongue is moist, with a thin white coating along the centre of the dorsum; it is red at the margins and at the tip. The gums have been slightly reddened by the calomel. There is no action of the bowels. She passed urine again at seven o'clock this morning. She was ordered to have a common enema immediately, to continue the powders every six hours, and to continue the lotion to the head.

10 P.M. She is more restless, frequently turns in bed, and occasionally sighs deeply. The countenance is rather flushed; the skin is warm, but not harsh. Pulse 90, with slight hardness. The bowels have acted once; the motion was dark coloured, and tolerably copious.

Jan. 6th. She has been very restless during the night, with occasional wandering; but is quiet this morning. She answers questions readily and coherently. She does not complain of pain, except when asked, and then only in the forehead; there is no pain at the seat of the fracture, but merely tenderness on pressure, with some heat and tumefaction of the scalp. The pupils are natural; there is no distortion of the features. Pulse 86; tongue moist. There is some thirst. She takes only milk and water, and occasionally a teaspoonful or two of gruel. The gums are a little puffed. She sleeps quietly at intervals.

1 P.M. As there had been no action of the bowels since yesterday afternoon, Mr. Shaw ordered a castor oil enema to be administered immediately. The powders were continued as before.

10 P.M. She has gone on well through the day; but this evening there is again some excitement manifested by frequent turning in bed and wandering at intervals. The head feels hot. Pulse 98, oppressed. The bowels have been moved by the injection; the motion contains much dark coloured and slimy matter, but no blood.

January 7th, 10 A.M. She has been restless through the night, wandering at intervals, but without decided delirium; no attempts to get out of bed. She slept quietly at times. To-day she complains more of pain in the forehead. There is no pain in the occiput. The tumefaction over the seat of fracture has diminished; but there is still much tenderness of the scalp here when touched. Pulse 98, still rather oppressed. The tongue is moist, covered with thick white coating. The bowels acted this morning. The urine is tolerably copious, and not high coloured.

1 P.M. The gums are more tender, with some mercurial fœtor of the breath. She complains much of tenderness about the lower part of the back and nates, which seems to be due only to bruising. The pain in the forehead continues. She was ordered to be placed on a spring bed, to have a blister applied to the forehead, and to take the powders night and morning.

10 P.M. She has dosed much at intervals through the day. Her sleep has been more disturbed during the last two or three hours; she wakes often, and talks at random. She does not complain of pain from the blister. Pulse 100, less easily compressed. There is more heat and dryness about the head, and of the surface generally. Thirst is considerable. She takes only milk and water.

Jan. 8th, 10 A.M. Her sleep was much disturbed during the first half of the night, but she was more composed towards the morning. She answers questions readily and correctly to-day. The pain in the forehead continues, the blister having risen but slightly. There is no deafness nor tinnitus aurium; no vomiting. The tongue is moist, thickly coated. The bowels acted last night, and again this morning; the motions were dark-coloured and slimy. She complains of some tenesmus.

1 P.M. The scalp is decidedly more hot; the integument of the face, and of the body generally, is also hot and dry to the touch. The pulse has risen to 115; full and with difficulty compressed. One-sixth of a grain of tartar emetic was prescribed, to be taken in a draught every six hours.

10 P.M. The bowels have acted freely once since last visit. The inflammatory symptoms have not increased, the pulse having again gone down to 110. There is no increase of pain in the head; no delirium nor coma. She sleeps quietly at intervals. The mixture does not produce vomiting.

Jan. 9th. She has passed a favourable night, having slept continuously for several hours. There is less heat about the scalp; no particular tenderness over the seat of fracture; the pain in the forehead is diminished. She complains most of pain in the back and loins. The catamenial discharge has just come on. The tongue is as yesterday. Thirst is still considerable. The bowels are free. Pulse 100, smaller, and more easily compressed. Her countenance is less flushed.

Jan. 10th. She has passed a favourable night. Her counte-

nance is natural; the skin is moderately warm, not harsh nor dry. She has little or no pain in the head; but there is still some tenderness over the seat of the fracture when touched. The tumefaction of the scalp is nearly gone. The tongue is cleaning; the gums are less tender; the bowels are free. The draught was continued three times a day; and she was allowed to have milk and barley broth.

Jan. 11th. She has passed a favourable night, and looks cool and comfortable to-day. She complained for the first time of pain about the left shoulder; and, on examination, Mr. Shaw found a fracture of the clavicle near the acromial end. There was some displacement; but by means of a good pad in the axilla, and bandages to support the elbow and keep it close to the side, fair apposition of the fragments was still procured. Her sister states that she inquired to-day for the first time how she came to be in the hospital; and, on being asked, she says that she has no recollection of any accident having occurred, or that she went to the Polytechnic Institution at all. She has, however, distinct recollection of occurrences which took place the day preceding. The pulse is now 95; her appetite returning. She took bread and milk for breakfast.

Jan. 12th. She is doing well; she slept comfortably the greater part of the night. She is free from pain except in the shoulder, and here it is not severe. The tongue is moist, cleaning. Thirst is much diminished. Pulse 78, soft. The draught was ordered to be taken twice a day only, and was omitted altogether on the following day.

Jan. 16th. Steady improvement has taken place since the 12th. She complains of no pain, except in the shoulder, on turning in bed. The fracture of the clavicle is becoming consolidated; the bandages have been readjusted. There is no pain nor tenderness of the scalp over the seat of the fracture. The bone is but slightly depressed, and feels merely like an indentation. She takes her broth and pudding with a good appetite; no medicine is administered.

Jan. 19th. She is doing well, is cheerful, and sits up in bed a good part of the day. Her appetite is good. Pulse 75, and improved in strength; the tongue dry and clean. Strong beef-tea and pudding were allowed.

Jan. 22nd. She was allowed to be out of bed. She says she has a little pain in the forehead, but only such as she had been accustomed to have before the accident. Pulse 70; skin cool.

Jan. 24th. She has sat up for some hours each day, and is in every respect doing well. Mr. Shaw has given permission for her removal to her own home to-morrow.

Jan. 25th. She was removed to day in an invalid bed, complaining of nothing but a feeling of weakness.

Jan. 26th. She was visited at her house by Mr. Shaw. She had slept soundly the whole night, and was free from pain in the head. Pulse 68; skin cool.

This patient was seen recently by Mr. Shaw. On careful examination of the head, the contour of the skull was seen to be still uneven, testifying to the reality of the depression of bone, about which there had at one time been some doubt, owing to the extensive ecchymosis. She continued to be impaired in her memory.

Case II. *General Concussion; Free Hæmorrhage, followed by copious serous-looking Discharge from the Left Ear, without symptoms of Compression.* Catherine Woodrow, a healthy looking young woman, aged 22, was brought to the Hospital at half-past 11 o'clock P.M. on the 3rd of January, 1859. She was one of the sufferers by the accident at the Polytechnic Institution. It was said that she was insensible when first taken up from beneath the mass of heavy stones which fell upon her; but, before her arrival at the Hospital, she had recovered consciousness.

On admission, she was found to have sustained general concussion, with some degree of shock to the system. The general surface was cold and pale; the pulse slow and feeble. She replied to questions promptly and naturally. The pupils were equal, moderately dilated, and answered to light. She had pain at the nape of the neck and at the occiput, but no swelling could be detected there. The left temple and upper part of the corresponding cheek were swollen; and the skin was grazed from a blow inflicted principally over the left jugum, but no fracture there or elsewhere in the skull could be detected. From the left ear there flowed a stream of blood of a watery appearance, as if diluted. The quantity which flowed was so great, that the patient's linen and the sheet of the bed below were extensively stained. It was estimated that about a drachm of this sero-sanguinolent fluid escaped in less than a minute. Her countenance was natural. The head was ordered to be shaved, and a spirit lotion to be constantly applied; and half a drachm of powder of jalap with calomel to be given immediately.

Jan. 4th, 9 A.M. She vomited slightly twice last night: at the first time, the vomited matters contained a small quantity of blood. On the whole, she has passed a quiet night. The discharge from the ear continued to flow at the rate mentioned for about an hour and a half last night; it then lost its florid colour and diminished in quantity, but did not cease. It is now nearly clear, like serum slightly stained with blood; and the amount discharged was observed to be increased when she strained in the act of vomiting, or even coughing. This effect was not produced by movement of the jaws, as in mastication. To-day the discharge consists of a perfectly clear serous looking fluid, oozing constantly from the external meatus, and increased by every act requiring a forcible expiratory effort, as coughing or sneezing. The countenance is calm and natural; the pupils are equal, and moderately dilated. There is some slight aching of the forehead, and occasional shooting pains behind each ear, which (as she expresses it) "seems to shoot across from one ear to the other." The pulse is 80, soft and compressible. The general surface is warm and soft. She has passed healthy looking urine this morning. The powder has acted well once. She was ordered to have one-sixth of a grain of tartar emetic, and two grains of calomel, every four hours; and to have gruel only for diet.

10 P.M. There have been no unfavourable symptoms. The discharge from the ear has continued more or less throughout the day. There is no increase of pain in the head; no undue heat of the scalp; the skin is generally warm and soft. Pulse 88, free from hardness. The tongue is moist; she has no particular thirst. The bowels have acted twice since the morning; the motions are free from blood.

January 5th, 9 A.M. She has passed a favourable night, having had some hours good sleep. She looks cool and comfortable to-day. The oozing of a clear fluid from the ear has continued up to the present time, and is increased by any straining effort, as in sneezing or coughing. The bowels are easy. The urine is of proper quantity, and not high coloured. The tongue is moist, slightly coated. She has no thirst. Pulse 86, soft. The gums are a little reddened. The calomel and antimony powders and the lotion were continued.

10 P.M. There are no indications of inflammatory action. She has only slight aching of the forehead when she lies still in bed; but on turning round she feels pain, "which seems to shoot across behind each ear", and the "whole head *feels heavy*". There is little or no discharge from the ear, except during the act of coughing; and then it issues with a slight gush. The discharge is of the same watery character.

Jan. 6th, 1 P.M. She passed a comfortable night. There has been no discharge from the ear during the night or this morning. Mr. Shaw fancies there is slight strabismus. There is no inequality of the pupils; no double vision. She has the same "peculiar sensation" in the head as yesterday, but only on turning in bed. Pulse 85, soft, and of good strength. The gums are a little tender. The tongue is rather more coated, but moist. The powders were ordered to be taken every eight hours only.

Jan. 7th. She is doing well. There has been a slight discharge from the ear again this mornlng; but the matter discharged is now rather fœtid, and stains the lint which she keeps in the ear. She has no particular pain in the head. Pulse as yesterday; she has no thirst; the bowels are easy. The powders were ordered to be taken night and morning. She was allowed broth.

Jan. 8th. She was rather restless during the early part of the night, but slept comfortably towards the morning. She says she felt an unusual sensation in her head before she got to sleep last night. She describes it as a "sort of giddiness, with a feeling of weight of the whole head". The discharge from the ear has been more free during the night, and contines this morning. It is still fœtid, and stains the lint of a yellowish colour, like pus. She cannot hear the ticking of a watch at the distance of half an inch from the affected ear, the finger being placed in the opposite ear; but when the watch is brought near enough just to touch the ear gently, she can hear the ticking, but still very faintly. She has a slight "rumbling noise" in the ear from which the discharge proceeds. The pulse has increased to 90, without hardness. The bowels act twice in the twenty-four hours. The tongue is moist, and cleaning; she has no thirst. The medicine was omitted; the lotion was continued. She has taken the broth with good appetite.

Jan. 9th. She is doing well. There is still a little purulent

discharge from the left ear, with occasional shooting pain behind each, more especially on sitting up in bed, when she has also some "giddiness". Her appetite is improving; but she is allowed only beef-tea. The pulse is as yesterday. The tongue clean and moist.

Jan. 11th. The discharge from the ear continues. The pulse has got up to 96, but is soft and readily compressed. The "pain and feeling of heaviness" on lifting the head from the pillow are not so great. The tongue is clean and moist; the gums are less tender. She was allowed pudding extra daily.

Jan. 12th. She is still doing well. The pulse has gone down to 88. The skin is cool and moist. The discharge from the ear continues, but in diminished amount. She takes her pudding and beef-tea with a good appetite.

Jan. 14th. There is still slight purulent discharge from the ear. The "giddiness and sense of weight in the head", though much diminished, are still felt on sitting up in bed. Still she sits up in bed and talks cheerfully to her friends.

Jan. 16th. She has gone on well since the 14th. There is still a slight purulent discharge from the left ear, and some giddiness on rising in bed. The strabismus is scarcely perceptible.

Jan. 18th. She is doing well in every respect; there has been no discharge from the ear during last night or this morning. She was allowed to have broth, pudding, and an egg daily.

Jan. 22nd. She is out of bed. There is no pain in the head, but still slight giddiness, and occasional sense of weight, which she attributes to weakness.

Jan. 24th. She has got up each day without any unfavourable symptoms, and with gradual improvement in strength. Mr. Shaw has given permission for her to leave the Hospital to-morrow.

Jan. 25th. She walked out of the Hospital to-day, merely supported by the arm of a friend, and complaining only of "feeling rather weak." She had taken no medicine since the 8th.

Jan. 26th. Mr. Brend visited her, by Mr. Shaw's request, at her own house. She had slept well the previous night. She was then cheerful, and free from pain, except slight aching of the forehead, and occasional slight giddiness on sitting up. On applying a watch to the left ear (that from which the discharge had proceeded), the right ear being at the same time stopped with the finger, she declared that she could not hear the watch tick; and she further stated that she had convinced herself from experiments that she had entirely lost the sense of hearing in the left ear.

Jan. 28th. Mr. Brend visited her again to-day. She expresses herself as "quite well, except for the loss of hearing on the left side." When asked, she says she has no pain in the head, but still occasional giddiness.

Since January 28th, she has called at the Hospital twice to inquire for a young woman, one of the sufferers by the accident, and still in the Hospital from fracture of the lower jaw. When last there, the sister stated that she was cheerful, and complained of nothing but the loss of hearing in the left ear. She had much improved in strength, and had taken some pretty long walks.

Remarks. Our report of these interesting cases has already reached such a length that we must confine our commentary upon them to a very small space, merely indicating the leading points of interest in each of them. In the first, there could be no doubt of the existence of fracture of the vault of the skull, with slight depression at the seat of (but not exposed by) the scalp-wound. This fracture, however, not being compound, and being unaccompanied with depression, was left alone; and with the happiest results, no symptom of irritation of the brain having supervened. Nor is the old rule of surgery—always to elevate a compound fracture with depression—by any means absolute in our modern hospital practice. We observed, a short time ago, a notable example of the success of the expectant plan, which we shall be able, perhaps, to lay before our readers. It is possible that the fracture in Mr. Shaw's first case might also have extended into the base of the skull; and in fact, in the great majority of the cases of fractured vertex which occur in civil life—*i. e.*, those which are occasioned by falls and heavy blows—the fracture will be found to extend into the base. But there was no absolute proof of this in the case before us, as the amount of hæmorrhage was not greater than occurs sometimes without fracture, and there was no loss of hearing. It is interesting to note the threatening symptoms of inflammation of the brain, and the way in which they yielded to the antiphlogistic action of calomel and tartar emetic.

The second case is a more unusual one. Here the existence of fracture of the petrous portion of the temporal bone was indubitable, being proved by the escape of a serous fluid from the ear *immediately after the accident*, and by the persistent lesion of the auditory apparatus, occasioning deafness on the affected side. It is well known that the symptom which used to be relied on as pathognomonic of fracture of the petrous bone—the escape of a serous fluid—has been observed where no fracture existed. Such a case is reported by Mr. H. Gray in the 6th volume of the *Pathological Transactions*, p. 22; but if that case is read attentively, it will be seen that, although it presents a considerable analogy to the present one, the evidence of the escape of the serous fluid *directly* after the accident, which is the vital point in this inquiry, is not at all distinct, and if our memory of the case (which we watched at the time) does not deceive us, there was always considerable doubt upon that point. Now there is no difficulty in understanding that when the membrana tympani has been ruptured, as it was in that case, and therefore the mucous lining of the tympanum and mastoid cells exposed, a large quantity of fluid may be secreted in a short space of time by the latter membrane, which, if mixed with blood, would be indistinguishable from the subarachnoidean fluid which escapes in cases where the petrous bone has been fractured and the tube of arachnoid laid open which coats the seventh pair of nerves. But when the discharge occurs immediately, it is difficult to see from what source other than the subarachnoid space such a quantity of clear fluid can run. That this was the source of the discharge here is further proved by the fact of its flow being increased by strong respiratory efforts. Such efforts would have had no effect upon the contents of the tympanum until a communication had been opened with those of the skull, which receive a distinct impulse from every respiration.

The case was a most fortunate one in its event; and it is not improbable, as was conjectured by the reporter, in some ingenious observations with which his notes were accompanied (but which we were obliged to omit for want of space), that the very profusion of the discharge, by unloading the vessels of the brain, might have acted to diminish the chance of inflammation.

Original Communications.

AN ACCOUNT OF A CASE OF MOLLITIES OSSIUM.

By Edward Latham Ormerod, M.D., F.R.C.P., Physician to the Sussex County Hospital.

[*Read before the Brighton and Sussex Medico-Chirurgical Society, June 2nd*, 1859.]

The deformed bones which I have the opportunity of shewing you this evening, are those of a man, formerly of some notoriety in this town. The chief particulars of his history have been kindly collected by Mr. Tuke, to whom I am also very much indebted for his zealous and able assistance in procuring the skeleton.

The father of the subject of these remarks was a shoemaker, about five feet ten inches in height, and stout in proportion; he was a man of dissolute habits, and died of diabetes at the age of fifty-five years. His mother was a Spitalfields weaver, a hard-working industrious woman, who died at the age of ninety-three.

They had six children. One daughter died young, and the other from flooding in childbed. One son died young; another of hæmoptysis, when about thirty-six years old; another was drowned; and the sixth lived to the age of sixty-eight, to be the subject of the very singular pathological changes to which I propose to call your attention. After his birth, his mother had some miscarriages, and bore some children, which died within a few days of their birth: he was the youngest surviving child.

There were no traces of a similar affection in any of his brothers or sisters; and when he came into the world, with both his arms broken, a reason was found for this anomaly, in the fact of his father having kicked his mother in the stomach during her pregnancy. The statement of the fact was probably more correct than the inference. However, he was a

fine child in other respects; and, though rickety, he improved as time wore on, till he was thirty years old, when, in spite of his deformities, and an accident four years before, by which he seems to have injured his thighs, he was five feet three or four inches in height, and had full use of his arms and legs. He could then walk several miles, and do a good day's work at his trade, of a shoemaker, without any inconvenience. He was then in his prime, and at this age he married.

At the age of forty, he seemed to have lost all his bodily strength; and his bones were so brittle, that they would break with the slightest blow. His marriage, and some pecuniary losses which had reduced him to poverty, may have had something to do with the change which had come over his health during these ten years; but in one of the possible causes, he had found a certain cure of his numerous fractures, for his wife had a specific remedy, compounded of various unsavoury ingredients, which she used to apply freely over the injury. Under her management, she says, in twenty-four hours the swelling and pain subsided, and in a month or less, the bone, large or small, was firm again. He had sore need of such a specific, for at one and the same time he had no fewer than seven fractures of different bones. Without any intention of detracting from the merits of the specific, the observations of his wife may be taken to shew that the fractures in this case followed the ordinary rule of such fractures; being attended by little pain or swelling or constitutional suffering, and uniting even more readily than in healthy bones. It does not appear that he suffered any pain in the bones preceding the occurrence of the fractures, as has been often noticed in these cases.

It was subsequently to the age of thirty, when he married, and poverty overtook him, that the chief changes in his skeleton, both the gradual bending and the sudden fractures, occurred. But I cannot obtain any exact history of these changes, so as to assign precise dates to the various fractures which we see now. He was well known, like his son and daughter, as a frequent applicant at our Hospital, on account of fracture of one or other bone, which united badly or not at all. But, as I have said, his wife soon got used to his bones breaking, and such an occurrence might often pass wholly unnoticed in the family circle, especially when he lay in bed, as he did almost entirely for the last few years of his life. He died, worn out by the constant pain caused by his distortions, and by some ulcers on his legs, at the age of sixty-eight; when he measured, as he lay on his back at his full length, no more than thirty-nine and a half inches.

This little deformed body contained a mind of considerable power, to however ill purposes it was applied. I am not idly raking up the records of a life of low blackguardism. We must not think how bad this man would have been had his ready wit been associated with a more able body to carry out its biddings: we may rather charitably believe that it was the disproportion which existed between his intellectual and bodily development which so depraved him. The condition of the brain in rickets is a psychological study of much interest; and I think the subjects of angular curvature of the spine have much to complain of, in the mental and moral faults properly belonging to rickets having been hastily and groundlessly ascribed to them.

This poor cripple was a shoemaker, and kept a low lodging house. While his money lasted he lived a very profligate life; and, so long as cockfighting was in fashion, he kept an establishment for that purpose. He was hasty and violent in his temper. Among his neighbours he always passed as a clever and ready man, and his intellect remained clear to the end of his life. He lived well, and chiefly on animal food; for the last seven or eight years of his life he took about three grains of opium daily, and was rarely without his tobacco-pipe in his mouth. I have no information as to the state of his urinary secretion, nor, indeed, as to any of the bodily functions, beyond mere general statements.

He had four children, all healthy-looking at their birth, two of whom, however, survived for a few hours only. These were both boys. The third boy lived to the age of sixteen years, when he died of small-pox. He was a frequent applicant at our Hospital, on account of broken bones, where he is still remembered as a most thorough-paced precocious little blackguard; or, as his mother has it, a singularly lively and sharp-witted child.

The poor daughter's history is a very sad one. She too, like her father and brother, was always breaking her bones, and was a frequent applicant at our Hospital. And, under the same domestic moral training as her brother, her precocious mind was similarly developed. The two children used to attend public houses to enliven the company as singers and jesters; and, when she could not walk, she used to be carried from one low pothouse to another, in her degrading vocation. She grew up as deformed as her father, and, in an evil hour, some one was tempted by her portion of twenty pounds to marry her. She became pregnant several times, but aborted at a very early period. One pregnancy, however, was unfortunately protracted to the eighth month, and it became necessary to perform the Cæsarean operation, from the effects of which she sank after three days, at the age of twenty-three.

The late Mr. Stafford extracted, by this operation, twin children, one already dead, and one which survived its birth only a few hours. The children were, to all appearance, well-formed for their age; but so had their unfortunate mother and her brothers been at their birth, and it is scarcely a matter of regret that by their early death this decrepitude was prevented from propagating itself to the third generation.

When I point to this almost perfect skeleton, as you see it now, which we owe to the careful manipulation of Mr. Charles Humphry, you will hardly sympathise with my regret that the examination of the body was so superficial. But, although it would have been of the greatest interest to have studied the morbid changes throughout, we were compelled, under the circumstances, to limit ourselves to the abstraction of the bones. And I take this opportunity of sincerely thanking the gentlemen who so very kindly gave me their assistance in a work of great fatigue and discomfort, and some little danger.

I may mention that the preparation of these bones has been attended with unusual difficulties: for the cold weather interfered very much with the putrefactive process during the first few days of the maceration, on which so much depends; and the bones are so soft and brittle that it was unsafe to submit them to any of the processes by which we complete the cleaning of healthy bones. I offer this apology for the stains which you may see here and there, disfiguring the skeleton to the eye of an anatomist. I have also to regret the loss of several bones, namely, the coccyx, and several of the bones of the toes, which have fairly melted away during the process of maceration; a circumstance not to be wondered at when we observe that all the bones of the feet which have been preserved consist merely of a mass of greasy adipocere, enclosed in a shell of periosteum.

At the suggestion, and with the assistance of Mr. F. Humphry, I have laid the skeleton in the recumbent position, very nearly that which the man occupied during the last bed-ridden months of his life. By this means the bones are exposed to the least possible strain; but with all the care that has been spent upon them, I fear that this singular preparation will not be a very permanent addition to our Museum.

There are three forms of disease of bone, all more or less closely allied, if not absolutely identical, which find ample illustration in the specimen before us; namely, mollities and fragilitas ossium, and rickets. On each of these I would make a few general remarks.

The points of difference between mollities and fragilitas ossium are not, for the most part, considerable. In both cases the disease is essentially an atrophy of bone; only in the former the earthy constituents are the first to be removed, and the bone gradually bends; while, in the latter, the softer constituents are chiefly affected, and the limb retains its proper form till the bone is broken by some accident. We might say, perhaps, that in the case of mollities ossium there is a degeneration, the earthy part being replaced by a more flexible, fatty material; while, in the case of fragilitas ossium, there is simple atrophy, the bony structure being weakened or disintegrated, rather than degenerated.

Regarding the most prominent distinctive character of these two forms of disease, namely, the alternative of bending or breaking, as a mere accidental circumstance, there is yet one important differential feature in their pathology.

I believe that mollities ossium is always a primary disease, while fragilitas ossium is sometimes secondary to other diseases, particularly to cancer; always, however, remembering to distinguish the fractures resulting from this general pathological condition from those which are dependent on a cancerous deposit in the bone, a point not always easy of discrimination from the symptoms alone. For, accidental as the fractures in fragilitas ossium may seem, yet, not unfrequently, the patients have been able by local pain to foretell the occurrence of a fracture of any particular bone.

In rickets another element has to be considered. Here is

not only atrophy, but arrest of bony development. The childish characters of the skeleton linger on into advanced years, and are clearly to be traced along with the results of the degeneration of particular bones. The large cranium, the small face, the narrow pelvis, and the stunted, feeble lower limbs, are quite as characteristic of rickets as the distorted extremities are. But these effects of rickets on the skeleton have been so fully elucidated by Mr. Shaw, that I can do no better than refer to his interesting essays for all further information on this subject. (*Medico-Chirurgical Transactions*, vol. xvii, and xxvi).

In rickets, again, there is this very important peculiarity, distinguishing it from mollities ossium, namely, that the disease is remediable. The bent bones, indeed, do not become straight, but they are made as strong as they would have been under any other circumstances. The undeveloped bones, indeed, never acquire the normal proportions; but they grow, and the limbs may have their natural bulk, though they want perfect physiological symmetry. But the disease ceases at last, and a period in the child's pathological history passes away, for the most part never to return.

The recorded histories of cases of mollities ossium do not lead us to believe in the power of any remedial agency to check the disease, nor justify any expectation that the disease will stop of itself. A fractured bone will sometimes repair itself under these circumstances, even more rapidly than in a healthy subject; perhaps from the limited affinity displayed by the rest of the body for the accessible phosphate of lime with which the bone is to be repaired. But some such unnatural stimulus seems to be required to induce ossific action, for elsewhere the disease steadily goes on to disorganise the bones.

The opinion thus far implied of the close analogy, if not the essential identity, which subsists between these forms of disease of bone, though very generally received, is objected to by no less an authority than Rokitansky (*Pathological Anatomy*, Sydenham Society's Translation, vol. iii, p. 177); and Mr. Solly has also been led, by observation of two cases of mollities ossium (*Medico-Chirurgical Transactions*, vol. xxvii, p. 459), to doubt its identity with rickets.

Still, the general opinion is that the results are the same, and referable to a similar process of atrophy, or fatty degeneration. And, just as fatty degeneration of different organs may own many different causes, all imprinting their own characters on the results, so may it be with fatty degeneration of the bones. No one would hesitate to name inflammation as one of the most frequent exciting causes of fatty degeneration; but pathological evidence, on the strength of which we refer some cases of mollities ossium to this cause, must be allowed equal weight on the other side, when it leads us to infer that there has been no inflammation at all, whether of the heart, or the liver, or, what concerns us at present, of the bones. Not doubting that some of these cases are of an inflammatory origin, still, we are not in a position to maintain that they are all such. And, excepting only this change in the lower end of the right femur, I do not believe that such is the pathological nature of any of the morbid appearances in the preparation before you.

With these few general remarks, I will proceed to the particular examination of the skeleton.*

The skull displays the ordinary character of rickets in the disproportionately large size of the cranium as contrasted with the face; not so much from a general excessive development of the cranium, as from an arrest of the development of the face. Individually, the cranial bones are imperfectly developed, the sutures are not closed, and Wormian bones are present in unusual places, as on the anterior edge of the left parietal bone, and the upper edge of both squamous bones. In their usual situations, along the mastoid and lambdoidal sutures, they are so numerous and so loosely compacted, that the skull might readily be broken by slight pressure. The outer surface is smooth and healthy looking; but the bones are so thin that in many places a pin may be pushed through them, and the left frontal sinus is only imperfectly closed in. But, in contrast to the want of development of the several bones, the great width of the forehead and the length of the cranial cavity from before backwards, are particularly remarkable. Equally remarkable is the depression at the upper angle of the occipital bone.

This arrest of development and atrophy appear in a more marked degree in the facial bones, which, notwithstanding all the care that has been taken in their preparation, look rough and papery. The alveolar processes of the upper jaw are hardly represented at all, and the lower jaw displays all the characters of edentulous old age. From behind the symphysis springs a strong forked bony process, calculated to give increased attachment and leverage to the muscles which have their origin here. I think that this is almost the only instance of such a provision to be noticed in this skeleton.

The vertebral column is contorted in the strangest way. There is very little bending in the antero-posterior direction; the distortion is lateral. One large curve, with the convexity to the right, begins at the third cervical vertebra, the chord of the arc touching the twelfth dorsal. While the chord of the other curve, which has its convexity to the left, reaches from the upper edge of the sacrum to the fifth dorsal. The length along the curves is seventeen inches; from the atlas to the sacrum, in a straight line, only fourteen; being half an inch less in the bones as they are mounted, than in the recent specimen.

There is not much to notice in the vertebræ themselves, they are small, and of a light porous texture. Their shape has been accommodated to the gradual distortion, the bodies being thinned on one or other side, and the spinous processes twisted according to the direction of the curve of the column in that part.

Their bodies, as is usual, are turned slightly round to face in the direction of the convexity of the curve. The ribs, here and there, have contracted slight bony adhesions to the vertebræ, but these are not, in any instance, anchylosed to each other. How, under these circumstances, any form of a thorax could be preserved, and the functions of the thoracic organs maintained, was a problem on whose correct solution hung this man's life. Let us try to trace this solution in detail.

The sternum and clavicles, almost alone among all these diseased and distorted bones, retain their shape and structure; the sternum being only turned a little towards the left. The first rib is in its natural position, or nearly so, on both sides; but below this the ribs on each side require a separate description. On the left, generally, down to the eighth rib, these bones are thin and slight, placed horizontally, rounded on their outer face, with a well marked ridge along their convexity, and marks along their upper and lower edges as if of articulating surfaces. They lie close along the transverse processes to their ends, over which they are stepped as it were, and thus sweep backwards in a bold curve, to give as much room as possible to the thoracic viscera. Below this the ribs have more of their natural form, though their direction is very irregular, and the want of space at the vertebral end has necessitated their overlapping one another. The seventh and eighth ribs are thus overlapped by the sixth, and the ninth overrides the tenth and eleventh ribs near their vertebral extremity, though they all lie pretty evenly at their sternal ends.

I know of nothing which explains the incongruous positions in which the right ribs, stripped of their integuments and the connecting pleura, seem to lie, so well as a sheet of wet pasteboard, folded in the same way as the pleura must have been folded here. On careful observation, it will be seen that the walls of the chest on this side have been creased, as it were, though the regularity of the folds has been disturbed by the unequal yielding of the several bones.

The cavity of the thorax on this side is much narrowed. The ribs are broad and strong, but they are bent like fishhooks at their angles, and, as they lie overlapping one another, some of their angles come almost into contact with the bodies of the vertebræ. The five upper ribs lie regularly one below the other; the sixth turns upwards, overlapping the three immediately above it, and being itself crossed twice by the seventh rib. The eighth rib is in the return of the fold, but is a little overlapped by the lower ribs, which extend outwards and downwards to cover the right ilium, which seems thus drawn within the thorax.

Such is the position which the right ribs occupy now that they are mounted; and such was very nearly the position which they occupied in the recent specimen. But, with all my care to restore them to the positions which they formerly held, I am

* More complete information on the subject of rickets and mollities ossium may be found in—

Cumin. On Rickets. Cyclopædia of Practical Medicine.
Stanley. On Diseases of the Bones, p. 217.
Shaw. On the Conformation of the Skeleton in Rickets. Med. Chir. Trans., vol. xvii, p. 434.
Shaw. On the Effects of Rickets upon the Growth of the Skull. Med. Chir. Trans., vol. xxvi, p. 336.
Curling. On Atrophy of Bone. Med. Chir. Trans., vol. xx, p. 336.
Solly. On the Pathology of Mollities Ossium. Med. Chir. Trans., vol. xxvii, p. 435.
Paget. Lectures on Surgical Pathology, vol. i, p. 131.
Catalogue of the Hunterian Museum, vol. ii.
Rokitansky. Pathological Anatomy. Syd. Soc., vol. iii.

These works leave little to be desired, but that we might find some means of preventing or removing the effects which they so accurately describe.

conscious that the deformity of the right ribs has been exaggerated. I think that the bones are made to overlap unduly, and I am sure that, instead of diverging as they now are placed, they ought to lie closer to each other. Some of this error may be due to the half-inch which has been lost in putting the vertebræ together; some, I think, to warping of the ribs themselves. But I am afraid that there is no remedy; for the bones are so delicate that they could not safely be drawn into closer proximity; and, singularly enough, the bones whose sternal ends diverge the most widely are just those about the correct position of whose vertebral ends there is the least doubt. I am inclined to think that the error is rather in the overlaid than in the overlying ribs. At least, the measure of the lower circumference of the chest now is just what it was in the recent specimen.

There is scarcely a rib on this side but gives evidence of the strains to which it has been exposed, by more or less unequivocal traces of old fractures. The tenth left rib has a fracture still ununited, though the thickened ends of the bones shew the fracture not to be very recent.

Among all this disease, the healthy condition of the clavicles is very remarkable; only they are small, and have had to accommodate themselves a little to the altered form of the other bones. The scapulæ are reduced to thin shells of bone, altered both in their outlines and in the direction of their surfaces by the general conformation of the side of the chest on which they have lain. The general convexity of the outer surface, the thin paper-like structure of the body, and the seeming lengthening of the coracoid process, due to the entire removal of the articular prominence, are very remarkable. But the bony structure, as much of it as is left, appears sound, like that of the skull; only the acromial and coracoid processes are soft and powdery. Both the coracoid processes have been fractured, and the point has taken a new direction downwards. The fracture of the left still remains ununited.

It would be difficult to assign any precise anatomical reasons for having placed the upper portions of the humeri on the sides of the body to which they seem respectively to belong; their natural characters have been so altered by long estrangement from their natural uses and positions. At the lower fractured end there are still prominent ridges for the attachment of muscles; but the articulating surfaces and the tuberosities are altered almost beyond recognition in the shrunk and withered head of each humerus.

The dry powdery condition of the upper fragments, constituting two-thirds or a little less of the whole length of these bones, contrasts strongly, as we shall see again in the lower extremities, with the solid waxy condition of their distal portion. This is a little triangular bit of bone, which has evidently been disconnected from the upper end for a very long time; the stump of the shaft and the articular surfaces having been all moulded to adapt themselves to their new uses and relations.

The position which the hands take is nearly the same on both sides, the bones of the forearm crossing each other; but, on the left side, both the longitudinal bend and the lateral twist occur near the middle of their length; while, on the right, this same position of the hand is produced by the radius being twisted half round the ulna at its upper end. The right bones are stronger, and have bent less; so that this forearm is full three-quarters of an inch longer than the left. Both hands are light, and free from distortion; but the bones are all soft and greasy. Some of the right carpal bones have a porcellanous articular surface, as if from rheumatic gout.

The diminutive size of the pelvis as a whole is a pathological feature eminently characteristic of rickets, which not only, as has been said, induces disease or degeneration of the particular bones, but arrests their due development. The sacrum comes forward to an unusual extent, the ossa ilii overlapping it behind, and being within an inch and a quarter of meeting. This also is a change usually referred to rickets; but, instead of descending straight, so as to enlarge the lower aperture of the pelvis, the sacrum is bent forward on itself, as if by disease supervening at a later period. The coccyx has been destroyed by maceration, so that we have no accurate knowledge of the extent to which the lower aperture of the pelvis was actually narrowed. The anterior superior spines of the ilium represent the points of the extreme divergence of the cristæ ilii, and are only nine inches apart. Measures, however, can convey a very inadequate idea of the distortion at the upper outlet. Besides the general constriction from the arrest of development and the advance of the sacrum, the right pubic bone has been pushed back, so as to lie within a quarter of an inch of the front of the sacrum. The acetabulum, with the sutures of the bones which usually meet to constitute it gaping widely, is occupied by the great trochanter; the head of the femur rests in front and to the outer side of the tuberosity of the ischium; while the joint, such as it is, is constituted by the upper surface of the neck of the femur rubbing on the thickened ramus of the ischium and os pubis. The shaft of the femur is bent very strongly, to accommodate the limb to this extraordinary position of its articular extremity. On the left side, the changes are much less marked; the acetabulum preserves its form, and discharges some of the functions of a socket for the atrophied head of the femur. The appearance of the articular surfaces, however, does not convey the impression that there has been any great amount of movement of this fragment of the thigh-bone.

In the absence of any reliable sources of information, we are left to conjecture as to the cause of these singular distortions; but I think that they may all be referred to the spinal curvature as the starting-point. First, the spine yielded, and the weight of the body was thrown on the right side of the pelvis and the great trochanter of this side. Under this pressure, the acetabulum gave way, and the distorted femur was drawn into its present position. A similar collapse on the left side would have probably quite interrupted the passage through the pelvis, and superinduced fatal obstruction of the bowels. But, besides being relieved of the weight of the body, the muscular pressure has been materially lightened on the left side of the pelvis by the fracture of that femur, and so its form has been preserved. I think that this is the correct mechanical interpretation of these singular distortions; and as mechanical we must regard them in the first instance, however largely disease may have contributed to the results, both in facilitating the distortion and the displacement, and subsequently in adapting the parts to their altered positions. But this disease was atrophy and fatty degeneration: there is not a single instance of caries or scrofulous disease of bone in all this skeleton.

The lower end of the right femur displays another very singular change. The shaft is bent and twisted on itself; but, instead of swelling into the condyles, it is abruptly broken off, and the end of the shaft is forced into a thin shell, which preserves the outer form of the condyles, and articulates as usual with the tibia. The rounded edges at the end of the shaft, and the spongy or woolly deposit of bone in its neighbourhood, show that this separation of the epiphysis has been of long standing, and accompanied by some irritation. On the left side, the femur has been freed, as already noticed, from such a strain, by a fracture near the upper third; and the two portions of the bones preserve their normal shape. There does not seem to have been any attempt at union; on the contrary, absorption appears to have been very active here; and the two long oblique worm-eaten surfaces, which are visible on the outer side of the upper and the lower fragments alike, seem to need the presence of a third fragment, which has been entirely removed, to make up the substance of the bone here.

The lower end of the left femur, and the bones of both the legs and feet, are not of the light, spongy texture which the bones of the trunk display; but are heavy and greasy, like the distal fragments of the fractured humeri. This greasy condition does not prevail to an equal degree through all these bones, and in their entire length. It is most marked at the extremities, but the shafts are soft, and the boring tools came out greasy instead of being followed by a light, powdery adipocere, as in other parts of the skeleton. The bones of the leg are soft, not brittle, and, under the weight of the body and the traction of the muscles, they have bent till the fibula forms a curve of which the radius is no more than three inches and a half.

In both limbs the fibula is on the inside of the curve; in the right, it is received into a groove of the tibia; in the left, it is fixed in its position by anchylosis. But no more bone has been deposited than is actually necessary, and even the sites of chronic ulcers over the shins are marked by no deposit of bone on the rounded edges of the tibia.

It has been objected to a purely mechanical explanation of the bending of ricketty bones, that they do not always, indeed, very rarely, bend in the direction of least mechanical resistance. And these two legs might be taken as instances where the bending has taken place precisely in one of the two directions in which, in consequence of their relative position, the two bones would offer most resistance. The disease has been, therefore, supposed to exert a modelling influence on the distorted growth of the bone, independent of mechanical considerations. I would not hazard a general opinion from the exami-

nation of these bones. I would only observe, that before rejecting the mechanical explanation, we must thoroughly investigate the particular case: for the direction of the greatest muscular strain is as effectual a cause of bending, as the direction of the least bony resistance; and I can easily conceive the muscles of the calf to have determined the direction of the curve here.

The feet need not occupy us long. All the bones have been preserved except a few phalanges which have melted away under the protracted maceration. The tarsal bones are many of them distorted, though not to such an extent as to throw any real difficulties in the way of their proper arrangement. And they are all small and ill-developed, contrasting strongly with the bones of the hands. But it is not surprising that they have yielded to the constrained posture in which they were placed, considering that what we call bones by courtesy, are really nothing more than fatty matter, contained within a thick case of periosteum.

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF CARDIAC DISEASES.

By W. O. Markham, M.D., F.R.C.P., Physician to St. Mary's Hospital, London.

III.—Causes of Pericarditis.

Inflammation of the pericardium is in no case to be regarded as an idiopathic inflammation. It may in almost every instance be traced either to local injury, or to some morbid condition of the system generally. Pericarditis, as the result of direct local irritation, has many different exciting causes. It may be produced by traumatic injuries, by blows and wounds. Tubercle or cancer deposited upon the serous surface of the membrane, or spreading into the sac from the parts around, will occasion it; so also may abscess of the liver, of the mediastina, and of the neighbouring parts, hydatids of the liver, ulceration of the œsophagus and of the stomach, etc., by opening into the sac, and there discharging their contents. Pleurisy, pneumonia, and peritonitis—all these, and similar local sources of irritation, may likewise excite inflammation in the membrane.*

Tubercle and cancer very rarely, if ever, arise primitively in the pericardium. These diseases almost invariably preexist in some other parts or organs of the body, before they appear here. Cancer generally spreads into the sac from the mediastinum, or some neighbouring organ affected with the morbid growth.

Pericarditis is more especially known to us as it appears in association with general disorders—with rheumatic fever, kidney diseases, tuberculosis, pyæmia, and the acute exanthemata. In such case, it is manifestly the local manifestation of a general affection of the body—the product, perhaps, of some morbid condition of the blood. But, though we have in these diseases evidences enough to satisfy us of the existence of some deleterious agent in the system, we are still quite in the dark as to the causes which determine the disease to fix itself especially in the pericardium.

If we reflect upon the catalogue of diseases which authors record as causes of pericarditis, we shall perceive that what are frequently written down as causes are, in reality, merely coexisting manifestations of the self-same disorder as that which provoked the pericarditis. In this sense, acute rheumatism cannot properly be called the cause of pericarditis. Both the affections are the resultants of a morbid state of the blood, and, as it would seem, of the same morbid state. What may be truly said of their association and relationship is this—that the morbid element of rheumatism more frequently displays its presence in the joints than it does in the pericardium; and more frequently at an early than at a late period of life. This becomes still more clear, if we call to mind the fact, that the pericardial inflammation does occasionally precede the arthritic affection in rheumatic pericarditis.*

Dr. T. K. Chambers, in his *Decennium Pathologicum*, gives us a list of one hundred and thirty-five cases of diseases in which recent signs of pericardial inflammation were found after death. These diseases are, as I have observed, ordinarily termed *causes* of pericarditis, but must be rather designated as coexisting disorders.

	Cases.
Rheumatic fever	18
Ditto, with diseased heart and kidneys	1
Uræmia from diseased kidneys, either alone, or with diseased heart	36
Diseased heart and dropsy	18
Pyæmia	18
Pneumonia	10
Pleurisy	5
Vomicæ in the lungs	8
Erysipelas	4
Typhus	3
Other causes	13

A glance at this table shows us, as Dr. Chambers remarks, how decidedly the constitutional predominate over the (so-called) local causes of pericarditis. Dr. Ormerod, for the better comprehension of these so-called causes of pericarditis, has reduced them all under two heads, viz.: 1. Rheumatic pericarditis; 2. Non-rheumatic pericarditis. This division of the inflammation will be found of practical utility. A study of the clinical history of pericarditis shows us that there are marked points of distinction to be observed in its nature, which enable us readily to class the disease under one or other of the above heads. These distinctive signs give us a clue to the nature of the disease, showing how its characters vary in different cases, and consequently how varied, and even opposite, its proper treatment must be under such circumstances. I shall, therefore, point out the distinctive characters which appertain to the rheumatic and to the non-rheumatic kinds of pericarditis.

Rheumatic pericarditis occurs at a comparatively early period of life. The average age of sixty-one of Dr. Ormerod's patients was twenty-one. The subjects of the disease are, for the most part, of (apparently) healthy constitution. As regards sex, women appear as often as—perhaps somewhat more often than—men, to be affected by it. The symptoms of the rheumatic pericarditis are prominent and well marked. The disease, except in rare instances, is associated with, and, in fact, preceded by rheumatic affections of the joints, which are of so striking a character that they cannot fail to excite the attention of the physician. The local pericardial inflammation, moreover, frequently reacts with violence on the system; and in such case, when death ensues, it is to the immediate consequences of the pericarditis—to the action of the inflammation on the heart itself—not to the *ordinary* effects of rheumatism, that the fatal result is ascribable.

The heart is overwhelmed and paralysed by the local action of the inflammation upon it. But though the symptoms of rheumatic pericarditis are usually severe, the disease, when uncomplicated with other cardiac diseases and pulmonary affections, rarely destroys life by its direct and immediate effects. A first attack of rheumatic pericarditis is, indeed, very rarely fatal.

Many observations lead me to suspect that there is an hereditary tendency, or family predisposition, to rheumatic pericarditis in the young; though, for obvious reasons, it is very difficult to arrive at any positive conclusions on this point. I have, for instance, remarked the existence of cardiac disease in the children of parents who have themselves suffered from rheumatism and heart disease. The following are examples of the fact which have fallen under my notice:—

In one family, the father and two children had disease of the heart. The father had suffered from several severe rheumatic attacks before the birth of these children, and there is now a constant cardiac bruit audible over his heart. In the children, about 14 and 15 years of age, the heart is so impaired as to produce the severest symptoms of cardiac disease. One seems to have once suffered from pains in the ankles; but, as far as I could learn, the other never had suffered from any external symptom of rheumatism. Her first complaints of illness were short breath and dropsical swellings, the products of the cardiac disease.

* I once saw a case of pericarditis, which resulted from ulceration of the œsophagus. The ulcer in its progress opened at last into the pericardium, and so permitted the contents of the stomach to pass into the pericardium. This is the only case of pneumo-pericardium which I have ever seen. The air, of course, came from the stomach in this instance. By gently pressing upon the stomach, its contents were readily forced, and seen to pass, up the œsophagus, and so through the ulcerated opening into the pericardium.

* A case of this kind is related by Dr. Graves, vol. ii, p. 159, "Clin. Med."

In another family, the father had for years been a martyr to rheumatism; and his child, about two years and a half old, had organic disease of the heart.

A child, 10 years old, had had rheumatism, and when I saw her had mitral valvular disease. Her mother had been ailing twenty years, and a loud systolic aortic bruit was in her audible over the heart.

Moreover, it is not at all uncommon to see two, and even three, children in one family attacked with rheumatic pericarditis; but then it may be in some instances objected, that the children are all exposed to the same exciting influences of disease, and that, therefore, what has produced the affection in one, may also have excited it in the other.

Non-rheumatic pericarditis, on the other hand, occurs at a later period of life than the rheumatic kind. Forty-two was the average age of persons affected by it in twenty-four cases reported by Dr. Ormerod. The subjects of the disease were, with a single exception, all of the male sex. The inflammation does not so much attack the healthy, as those whose constitutions are originally weak, or have been debilitated and depraved through indulgence in ill-habits of living. It is far more serious than rheumatic pericarditis in its immediate consequences.

Dr. Ormerod informs us, as the results of his experience that 91·6 per cent, of his non-rheumatic cases were fatal; whilst of the rheumatic sort, 18 per cent only were fatal. The local symptoms, again, of non-rheumatic pericarditis are at times very obscure; they are often, indeed, so obscure as not to direct the observer by any local signs to the seat of the disease, and thus it not unfrequently happens that the existence of the pericarditis is first discovered only after death.* In correspondence with this fact, it may be observed that the local inflammation does not appear to exercise, by reaction (as happens in the case of rheumatic pericarditis), any particular influence over the patient's general condition, so as to appear in any direct way a cause of death. Moreover, the pathological changes found after death are not so considerable as those which result from rheumatic pericarditis, a circumstance which may explain, in some degree, the frequent absence of local symptoms during life in non-rheumatic pericarditis.

It is not, therefore, by the violence or the immediate effects of the local inflammation, that life is destroyed in cases of non-rheumatic pericarditis.† Death rather results from the general action of that particular disease which has, in fact, preceded, and has given rise to, the pericarditis. Thus, for example, when pericarditis appears in the course of kidney disease, it usually supervenes at an advanced period of the renal disorder; but kidney disease (of the character here inferred) is, as we well know, for other reasons fatal in its consequence, and quite independently of its action upon the heart. The serous membranes, under the influence of uræmic disease, readily take on inflammatory action; and, of all the membranes, the pleural and the pericardial appear to be most frequently subjected to it.

Thus, then, in *non-rheumatic pericarditis*, the local inflammation plays a subordinate part. Its share, as a disturber of the system, is but small; so that it is, in fact, usually little more than a local sign (unimportant in its immediate effects) of a serious general disorder. In *rheumatic pericarditis*, on the other hand, the local inflammation must be considered, for the moment, as the all important fact; its consequences fall at once, and with violence, upon the heart; the inflammation is sthenic, and its products may be of such a nature as to act directly on the heart, both impeding mechanically, and otherwise seriously deteriorating its powers. The general constitutional disorder with which it is associated is subordinate in importance to the local inflammation, which it has engendered.

The causes of *non-rheumatic* pericarditis, as may be inferred from what has been said at the head of this chapter, are of two kinds. They are local and constitutional. The chief local causes are: cancerous diseases, arising within the sac, or, as much more frequently happens, spreading into it from some of the parts around the pericardium; tuberculosis, pleuritis, and peritonitis, by acting as local sources of irritation; abscesses of neighbouring organs or parts; and hydatid cysts, by opening into and discharging their contents into the sac.

The chief constitutional causes, or, to speak more correctly, the diseases in connection with which the non-rheumatic pericarditis is observed, are diseases of the kidney, pleurisy, pneumonia, pyæmia, scarlatina, peritonitis, variola, etc.

Bright's disease of the kidney has been especially referred to by authors as a very frequent excitor of the inflammation. My own experience does not at all agree with this conclusion. Out of a great number of cases of kidney diseases which have come under my observation in the pathological department of the St. Mary's Hospital, I have met but with very few where there existed any recent signs of pericardial inflammation. The same results have been arrived at in Edinburgh, where kidney disease is very common.

Professor Bennett (*Principles and Practice of Medicine*) tells us, "That in none of his cases of pericarditis has there been a complication with Bright's disease."

Dr. Christison also says that pericarditis is rarely seen among the sequelæ of kidney disease.*

Happily, a knowledge of the actual relative proportion of the frequency of pericarditis, in coincidence with kidney disease, is not of much practical importance to the physician; for the knowledge would in no manner advance his therapeutical powers over it. Pericarditis, when it does thus arise, comes on in the advanced stages of the kidney disease, and would, under such circumstances, claim no special attention as an object of treatment. In all the cases, indeed, of non-rheumatic pericarditis, of *constitutional origin*, the treatment has no direct reference to the pericardial inflammation; it is guided entirely by the nature of the constitutional disease with which it may happen to be associated. Herein it differs essentially from the treatment of rheumatic pericarditis.

Relation of Pericarditis to Rheumatic Fever. Statistics have as yet given us no sure information on this subject. M. Bouilland and Dr. Hope found pericarditis present in about one half of their cases of acute rheumatism; but their experience does not at all coincide with the conclusions arrived at by later observers.

Dr. Taylor makes the number about one case of pericarditis in nine of rheumatic fever; Dr. Budd, about one in eight; Dr. Latham, about one in eight.

It is well to remark, however, that results on this subject, derived from the observation of cases which have been taken indiscriminately, without regard to age or sex, are of very little value; for it is a fact that at certain periods of life the coincidence of the rheumatism and the pericarditis are much more common than they are at others. Thus, adult persons attacked by acute rheumatism are infinitely less liable to cardiac complications than the young are. After the age of thirty, pericardial and endocardial inflammations are comparatively rarely met with as the associates of rheumatism; whilst, on the other hand, before the age of twenty, and in early life, they are more frequently present than absent in connection with that disease.

Every physician must have frequently had occasion to corroborate the fact stated by Dr. Watson—a law he calls it—namely, that the younger the patient is who suffers acute rheumatism, the more likely will he be to have rheumatic carditis. Climate, also, it is probable, has something to do with the matter.†

[*To be continued.*]

* The extremely large fatality (as would appear from the statistics) of non-rheumatic pericarditis is, no doubt, more apparent than real; and for this reason:—As non-rheumatic pericarditis is occasionally only discovered after death, it is evident that it may have existed in cases where recovery has taken place, having escaped observation during the progress of the particular disease with which it was associated. This fact is corroborated by the circumstance, that we sometimes after death meet with extensive pericardial adhesions, in cases where there is no history of the previous existence of any rheumatic affection.

† In some rare cases, however, the amount of effusion is so great as mechanically to interfere with the heart's action.

* It is most probable that those writers who have made kidney diseases stand so high in the catalogue of causes of pericarditis, have set down as instances of the fact, all those cases in which pathological conditions of the pericardium have been found coexisting with kidney-diseases after death. But such calculations are manifestly incorrect. In many of these cases, it is certain that other diseases of the heart and of different organs of the body were present; and in many of these it would doubtless be equally correct (perhaps more correct) to call the cardiac disease the cause of the kidney-disease, as *vice versâ*. Old pericardial adhesions coexisting with granular kidney, can in no way be called the consequences of the kidney-disease; they may have very possibly existed before the kidney-disease began. Of the cases of heart-disease recorded by Dr. Barclay (*Med. Chir. Trans.*, vol. xxxv), I cannot find above two or three in which there is any apparently close relation between the kidney-disease and the pericardial affection. But, on the other hand, I find that in thirty-four of the ninety-two cases there was marked kidney-disease present without any pericardial affection; and that there were found twenty-six cases of lesions of the pericardium without any kidney-disease. Frerichs also (*Die Bright'sche Nierenkrankheit*, p. 120) found inflammatory exudations in the pericardium in only thirteen out of two hundred and ninety-two cases of Bright's disease.

† Dr. Chevers states, that although articular (acute) rheumatism is very prevalent in India, the association of pericarditis and endocarditis with this affection is very rare. (*Dublin Journal Med.*, 172, 1842.)

CASE OF MALFORMATION.

By J. H. Spencer, Esq., Hallaton.

I was called to Mary Lee, after a midwife, and found what I considered placenta prævia, but which turned out to be what I may call *liver* presentation; the liver with the stomach and part of the intestines being external. There was also singular malformation of the chest, with spina bifida. There was not a trace of organs of generation, nor of anus; and not a vestige of funis could be found. No doubt, from the ragged state of the liver and placenta, they were in close contact, and thus had the child been even well nourished, being quite of the average weight.

The mother had suffered a good deal the fortnight preceding her accouchement; no doubt from the dragging at the placenta, which was firmly adherent. The child was dead, but had not long been so.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, SEPTEMBER 10th, 1859.

THE REPRIEVE OF SMETHURST.

The reprieve of Smethurst, so confidently anticipated by the whole country, has taken place as a matter of course. If he had been hanged, there would no longer have been safety for any medical man who waited upon the death-bed of his own wife, and was more than ordinarily attentive to her.

For Smethurst individually we care little; but it is of the utmost importance that human life should not henceforth be at the mercy of bungling experimenters, imperfect medical observers, and ignorant and under-educated jurymen.

It must have struck our readers that, in the present instance, the real trial of the prisoner took place after the verdict of death had been pronounced, and the judge had, with all due solemnity, put on the black cap. Immediately the evidence had been disseminated throughout the length and breadth of the country, then the real trial of Smethurst commenced. The letters which appeared in the public papers, from a hundred different quarters, formed the true appeal of the prisoner against the decision of the jury; and the result was its reversal. Henceforth the public will not rest satisfied, in trials of life and death, where nice points of scientific evidence are discussed, with the verdict of an ill-informed jury, led by a too partial judge. If we must not lay hands on the venerable "twelve good men and true", it is clear we cannot go on without the institution of some court of appeal; unless we choose to rest satisfied with that irregular court of appeal, the public press, which in this instance has so unceremoniously put aside judge and jury, and brought its powerful force to bear upon the judge at Downing Street.

If medicine has had the misfortune of leading human life to the verge of the gallows, it is at least satisfactory to know that to medicine we owe our escape from such a public disaster. We think there can be little doubt on the professional mind, that Smethurst owes his life to the evidence given with such earnestness and force by Dr. Tyler Smith. His letter in the *Times* at once arrested public attention, and compelled authorities to listen. We may state that, from the moment of its appearance, the Home Secretary was in constant communication with him; and it was on his final statement, given in the *Times*, that there was nothing in the symptoms of Isabella Bankes incompatible with Smethurst's innocence, that the reprieve was decided upon. In a trial in which, we regret to say, the spirit of partisanship, and the instinct of man-hunting have been so very apparent, it must be at least satisfactory to our distinguished associate, that his instincts and his advocacy have been on the side of justice and mercy.

As there is a very general opinion that Smethurst did the deed, although the evidence was totally insufficient to convict him, we may, perhaps, be permitted to state that this opinion seems to be founded on the alleged fact that no fewer than three medical men, without communicating to each other their suspicions, came to the conclusion that Miss Bankes was being poisoned; and on the statement of the judge, made in his charge, that "no answer had been given to the main point of the prosecution, that no medicine whatever had the slightest effect upon the malady under which the deceased was suffering." With respect to the first statement, we think the shorthand evidence clearly proves that the medical men did communicate their suspicions to each other. It is far from our purpose to say that these gentlemen have, in total disregard of their oaths, told untruths; but there are a hundred modes of communicating suspicions without the use of words, and, we may add, quite unconsciously to the persons themselves—an expression of face would be sufficient. Indeed, we may say that, in our opinion, it would be very difficult to conceal a suspicion of this kind—in manner, at least, it would betray itself. That Dr. Julius did lead Dr. Bird to suspect poisoning, we may infer from the following passage in the evidence of the latter:—

"Mr. Serjeant Parry. *Q.* Did you ever form that opinion" (of slow poisoning by arsenic) "before Dr. Julius suggested it to you? *A.* I did not. He first suggested it to me, and then I agreed with him."

Here it is clear that, as far as slow poisoning by arsenic was concerned, Dr. Julius did communicate his suspicions to his partner. And can we conceive Dr. Todd coming down to this mysterious case without extracting some opinion from the physician in attendance? The only thing which puzzles us here, however, is to reconcile Dr. Todd's belief that he was treating a person who was being slowly poisoned, with the fact that he ordered her copper pills! This prescription would seem to imply that he thought she was suffering under dysentery. If he suspected poison, why did he order that which would only add fuel to the fire? Our own impression is, that there was a vague understanding between all of the medical men in attendance, which did not take a definite shape until Dr. Taylor gave his opinion; and then, to their retrospective eyes, all was clear.

With regard to the judge's extraordinary statement, we can only say, that there is nothing more common than for dysentery to run its course in defiance of all the skill of all the doctors in the world.

LAW AND PHYSIC.

A court of law is an entertaining, and, to a philosophical observer, an instructive scene. It is as amusing to watch the process, as it is instructive to become acquainted with the results, of a winnowing-machine that affects to deal only with relevant matter; yet, in point of fact, there are few congregations of civilised men where so much unnecessary jargon is permitted to have a hearing, as in a court of common law. Observe the judge during the examination in chief of a material witness—with what care his notes are taken: how accurate and orderly is the registration of the testimony. And now observe the judge during the cross-examination of the same witness: he leans back in his chair; his pen is dropped; his organ of intellectual appetite is evidently satisfied, and all that remains for him is to chew the cud of sweet and bitter patience until the next witness is called. No one knows better than the learned gentleman on the bench (for he has been an advocate himself) that the volley of sarcastic dust which the counsel is throwing in the eyes of the jury during the cross-examination is simply *nihil ad rem*, and has as much to do with the case in hand as with a trial in the courts of the planet Jupiter.

There are many things connected with law proceedings that are sound, if taken in a *juridical* sense, which are altogether obstructive of the ends of justice when taken in a *constitutional* sense; and among them are the legal methods of settling certain questions of lunacy. What can be easier than for a voluble and unscrupulous advocate so to work on the credulity of twelve ignorant men, by giving his own biassed interpretation of the medical evidence, as to twist their verdict into a virtual condemnation of the medical witness?

We profess to hold in the greatest veneration and respect whatever is of antiquity and substantial foundation in the statute-book of the realm. We reverence trial by jury as among the most valuable of our English privileges; but, while we esteem and hold up this institution within its just limits, we are bound to remind our legal friends that trial by jury, as it now exists in England, is not the *magnum opus* of Magna Charta; it does not resemble that fixed code of the Medes and Persians that admitted of no emendation. Juries have, we believe, since their creation, undergone the rough treatment of no fewer than fifty Acts of Parliament; in fact, they have been modelled from time to time, to suit the special purposes for which they were wanted. It is, therefore, monstrous to suppose their organisation to be so perfect as never to require repair; and we assert that the time is now come when, if the medical profession is to receive justice at the hands of the English law, the pleadings in the cause of the insane must be submitted to the jurisdiction of a body more capable of weighing their merits than that which is composed of twelve untrained John Bulls led by a crafty barrister. The truth is, such pleadings are generally of a very delicate, not to say abstruse character; and demand, on the part of those who are empowered to decide on them, something more than mere legal knowledge. The principle of trial by jury we fully admit to be the right one in this case; but we would have a jury for such a purpose to contain a large share of the scientific element. When a committee is appointed to inquire into the effects of coal-gas on the pictures of the National Gallery, we find it composed of scientific chemists, engineers, and artists. Are the temporal interests of a madman, and the fame of his medical adviser, of less value in the eyes of the legislature than the safety of a work of art?

Our earnest endeavour, then, is to make this a *constitutional* question, and to rouse the members of the senate to a consideration of the peculiar intricacies of the subject. Let them banish from their minds all foregone opinions, and exercise their primitive right to govern the doctrines as well as the acts of the courts of law. We fear that, of late years, too much has been yielded in the opposite direction; and that the public interest has suffered from the popular conclusion that lawyers should frame the laws, and the legislative assembly confirm them; whereas, confessedly, the most efficient measures and rules to protect society would be devised by those who have no professional bias, no preconceived notions, and no innate jealousies, to interfere with the exercise of their judgment.

Before quitting this subject, we have one word to offer on the relative powers of mind which lawyers and doctors bring to bear on the investigation of scientific truths. And here we disclaim all intention of drawing an invidious picture of the two professions respectively: our object is rather to point out the circumstances that have hitherto tended to frustrate the healthy cooperation of the energies that are displayed on both sides, than to insist on the intrinsic excellencies of either.

It is well known that the lawyer throughout his career, from the beginning of his legal existence in the Inns of Court to his final resting-place on the woolsack, is at every stage submitted to the ordeal of a discipline that tends to make him the exponent of a positive philosophy. Demonstrable truth is the grand end and aim of his professional work; and, although the validity of the means, when brought into action, must depend upon the accuracy of the scientific induction, and be tested by processes that are common to every description of inquiry, still, if we look into the direction which our later judicial proceedings are taking, we shall find, as an example of the modern contracting spirit, the law of evidence gradually becoming more restrictive; and the testimony which was formerly admitted on trials without question, such as hearsay evidence, now excluded, except in extreme cases. All this may be very advisable in ordinary instances; it may be very desirable in pure law, as in mathematics, so to narrow your vision as to have but one thing before you; but a wider field is required for those who seek to enrich science with new facts and the interpretation of general laws. The training of the scientific physician is not so much opposed to the severe educational course of the lawyer, as that something more is added to it. The medical man has to carry his reasoning faculties up into the higher departments of legitimate induction. The theory of probabilities, the elimination of chance, and the registration of empirical laws, are for ever forcing their importance upon his consideration in his dealings with the changing phenomena of disease; and that physician arrives at the truest conclusion in his practice who has the gift of bringing the largest number and variety of facts before him at a glance, and, by accurately observing the elements of the facts, of best determining what are the "middle results" of all.

If the principles of constitutional law and of scientific medicine can be made to walk hand in hand, and if the professors

of the latter art can be not only protected from the unjustifiable attacks sometimes made on them, but enabled to place their arguments before men capable of comprehending them, we feel confident that society generally will gain by the coalition. If, otherwise, physicians and scientific men are to continue to be exposed to the licentiousness of an irresponsible bar; if science is to be ridiculed, and facts sneered at, until they utterly fail of producing any more impression than the chattering of an idiot,—we may abandon all hope of immediate progress in forensic medicine.

THE WEEK.

The anticipated combination of the medical and surgical corporate bodies is beginning to be realised. This day's Journal contains two advertisements, in which it is announced that the Royal College of Physicians of Edinburgh has made arrangements with the College of Surgeons of that city, as well as with the Faculty of Physicians and Surgeons of Glasgow, for the purpose of holding, in conjunction with each of the latter bodies respectively, examinations of candidates for licenses to practise. The stated object of the joint examination is announced to be "to give to students facilities for obtaining from two separate bodies, and at less expense, a double qualification in medicine and surgery". Codes of regulations regarding professional and general education have been agreed on; and the first examination in general education will take place in a few weeks. We hope that it will not be long before we shall have to announce a combination of the London Colleges for the same purposes as those for which the Scotch corporations have entered into co-operation. It has been rumoured that the London College of Physicians has made the proposal, but that the College of Surgeons has received it with aught but favour. For the credit of the College of Surgeons, we trust that this rumour is without foundation, or, at all events, that it is only an exaggerated version of a temporary hesitation on the part of a body which finds it a hard task to shake off old and cherished prejudices.

If the account given by a correspondent of the *New York Times* be reliable, there would appear to have been a great dearth of proper medical attendance for the wounded during the late war in Lombardy. The writer states that on visiting the hospitals at Brescia, which contained the soldiers both of the French and the Austrian armies wounded at the battle of Solferino, he found that in several of them there was no French surgeon at all in attendance, and that a considerable number of the wounded were given up to Italian civil surgeons—men of good intentions, but who had never practised military surgery. In each hospital there were from one to five regular male nurses, an Italian *pharmacien* (who did nothing but give out the medicine and dressings), and a group of ladies in silk dresses and hoops, who did most of the nursing, both for French and Austrians. Purulent infection and hospital gangrene were noticed as occurring in several instances. The men of the various nationalities composing the Austrian army especially appeared in great distress, as it was next to impossible for them to meet with any one understanding their language, or able to divine their wants. The writer observes that no army surgeons in the world are superior, either in science or in administrative ability, to the surgeons of the French army; but, in his opinion, the wounded of Solferino were not well treated in any sense—neither in the mode of conveyance, nor the nursing, nor the surgical treatment. Most probably no calculation had been made for such an immense number of wounded. The deaths were said to be thirty daily in a total of ten thousand; and three-fourths of these must be attributed to the bad hygienic conditions surrounding the patients.

A correspondence has taken place between Mr. S. L. Rymer, Secretary to the Council of the College of Dentists, and the Secretary to the London Medical Registration Association, with regard to the propriety of the use of the term surgeon-dentist, by persons who are not members of a College of Surgeons. Mr. Rymer argues that the term "surgeon-dentist" is properly employed by dental practitioners, its meaning being simply "an operator on the teeth;" but he allows that if the title be employed to allure the public into supposing that the person assuming it is a surgeon, and it can be proved that the public have been so deceived, such a person is without doubt an offender against law. He says that the last clause of the Medical Act contains a provision which exempts dentists from its provisions in every instance; and he suggests that if there still remains any doubt, the matter should be tried in a court of law. The Committee of the Registration Association, in reply, state that they will contest the point at a convenient time. They further express their views on the matter referred to in Mr. Rymer's letter, summing them up in the following abstract:

"1. The word 'dentist' means 'an operator on the teeth;' 2. 'surgeon-dentist' implies that, in addition to the occupation of 'dentist,' the party has the statutory qualification of 'surgeon;' 3. It is penal to use the prefix 'surgeon' unless in possession of the legal qualification conferring such title."

Association Intelligence.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, September 1859.

Editor's Letter Box.

THE TREATMENT OF BOILS.

Letter from John Watson, M.D.

Sir,—I notice in the current week's Journal Dr. Durrant's remarks on the treatment of boils. As you did me the favour to print a paper on the subject about a twelvemonth ago, I will not repeat what was there stated; my views being in many respects at variance with Dr. Durrant's.

I wish merely to direct attention again to the value of large doses of nitric acid in this troublesome complaint, allowing at the same time *a full meat diet.* During the present summer, I have treated three adults, giving two drachms daily of the dilute acid in four doses; and in each the disease aborted:—that is to say, no fresh ones made their appearance, and the urine gradually lost its previously anæmic character.

I am, etc., John Watson.

Southampton, September 5th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

*Davey, J. G., M.D., Northwoods, Bristol, on Sept. 4.
Mudd, W. H., Esq., Surgeon, New Cross, on August 30.
*Pollard, Wm., jun., Esq., Torquay, on September 1.
Shillitoe, B., Esq., Surgeon, 34, Finsbury Sq., on Aug. 30.

Of daughters, the wives of—

Birkett, Edmund Ll., M.D., 48, Russell Square, on Sept. 2.
Lumsden, C. G. G., Esq., Assistant-Surgeon 90th Regiment, Punjaub, on June 30th.

MARRIAGES.

Brown, John, M.D., Bengal Army, to Katherine Stewart, second surviving daughter of the late Rev. G. A. Simpson, of Fyvie, Aberdeenshire, on September 1st.
Cave, Charles Daniel, Esq., of Clarehill, Gloucestershire, to Edith Harriet, eldest daughter of *J. A. Symonds, M.D., Clifton, on September 1st.
Gordon, Charles, M.D., to Frances Anne, eldest daughter of the Rev. Charles A. Austin, British Chaplain at Pernambuco, on August 9th.
Haverfield, Captain J. T., to Louisa, daughter of J. R. Handyside, M.D., of St. Petersburgh, at Derby, on Aug. 23.
Lallemand, George E., Esq., eldest son of *F. F. Lallemand, Esq., Surgeon, of Macclesfield, to Emilie H. B., youngest daughter of the late Wm. Haver, Esq., at Great Holland, Essex, on August 24th.
Marsh, Alfred, Esq., of Stamford Hill, to Emma, eldest daughter of J. A. Ransome, Esq., Surgeon, Manchester, on August 25.
Matthews, the Rev. T. R., of Gonville and Caius College, to Margaret Mary, elder daughter of *John N. Thompson, Esq., Surgeon, Nottingham, on August 25th.
*Mitchell, T. R., Esq., Liverpool, to Emma, daughter of John Roberts, Esq., Manningham, on August 31.
Smithes, John T., Esq., to Eleanor F. J., second daughter of F. Cobb, M.D., Milbridge, Surrey, at Oporto, on Aug. 23.

DEATHS.

Anderson, Alexander, M.D., New Hampton, on Sept. 6th.
Cheek, George N., Esq., Bengal Medical Service, at Conoor, aged 65, on July 3rd.
Dobson, William C., Esq., Surgeon, of Highbury, aged 30, on August 28th.
Gillespie, Alex., M.D., at Edinburgh, aged 83, on Sept. 1.
Granger. On August 23rd, at Exeter, Elizabeth, wife of Frederick Granger, M.D.
Henderson. On August 30th, at Bridge of Allan, N.B., Capt. Wm. Henderson, Bengal Engineers, son of Wm. Henderson, M.D., Aberdeen.
Latham. On August 30th, at Greenford, aged 2, Percy, son of R. G. Latham, M.D.
Pritchard. On August 25th, at Stratford-on-Avon, aged 84, Mary, wife of James Pritchard, Esq., Surgeon.
Simpson, John, Esq., Surgeon R.N., at Haslar, aged 39, on August 28th.
Smith. On September 3, at Hadham, Herts, aged 5 months, Rose Charlotte, daughter of *F. M. Smith, M.D.
Solly. On July 24th, at Cawnpore, Lieutenant Wm. H. Solly, 2nd Bengal Light Infantry, eldest son of Samuel Solly, Esq., Surgeon, London.
Wheeler. On August 30th, aged 21, Louisa J., youngest daughter of C. W. Wheeler, M.D., Shirley Lodge, Hants.
Whipple, Frederick J., Esq., Surgeon R.N., at Compton, Devon, on August 28th.

APPOINTMENTS.

*Walker, Thomas J., M.B., appointed Assistant-Physician to the Queen's Hospital, Birmingham.

PASS LISTS.

Royal College of Physicians of London. The following Extra-Licentiates were admitted members, under the new bye-laws, at the Comitia Majora, held on Sept. 7th:—

Bradshaw, Wm. W., Reading
Cooper, Thomas H., Slough
Evans, Oliver, Marine Hospital, Woolwich
Johnson, Henry, M.D., Shrewsbury
Neale, Melville, Sandhurst
Ogden, James, Manchester
Porter, John H., Cheltenham
Scott, Robert J., Plymouth
Thurnam, Jno., M.D., Devizes
White, Fredk. B., Backwell, Somerset
Williams, Caleb, M.D., York

At the same Comitia, the following Graduates in Medicine were admitted members under the temporary bye-laws:—

Alexander, W., M.D., Halifax
Anderson, Wm. A., M.D., Hillingdon
Banks, J. T., M.D., Crawley
Begley, W. C., M.D., Hanwell
Biggs, James S., M.D., Surrey County Asylum
Bright, James R. D. P., M.D., Cambridge Square
Broughton, Hugh H., M.D., Preston
Chadwick, Chas., M.D., Leeds
Coates, Charles, M.D., Bath
Collingwood, C., M.B., Liverpool
Drake, Aug., M.B., Exeter
Evanson, R. T., M.D., Torquay
Gee, Robert, M.D., Liverpool
Gibb, G. D., M.D., Portman St.
Greenwood, H., M.D., Blackheath
Guy, Thomas, M.D., Rochester
Hake, T. G., M.D., Spring Gns.
Halford, G. B., M.D., Pimlico
Hardinge, H., M.D., Sackville Street
Harley, G., M.D., Harley St.
Harrison, Jas. B., M.D., Manchester
Haward, E., M.D., Harley St.
Heaton, J. D., M.D., Leeds
Hawkins, J. V., M.D., King's Lynn
Heslop, T. P., M.D., Birming.
Hobson, Benjamin, M.B.
Hooper, J. M.D., Hoddesdon
Inman, Thos., M.D., Liverpool
Jones, C., M.D., Manchester Sq.
Jones, J., M.D., Woburn Place
King, Henry S., M.B., Lower Grosvenor Street
Kingsley, G. H., M.D., Bridgewater House
Kingsley, H., M.D., Stratford-on-Avon
Lewis, Waller A., M.B., General Post Office
Lucas, T. P., M.D., Brecon
McEwen, W., M.D., Chester
McWilliam, J. O., M.D., Trinity Square
Mitchelson, G. F., M.D., Kensington Gardens
Norton, R., M.D., Bayswater
Noyes, Henry G., M.D., Lee
Ogle, Wm., M.B., St. George's Hospital
Paley, Wm., M.D., Halifax
Palmer, Edw., M.D., Lincoln
Pickering, J., M.D., Winchester
Powell, R. H., M.D., Wyndham Place
Priestley, William O., M.D., Somerset Street
Ramsay, W. F. R., M.D., Somerset Street
Richardson, Chr. Th., M.B., Hinde Street
Robertson, C. A. L., M.B., Hayward's Heath
Sherlock, J., M.D., Worcester County Asylum
Stilwell, Geo. J., M.D., Hillingdon
Stookes, Alex. R., M.D., Liverpool
Sykes, John, M.D., Doncaster
Travis, Nath. A., M.D., Nice
Tuke, Th. H., M.D., Chiswick
Tyacke, N., M.D., Chichester
Waters, J., M.D., Bedford Sq.
Williams, Ph. H., M.D., Worcester
Withecombe, J. R., M.D., Grosvenor Street
Wright, John J., M.D., Malton

University of London. M.B. First Examination, 1859. Examination for Honours.

Anatomy and Physiology.

Fagge, C. H. (Exhibition and Gold Medal), Guy's Hospital
Bastian, H. Charlton (Gold Medal), University College
Buszard, Frank, Guy's Hospital } Equal.
Smith, William John, University College }
Gee, Samuel Jones, University College
Huxley, James Usher, King's College
Evans, Alfred Wm. Armour, Guy's Hospital } Equal.
Holland, Edmund, University College }
Grabham, Charles, St. Thomas's Hospital
Bankart, James, Guy's Hospital
Jeaffreson, Horace, St. Bartholomew's Hospital

Chemistry.

Fagge, C. H. (Exhibition and Gold Medal), Guy's Hospital } Equal.
Gee, S. Jones (ditto), University College }
Smith, William John, University College
Buszard, Frank, Guy's Hospital
Bankart, James, Guy's Hospital } Equal.
Huxley, James Usher, King's College }
Grabham, Charles, St. Thomas's Hospital
Jeaffreson, Horace, St. Bartholomew's Hospital
Holland, Edmund, University College
Galton, John Henry, Guy's Hospital
Watts, Robert, Bengal Medical College, and University College

Materia Medica and Pharmaceutical Chemistry.

Fagge, C. H. (Exhibition and Gold Medal), Guy's Hospital
Smith, Wm. John (Gold Medal), University College
Buszard, Frank, Guy's Hospital
Bankart, James, Guy's Hospital
Huxley, James Usher, King's College
Holland, Edmund, University College
Galton, John Henry, Guy's Hospital

Botany.

Fagge, Charles Hilton (Gold Medal), Guy's Hospital
Huxley, James Usher, King's College

University of Edinburgh. On August 1st, the annual ceremony of graduation took place, under the presidency of Professor Kelland, the office of Principal being vacant. The following is a list of the graduates. Those to whose names three asterisks are prefixed, obtained prizes for their dissertations; those who have two asterisks prefixed, were deemed worthy of competing for the prizes; and those to whose names one asterisk is prefixed, were commended for the dissertations.

Scotland.

*Bell, Joseph
Bell, William
***Brown, John
*Dewar, James Alexander
Dods, George
Doig, Charles David
Douglas, William
Farie, Robert
Ferguson, James
*Hill, George
Horne, John
Johnston, James
*Johnston, John Wilson
Johnston, William
*Inglis, Andrew
*Lethbridge, Tyndall
Lorimer, William
**Maclagan, David Philip
*McGown, Thos. Cochrane
Miller, James
*Moir, Robert
Munro, James
Orr, John Henry
Picard, Peter Kirkpatrick
***Rorie, James
Roy, William
Sclanders, Alexander
*Shearer, George
**Somerville, Robert
Traill, William
Tulloch, James Tulloch
Turnbull, William

From England.

*Ainslie, Thomas Alex.
Alston, William Evelyn
*Bree, Charles Robert
*Duke, Allen Abraham
Fawssett, Frederick
*Fayrer, Joseph
Garrington, Arthur M.
Horniblow, Wm. Robert
Inman, William
**Moore, John Daniel
Norman, John
Pearse, Arthur
Savile, Robert
*Sisson, Richard Samuel
Turnbull, Alexander

From Ireland.

Little, Samuel
Rutherford, David John
Willis, William

From India.

Grant, James George G.
Madden, Charles Wm. C.

From Jamaica.

Anderson, Izett William
*Dignum, Henry Graham
*Stewart, John Edmonstoune

From Nova Scotia.

Gossip, Charles John
Mitchell, Robert

From Australia.

Williamson, George

From the Mauritius.

*Pougnet, François Volcy

From Sierra Leone.

*Horton, James Africanus B.

After the capping, Professor Goodsir delivered an address on the present relations of medicine to physiological science. The subject of Dr. John Brown's prize dissertation was "Notes on the Surgery of the Indian Campaign of 1857-8"; and of Dr. Rorie's, "The Anatomy of the Sympathetic System of Nerves".

HEALTH OF LONDON—SEPTEMBER 3rd, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... { Boys .. 878 / Girls .. 833 }	1711	.. 1047
Average of corresponding weeks 1849-58 ..	1437	.. 1123

Among the causes of death were—diarrhœa, 156; cholera, 5; small-pox, 27; measles, 15; scarlatina, 15; diphtheria, 13; croup, 3; whooping-cough, 15; fever, 49; consumption, 129; accidents, 25. Forty persons died at 80 and upwards; and 201 children under one year.

Barometer:

Highest (Sun.) 29.831; lowest (Tu.) 29.435; mean 29.600 in.

Thermometer:

In sun—highest (Mon.) 94°; lowest (Fri.) 74.8°.
In shade—highest (Mon.) 76.9°; lowest (Wed.) 46.5°.
Mean—57.5°; difference from mean of 43 yrs.—1.5°.
Range—during week, 30.4°; mean daily, 18.8°.

Mean humidity of air (*saturation*=100), 72.
Mean direction of wind, S.W.—Rain in inches, 0.33.

Influence of the River Emanations on Health. Dr. McWilliam, in his Report on the health of the waterguard and waterside officers of Her Majesty's Customs during 1858, makes the following remarks:—My duties of medical inspector led me to watch closely for any unfavourable influence, which the condition of the river might exert upon the health of the waterguard and waterside officers under my charge. The former, in number upwards of 800, may be said to live on the river, or in the docks, in ships, or in barges, and open boats; and the latter, numbering upwards of 500, are employed during the day in the docks, or at the various wharves of the bonded warehouses on each bank of the river. The total number placed on the sick list from all causes during the four hot months of the past year, although slightly in excess of those sick at the same period in 1855 and 1856, was below the average of three previous years, and considerably lower than in the year immediately preceding (1857), when the river and docks were also offensive, but in a degree immeasurably less than in the past year. Then as respects bowel affections, in which I include diarrhœa, choleraic diarrhœa, dysentery, etc., the types of those forms of disease, which in this country, noxious exhalations are commonly supposed to originate, we find the additions during the four hot months of the past year from this class of complaints 26·3 below the average of the corresponding period of the three previous years, and 73 less than those of 1857. The number daily sick was also below the average, although there were several cases of rheumatism, phthisis, and other disorders on the list during nearly the entire year. * * * In my Quarterly Report to the Board for April, May, and June last, I guarded myself against committal to the opinion that the then state of the river would always continue innocuous. I observed "that the river, by a continuance of high temperature, *might* become morbific I do not presume to deny. I only assert that it has not as yet acquired that property." (Report, July 1st, 1858.) The succeeding three months, however, passed away, with only an insignificant amount of diarrhœa cases, and the general health of the departments continued in every respect favourable. From the authorities at the St. Katherine Docks, the London Docks, the East and West India Docks, the Regent's Canal Dock, the Victoria Docks, and the Surrey and the Commercial Docks, I

was very readily furnished with information regarding the health of the officers, clerks, labourers, etc., in these docks respectively. These documents will be found in the Appendix; and it will be seen that the numbers absent by sickness in the London Docks, the St. Katherine's, and the East and West India Docks during the past summer were less than in the same season of the previous year. According to the reports of the Registrar General, 1858 was an unhealthy year; but the mortality in spring and summer was below the average, the excess of deaths having taken place in the six cold months. From the same authority we learn that diarrhœa and summer cholera were, in London, "perceptibly less fatal than usual." In the summer quarter of 1857 the deaths from the former of those complaints were 2,343, and from the latter, 177; while the respective numbers of the quarter ending September 30th, 1858, were 1,391, and 90. While, then, it is not only admitted, but urged, that miasms and foul emanations, from whatever source arising, call for the immediate employment of every means of prevention or mitigation which science and art can suggest, and that the legislative and other investigations into the condition of the Thames during the last summer were fully demanded by the occasion, it is nowhere sustained by evidence that the stench from the river or docks, however noisome, was in any way productive of disease. On the contrary, there was less disease of that form to which foul emanations are supposed to give rise than usual. I am quite assured that, had cholera in an epidemic form, appeared in London during last summer, the cause and effect relation of the stench of the river, and the advent of that disorder, would have been considered as firmly and triumphantly established, not only by the majority of the public, but also by not a few of the medical profession; indeed, the death of a Thames waterman in June, said to have been from Asiatic cholera, was very generally ascribed to river poisoning, and was announced as the signal of an impending outbreak of that dreaded scourge; but had the river been capable of inducing cholera, it is surely not a little extraordinary that among some hundreds of thousands living in its immediate neighbourhood, one man only should have suffered from this disorder. It is opposed to all analogy, and to the usual order of nature, and therefore entirely unphilosophical to suppose that a cause so extensively diffused, should have been so singularly limited in its effect.

Sick Soldiers. The annexed circular memorandum, addressed to officers commanding regiments and depôts on home stations, has been issued:—

"Horse Guards, S.W., Aug. 31.

"In consequence of the numerous claims from private practitioners for medical attendance upon soldiers labouring under chronic diseases, who are employed on the recruiting service and other duties away from their regiments, the General Commanding-in-Chief desires that every soldier shall be subjected to a careful medical examination on the day before or on the day on which he leaves his regiment or depôt for detached duty of any kind. His Royal Highness likewise desires that, before granting sick furloughs, commanding officers will obtain from medical officers a distinct opinion as to whether the cases are likely to be benefited by the removal of the patients to another locality; and further, that they will take steps for ascertaining that the men's friends are in a situation to afford them such aid as the nature of their ailments may require. Much needless suffering must result if soldiers labouring under chronic diseases are allowed to visit friends who are unable to provide them with the necessary accommodation and comfort. "By Command,

"W. F. Forster, *Deputy Adjutant-General.*"

Statistics of Lunacy. The recently issued Report of the Commissioners in Lunacy gives the following statistics. In 1858, 4,985 lunatics (2,413 males, and 2,572 females) were admitted into county and borough asylums, while 2,614 were discharged (1,965 recovered). On New Year's Day last there remained on hand 15,842 lunatics, of whom 1,673 were deemed curable; 11 were found lunatic by inquisition, 326 were criminals, and 1,354 were chargeable to counties or boroughs. 1,858 lunatics remained in hospitals on the 1st of January, 1859; 904 were admitted, and 607 discharged (341 recovered) last year. In the metropolitan licensed houses there were 2,551 lunatics on hand last New Year's Day (331 deemed curable, 132 found lunatic, and 36 criminals). 119 only were chargeable to the public. 1,287 were private, and 1,264 pauper lunatics. In the provincial houses 2,523 lunatics remained on the 1st of January last, of whom 179 were chargeable (413 only deemed curable). Thus, there were altogether 22,774 lunatics in durance on the 1st of January, 1859 (+137 in the naval hospitals), and of these 2,773 were deemed curable. 300 were lunatics by inquisition, 682 were criminals, and 1,652 chargeable to counties or boroughs. 4,889 of the 22,911 were private, and 18,022 pauper patients.

The Yellow Fever at Lisbon. The municipality of Lisbon have had above two hundred silver medals struck, for the purpose of honouring the acts of devotion and charity manifested during the prevalence of yellow fever in that capital in 1857. They are to be distributed among those persons whose services were most eminent during the epidemic. On one face of the medal is an allegorical upright figure, symbolising the town of Lisbon; and on the other side is the legend, "To humane devotion", surrounded by a crown of oak. A diploma or certificate will accompany each medal. Pensions, not exceeding 200,000 *reis* (about £58), are also to be granted to medical men, priests, and other persons, who, after having distinguished themselves in the epidemics of 1853 and 1857, have become incapacitated from continuing their profession.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Dr. Jas. Russell; Mr. Edw. Lister; Mr. T. W. Crosse; Mr. Wm. Martin; Dr. Lionel Beale; Mr. C. J. Evans; Dr. Tilt; Dr. Tylor; Dr. Hyde Salter; Dr. Markham; Dr. P. H. Williams; Dr. William Camps; Dr. E. L. Ormerod; Dr. R. H. Taylor; Mr. T. Holmes; Dr. Leet; Dr. F. J. Brown; Dr. J. Watson; Mr. I. Harrinson; The Secretary of the New Sydenham Society; Mr. Wm. Copney; Mr. James Reid; and Mr. H. Terry, Jun.

BOOKS RECEIVED.

1. De l'Alcool, et des Composés Alcooliques en Chirurgie, de leur influence sur la réunion immédiate et sur les accidents graves ou mortels des plaies et des opérations (phlegmons diffus, phlegmasies des synoviales tendineuses, infection purulente, etc.) Par M. J. F. Batailhé et M. Ad. Guillet. Paris: 1859.

ADVERTISEMENTS.

Grosvenor Place School of Medicine.

No. 1, GROSVENOR PLACE (adjoining St. George's Hospital).

WINTER SESSION 1859-60.

LECTURES.

The Introductory Lecture will be delivered on Monday, October 3rd, at Three o'Clock, p.m., by Dr. COCKLE.

General Anatomy and Physiology—Dr. Richardson.
Descriptive and Surgical Anatomy—Dr. Halford and Mr. Lawson.
Practical Anatomy—Mr. Pittard.
Chemistry—Dr. Thudichum.
Principles and Practice of Medicine—Dr. Cockle and Dr. Leared.
Principles and Practice of Surgery—Mr. Spencer Wells & Mr. Adams.

Fees. General Fee to all the Lectures required by the Universities of London and St. Andrew's, the Royal College of Surgeons of England, and the Society of Apothecaries, 85 Guineas.

Special Arrangements may be made for any one of the Examining Boards.

Prizes and Honorary Certificates will be awarded for general proficiency at the termination of the Session.

The Microscope is used to illustrate the Lectures and Demonstrations.

The Dissecting Room and Museum of Anatomy are open to the Students during daylight, where their Studies are superintended by the Lecturers on Anatomy and Mr. Pittard.

The Lecturer on Chemistry has a Private Laboratory, where Students are instructed in Analytical and Physiological Chemistry.

Instruction in Pathological Anatomy is given by the Lecturer on Physiology.

Further information may be obtained at the School, 1, Grosvenor Place; of Dr. Richardson, 12, Hinde Street, Manchester Square, W.; or at the Residences of the different Lecturers.

Now ready, price 5s. 6d., or free by post to any part of the United Kingdom, price 6s., Fourth Edition, greatly enlarged and improved,

A Grammatical Introduction to the

LONDON PHARMACOPŒIA, and a KEY to PHYSICIANS' PRESCRIPTIONS. By F. S. LEACH.

"This little work will be found extremely useful to students who have received but an imperfect classical education."—*The Lancet.*

HUGHES and BUTLER, Medical Booksellers and Publishers, 15, St. Martin's-le-Grand.

St. Bartholomew's Hospital and

MEDICAL COLLEGE.—The WINTER SESSION will COMMENCE on October 3rd, with an INTRODUCTORY ADDRESS by Mr. HOLDEN, at Seven o'Clock P.M.

LECTURES.

MEDICINE—Dr. BURROWS and Dr. BALY.
SURGERY—Mr. LAWRENCE.
DESCRIPTIVE ANATOMY—Mr. SKEY and Mr. HOLDEN.
PHYSIOLOGY AND GENERAL ANATOMY—Mr. SAVORY.
CHEMISTRY—Dr. FRANKLAND.
SUPERINTENDENCE OF DISSECTIONS—Mr. CALLENDER and Mr. SMITH.

SUMMER SESSION, 1860, *Commencing May* 1.

MATERIA MEDICA—Dr. F. FARRE.
BOTANY—Dr. KIRKES.
FORENSIC MEDICINE—Dr. BLACK.
MIDWIFERY, etc.—Dr. WEST.
COMPARATIVE ANATOMY—Mr. M'WHINNIE.
PRACTICAL CHEMISTRY—Dr. FRANKLAND.

HOSPITAL PRACTICE.—The Hospital contains 650 Beds, and relief is afforded to more than 90,000 Patients annually. The In-Patients are visited daily by the Physicians and Surgeons, and Clinical Lectures are delivered—On the Medical Cases, by Dr. Burrows and Dr. Farre; on the Surgical Cases, by Mr. Lawrence, Mr. Stanley, Mr. Lloyd, and Mr. Skey. The Out-patients are attended daily by the Assistant-Physicians and Assistant-Surgeons.

COLLEGIATE ESTABLISHMENT.—Students can reside within the Hospital Walls, subject to the rules of the collegiate system, established under the direction of the Treasurer and a Committee of Governors of the Hospital. Some of the Teachers and other Gentlemen connected with the Hospital also receive Students to reside with them.

SCHOLARSHIPS, PRIZES, ETC.—At the end of the Winter Session, examination will be held for two Scholarships of the value of £45, for the year. The Examination for Prizes and Certificates of Merit will take place at the end of the Winter and Summer Sessions.

Further information may be obtained from Mr. Paget, Mr. Holden, or any of the Medical or Surgical Officers or Lecturers; or at the Anatomical Museum or Library.

St. George's Hospital Medical School.

SESSION 1859-60.—The WINTER COURSE of INSTRUCTION will commence on SATURDAY, October 1st, with an INTRODUCTORY ADDRESS by Mr. H. C. JOHNSON, at 2 p.m., at the Hospital.

Physicians—Dr. Page, Dr. Bence Jones, F.R.S., Dr. Pitman, and Dr. Fuller.
Assistant-Physicians—Dr. Barclay and Dr. John W. Ogle.
Obstetric Physician—Dr. Robert Lee, F.R.S.
Surgeons—Mr. Cæsar Hawkins, F.R.S., Mr. Cutler, Mr. Tatum, and Mr. H. C. Johnson.
Assistant-Surgeons—Mr. Prescott Hewett and Mr. George D. Pollock.
Dentist—Mr. Vasey.

Lecturers—Medicine—Dr. Pitman.
„ Surgery—Mr. Tatum.
„ Anatomy—Mr. Pollock and Mr. Gray.
„ Physiology—Mr. A. Johnson.
„ Chymistry—Dr. H. M. Noad.

The Hospital contains 350 beds.

Clinical Lectures are given by the Physicians and Surgeons of the Hospital during the Winter and Summer Sessions, and Clinical Instruction is given in the Wards by the Physicians and Surgeons, and on the Diseases peculiar to women by the Obstetric Physician.

A Maternity Department, for the delivery of married lying-in women at their own homes, is established at the Hospital, under the superintendence of the Obstetric Physician.

The Surgeons' Perpetual Pupils are eligible to be Assistant House-Surgeon for Six Months, and House-Surgeon for Twelve Months (without additional Fee), when properly qualified for the Office. Pupils of the Hospital are eligible to the office of Obstetric-Assistant, when duly qualified, at a salary of £100 per annum.

Pupils entering to St. George's Hospital Medical School are free to all Lectures and Hospital Practice necessary for the Examination of the College of Surgeons and Society of Apothecaries, by the payment of FORTY GUINEAS the first year, FORTY GUINEAS the second year, and TWELVE GUINEAS the third year. But Pupils have the option of entering to the different courses of Lectures and Hospital Practice by separate payments.

EXHIBITIONS AND PRIZES.

"The William Brown Exhibition," of Forty Pounds per Annum, tenable for Three Years, may be held by any Pupil, perpetual to the Medical or Surgical Practice, who has commenced his third, but not completed his fourth Winter Session. Pupils entering to the Hospital Medical School in the Session 1859-60 will be entitled to compete for this Exhibition.

A Prize of Twenty Guineas, for general proficiency in Medical Studies, will be offered to Students who enter to the Hospital Medical School for the Session 1859-60. The Examination will take place in July.

Also, for the encouragement of Clinical Study—

A Prize of Twenty Guineas, for Surgeons' Pupils in their second year; a Prize of Twenty Guineas, for Physicians' Pupils in their second year; Sir Benjamin Brodie's Clinical Prize in Surgery; the Thompson Medal; the Lewis Powell Clinical Prize in Medicine; and Sir Charles Clarke's Prize for Good Conduct.

Further information may be obtained from Mr. Pollock, the Treasurer of the School; from any of the Lecturers; or from Mr. Hammerton, the Apothecary of the Hospital.

St. Mary's Hospital Medical School.

—The WINTER SESSION will commence on Monday, October 3, at Eight o'clock, P.M., with an Introductory Address by Mr. URE.

It is a distinctive characteristic of St. Mary's Hospital that the following Medical Appointments are annually conferred upon the Pupils free of every expense. The advantages of Five of these Appointments far exceed in money value as many SCHOLARSHIPS of Fifty Pounds each. There are four Resident Medical Officers, who board (free of all expense) in the Hospital, three of whom are appointed for twelve months; and one (the Obstetric Officer), who is appointed for six months; four Non-Resident Medical Officers; a Medical and a Surgical Registrar; all of whom are appointed by the Weekly Board of Governors on the recommendation of the Medical Committee. Clinical Clerks and Dressers are selected from the best qualified Students. All the above offices are awarded after competition, among the qualified Perpetual Pupils of the Hospital.

Physicians—Drs. Alderson, Chambers, Sibson, H. Jones, Sieveking, and Markham.
Surgeons—Messrs. Coulson, Lane, Ure, Spencer Smith, Walton, and J. Lane.
Physician-Accoucheur—Dr. Tyler Smith.
Ophthalmic Surgeon—Mr. White Cooper.
Aural Surgeon—Mr. Toynbee.

Further information may be obtained on application to the Dean of the School, who will also furnish the names of Gentlemen in practice in the vicinity of the Hospital willing to receive pupils to reside with them.

SPENCER SMITH, Dean of the School.

St. Mary's Hospital, August 1859.

Guy's Hospital. — The Medical

SESSION commences in OCTOBER. The Introductory Address will be given by Dr. HABERSHON, on Saturday, the 1st of October, at Two o'clock.

MEDICAL OFFICERS.

Physicians—Thomas Addison, M.D., G. H. Barlow, M.D., Owen Rees, M.D., F.R.S., W. W. Gull, M.D.
Assistant Physicians—S. O. Habershon, M.D., S. Wilks, M.D., F. W. Pavy, M.D.
Surgeons—Edward Cock, Esq., John Hilton, Esq., F.R.S., John Birkett, Esq.
Assistant Surgeons—Alfred Poland, Esq., Cooper Forster, Esq., T. Bryant, Esq.
Obstetric Physician—Henry Oldham, M.D.
Assistant Obstetric Physician—Braxton Hicks, M.D.
Surgeon Dentists—T. Bell, Esq., F.R.S., J. Salter, Esq.
Surgeon of the Eye Infirmary—John F. France, Esq.

LECTURERS—WINTER SESSION.

Medicine—Owen Rees, M.D., F.R.S., W. W. Gull, M.D.
Surgery—John Hilton, Esq., F.R.S., John Birkett, Esq.
Anatomy—Alfred Poland, Esq., Cooper Forster, Esq.
Physiology—F. W. Pavy, M.D.
Chemistry—Alfred Taylor, M.D., F.R.S.
Demonstrations on Anatomy—Mr. Durham and Mr. Moxon.
Experimental Philosophy—Mr. Durham.

Gentlemen desirous of becoming students must give satisfactory testimony as to their education and conduct. They are required to pay £40 for the first year, £40 for the second year, and £10 for every succeeding year of attendance, or £100 in one payment entitles a student to a perpetual ticket.

Dressers, Clinical Clerks, Ward Clerks, Obstetric Residents, and Dressers in the Eye Wards, are selected according to merit from those students who have attended a second year. A Resident House Surgeon is appointed every six months from those students who have obtained the College Diploma.

Six Scholarships, varying in value from £25 to £40 each, will be awarded at the close of each Summer Session for general proficiency.

Two Gold Medals will be given by the Treasurer—one for Medicine and one for Surgery.

A Voluntary Examination will take place at entrance in Elementary Classics and Mathematics. The first three candidates will receive, respectively, £25, £20, £15.

Mr. STOCKER, Apothecary to Guy's Hospital, will enter students and give any further information required.

Guy's Hospital, July 1859.

London Hospital Medical and Sur-

GICAL COLLEGE, Mile End. 1859-60.—The next WINTER SESSION will commence on Monday, October 3rd, 1859, when the Introductory Lecture will be delivered by Mr. CRITCHETT, at Three p.m.

Nicholas Parker, M.D.—Medicine
Thos. Blizard Curling, F.R.S. } Surgery
George Critchett }
John Adams—Descriptive and Surgical Anatomy
Andrew Clark, M.D. { Physiology and General and Morbid Anatomy / Practical Histology
John Sharman } Practical Anatomy
John Cooper }
Henry Letheby, M.B.Lond.—Chemistry; Practical Chemistry
H. J. Barrett—Anatomy and Pathology of the Teeth, and Dental Surgery
F. H. Ramsbotham, M.D.—Midwifery and Diseases of Women & Children
F. H. Ramsbotham, M.D. } Forensic Medicine
Henry Letheby, M.B.Lond. }
Herbert Davies, M.D.—Materia Medica and General Therapeutics
George Critchett—Ophthalmic Surgery
Robert Bentley, F.L.S.—Botany
J. Langdon H. Down, M.B.—Comparative Anatomy

General Fee for attendance on the Medical and Surgical Practice, qualifying for the examination at the London University, Royal College of Surgeons, and Apothecaries' Hall, and for perpetual attendance on all the Lectures, 84 guineas, payable in two instalments of 42 guineas each, at the commencement of the two first winter sessions of attendance.

Perpetual Fee to the Lectures alone, £50.

Students can make special entries to Lectures or Hospital Practice.

Further particulars and prospectuses can be had on application to Dr. PARKER, Hon. Secretary, 22, Finsbury Square, E.C.; or at the College.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXLII.] LONDON: SATURDAY, SEPTEMBER 17, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

HULL GENERAL INFIRMARY.

I. FRACTURE OF OS HUMERI, AND DISLOCATION OF RADIUS AND ULNA AT ELBOW-JOINT: FRACTURE OF INNER MALLEOLUS AND LOWER THIRD OF FIBULA: FRACTURE OF RIBS, AND EMPHYSEMA: RECOVERY.

Under the care of R. M. CRAVEN, Esq.

[*Communicated by* C. J. EVANS, Esq., *House-Surgeon.*]

SIMON LINWOOD, aged 44, was admitted, under the care of Mr. Craven, on June 14th, 1858, having met with an accident a short time before. He was working at an arch over a drain, when some of the brickwork fell, and buried him beneath it. He sustained a fracture of the right os humeri about its middle, with dislocation of the radius and ulna backwards; fracture of the inner malleolus and lower third of the fibula on the same side of the body, with apparent dislocation of the foot backwards; also fracture of one or more ribs on the right side, with a wound of the lung, and emphysema to a small extent. The dislocation at the elbow was reduced without much difficulty, and the arm was placed upon a straight splint, with an opening at the elbow, where there was a long flesh-wound over the olecranon, but not communicating with the joint. There was a marked prominence in front of the ankle, and a corresponding increase of hollow above the heel, resembling a luxation of the foot backwards, but there was more mobility than usual in such cases. Extension failed to reduce it, and the limb was placed on a double-inclined plane. A broad flannel bandage was bound round the chest.

June 15th. He passed a good night. He was ordered to have an ounce of castor oil, and an effervescing saline draught occasionally.

June 17th. His countenance is anxious, and the respiration hurried. Pulse 120; tongue furred. Large crepitation is heard over the right side of the chest.

℞ Tincturæ benzonii comp. ʒss; spiritûs ætheris nitrici ʒij; misturæ camphoræ ad ʒviii. M. Sumat ʒi 4tis horis.

℞ Hydrargyri cum cretâ, pulveris ipecacuanhæ comp. āā gr. iii. Fiat pulvis cum singulis dosibus misturæ sumendus.

June 18th. The chest-signs are the same; the expectoration is muco-purulent, and tinged with blood. Pulse 120.

June 19th, 6 P.M. He seems worse; and says himself he shall not live. Pulse 130; tongue furred, but moist. He has pain in the right side, and great dypsnœa. The expectoration is more bloody. The mixture and pills were continued every two hours.

June 20th. The urgency of the symptoms is somewhat abated. There is less dyspnœa. Pulse 120. The bowels have been relieved several times. Crepitation and friction-sound are heard on the right side of the chest. The sputa are still much mixed with blood. The same treatment was continued.

June 22nd. The dyspnœa is much less urgent, and there is now very little expectoration. The pulse is reduced to 100. There is free discharge from the elbow, with a sense of fluctuation. The arm was removed entirely from the splint, and a large quantity of bloody matter was evacuated on pressure. It was laid upon a pillow with the hand raised. He was ordered to have a wineglassful of infusion of calumba three times a day, and meat and half a pint of porter daily.

He continued to improve from the last date; and, on July 20th, his leg was done up in a starched bandage, and he was allowed to get up. The front of the ankle was more prominent than natural, but there was full movement of the joint. The fracture of the arm had firmly united. The wound of the elbow was quite healed.

Aug. 2nd. He was discharged well, having been in the Infirmary seven weeks.

REMARKS. At one time (about 19th June) his condition was exceedingly unpromising, and indeed it was considered that he would not recover. He had an additional shock, too, in the fact of his son being killed on the spot by a similar accident at the same bridge, only a short time after his being brought to the Infirmary.

II. DISLOCATION OF THE THIGH-BONE INTO THE SCIATIC NOTCH: FURTHER DISLOCATION INTO THE OBTURATOR FORAMEN DURING ATTEMPTS AT REDUCTION: FINAL REDUCTION BY MANIPULATION.

Under the care of R. M. CRAVEN, Esq.

[*Communicated by* C. J. EVANS, Esq., *House-Surgeon.*]

JAMES SMITH, aged 38, smith's carpenter, a large powerful man, was admitted, under the care of Mr. Craven, on July 7th, 1859. A large mass of wooden palings had fallen upon him, burying him beneath them. When admitted, he was holding his right leg up against and parallel with his thigh, which was also flexed upon the pelvis. There was found to be dislocation of the right os femoris into the ischiatic notch, the thigh being directed obliquely across the opposite one, with shortening and inversion of the foot. A bone-setter had seen him in the first instance, but dared not meddle with the case. He was put fully under the influence of chloroform, and an attempt at reduction was made by jack-towels from the knee and perineum in the usual manner, but without success. The limb was then quickly and forcibly moved obliquely upwards and across the other, when with an audible noise the head of the bone slipped from its place. But, oddly enough, on further examination, it was found to be not in the acetabulum but in the obturator foramen. The limb was now elongated several inches, and a little everted, and there was a well-marked depression in the ordinary seat of the trochanter major; the body was also arched forward somewhat from the tension on the psoas and iliacus muscles. A similar movement of the limb was again made, and the head of the bone slipped into its socket with an audible noise. A broad bandage was bound round the hips, and the legs were tied together. Forty minims of liquor opii sedativus were given.

July 14th. An ammoniated liniment was ordered to be applied to the hip twice a day. He got up on the 19th, and was discharged on the 23rd; only a little weakness remaining.

REMARKS. There could be no doubt about the second luxation in this case, for the leading symptoms of the two forms of dislocation which existed are so very different. Although the head of the bone was *heard* to slip into its socket, the noise was not the loud *snap* which is generally noticed; this might be accounted for by the great relaxation of the muscles produced by the chloroform.

III. SYMPTOMS OF TYPHOID FEVER, WITHOUT THE USUAL POST MORTEM APPEARANCES.

Under the care of Sir HENRY COOPER, M.D.

[*Communicated by* C. J. EVANS, Esq., *House-Surgeon.*]

JULIA WATKINSON, aged 15, was admitted, under the care of Sir H. Cooper, on December 30th, 1858, with symptoms of fever. She had been ill about a fortnight, her complaint commencing with sickness and rigor. There was a hebetude of manner about her, and the skin had a dingy hue; some little tenderness of the abdomen, but no tympanitis. Scattered over it were a few faint rose spots. The pulse was soft, with moderate volume. She was ordered to have a simple saline draught every three hours.

December 31st. She appears much the same; she passed a tolerable night. She was ordered to take a calomel and antimony pill at bedtime, and an effervescing draught every three hours.

January 2nd, 1859. The bowels have been relieved daily; the stools have an ochreous appearance. The rose spots are more marked and more numerous; the abdomen is rather tympanitic. There is more stupor, with sordes about the mouth. The patient is very weak. Six grains of Dover's powder were ordered to be taken immediately. She was ordered to have two ounces and a half of wine daily.

Jan. 3rd. The patient is more feeble, and sinks down in the bed. The stools continue the same. The Dover's powder was repeated at bedtime, and the wine was increased to four ounces daily.

Jan. 4th. She is decidedly worse; pulse very feeble.

℞ Ammoniæ sesquicarbon. gr. xij; misturæ camph. ℥vj. M. Capiat ℥j 3tiâ quâque horâ.

She died the same night.

Autopsy, fourteen hours after death. The head was not examined. All the other organs of the body were quite healthy. The small and large intestines, which were examined carefully from end to end, presented only a slight patch of congestion in one or two places, not the least appearance of ulceration of the mucous membrane being visible.

Remarks. This patient seems to have sunk simply from asthenia. The healthy condition of the intestines was somewhat remarkable, considering the rose spots and the nature of the stools, which are usually considered as characteristic of intestinal disease.

BIRMINGHAM GENERAL HOSPITAL.

LARGE DILATATION OF THE ENTIRE ARCH OF THE AORTA: SEVERE DYSPNŒA: DEATH FROM COMA.

Under the care of James Russell, M.D.

[*Clinical Clerk*—T. H. Bartleet, Esq.]

Peter McHughes, aged 49, a gardener, was admitted on June 8th, 1859. He states that he has always been temperate; he has never had syphilis; he was in the army for seven years, but left it twenty-five years ago. He has always enjoyed good health, excepting that he was laid by for a month by rheumatism some years ago; he thinks that his heart was attacked with the disease, as his chest was blistered. His family is healthy.

One night last October, when in bed, he was attacked, without any premonitory symptoms, with severe pain in the right side of his chest; it was very acute, and caught his breath; after the application of a mustard plaster, it moved into his back and right arm. This pain continued to recur for three or four months, and he suffered from palpitation. In March or April he began to suffer from distress in breathing; but up to a month before his admission he was equal to active exertion. He was in the Leamington Hospital for some time, and left much relieved. He cannot recollect having made any unusual effort before the attack of pain, nor can he refer its occurrence to any special cause.

Present State, June 9th. He is a well made man, of healthy aspect, but thin. His chief symptom is a very constricted state of breathing, which occasions great distress, and has been so much aggravated at intervals since his admission, as to necessitate the repeated inhalation of chloroform. It is never entirely absent, and is immediately increased by talking, or by the least excitement, so that the necessary examination of his chest could only be accomplished piecemeal on successive days. There is much stridor during inspiration, and a frequent spasmodic cough, terminating in the expectoration, with much difficulty, of transparent mucus. His voice is somewhat hoarse, and when the spasmodic breathing is present, speaking is performed as much during the protracted inspiration as during the process of expiration. His face is tranquil, and free from lividity. Pulse 86, feeble: alike in each wrist. His appetite is good; but he has eaten little, in fear of "stuffing his pipes".

The inner portion of the three upper right ribs is unnaturally prominent, and the upper part of the sternum is also thrown rather forward. Over this prominent region, a distinct double pulsation is felt; the second impulse giving precisely the sensation of a wave of fluid impinging strongly upon the wall of the chest. There is no abnormal pulsation above the clavicles or sternum. Percussion is perfectly dull in the upper anterior region of the chest, over a space commencing on the left side of the sternum over the origin of the first rib, crossing the sternum obliquely, and involving the three upper ribs on the right side to a distance of three inches and a half. Elsewhere the chest is resonant. The usual cardiac dulness is absent, the impulse of the heart, which is very feeble, being felt by the side of the epigastric triangle. Over the region of dulness a loud double sound is audible, closely resembling the cardiac sounds, excepting in being louder; these sounds diminish in intensity in receding from the tumour, and are very faint at two-thirds of the distance between it and the heart, where they are replaced by the sounds of that organ. There is no bellows-sound.

Both sides of the chest move equally in respiration, but to an unnaturally small extent. The respiratory sounds, as heard at different examinations, presented continual variation; in three examinations they were found to be more feeble over the root of the left lung, but when the breathing was most tranquil they were of equal intensity on both sides; they were sometimes almost absent from certain parts of the chest; they were harsh and generally coarse; rhonchus and stridor prevailed more or less throughout both lungs, or, if absent at first, rapidly developed themselves under the excitement of the examination; occasionally, the respiratory sounds became almost bronchial over the roots of the lungs. A distinct diffused impulse, synchronous with the beat of the heart, was felt over the posterior region of the left chest, especially in the middle third. The venous system was perfectly free from distension; there was no œdema. Deglutition was natural.

During the remainder of his life his health materially improved. The fits of constricted breathing were excited by the least excitement, by the effort of going to the night-chair, or by talking continuously, though only for a short time; there was no lividity during their continuance, but the extremities became chilly, and the pulse fell and intermitted. He was unable to inhale chloroform, on account of the irritation produced by its first impression upon the bronchial mucous membrane, but obtained more relief from opium than from any other remedy, combined with perfect quietness.

On July 18th, he experienced an attack of a totally different character from those which had preceded; his face became perfectly livid; his lips and tongue much swollen; his pupils contracted and insensible; and he was perfectly comatose for half an hour; the attack passed off with heavy sleep. A second occurred on the 20th; about two A.M. on the 22nd, he fell asleep, and at six was found perfectly comatose, with stertorous breathing. He died at eleven A.M.

Sectio Cadaveris. The heart and its appendages were put aside in the temporary absence of Dr. Russell. The heart was large; its outer surface presented traces of old lymph, and the apex adhered to the pericardium. There was a considerable amount of fat upon the right ventricle. The left ventricle was considerably dilated with corresponding hypertrophy. The valves were healthy. The entire arch of the aorta was dilated into a large pouch, five inches in vertical diameter, which commenced immediately above the sigmoid valves, and terminated at about the same level. It reached the level of the upper edge of the first rib, and was in contact with the cartilages, apparently, of the three upper ribs; it lay in front of the trachea, but was in very close contact with that tube only just above the bifurcation, and had not exerted material pressure upon it; the interior of the trachea presented its normal character. Both brachio-cephalic veins and the superior cava were so closely adherent to the sac, that it was difficult to conceive that they could escape material interference with their function; the vagi and the left recurrent nerves were in close connection with its walls. The cartilages of the ribs were uninjured. The sac was empty; its interior was puckered and irregular; a few flakes of fibrine adhered to it; but it was free from calcareous degeneration. The superior wall was half an inch in thickness; in one patch the outer layer was removed, and the surface of the subjacent tissue was friable and irregular, exactly resembling the surface of an old coagulum, for which indeed it was at first mistaken; the inner and outer layers were separated with great facility for a considerable distance. The inner and outer layers of the middle coat of the primary arteries presented the same readiness to admit of separation. A large coagulum coloured with blood lay in the aortic orifice, and in great measure closed it; it was four inches in length; its larger extremity, nearly three inches broad, lay within the pouch. A second coagulum of pure fibrine lay doubled up in the tricuspid orifice; it was three inches long, and very narrow; it was perfectly free, except at

one extremity, where it was entwined among the tendinous cords of the valve.

Remarks. The constricted breathing, so prominent and distressing a symptom in this case, was doubtless occasioned by irritation of the vagi, which were in very close connection with the wall of the aneurismal sac; but it was remarkable how far the spasmodic action extended along the bronchial tubes, apparently throughout their ramifications. The stridor was indeed more bronchial than laryngeal, and the condition of the lungs appeared to resemble that which is present in spasmodic asthma. The left vagus, from its relation to the arch of the aorta, would suffer more than the right, under varying conditions of the sac, and it is probably to this circumstance that we must ascribe the greater feebleness of the respiratory sound in the root of the left lung, which was repeatedly noticed when the breathing was constricted, but was absent when respiration was tranquil. It is likely that the comatose attacks which terminated the case were occasioned by the presence of the coagula in the orifices of the heart, chiefly perhaps by that in the tricuspid orifice, which was evidently of older date, and would exert a more direct influence in retarding the return of blood from the brain. The case presented a very good example of the double pulsation and double sound in thoracic aneurisms, the latter nearly resembling the sounds of the heart; and there could be little question that the second sound and impulse were produced by a regurgitant wave transmitted through the aneurismal sac, which, being quite empty of coagula, was in the most favourable state for the production of such a wave.

ST. BARTHOLOMEW'S HOSPITAL.

TWO CASES OF EXTRAVASATION OF URINE.

Under the care of W. Lawrence, Esq.

[*From Notes by* G. F. Helme, Esq., *House-Surgeon.*]

Case i. William Woodcock, aged 39, was admitted, under the care of Mr. Lawrence, on February 3rd, suffering from stricture of the urethra, with an inflammatory swelling in the ischio-rectal fossa. He had been the subject of stricture for nine or ten years, and had frequently had instruments introduced into his bladder on account of complete retention. A week previous to admission, he noticed a swelling on the buttock. After remaining in the hospital three weeks, Mr. Lawrence, suspecting deep suppuration in the ischio-rectal fossa, made an incision into the tumour which presented itself there. No matter escaped; the cut tissues only seeming infiltrated and brawny. The wound caused by the incision remained open, in consequence of a considerable quantity of urine escaping by it, scarcely any being passed by the penis.

Several attempts were now made to pass a full-sized catheter; but, in consequence of the riddled state of the patient's urethra, it was impossible to introduce any instrument at all. The patient continued in this state, passing all his urine by the wound in the ischio-rectal fossa, up to the 12th March; when, as he was desirous that something further should be done, he was removed to the theatre, Mr. Coote intending to perform perineal section on a Syme's staff. However, under the influence of chloroform, Mr. Coote succeeded in passing a No. 9 catheter, and consequently the idea of performing perineal section was abandoned.

The catheter was retained in the bladder until March 21st, up to which time the patient had not had a single untoward symptom; and, when the instrument was removed, the fistula in the perineum was found to have closed, the urine passed by the penis, and the patient expressed himself as being "quite a different man, not having been so well for years."

March 23rd. A No. 9 catheter was passed with ease, and retained for twenty-four hours, when it was withdrawn, in consequence of a good deal of constitutional disturbance (rigors, etc.) coming on. The rigors continued, at different intervals, up to the 28th; up to which time the urine had been passed freely by the penis.

On the morning of March 28th, Mr. Helme was called to the patient, and found his penis and scrotum considerably swollen and œdematous, evidently from the presence of extravasated urine. The patient had, only a few minutes before his arrival, got out of bed to pass urine; and, having felt something snap, the swelling appeared. He was in a critical state; small pulse; tongue dry, and sordes on the teeth. Very free incisions were made in the penis and scrotum.

Mr. Coote soon saw him, and he determined on cutting into the bladder, and giving free exit to the urine. Chloroform having been administered, a No. 9 catheter was introduced and withdrawn: an ordinary lithotomy staff was then passed, and Mr. Coote, with the aid of a blunt gorget, made a free opening into the bladder; in fact, performed the lateral operation for lithotomy, being convinced that nothing short of this formidable proceeding gave any chance of the man's recovery. He never rallied from the operation, and died on the morning of April 1st.

On *post mortem* examination, a large abscess, containing about six ounces of pus was found connected with the anterior wall of the bladder, but not communicating either with the interior of the bladder or the cavity of the pelvis. The whole of the membranous portion of the urethra was found to have sloughed away. The kidneys were extensively diseased, in consequence of the old-standing stricture.

Case ii. James Pettit, aged 40, was admitted March 5th, complaining of a painful swelling in the perineum. The day previously to his admission, he had applied at the surgery as a casualty patient. The perineum was then slightly indurated; and, the hospital being very full, he was sent home, and told to come in a few days, or sooner if he was at all worse. However, on the following day he was admitted, having passed a restless night in consequence of the severe pain. The perineum, at the time of his admission, was considerably tense and swollen, with a slight blush over the scrotum. He had never had gonorrhœa; but the corona glandis was marked with the cicatrix of a phagedenic ulcer. He passed water well, and without any pain. It was thought advisable to pass a catheter, which was done without any difficulty, there being apparently no obstruction to its passage.

March 7th. Mr. Lawrence saw the patient. The swelling of the scrotum was extended, and all signs of extravasation of urine. Very free incisions were made into the perineum and scrotum: the tissues had sloughed, and the incisions exposed a cavern almost the size of an orange. The urine now passed by the wound; some also by the penis. Brandy was ordered *ad libitum.*

March 8th. He took twenty-four ounces of brandy in twenty-four hours, and appeared none the better for it. The urine was still extending, as there was a slight blush and tenderness on the pubes.

March 9th. Urine was evident on the pubes: incisions were made. Brandy was ordered *ad libitum.*

March 10th. It was evident that the patient had no chance of recovery. The urine was extending further.

March 11th. The redness from extravasated urine had now reached the axillæ on both sides: incisions were made. The patient was evidently sinking.

March 14th. The patient died this morning, having lived much longer than could have been expected: the quantity of brandy taken evidently kept him alive.

On *post mortem* examination, the urethra was found *entirely free from any stricture.* The bladder and kidneys were also quite healthy. About a quarter of an inch of the urethra (about the membranous portion) had from some cause ulcerated, and was the means of letting the urine escape.

ST. GEORGE'S HOSPITAL.

TWO CASES OF EXTRAVASATION OF URINE.

Under the care of Cæsar Hawkins, Esq., and Prescott Hewett, Esq.

Case i. John L., aged 42, was admitted on May 12th. He was a butler, and had been intemperate at one period of his life, but not latterly. He had had a stricture, the result of gonorrhœa, for nine or ten years; and had always been able to pass a No. 4 catheter when he found any difficulty in making water. On May 7th, he was attacked with retention of urine, and failed in passing his catheter. He then went to his ordinary medical attendant, who also found himself unable to pass the instrument. A little urine passed at that time, but none during the next day. On the following morning, another attempt at catheterisation was made, but again without success. Some medicine was given, and the urine continued to flow by drops till the morning of the 11th, since which time he had passed none. A fresh attempt was made to pass instru-

ments just before his admission. This was at midnight; and when the house-surgeon saw him, he determined not to attempt to pass instruments, but ordered a hot bath, and forty drops of laudanum every hour. He went to sleep after the second dose, so that no more laudanum was given. When he was next seen, at 10 A.M., the bladder was found to be distended beyond the umbilicus, and excessively hard and tender to the touch. The whole cellular tissue of the perinæum, scrotum, and penis, were distended and reddened from extravasation of urine. The pulse was small, 108; the tongue brown and perfectly dry. The pupils were still contracted and sluggish from the opium, and he was constantly dozing off to sleep. When an instrument was passed down the urethra, the anterior part of its membranous portion was found much lacerated; and it was impossible to reach the bladder. He was accordingly taken into the operating theatre, and Mr. Prescott Hewett proceeded to cut into the bladder. A staff was at first passed down the urethra as far as it would go; but it was found that its point passed out of the middle line, and that it was of no service. Keeping in mind, however, the relations of the parts, Mr. Hewett had no difficulty in making an incision into the dilated portion of the urethra behind the stricture, which was easily recognised by its smooth lining and tubular outline; and then the finger could easily be passed into the bladder. A gum catheter was then guided along the finger, and a very large quantity of offensive urine drawn off. Free incisions were made into the parts where extravasation had occurred. The subsequent treatment consisted merely of an attempt to keep him alive by the very free use of stimulants and nourishment. This, however, did not succeed: he gradually became weaker and less sensible; then delirium came on, followed by hiccough; and he died on the fifth day from the operation.

On examination, the urethra was found healthy down to within an inch from the membranous portion, where it was extremely dilated and sloughy, forming a large cavity with ragged walls, which led to the bladder. The incision in the perinæum led into this cavity, in front of the prostate. There was no obstacle on the dead subject to the passage of an instrument, the tissue forming the stricture having been entirely destroyed by the sloughing. The bladder was a good deal thickened and fasciculated, and the mucous membrane ulcerated in patches. The kidneys were healthy, except that there were spots of ecchymosis here and there in their tissue. The ureters were not dilated. The other viscera presented nothing remarkable.

Case II. T. B., aged 39, was admitted, under Mr. Hawkins's care, on May 18th. He had had a bad stricture for the last six years; and much of the glans penis had sloughed off, as a consequence of syphilitic sores. The urine passed through a new orifice, about an inch below the meatus. He had been under treatment once for the stricture some years ago, when a No. 4 silver catheter was passed several times into the bladder. Four years ago, he had had retention of urine, which was relieved at this Hospital by the passage of a catheter. At that time the stricture seems to have been tight, as the instrument could not be passed until after the use of the hot bath. Having obtained relief from the retention, he would not stay in the house. Since this he had had occasional attacks of retention, but had always been able to pass water after a few hours, and never had had any treatment. A month ago, in one of his attacks of retention, he tried to pass the smallest gum catheter for himself, but failed to do so. The present attack had lasted till the previous morning (he was admitted at 5.30 A.M.) The cellular tissue of the penis and scrotum was then much distended with extravasated urine; and the extravasation was beginning to show itself above the groin, on the lower part of the abdomen. There was no hardness or pain in the perinæum; and the patient described the swelling as having commenced in the penis, and passed downwards to the scrotum, and upwards to the abdomen. Free incisions were made into the cellular tissue whenever any trace of extravasation was seen. The bladder did not appear to be distended. The prepuce was so much inflamed as to cause phimosis; and when it was slit up, it was almost impossible to find the urethra in the midst of the mass of cicatrix by which the glans was replaced. Mr. Hawkins succeeded, however, at length, in passing a small silver catheter down through a dense mass of stricture to within a short distance of the membranous urethra, where the instrument seemed to be checked by another stricture. He had two hot baths during the day, and several doses of laudanum; but the urine passed only in drops. The same treatment was continued next day, until the increased drowsiness compelled the omission of the laudanum. The whole skin and cellular tissue of the scrotum were now nearly black from gangrene. Mr. Pollock was summoned, in Mr. Hawkins's absence, and made numerous fresh incisions, one of which was prolonged through the middle line of the whole scrotum into the urethra. Through this incision the urine passed freely during the rest of his life; but he did not rally, notwithstanding the very free use of stimulants. The gangrene extended; he became quite insensible towards the close of his life, and sank on May 23rd, four days after the last operation.

On *post mortem* examination, the whole of the superficial parts of the scrotum and penis were gangrenous, and the gangrene had spread to a slight extent on the abdomen, near the root of the penis. Numerous incisions existed into this gangrenous mass. The urethra was much dilated, from the posterior part of its spongy portion to the meatus, forming a sloughy cavity with ragged walls. In front, it ended in the sloughy tissue of the glans penis, the natural meatus being quite destroyed. Posteriorly, there was a slight contraction, about an inch, just in front of the membranous portion; and just in front of this, a false passage in the floor of the urethra, leading a short distance into the corpus spongiosum. The anterior part of the urethra presented no traces of the stricture which had existed during life, all the tissue which had formed the constriction having sloughed away. The bladder was much distended; its muscular fibres fasciculated; the mucous membrane ulcerated in detached spots, and in some places black from ecchymosis. The kidneys were somewhat vascular, but otherwise healthy. The ureters were natural. The other viscera were healthy.

Remarks. We have given above a series of cases of a complaint unfortunately only too common, but which in most instances might have been entirely obviated by a little timely attention. Unhappily, the mere presence of a stricture gives so little inconvenience, that poor men will commonly prefer bearing it and hoping that it will cure itself, to a troublesome or costly attendance on a medical man. Hence these cases are seen almost exclusively in hospital practice. In all the cases before us, except the second, the patients were not seen till after the occurrence of extravasation, so that there could be no doubt of the propriety of the course adopted, viz., to open freely the urinous collection and seek the nearest way from the situation of the latter into the urethra behind the stricture—otherwise, we believe, there is now little difference of opinion as to the preferability of the method of treatment recommended by Mr. Cock, viz., to open the bladder from the rectum, and allow the urethra a few days of quiet to right itself, instead of irritating and perhaps wounding it by hopeless attempts to pass instruments. In the last case, the deformed and neglected condition of the urethra forbade the least hope of reaching the bladder from the meatus, still it was better to make the attempt, since the scrotum must be opened, and therefore the puncture of the bladder from the rectum would not have been justifiable. In Mr. Coote's case, and in the operation performed by Mr. Hewett, the only prospect of a cure was obviously in procuring a free exit for the urine by cutting into the bladder from the perinæum; and since in the former, the dilatation of the stricture had not prevented (if it had not occasioned) the extravasion, it was thought useless to allow more urine to be extravasated, which would doubtless have occurred had incisions merely been made. In Mr. Hewett's case no staff could be used, or rather the staff, instead of a guide, was a means of error, since it led away from the middle line, and yet no difficulty was found in reaching the neck of the bladder. This operation is, indeed, easy enough on the dead subject, as we have satisfied ourselves by repeated trials. On the living, the sloughing and indurated state of the tissues doubtless makes the matter much more complicated; still, by keeping steadily in the middle line, the dilated urethra must at length be reached, and if the water is retained, its escape will prove a guide for the introduction of the catheter, otherwise the smooth walls of the cavity will be recognised by the finger. Mr. Lawrence's second case was a very uncommon one, being apparently one in which the urethra was affected secondarily by an abscess forming, from some accidental cause, in the perinæum. The large size of the cavity, and the frightful rapidity with which the effusion proceeded, precluded all hope of the patient's recovery. The frequent inefficiency of the opium treatment for the relief of retention of urine, is shown by the fact that in two cases the patients fell asleep and became partially narcotised, without any alleviation of their symptoms.

Original Communications.

THE CONSEQUENCES OF ASTHMA.

By HYDE SALTER, M.D., F.R.S., Fellow of the Royal College of Physicians, and Assistant-Physician to Charing Cross Hospital.

Tendency of Asthma to disorganise. The Connseqences of Asthma fourfold: 1. Its direct results on the Bronchial Tubes; Hypertrophy of the Bronchial Muscle; Bronchial Contraction. 2. Results of Obstructed Pulmonary Circulation; *a*, In the Lungs (Congestion, Œdema, etc.); *b*, In the Heart (Hypertrophy, Dilatation); *c*, in the Systemic Venous System (Venous Stasis, Œdema, etc.). 3. Emphysema; Is pure Asthma capable of generating it? 4. Acquisition of the Asthmatic Physique; Its Distinctiveness; Its Characteristic Gait, Physiognomy, and Configuration; Rationale of the Asthmatic Spinal Curvature; Peculiar Chest of Young Asthmatics.

Asthma never kills; at least, I have never seen a case in which a paroxysm proved fatal. If death did take place from asthma, it would be by slow asphyxia—by the circulation of imperfectly decarbonised blood; and before this occurred I think the spasm would yield. When asthma terminates fatally it does so by the production of certain organic changes in the heart and lungs; and it is on this tendency to the generation of organic disease that the gravity of asthma depends.

The consequences of asthma admirably illustrate two laws of our organisation: one, that the workings and processes of life are so intimately bound together, so exactly fit and interlock, that one cannot go wrong without dragging the rest with it; the other, that healthy function is as necessary to healthy structure, as healthy structure is to healthy function. Without asserting that the perverted function of a tissue or organ is in all cases dependent upon some real though perhaps inappreciable perversion of its structure or constitution (which, though perhaps probable, is at present beyond our demonstration), we may safely affirm the converse—that no tissue or organ can long be the seat of perverted action, without perversion in its structure or constitution inevitably following. Organs are made for action, not existence; they are made to *work*, not to *be*; and only when they *work* well can they *be* well. It is the universal law of organisation, that the function of parts shall be, if not absolutely coincident, at any rate indissolubly connected, with their nutrition. The very nutrition of organs is planned on the supposition of their being working machines, and in exact accordance with the work they have to do; so that their working can neither be suspended nor deranged without interfering with their nutrition, and therefore with their structure. Organs either misused or disused invariably organically degenerate.

If we examine the chest of an asthmatic who has but recently been affected with his disease, or whose attacks have been infrequent, we shall very likely find evidence of perfect anatomical soundness of all its organs; but if we examine him again in ten years we shall to a certainty, if the patient has in the interval suffered constantly from attacks of his malady, find evidence of organic disease of the lungs, and very likely of the heart. Now, why is this? Why should organic disease be the inevitable sequel of that which is at first a mere functional and occasional derangement? From the very law I enunciated just now—that functional disorder cannot exist without dragging in its train organic change.

The consequences of asthma appear to me to be fourfold:—1. The direct results on the bronchial tubes themselves of the inordinate action of their walls; 2. All those results of obstructed circulation, first pulmonary, then systemic, which the inadequate supply of air to the lungs induces; 3. That special result of the unequal and partial distribution of air to the lungs—emphysema; 4. The general effect of the disease on the physiognomy and build of the patient—the production of what may be called the *asthmatic physique*.

1. *Direct Results of the Asthmatic Spasm on the Bronchial Tubes themselves.* Organic muscle obeys the same laws as voluntary; its nutrition, and therefore its development, is proportioned to its activity; and this evidently from the same final cause—that it may be equal to its work. No sooner is its activity exalted, or more work thrown upon it, than it immediately hypertrophies: witness the urinary bladder in stricture, and the gall-bladder in biliary calculus. The bronchial tubes in asthma afford but another example of the same thing, and their excessive action issues, from the operation of the same law, in a similar hypertrophous development. Accordingly, we constantly find, amongst the morbid appearances mentioned in the *post mortem* examinations of asthmatics, an undue conspicuousness and thickening of the circular fibres of the bronchiæ. One certain result of this hypertrophy of the bronchial muscles is a permanent thickening of their walls, and consequent narrowing of their calibre; and one possible result is a greater disposition on the part of the hypertrophied muscle to take on a state of contraction. To the former, perhaps, is in part due that slight constant dyspnœa which is so disposed to develope itself in asthma; to the latter, the increased tendency to, and frequency of, spasm which characterises some cases.

Contraction of the bronchial tubes—a permanent diminution of their calibre—is another direct result of asthma. A certain amount of narrowing is inevitably involved in the increased thickness of their walls, due in part to the hypertrophy of their muscular element, in part to the congestive tumidity of the mucous membrane, which is the almost invariable accompaniment of long continued asthma. Perhaps, too, as suggested by Dr. Williams, the very fact of an increase of the contractile element of the walls of the bronchiæ involves a degree of permanent passive contraction in excess of what is natural, just as the irritable bladder, is a contracted bladder as well as a thickened one. A certain amount, then, of thickening, and a certain amount of contraction of the bronchial tubes, is fairly to be assigned to asthma, and has in it its sole and sufficient cause.

But we sometimes find in cases of asthma a degree of contraction far beyond what is thus explicable, amounting to complete occlusion. Now remembering how commonly asthma is complicated with bronchitis, how exactly such a condition is that which old severe bronchitis tends to produce, and how inadequate simple spasm seems to produce it, I am inclined to think that the asthma has nothing to do with it, that it is to be assigned wholly to the bronchitis that has complicated the case, and that cases of asthma in which it is found are always mixed cases. This kind of bronchial contraction, converting the tube into a fibrous impervious cord or band, thickened and knotty, I believe to be always inflammatory in its origin.

Dilatation of the bronchial tubes is another morbid condition that has been found in asthma. I think the most dilated bronchial tubes I have ever known were in a case of asthma. But whenever I have seen it there has been bronchitis as well as asthma, and, for the reason I have just assigned in the case of contraction, I should attribute this also to the bronchitis and not to the asthma. I do not see how bronchial spasm could possibly generate it, whereas I do see in the destruction of the vital and physical properties of the bronchial walls by severe inflammation the most rational explanation of its production.

And I may here remark in passing, that there are two circumstances that greatly impair the value and reliability of the specimens of the morbid anatomy of asthma found in our museums:—one is, the looseness with which the word asthma is, and still more has been, used; the other, the extreme frequency with which, even in cases of true asthma, bronchitis has at some time or other existed.

2. *The Results of Obstructed Circulation induced by Asthma.* Asthma is a state of partial asphyxia, and it therefore gives rise to an identical morbid anatomy, differing only from that of absolute asphyxia in its incompleteness, and in those ulterior changes for which, in absolute asphyxia suddenly induced, there is no time. When a man is drowned we know that an impassable obstruction is at once established to the passage of the blood through the capillaries of his lungs; within a minute or two the stoppage is complete. The pulmonary vessels, still filled from behind, become engorged with the blood that they cannot pass on; the right chambers of the heart become distended with the blood which they cannot empty into the engorged lungs; and thus, the obstructing force propagated backwards, the cavæ and their tributaries become distended with accumulated blood in increasing quantities as long as life is prolonged. Meantime, the left side of the heart receives hardly any blood, and its action fails for want of its normal stimulus, while the

right side becomes less and less able to contract on its bulky contents.

Soon, from these opposite causes, the heart ceases to beat, and life is extinct. We open the body, and find—arteries, left side of the heart, and pulmonary veins empty; pulmonary artery, right side of the heart, and all the great veins gorged with black blood. Now there can be no doubt that exactly the same thing takes place at every attack of asthma, but only to a degree that is compatible with life. If we could see into an asthmatic during a fit we should see a certain dose of the same deranged distribution of blood, and from the same cause—pulmonary capillary arrest from the shutting off of air. We should see pulmonary venous congestion, distended right heart, large veins full, and a scanty supply of arterialised blood finding its way to the left ventricle. All external manifestations are consistent with this:—the small and feeble pulse, the irregular and faltering systole, the turgid veins of the head and neck, the occasional hæmoptysis, the dusky skin. If all the bronchial tubes could be simultaneously so contracted as to be completely occluded the same result would take place as if a ligature were placed round the wind-pipe, the deprivation of air would be complete, and death would supervene. But such is not the case, all the bronchiæ are not simultaneously contracted, and their contraction does not amount to complete occlusion. The arterialisation of the blood is lowered, not arrested, and life is maintained. By and by the spasm yields, air is freely admitted, the bar at the capillaries ceases, the pulmonary veins unburden themselves, and all is well again.

But can such a state of things exist long, or exist often, without producing other organic changes? Certainly not. No tissue or organ can be long or often the seat of vascular disturbance without becoming more or less disorganised. I shall consider the changes that result from this stoppage at the pulmonary capillaries that every attack of asthma gives rise to in the order in which they occur,—in the lungs, in the heart, and in the systemic venous system; that is, in those three segments of the circulation along which, in a retrograde direction, the obstructing force is propagated.

In the Lungs the first result is what is called venous congestion—a term in part correct and in part erroneous; for, while the congestion is congestion with venous blood, the congested vessels are really branches of the pulmonary arteries. I am not aware that the exact seat of this congestion is determined, whether it is limited to the branches of the pulmonary arteries, or involves the capillaries as well. That will depend on where the seat of obstruction is. If the capillaries are congested the seat of obstruction must be in front of them; if the capillaries themselves are the seat of the obstruction they cannot be congested—the congestion must be limited behind them. Now I am inclined to think that the exact seat of the obstruction is in the minute venules, just where the blood is passing from the capillaries into the pulmonary veins; and my reasons are these:—The cause of the stoppage is the blood not being what it should, not being properly decarbonised: now, the capillaries are the seat of its decarbonisation; it is not, therefore, until it leaves them and arrives at the ultimate pulmonary venous radicles that it becomes what it should not be—venous blood where it ought to be arterial. That point, then, where its defective arterialisation must be first recognised, must be the point of its arrest. This would imply capillary engorgement. Whether the absolute capillaries are involved in the engorgement I cannot say, or whether it stops at the ultimate twigs of the pulmonary artery. It should be made the subject of careful microscopical observation, which I have not yet made it.

Indeed, I am not aware that the state of the vessels in chronic pulmonary congestion has ever been made the subject of microscopical investigation.

One result of this impeded circulation through the lungs which I believe will one day be demonstrated, is thickening of the walls of the ultimate arterial twigs analogous to that which Dr. Johnson has shown to take place in impeded circulation through the kidney, and produced in an identical way. This too, I regret to say, I have never since the idea occurred to me had an opportunity of verifying. Another result is, that the engorged vessels gradually lose their tone and yield to the distending force of the blood, so that the congestion becomes more and more considerable and of more and more easy induction. Another result is, that the serous portion of the accumulated blood transudes the walls of the vessels, and, escaping into the areolar tissue and air cells, gives rise to œdema. From this accumulation of blood, and displacement of the air in the air cells by serum, parts of the lung may undergo what has been called splenization, becoming quite solid, airless, sinking in water, non-crepitous, and black. And this is the state in which the more dependent parts of the lungs of those who have died of chronic asthma are often found;—a state not to be distinguished from that of the lungs in fatal chronic bronchitis, and which is, in fact, the morbid anatomy of slow asphyxia, however produced.

Hypertrophy, and dilatation of the right side of the heart has long been a well known and recognised complication of asthma. In examining the chest of an asthmatic patient we often find the heart's pulsation plainly felt, and even seen, in the scrobiculus cordis, while in its normal situation it can hardly be perceived. For this there are several reasons. One is, that the violently acting diaphragm draws the heart down lower than usual; another, that an emphysematous left lung may thrust it downwards and to the right, and also, by overlapping it, produce that undue resonance in the region of the heart's dulness and that indistinctness of the apex-beat beneath the nipple which are recognised signs of emphysema in this situation. But a third reason undoubtedly is dilatation of the right ventricle.

Although this last is the only cause I have seen assigned for this displacement of the heart's beat, I insist on the other two as adjuvant, because they are evidently sufficient of themselves to drive the heart down into the scrobiculus, and transfer its pulsation thither without any dilatation of the ventricle. In cases of recent asthma, where there has been no time for dilatation or hypertrophy of the right ventricle to take place, and where, in the intervals of the attacks, the situation of the heart's beat has been perfectly normal, I have felt and even seen this pulsation in the scrobiculus very strongly marked at each fit, coming with the fit and going with the fit. Now hypertrophy and dilatation of the right ventricle are not conditions that can come and go. It is evident, then, that a transference of the heart's pulsations to the scrobiculus may be produced by simple displacement of the organ, without any extension of its right chambers; and therefore, when occurring during a paroxysm of asthma, this sign is not to be relied upon as evidence that the heart has organically suffered.*

But why should heart-disease be the legitimate sequel of asthma? Why should the stricture of the bronchial tubes tend to produce hypertrophy and dilatation of the right ventricle? The connection of these remote and apparently dissociated conditions is at once supplied by the law of asphyxia which I have just now referred to—that the shutting off of air from the lungs immediately brings the pulmonary circulation to a stand-still, and places in front of the right chambers of the heart an obstacle which they cannot overcome. This obstacle at the pulmonary capillaries provokes unwonted efforts on the part of the right ventricle, which of course becomes more or less hypertrophied. After a time the ventricle yields to the distending force of the accumulated blood, next, the auricle, and finally, the great veins and the whole of the venous system; so that ultimately asthma may end in general venous congestion and dropsy, just in the same way as primary cardiac disease. But asthma may go on for a long time without any such results. It is surprising how severe the paroxysms may be, and for how many years the disease may continue (provided the fits are not prolonged and frequent), without the heart being in the least affected. It is only in cases of very long standing, and when the fits are tedious, and leave a certain amount of permanent dyspnœa in the intervals (especially if there is some bronchitic complication), that these changes in the heart take place. As far as my experience goes, I should say that they never occurred as long as the recovery in the intervals was absolute. I cannot therefore agree with Dr. Todd (*Medical Gazette*, vol. 46, p. 1001) in the importance he assigns to evidence of dilatation of the right ventricle as a diagnostic sign of asthma. "I look upon this sign," he says, "as one of the most characteristic symptoms of asthma; and I consider its presence in any case where I suspect asthma as a clear confirmation of the correctness of those suspicions. In accordance with this view, one of my first steps in examining a patient whom I suspect to be asthmatic is to apply my finger to the scrobiculus cordis. If I find no beating of the heart there, my conclusion is a contingent negative. But if I find it beating there, and not in its natural

* Of the truth of this, any one may satisfy himself by placing his finger on his scrobulus cordis, and taking a deep inspiration, when he will immediately feel the cardiac pulsations, which will continue as long as he keeps his chest at full distension;—he expires, and it is gone. Here you have the same conditions with regard to the situation of the heart that you have in asthma, only in a less degree—lung distension and flattening of the diaphragm; in fact, in asthma the parietes of the chest, diaphragmatic and costal, are in a state of permanent extreme inspiration.

position under the nipple, my conclusion is a certain affirmative."

Doubtless, in a case of suspected asthma, evidence of dilatation of the right side of the heart would strengthen the diagnosis; but the absence of it would go no way at all to negate the supposition that asthma existed. It would simply show that one of the results of asthma had not yet arisen, and it would establish a presumption that the disease had not been of long standing, that it was unassociated with chronic bronchitis, and that it had as yet inflicted no organic changes on the lungs. A patient's heart-beat may be in every way normal, and yet half an hour ago he may have been in the agonies of an asthmatic paroxysm. The positive evidence of heart-change in asthma is of some value; its negative evidence is worthless.

3. *Emphysema* is certainly the commonest of all the morbid changes that asthma tends to produce. I should say it was extremely rare to find the lungs of those who have suffered from asthma long entirely free from emphysematous inflation. The best examples of emphysema that I have ever seen have been in the *post mortem* examinations of chronic asthma.

Adopting that view of emphysema so ably advocated by Dr. Gairdner—that it is essentially a compensatory dilatation, and implies the neighbourhood of non-expansible lung—I believe the mechanism of the production of emphysema by asthma to be as follows:—The bronchial spasm shuts off the air; the shutting off the air produces capillary stasis—partial asphyxia; the congested vessels relieve themselves by the characteristic mucous exudation; the continued occlusion of the bronchial tubes, if the spasm does not yield, shuts up this mucus, and prevents its escape, and at the same time, by barring the access of air, prevents efficient cough; so long as the spasm lasts, therefore, its escape is doubly prevented—by direct obstruction, and by the want of the natural machinery for its expulsion. The tubes affected by the asthmatic contraction thus become doubly obstructed—at first narrowed by spasm, and then completely occluded by mucous infarction. As long as the spasm lasts the escape of the mucus is impossible. In the meantime, whatever may have been the length of the attack (and we know that it often lasts for days), the inspiratory muscles are making the most violent efforts to fill the chest, and are, in fact, keeping it in a state of extreme distension.

The length of time required for the removal of air from a lobule, from which communication with the external atmosphere is completely shut off by occlusion of its corresponding bronchial tube, I do not know; so I do not know if, in an attack of asthma, any actual lobular collapse could take place, although, in a prolonged attack of some days I feel no doubt that it would. At any rate, the lobules whose bronchiæ are occluded cannot yield to the distending force of the inspiratory muscles; the whole distension of inspiration is, therefore, spent on those portions of the lungs whose communication with the external air is free; the open lobules have to expand for themselves and their occluded neighbours, and undergo an excessive inflation in proportion to the amount of lung that is non-expansible,—in other words, become emphysematous. If we consider how complete the occlusion must be by this double process of spasm and infarction, how protracted asthma often is, and how violent are the inspiratory efforts that characterise it, I do not think we shall wonder at any amount of emphysema that is thereby produced, nor at its being one of the commonest organic changes to which asthma gives rise.

It will be seen, from the account I have just given, that asthma produces emphysema just in the same way that bronchitis does. The two processes are essentially identical. In the one case the bronchial tubes are narrowed by inflammatory thickening of their walls and occluded by inflammatory exudation (muco-pus); in the other, they are narrowed by spasmodic contraction and occluded by the exudation of congestion (viscid mucus). The only difference is, that the narrowing and occlusion of bronchitis are generally of longer duration than those of asthma.

I think Dr. Walshe is quite right in his opinion that "The connection of emphysema with spasmodic seizures is certainly sometimes, possibly always, dependent on an intervening irritative or passive congestion of the tubes." That it is so sometimes I think is certain, because I think that congestion of the tubes is the immediate result of prolonged spasm. But is it always? If not, then emphysema may result from the spastic occlusion of the tubes without any mucous infarction. Is this possible? Is asthmatic spasm ever so complete and continuous as to produce the results of plugging,—lobular isolation, and collapse? This is a question that I think would be very difficult, at present perhaps impossible, to answer. One thing I feel strongly persuaded of, that it is not necessary that there should be any bronchitic complication, anything actually inflammatory, in order that asthma should result in emphysema. I have seen emphysema developed in a case of asthma in which bronchitis never existed.

It is hardly worth while for me to describe the symptoms that mark the closing scene of those miserable cases of asthma that terminate in the production of these organic changes in the heart and lungs that I have just been describing. When once the right cavities of the heart have become dilated and the obstructing force retrogrades upon the systemic veins, the symptoms are not to be distinguished from those which characterise a similar condition induced by chronic bronchitis. The cases differ alone in their previous history. There is the same rattling wheeze, the same choking cough, the same orthopnœa, the same abundant frothy expectoration (but in the case of bronchitis more purulent), the same venous regurgitation, the same choked-up breathlessness, getting ever worse and worse as the œdema and congestive solidification rise higher and higher in the lungs, the same general œdema beginning at the feet and gradually creeping up the trunk, the same cyanosis. The sufferings of this gradual choking-out of life are most painful to witness till the increasing heaviness from the circulation of venous blood in the brain deepens into the insensibility which ushers in dissolution.

OBSERVATIONS ON SOME OF THE OBSCURE FORMS AND VARIETIES OF AGUE: WITH GENERAL REMARKS ON THE DISEASE.

By E. Garraway, Esq., Faversham.

[*Read before the East Kent and Canterbury Medical Society.*]

The phenomena of ague, so characteristic, so well known, and so often witnessed in this division of the county, might well be supposed to afford no difficulties in diagnosis; and when developed in its three consecutive stages of cold, fever, sweat, followed by immediate recovery, there can be none; but the variations which these phenomena assume, their sometimes absence, and their not unfrequent substitution by other symptoms, apparently totally unconnected with ague, and only known to be in alliance with it by their remission and return, render its discrimination a matter occasionally of no slight embarrassment.

You are sent for to a young man in previously good health, who is suddenly seized with great pain in the side, accompanied by severe vomiting, with or without acceleration of pulse, according to the time he may have been under the influence of the attack. You discard the idea of any inflammatory affection, and have little hesitation in pronouncing the case one of passing gall-stones. Nothing of the kind! Wait awhile, and your patient breaks out into a profuse sweat, and in a few hours is well; only, however, to have a repetition of the seizure on the next day or the day following.

A mother sends in terror for you to see her infant, perhaps only three or four weeks old. The child is cold; its extremities are blue; pulse almost imperceptible;—in short, the little creature appears moribund. You think of imperfectly closed foramen ovale, of internal hæmorrhage, of accidental poisoning,—you do not know what to think, and communicate your fears to the anxious parent. Needless alarm! In due course the infant becomes warm again, then hot, and finally covered with beads of perspiration. This also was ague.

You are called to a child in convulsions, or to a supposed case of brain fever; perhaps, a young woman, whom you find delirious, with quick pulse, dry tongue, and burning skin. You are strongly tempted to leech, blister, and adopt antiphlogistic treatment; but, on inquiring, find that two days preceding the young woman or the child was similarly affected, though possibly in a lesser degree. This is all-sufficient for your diagnosis, you predict a resolution by sweat, and in a few hours your patient is recovering for that time.

The next case you find in bed, with a burning skin, rapid pulse, parched brown tongue, every limb racked with pain,—in short, all the symptoms of a low, continued fever. Such you pronounce it, and order aperients and salines. To your astonishment, on calling the following day, you find your patient eating his dinner, with a moist, clean tongue, cool skin, quiet pulse; in fine, convalescent. You rejoice with him on his speedy recovery. Vain exultation! To-morrow he is worse than ever;

his tongue like brown toast; and did not the intermission enable you to call it ague, you might well be excused for pronouncing it a case of approaching typhus.

You are hastily summoned by the friends of an old gentleman to find him in a state bordering on coma. He is prostrate on the sofa, his eyes half closed, his mouth open, his pulse feeble and intermitting. He appears neither to know nor understand you, as you can elicit no answer to your questions. Reflecting upon his advanced age, you think of cerebral degeneration, of ramolissement or ossification; communicate your alarm to his relatives, and think your octogenarian friend is at length going the way of all flesh. Not at all. "Doctor!" he exclaims the next day, with his bottle of port before him, "I've had a pretty good dose of your physic, now you must take a glass or two of mine." To-morrow, of course, the old gentleman is down again; but you push quinine vigorously, and he is soon well.

All who have any extensive experience of ague will readily admit that these are no exaggerated nor fancy pictures; but are really taken from the life; indeed, I have each individual case to which I have alluded in my mind's eye at this moment.

But various and multiform as are the phases of intermittent fever or ague, still more are the protean manifestations of its kindred affection, neuralgia, which, in this neighbourhood at least, almost invariably assumes the intermittent form. It is needless to weary you with the attempt to enumerate the seats of this most painful—often excruciating—disorder. Let it suffice that wherever nerves of sensation are distributed there may it fix its seat, simulating, like hysteria, a variety of inflammatory and other serious maladies, to which, however, it bears really no affinity whatever. It is worthy of note, too, that generally speaking no derangement of the prima via, no local nor constitutional cause can be traced as originating or keeping up the disorder, most of its subjects being, during the intervals of pain, in the enjoyment of perfect health. The cause must be sought for from without, that which originates ague in one constitution giving rise to neuralgia in another.

There is no question at all that marsh miasmata constitute the direct primary exciting cause of intermittent; and although it may be reinduced in a system already rendered prone to its invasion by exposure to cold and damp—the easterly wind, foul air, mental or physical depression, impoverished diet, etc.—yet these alone are not sufficient primarily to excite a paroxysm in one who may have been fortunate enough hitherto to have escaped its onslaught.

For the last year or two ague has been unusually rife in this locality; indeed, for universality and severity, I have seen nothing like it since my first acquaintance with Faversham, now some twenty years ago. People of all ages and conditions have succumbed to it. I have been attending at the same moment patients from a fortnight old to eighty years. It has penetrated far and wide over the country, into districts where intermittent has scarcely ever before been known; and, taking into consideration the exceedingly dry character of the last two winters, the public who think of ague in connection with wet and cold are sorely puzzled to account for its ravages. My medical brethren have, however, doubtless long since come to the same conclusion as myself, namely, that to these same exceedingly dry seasons may be attributed whatever extension of ague we may have had beyond its accustomed limits. During the year 1858, meteorologists tell us that there was a deficiency of rain to the extent of six or eight inches, a very large amount; but they do not tell us that there was any material alteration in the hygrometric condition of the atmosphere. It appears to have contained its due proportion of moisture notwithstanding the earth's surface was for a considerable time preternaturally arid and dry. Whence then was this moisture derived? Obviously from such collections or natural supplies of water as might be nearest at hand; and in the case of Faversham, Sittingbourne, Milton, and the surrounding country, the supplies were necessarily drawn from the extensive tracts of marsh land in connection with the river Medway and the Swale. Evaporation here went on to an enormous, probably an unprecedented, extent; and the prevailing winds carried the miasmata thus borne aloft far and wide over the county. It will be remembered too that last winter was particularly mild, there was almost no frost, and consequently little check to the vegetable decomposition which, rapid in warm weather, is generally suspended more or less during the colder months. Every circumstance, then, was favourable to the generation of the miasmata which we acknowledge as prime source of ague. One curious instance I met with of the direct and immediate influence of marsh effluvia. It occurred in a gentleman connected with the oyster fishery, who, as often as he took a short cut across one particular marsh to the oyster beds, was seized with ague; but on making a circuit of a mile and a half out of the direct route, he as invariably escaped.

After no inconsiderable experience of intermittent fever, I must confess that my notions of its pathology are of the cloudiest character. It is easy to comprehend the sequence of phenomena constituting the fit; but why, after this, a state of perfect health should supervene—why, in twenty-four, forty-eight, or seventy-two hours, there should be a recurrence of the attack—why this should be repeated at regular intervals, again and again—why a few doses of quinine should immediately break this chain of action—why a strong mental impression, as from the effect of so-called charms, should sometimes accomplish an instantaneous cure, tending to the inference that ague is purely a nervous disorder—why, precisely at the end of a fortnight, or, as the popular idea is, at the change of the moon, if quinine be early discontinued, the fit should recur, not certainly invariably; but by no means infrequently. All these are matters to my mind involved in utter mystery, and I doubt whether our pathology of intermittent is very much in advance of what it was two hundred years ago. Even the learned Sydenham, who generally contrives to find some quaint reason for everything, and explains the most recondite phenomena of disease, completely to his own if not to our satisfaction, after sagely discoursing upon the turgescence, fermentation, and despumation of the blood, says, in allusion to the *hidden fomes* not pursuing its effervescence alike in all agues, "for sometimes it requires one day, sometimes three, before it comes to maturity and makes a new fit. I say, if any one should inquire about this matter, I would plainly confess I knew not, nor has any other that I know, sufficiently explicated this hidden work of nature."

He has an ingenious way of accounting for the long persistence of ague in the system by regarding it as an ordinary fourteen or twenty-one day fever, eliminated, or carrying on its fermentation at intervals instead of continuously; for example, a quartan, he says, lasts six months, and allowing five hours and a half for every fit, you will find at the end of this period it has occupied exactly three hundred and thirty-six hours, or fourteen days, and so of the other forms. In our time, unless ague take its departure after two or three shakings, medical aid is had recourse to, so that when its natural termination might arrive it is difficult to say; but I fancy it would display a most uncertain and irregular character.

We do not find, at all events in this neighbourhood, that agues inflict any severe or permanent injury on the constitution, the enlarged spleen or ague-cake is not often detected; perhaps, not often enough looked for; for these disorders, from their frequency, come to get treated as matters of routine. At all events, save temporary internal congestions which, for aught I know, may be the cause and not the effect of the paroxysm, we do not find evil consequences arise. Of course there are exceptions, but I can only call to mind one family in whom life was really imperilled by continued exposure to marsh miasmata. These people had removed from a more inland district to the borders of a marsh; they immediately became aguish, and, unless constantly under the counteracting influences of quinine, continued so. The once sturdy, ruddy children grew white, thin, flabby, and the youngest, an infant, died. The father, formerly robust, strong, and energetic, became pallid, feeble, and seldom fit for work. The mother fared worse still; for, in addition to the failing powers which she shared in common with the rest of the family, she was frequently suffering from attacks of what I then considered hepatitis, although subsequent experience has led me to conceive that these might possibly have been only neuralgic seizures; still, accompanied as they were with a very rapid pulse and acute pain, one was fearful of not treating them in some degree antiphlogistically. At length the poor woman became gradually so utterly prostrate and anæmiated—her pulse, a mere thread, always ranging over 120—her aspect that of one dying of hæmorrhage—that her husband consented to have her lifted from her bed, put into a cart, and brought to Faversham; a removal of not more than two miles. He and his family followed. From that moment they one and all began to improve, and to this day there is not a more hard-working, hearty, and robust family in the neighbourhood. This is, I say, an extreme case, such as I have met with once and only once. These people, it will be observed, were new comers; and new comers, I need scarcely tell you, always suffer most.

The acclimatised, or the natives, who are "to the manner

born," if they have ague do not appear to mind it. One old man I remember, who lived in a cottage on the marsh, and rejoiced in the ever green name of "May," continued in blossom for 101 years, notwithstanding he took his turns of ague with the rest.

In a disease concerning the pathology of which our notions are so indefinite and vague, it is no marvel that our treatment partakes of the empirical; nevertheless, we may boast of having made some advance since the days of Sydenham, who says, "As to the cure of spring agues, I ever thought they were to be left to themselves without doing anything, because I never knew any one destroyed by them; and, on the contrary, that those who endeavoured to cure them made them only more obstinate and lasting."

We all now cure ague with the disulphate of quinine; but I am afraid none of us would give a very lucid explanation of its *modus operandi*, notwithstanding we look upon it almost as specific. Our intermittents here, with scarcely an exception, are all amenable to this remedy. We precede its administration by a calomel purge, repeating this, if there be hepatic congestion, as often as may be required; push the quinine, not waiting for a clean tongue, to the extent of about twenty grains in the interval, and if our patient does not escape the next threatened attack, which, however, he frequently does, we may safely promise him immunity from any further seizure.

In obstinate cases, we combine the liquor potassæ arsenitis with the quinine. Arsenic alone requires time to produce its effect on the system, and we have seldom patience to wait when the more speedy remedy is at hand. In those cases which recur at the end of a fortnight, a few doses taken on the day or two preceding the expected ague-fit prove effectual in preventing it. The same mode of treatment is generally applicable to neuralgia in its multitudinous forms, although it must not be expected that these should yield so readily as simple intermittent fever; but quinine is still *the* remedy, in combination either with steel or arsenic. I have had little experience of the hydrochlorate of ammonia, so frequently prescribed by Dr. Watson, quinine proving all-sufficient for our needs; and I doubt not this is the experience of every one practising in localities where marsh miasmata are engendered. Change of air, provided it be sufficiently far from any source of malaria, is equally efficacious in arresting the disorder, but patients frequently have it again soon after their return; indeed, in those who are susceptible to the influences of marsh poison, nothing short of an entire removal will wholly do away with the liability to an occasional attack, a measure, however, unnecessary to be thought of so long as we have at command an antidote so powerful and efficacious as the disulphate of quinine.

CASE OF HÆMATURIA: CANCER OF BLADDER AND KIDNEYS: TUBERCLE IN LUNG.

By John W. Goodwin, M.D., Physician to the Suffolk General Hospial, Bury St. Edmund's.

T. J., aged 60, by trade a plasterer, first consulted me in December 1856. His history was that until two months previously he had enjoyed good health, when he was seized with pain in the loins, and suffered some pain at the time of passing water over the region of the bladder; this pain extended down his thighs; he also experienced a difficulty in passing water for the first time in his life, and observed that he passed one day about three tablespoonfuls of blood, after endeavouring to pass urine. Since this time he had occasionally passed quite clear urine, but it usually contained a good deal of blood. When I saw him, he looked sallow and cachectic, and his pain in the loins was very great and constant, and caused him to endeavour to pass urine very frequently. Pressure over the bladder did not cause pain. There were two enlarged inguinal glands on the right side. After passing urine, he suffered pain at the end of the penis. He had never observed the stream of urine to be forked or stop suddenly. I directed him to be cupped every other day to a small amount of blood, and to apply the glasses for a considerable time each day, and to take ten grains of gallic acid with henbane and infusion of roses three times daily, and to keep in bed.

Upon examining his urine under the microscope, I found pus globules, red and white corpuscles of blood in large quantities, squamous epithelium, with large granular nuclei and nucleoli; large round epithelium containing many resplendent granules, probably from the fundus of the bladder; and caudate and round cells with resplendent granules. I made a great many examinations during the time the patient was under my care, with the same results.

I tried lead and other styptic medicines without any marked effect, and he continued much in the same condition for three weeks, when I gave him the tincture of sesquichloride of iron in frequent small doses. He then continued about five days without passing blood, when he began to suffer from incontinence, and also from tenesmus and constant desire to evacuate the bowels. He was evidently getting weaker daily, and sank gradually, and died on the 17th January, 1857.

A *post mortem* examination was made on 19th January. The left lung, adherent at the apex to the costal pleura, contained several little masses of tubercular deposit, many in a state of suppuration, and several little cavities, of about the size of peas. The right lung was healthy. The heart was healthy. The liver contained one mass of cancerous matter, of about the size of a walnut, in the anterior part of the larger lobe; this tumour was not encysted nor prominent from the surface, but was solid throughout, and somewhat denser than the hepatic tissue. The right kidney was slightly enlarged, and, with its cortical and intertubular portions, was white and condensed. There was no mottling or granulation of the surface, the capsule readily peeling off. The left kidney was much larger than the right, with much cortical and interconical deposit. The bladder was much contracted; its walls were thickened to four or five times their natual size by the deposit of an uniform whitish material. From its mucous surface sprouted several small lobulations, having the same whitish appearance; there was no blood on their surface, but two small clots were found in the cavity of the bladder. The largest of these outgrowths was situated just behind the prostate, and was as large as a hazel-nut.

Such were the morbid appearances found; and my friend, Dr. Eade, was good enough to assist me in the microscopic examination of the morbid specimens.

The contents of the small pulmonary cavities were chiefly granular tubercle-corpuscles, masses of molecular matter, pus globules, and large oil globules, with one or two fragments of yellow elastic tissue. The juice scraped from the white tumour in the liver, showed myriads of very transparent cells of all conceivable forms; some contained one, others two or more nuclei, these nuclei containing nucleoli; some cells contained a large number of resplendent granules. The fluid scraped from the yellowish-white intertubular deposit in the right kidney showed cells rather smaller than those in the liver; many rounded, others fusiform, or variously shaped; most of them with a large and very distinct nucleus, and all granulated on the surface, some with two or more nuclei. The fluid from the left kidney contained a great many cells, but of smaller size, more like pus with bright central globules; here and there a caudate cell of a larger size was seen. Much free oil was present. The bladder-tumours were evidently medullary; and they were examined, with similar results as above.

Remarks. Hæmaturia, as is well known, depends on a variety of causes, and in some cases it is often rather doubtful as to what the immediate cause may be, or where it is situated. Dr. Watson says in his *Lectures* that, as a general rule, most cases of hæmaturia, which appear to be doubtful, will prove to be renal. I think this is the case, but still I think that we have such a powerful assistant in the microscope, that our difficulties of diagnosis are very much diminished. In this case, after one or two examinations of the urine, which was like porter and deposited very little sediment, I found such unusual appearances for urine, that I at once suspected the nature of the case—such cells, so constant and of such complicated character, could indicate, I imagined, nothing but cancer, and that of the bladder, and an opinion to that effect was expressed.

I have thought it desirable to publish this case, as it is, I think, interesting as regards the microscopic information which I obtained, and also that it furnishes an instance of an exception to the law which asserts that cancer and tubercle do not coexist in the same subject. There were no pulmonary symptoms during life, so that I never examined the lungs; but had I done so, no doubt there would have been auscultatory evidence of the tubercular disease, as there were small cavities, as well as softening tubercle. I should consider the disease in the bladder to be primary, and that in the kidneys and liver secondary deposit.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY
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Lecture IV.

Urine in Disease. *Arrangement of the Subject. Diathesis.* Excess or Deficiency of Water and the Organic Constituents present in Health. *Excess of Water: Diabetes Insipidus: Deficiency of Water: Increased Acidity of Urine: Principles of Treatment: Nitric Acid in the Urine: Ammonia: on Detecting Urea in the Blood or Serum: on Detecting Ammonia in the Breath: Urea; Excess of Urea; Deficiency of Urea: Colouring Matter: Excess of Uric Acid and Urates: Principles of Treatment: Extractive Matters: General Remarks on the Increase of the Organic Constituents, with Analyses: Analyses of Urine in Chorea: Analyses of Urine in Skin-Disease.* Excess or Deficiency of the Inorganic Constituents present in Health. *Chloride of Sodium; its Diminution in Acute Inflammations: Sulphates; Increase in Cases of Chorea, Rheumatic Fever, etc.: Influence of Remedies: Alkaline Phosphates; Increased Secretion of Alkaline Phosphates in Inflammation of the Brain; Analyses; Earthy Phosphates; Increase in the Urine of Cases of Mollities Ossium; Analyses.*

Urine in Disease.

Before I describe in detail the particular characters in which a specimen of urine may differ from the secretion in its normal state, it is desirable to consider one or two questions of general interest, which can be more advantageously discussed here than in a future part of the course. It is also necessary that I should give you a sketch of the order in which the subject will be treated of.

Many alterations in urine, which have been termed "*morbid*", really depend upon increased or diminished activity of the same chemical changes which occur in health. It is often very difficult to decide how far an alteration in the quantity or quality of the constituents should be attributed to physiological changes, or referred to morbid actions. We must also carefully bear in mind that important changes often occur after the urine has been passed, and may be due to the action of the air, fermentation caused by the presence of mucus, and a number of other circumstances. There are many alterations in the urine, depending upon a temporary derangement of those actions which occur in a state of health, which would not be properly described under the term healthy, but which, nevertheless, cannot properly be called morbid. I do not attempt, therefore, to divide *accurately* healthy urine from morbid urine, and only wish you to look upon this as a sort of rough artificial division, adopted for convenience alone. Indeed, all such divisions are quite artificial; and no one attempts to assign accurate limits even to large and important branches of natural science, as anatomy, physiology, histology, botany, medicine, surgery, etc., which, merely for convenience, are treated of as separate subjects.

The functions of digestion, respiration, and circulation, are intimately concerned in the formation of those substances which are removed from the system in the urine. The characters of the secretion are much affected by the state of the skin and the action of the liver; and there are many other circumstances which may cause an alteration in the urine, independently of those numerous affections to which the urinary organs are exposed. Disease of the secreting structure of the kidney, or of any part of the complicated and extensive efferent channel by which the urine is carried off from the gland, may cause very important alterations in the characters of the secretion. Now, it is of great importance to us, as practitioners, to know that an examination of the urine materially assists us in endeavouring to ascertain the exact nature and precise seat of the derangement. Sometimes we are able to diagnose the morbid alteration from an examination of the urine alone; but in almost all cases an examination of the secretion affords important information bearing on the nature of the case. Certain substances, which are ordinarily eliminated in the urine, may, in consequence of morbid actions having been set up, be attracted to other parts of the body, or be eliminated through other channels. When the kidney itself is affected, the morbid condition may be temporary or permanent; and this can often be ascertained with certainty by examining the urine. The mucous membrane of the pelvis of the kidney, of the ureter, or of the bladder, may be the seat of the lesion, and thus the characters of the urine may be altered in a very important manner; or lastly, a certain effect may be produced by the growth of adjacent tumours, by causing pressure, altering the structure of the organs, etc.

The *ordinary constituents* may be in greater or less proportion than in health, or certain *soluble substances* not met with in the healthy secretion may find their way into the urine. As I have before remarked, a little mucus from the urinary passages is the only deposit which occurs in health. In disease, *insoluble deposits* are commonly met with. Substances which are comparatively, though perhaps not absolutely, insoluble (being soluble in a very large quantity of the secretion), may float upon the surface of the urine, or may be suspended throughout the fluid.

By *microscopical examination*, combined with chemical tests, we can make out the nature of a deposit. By *chemical analysis* alone, we can ascertain an abnormal proportion of substances present in health, or estimate the quantity of such as are not found in the healthy secretion.

Diathesis. Let me now ask your attention for a few minutes to the question of diathesis. The "uric acid", the "phosphatic", the "oxalic", the "sulphuric" *diatheses*, and others, are constantly spoken of. It is well that we should try to discover exactly what is understood by this term in such frequent use, and consider whether any real advantage is gained by employing it in the manner in which it is generally used. Although this word has been employed by very high authorities since the time of Dr. Prout, there appears to be some objection to its use as an explanation of the causes of the production of urinary deposits.

In the first place, with reference to the *uric acid diathesis;* this term has been applied to all cases in which the urine habitually contains deposits of uric acid and urates. This precipitation of uric acid in an insoluble form is due to a change taking place in the urine, at least in the majority of instances, after it has been secreted. Excess of uric acid may exist in the urine in two states, *dissolved in the fluid*, and in the form of an *insoluble deposit.* In the first case, the practitioner would not be cognisant of the excess; and a person may be passing a very considerable quantity of urates, in a state of solution, for a long time, without any notice being taken of the fact. On the other hand, a patient's urine may contain only the healthy proportion of uric acid; but this, owing to a change taking place after it has left the bladder, might be deposited in an insoluble form. From this circumstance alone, it would be inferred that the last patient had a disposition to the formation of a large quantity of uric acid (*uric acid diathesis*), while really there might be a much larger amount produced in the former instance.

Persons whose urine has deposited triple phosphate and phosphate of lime have been said to suffer from the phosphatic *diathesis;* while the deposition of the sediment depends, at least in the great majority of cases, upon a change effected in the urine after it has left the secreting part of the organ, and has not necessarily anything to do with the habit of body or peculiarity of constitution, or with the state of the blood.

Dr. Bence Jones defines the phosphatic diathesis and the sulphuric diathesis in the following terms:—"What I wish to impress upon you now is, that the true phosphatic diathesis—that is, the occurrence of an excess of an alkaline and earthy phosphates in the urine—may not make itself apparent to the eye. The alkaline phosphates may be present in an inordinate excess; and, as in the sulphuric diathesis, the sulphates may be immensely increased," etc. (Lectures on Digestion, Respiration, and Secretion, *Medical Times and Gazette*, March 27th, 1852.)

Now, in these cases, what is observed is, that a greater proportion of certain constituents is excreted in the urine than occurs in perfect health. The different physiological conditions under which an excess of many is produced are well un-

derstood, and the result cannot be referred to any peculiar habit or diathesis. If we speak of the *sulphuric acid diathesis*, we must, of course, admit the *urea diathesis;* for usually, when the sulphates are in excess, a corresponding increase in the proportion of urea exists. On the same principle, we might speak of the *extractive diathesis* and the *water diathesis*. It would be quite as fair to talk of the *carbonic acid diathesis* when an increased proportion of carbonic acid was exhaled, etc.

Many of the above remarks will apply to the so-called *oxalic diathesis*. The presence of these substances, and the increase of those materials which exist in health, depend upon the action of well known laws, and result as the natural consequence of confinement, exposure to cold, particular food, etc. No peculiar diathesis can be discovered in persons who pass urine having these characters: in fact, in the majority of cases, the peculiar condition is only of temporary duration; and it therefore seems to me that the term *diathesis* is quite inapplicable. We may perhaps speak of the *gouty diathesis*, and of the *rheumatic diathesis*, with more propriety, because here there certainly is a peculiarity of constitution, which may be transmitted from parent to offspring, and which is characterised by the invariable presence of certain morbid actions which exist in the conditions familiar to us under the terms *gout* and *rheumatism*. But of the actual state of the blood, and condition of the vital processes, which lead to the symptoms with which we are so familiar, we really know very little; so that it seems to me better, even in this case, to discard the terms, and say that a patient suffers from attacks of gout or rheumatism, instead of attempting to hide our ignorance of the essential nature of these morbid states under a learned term, the meaning of which cannot be well defined. I shall venture, then, to discard altogether the use of the word *diathesis* in the discussion of morbid states of the urine; and I think we shall be in a better position to investigate the causes of changes occurring in the urine in disease, and to study the manner in which urinary deposits are formed.

I propose to draw your attention to the subjects in the following order:—First, cases in which there is excess or deficiency of any of the normal constituents of urine. Secondly, I shall refer to the characters of certain soluble substances in the urine in disease, which are never met with in a state of health; and then propose to give a brief sketch of the anatomy and physiology of the kidney, including some of the most important morbid changes which occur in the organ, especially with reference to the formation of casts of the uriniferous tubes. This leads us to the subject of *urinary deposits;* and we shall consider the various plans for collecting and preserving them, and the characters of the extraneous matters which are often present accidentally. The insoluble substances constituting *urinary deposits* will be divided into—

a. Substances floating on the surface of the urine, or diffused through the fluid.
b. Light and flocculent deposits.
c. Dense and opaque deposits.
d. Granular and crystalline deposits.

The subject of *urinary calculi* follows next in order; and lastly, I propose to draw your attention to the apparatus of use for the microscopical and chemical examination of urine, urinary deposits, and calculi; the volumetric analysis of urine; and other points of practical importance in investigating the characters of the secretion.

Let us now proceed to the consideration of specimens of urine, in which an excess or deficiency of the normal constituents of the secretion is observed.

Excess or Deficiency of Water and the Organic Constituents.

Water. The varying quantities of water removed from the body, in different physiological states of the system, have been already referred to. We are all familiar with the relations existing between the functions of the skin and intestinal canal and the kidneys. The same laws hold in disease. If the kidneys be diseased, and the intestinal canal, the skin, and the respiratory apparatus, be tolerably healthy, the latter to some extent fulfil the work of the kidneys. In skin-diseases, and in certain affections of the intestinal canal, increased work is thrown upon the renal apparatus. In the treatment of such cases, the practitioner must bear in mind the existence of these relations. There are, however, certain affections in which the quantity of water removed from the body is greatly increased. In various hysterical and other emotional affections, large quantities of pale urine, containing but a small quantity of solid matter, are frequently voided. Some persons habitually pass very dilute urine, which is not very easily explained, but is probably to be looked upon as an individual peculiarity, corresponding to the constant sweating, and to the unusual amount of action of the alimentary canal, occasionally met with in persons who enjoy good health. It has been already remarked, that water increases the disintegration of tissue; and when a large amount of fluid is taken, the total quantity of solids removed in the urine is greater than in health. When the solids as well as the water are greatly increased in quantity, we should be led to fear the existence of diabetes. An unusual quantity of urine, of very high specific gravity, and therefore containing a large amount of solid matter, is almost characteristic of this condition.

Diabetes Insipidus. The majority of the so-called instances of diabetes insipidus are cases in which there is great thirst, and a large amount of water is removed from the kidneys daily (*diuresis*); but the total quantity of solid matter is not above the normal standard. In a few of the cases recorded, it would appear that the latter is also much increased; but these must be very rare. There is no sugar in these cases. I have seen cases in which the quantity of water passed as urine was two or three times as great as that said to have been taken in the food; but I firmly believe that deception was practised, and that the patient got water by stealth. Of this condition, termed by some authors *diabetes insipidus*, I know but little. I do not think that the condition is sufficiently well characterised to give to it the title of a distinct disease; I believe it depends merely upon a large quantity of water having been taken. The following analysis represents the composition of the urine in one of these cases. It was obtained from a man aged 45, in King's College Hospital, under Dr. Todd, who was passing about eleven pints of urine *per diem*, while he was drinking about thirteen pints of liquid. Reaction feebly acid; specific gravity 1002·8.

Analysis 1.

			In 24 hours.
Water . . .	995·91		
Solid matter . .	4·09	100·00	394
Organic matter .	2·79	68·22	268
Fixed salts . .	1·30	31·78	125

The quantity of urea excreted in twenty-four hours in this case was very small, which confirms the observation of Bischoff, that the ingestion of a large quantity of water diminishes the excretion of urea. At first, the total quantity passed in twenty-four hours is above the average, because much is washed out from the tissues by the large quantity of fluid; but afterwards it falls, because less is formed in the organism than under ordinary circumstances. The proportion of inorganic salts to the organic constituents of the urine is very high, though the total quantity is less than is passed in health.

Deficiency of Water is, in the great majority of cases, associated with an abnormal quantity of solid matter. The ingredient which is usually in excess, and to which the urine owes its great density, is urea; so that urine of this character will be more conveniently considered presently. There are cases in which a very small quantity of urine, containing but a small percentage of solid matter, is passed; but in these *albumen* is present, and they will be considered under this head. When the total amount of urine is very small, and the secretion contains but little solid matter, the secreting structure of the kidney will probably be found to be very much impaired; and it is necessary to endeavour to make other organs take part in eliminating from the system substances which normally pass off in the form of urine.

Increased Acidity of Urine. The causes of the reaction of healthy urine have been already considered in Lecture I, and it is therefore unnecessary to pursue this part of the subject farther. Vogel states that, in chronic and acute diseases, the quantity of free acid is diminished for the most part. In many cases of pneumonia and rheumatic fever, however, the quantity of free acid is much greater than in health.

A highly acid condition of the urine, persisting for a long period of time, may cause the precipitation of uric acid, and so lead to the formation of a calculus. Acid urine not unfrequently causes irritable bladder, and excites other morbid actions. In most cases, the salts of the vegetable acids (citrates, acetates, tartrates) will be found more efficient in counteracting this acid state of the urine, than alkalies or their carbonates, and are less likely to interfere with the digestive process. There are, however, low conditions of the system in which the acid state of the urine, and a tendency to the deposition of uric acid in large quantity, are not relieved by alkalies;

on the contrary, such cases are often much benefited by an opposite plan of treatment—tonics and the mineral acids before meals, a nourishing diet, with a moderate supply of simple stimulants with a little alkali, or given in alkaline waters. Pepsine is often of great use in these cases. Many of them seem to be intimately connected with impaired digestive power. The acid state of the urine may then depend upon very different conditions of the system, and these must be carefully considered in each individual case before any plan of treatment is suggested.

An *alkaline condition* of the urine may be due to several causes, and requires, therefore, to be treated on different plans. The connexion between an alkaline state of the urine, depending upon fixed alkali, and the secretion of a highly acid gastric juice, has been already referred to. In such cases, attention must be paid to the state of the digestive process; and, when this is set right, the urine will regain its normal characters. Dr. Bence Jones (*Medico-Chirurgical Transactions*, vol. xxxv) alludes to three cases of dyspepsia with vomiting of a very acid fluid (two of them rejecting sarcinæ), in which the urine became alkaline from the presence of fixed alkali when the quantity of acid set free at the stomach was very great; but, when this was small, the reaction of the urine was acid. It must, however, be borne in mind that the very acid nature of the materials rejected in many cases of vomiting, and especially in cases of sarcinæ ventriculi, arises, not from the secretion of an acid fluid by the glands of the stomach, but from the decomposition or fermentation of the food when acids are developed, among which may be mentioned acetic, lactic, and butyric acids. At the same time, there can be no doubt that, in many cases of dyspepsia, the feebly acid or alkaline condition of the urine arises from the secretion of an abnormal amount of acid by the stomach. "The degree of the acidity of the urine may, to a certain extent, be regarded as a measure of the acidity of the stomach." (Dr. G. O. Rees, *Lettsomian Lectures*, 1851.)

Dr. Rees has drawn attention to a large class of cases in which he explains the alkaline condition of the urine as follows:—Urine which is highly *acid* at the time of its secretion, irritates the mucous membrane of the bladder, and causes it to secrete a large quantity of *alkaline fluid*. This mucous membrane in health secretes an alkaline fluid, to protect its surface, just as occurs in the case of some other mucous membranes. Under irritation, more alkaline fluid than is just sufficient to neutralise the acid of the urine is poured out; and hence the urine, when examined, is found to have a very alkaline reaction. In such cases, this highly alkaline condition is removed by giving liquor potassæ or some other alkali, or a salt of a vegetable acid which becomes an alkali in the system. The urine is not secreted so acid, and therefore does not stimulate the mucous membrane to pour out so much alkaline fluid. I know no observations to contradict Dr. G. O. Rees' explanation of the fact that, in some cases, *alkalies cause the urine to become less alkaline, or even restore its acid reaction;* yet one would hardly expect, if this be the explanation in cases generally, that the natural reaction of urine would be acid. If there was danger of the healthy mucous membrane suffering from the contact of a fluid only a little more acid than that destined to be continually touching it, should we not expect it to have been of such a character as to resist this action like the mucous membrane of the stomach, instead of being excited to secrete a fluid of such a nature as might lead to its own destruction? Again, the mucous membrane of the bladder bears very well the contact of acid fluids which are sometimes injected; and patients sometimes for years pass intensely acid urine, without the secretion of this excess of alkaline fluid from the mucous membrane.

Nitric Acid in the Urine. Dr. Bence Jones (*Philosophical Transactions*, 1851, p. 399) has been led to the conclusion that ammonia, in its passage through the organism, gives rise to the production of a certain quantity of nitric acid, which is eliminated in the urine. He found that the acidity of the urine was not diminished by giving large quantities of carbonate of ammonia; and that, in some instances, the acid reaction seemed to be increased. While tartrate of potash soon rendered the urine alkaline, this effect was not produced by the corresponding salt of ammonia.

The following test, suggested by Dr. Price, was employed for the detection of the nitric acid, in preference to the indigo test. By this plan, one grain of nitrate of potash dissolved in ten ounces of urine was detected with the greatest certainty. From four to eight ounces of urine were mixed with half an ounce of strong and pure sulphuric acid, free from nitric acid. Two-thirds of the mixture were distilled over; and, after being neutralised with pure carbonate of potash, the distillate was evaporated to a very small bulk. From a drop, to half the residue, was mixed with the following test-solution. To a solution of starch, a drop or two of a solution of iodide of potassium, specific gravity 1052, and very dilute hydrochloric acid, specific gravity 1005, were added. If nitric acid is present, the iodine is set free, and a blue iodide of starch is at once formed.

Another portion of the residue was placed in a basin, and a very small quantity of indigo, with excess of sulphuric acid, added. If nitric acid was present, upon applying heat for a few minutes, the colour of course disappeared.

From numerous experiments, varied in many ways, Dr. Bence Jones came to the conclusion that ammonia in the organism is partly converted into nitric acid. The nitrogen of the air also, in ordinary combustion, unites with oxygen to form nitric acid. Urea and caffein, and other substances containing nitrogen, give rise to the formation of a small quantity of nitric acid. Although Lehmann has failed to confirm these results, he has not, I think, succeeded in shaking the evidence in favour of this view. Dr. Bence Jones brings forward several cases of healthy persons whose urine did not yield a trace of nitric acid; but, three or four hours after they had taken carbonate of ammonia, evidence of the presence of the acid was afforded by the starch and also by the indigo test. After twelve hours, only a trace could be detected; and, in twenty-four, even this ceased to be perceptible. The urine was examined in precisely the same manner in every case. I think, therefore, we may conclude that a small amount of ammonia in the organism is converted into nitric acid; and it is not improbable that, under certain circumstances, the quantity of nitric acid formed in this manner may be very much increased.

Ammonia. Numerous experiments seem to show that in health a small quantity of ammonia escapes in the urine. Neubauer has conclusively proved that certain ammoniacal salts pass through the organism, and may be detected in the urine unchanged. Ammonia, as is well known, is very easily produced by the decomposition of the urea; but it is almost certain that a small quantity passes into the urine from the blood, independently of that derived from this source.

In disease, the quantity of ammonia present in the urine is often so great as to be smelt all over the room in which the patient lies; but in these cases the ammonia arises from the decomposition of the urea after the urine has left the bladder, and in some it is decomposed even while it yet remains in this viscus.

It is doubtful if a large amount of ammonia under any circumstances accumulates in the blood afterwards to be excreted in the urine, as it is probable that, if formed, it would escape more rapidly from the lungs or intestinal canal. The doctrine that the coma occurring as a sequel to many cases of kidney-disease, depended upon the accumulation in the blood of ammonia produced by the decomposition of urea, was originally put forward by Frerichs. In some of these cases of renal coma, ammonia is present in abnormal quantity. In others, neither urea nor ammonia can be discovered in the blood, while sometimes urea can be detected without difficulty. Let me allude briefly to two or three cases, in which urea was discovered. Half an ounce of blister serum from a man suffering from renal coma yielded ·54 gr. of nitrate of urea. The patient died shortly afterwards, and urea was detected in the blood and in the brain substance. In another insiance, it was detected in the serum of a blister from a man who had had one epileptic fit, depending upon renal disease. In the case of a boy, aged 18, who suffered from epileptic fits, I also detected it in blister serum; as well as in eight ounces of serum from a man suffering from acute dropsy of a week's duration; and I might refer to others in which I obtained undoubted evidence of the presence of urea. There are many other cases of the same character in which I failed to detect urea, or ammonia resulting from its decomposition.

I have several times examined the breath of such patients, without being able to obtain indications of a larger quantity of ammonia than is afforded by healthy persons. I think, therefore, that we must admit that there are many cases of the so called *uræmic poisoning* which have not yet been satisfactorily explained. It may, however, be urged that, in many cases, although ammonia was found, it might have been rapidly eliminated from the skin or intestinal canal, so as to escape detection. Bernard and Barreswil have performed some experiments which prove that, after extirpation of the kidneys, urea escapes into the intestinal canal in the form of an ammo-

niacal salt; and they found that it could not be detected in the blood in less than from twenty-four to forty-eight hours after the operation, when the animal had become weak and exhausted.

On detecting Urea in the Blood or Serum. The urea may be detected by concentrating the serum and extracting with strong alcohol, or the fluid may be evaporated to dryness and the dry residue treated with boiling alcohol. The alcoholic solution is evaporated to dryness, treated with a drop of distilled water, and two or three drops of strong nitric acid allowed to fall into the syrupy solution. If urea be present, crystals of the nitrate

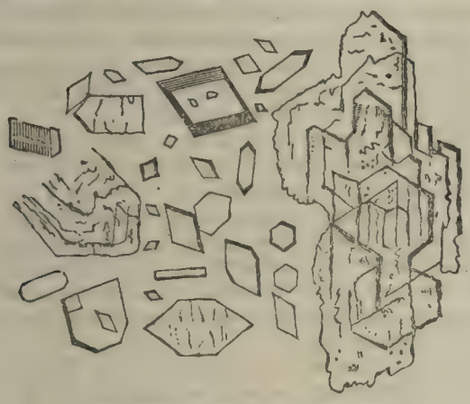


Fig. 2.—Nitrate of Urea × 215.

of urea are formed, and may be readily distinguished by microscopical examination.

On detecting Ammonia in the Breath. The method of examination which Dr. Richardson recommends is the following. An instrument in the form of a straight breast pump is employed to breathe through; a drop or two of hydrochloric acid is placed in the bulb, and a perfectly clean slip of microscope glass placed across the trumpet extremity of the tube, and secured by an India-rubber band. The alkali, as it passes over the



Fig. 3.—Crystals of Chloride of Ammonium obtained by breathing over hydrochloric acid.

bulb, combines with the acid, but some of the acid and alkaline vapours pass over together and condense on the microscope glass. As this becomes dry, crystals are formed. In health, traces of ammonia are always found in this manner.

[*To be continued.*]

University of Oxford: Dr. Radcliffe's Travelling Fellowship. The following notice has been issued by Dr. Acland, Regius Professor of Medicine:—In conformity with an ordinance of the University Commissioners, the electors under the will of Dr. Radcliffe have directed that an examination for a travelling fellowship shall be held in the course of next term. The Examiners will hereafter notify the particulars of the examination, which will be in sciences connected with medicine. The successful candidate will receive £200 per year for three years, half that time being occupied in medical study out of Great Britain. One such Fellowship will henceforward be offered for competition every year. Those may be admitted as candidates who have taken a first class in the Natural Science School of Oxford, and who intend to qualify themselves to practise medicine as medical graduates of the University.

Transactions of Branches.

EAST ANGLIAN BRANCH.

CONGENITAL HERNIA (HERNIA INTO THE VAGINAL PROCESS OF THE PERITONEUM): SUPPLEMENTARY SAC OR POUCH.

By T. W. Crosse, Esq., Norwich.

[*Read July 8th*, 1859.]

This specimen was taken from a man, aged 60, who was admitted into the Norfolk and Norwich Hospital, on the night of May 23rd, 1859, with symptoms of strangulated hernia. The history he gave of himself was that for the last eight years he had had a rupture on the right side, a portion of which always remained in the scrotum. He had never worn a truss, and had been able to follow his occupation as a labourer. On the morning of his admission, and without any apparent cause, his rupture became much larger, and he suffered during the day from sickness and vomiting. A medical man who saw him towards evening, did not make any attempts to relieve him by the taxis, but sent him up at once to the hospital, where he arrived about 10 P.M.

On admission, he was in a very weak and enfeebled condition, with a swelling of considerable size occupying the right inguinal region and scrotum. This swelling might be divided into three parts: *an inguinal*, in the region of the inguinal canal; *a scrotal portion*, which was large and globular; and a *third part*, rounded and smaller, situated over the femoral vessels. The separation between the inguinal and scrotal portions was distinctly marked by a folding in of the skin, and was probably caused by the tightened and stretched condition of the external abdominal ring. The scrotal portion was large, round, and tense, and presenting much the appearance of hydrocele. The testicle could not be detected on manipulation. The swelling over the femoral vessels suggested the possibility of a femoral rupture complicated with hydrocele; but the intimate relation between all three of the portions described, indicated their being contained in a common sac, which had evidently passed through the inguinal canal.

Careful attempts were made to effect reduction by the taxis, both in and out of the warm bath, but without avail. The symptoms of strangulation were not urgent, there was no vomiting or even sickness now present. Neither the body nor the tumour was painful, and the bowels had been freely relieved on the previous day. Under these circumstances, it was thought better to postpone an operation until the morning, and a freezing mixture was accordingly ordered to be kept constantly applied, and an injection to be administered. The injection brought nothing away. Vomiting recurred during the night, and again on the following morning, when his pulse stood at 120, and he was more feeble and exhausted. An operation being at once demanded, I cut down upon the tumour and exposed the sac, which at its lowermost part was greatly attenuated, and yielded to the pressure of the director, when introduced under the fascia that covered it. Several ounces of dark coloured serum escaped, and on enlarging the opening it became evident that the intestine was situated in the cavity of the tunica vaginalis; the swelling in the femoral region consisting of a pouch of the same membrane, and containing also intestine. The bowel was a good deal discoloured, and covered with clots of bloody lymph; the coils were matted together by inflammatory adhesion, which were gently separated. The seat of stricture, as usual, was at the neck of the sac, which was incised so as to admit of the easy return of the intestine, a very large portion of which had been strangulated.

The wound was closed by sutures, and the requisite compresses and bandages applied. Chloroform was not given, and stimulants were freely administered both during and after the operation; but he never rallied, although all sickness ceased; and he sank in about seven hours, from collapse.

On examination after death, there was no general peritonitis manifest; and the strangulated portion, consisting of about eighteen or twenty inches of ileum, though very much congested, was not gangrenous or mortified; it was slightly adherent to the neck of the sac. The testicle was found situated in the inguinal canal, the cord lying behind it. The pouch in the femoral space had passed beneath the fascia, and lay just above the saphenous opening, through which it could easily be made to protrude. The patient was of a very spare habit, and much emaciated. The veins contained scarcely any blood. The other viscera were healthy.

Remarks. Varieties in the form and shape of hernial sacs have been frequently noticed by authors, and are presumed to result either from the unequal pressure of their contents, or the unequal strength of their surrounding parts. The situation of that in the case I have now detailed constitutes its peculiarity, and is very unusual, occasioning, as it very nearly did, a femoral hernia, owing to its relation to the femoral vessels and the saphenous opening, and making its way towards this point, above instead of below Poupart's ligament. Looking at the mouth of this pouch, I think it quite possible that it might have been a separate hernial protrusion, and that it was driven into the situation described by the sudden descent of a larger portion of intestine into the cavity of the tunica vaginalis.

There was nothing in the condition of the peritoneum and bowels to forbid the recovery of the patient, as far as one could judge by the *post mortem* examination. He might perhaps have had a better chance, had he been earlier submitted to operation; but I question whether, under any circumstances, his spare and enfeebled frame would have rallied from the shock which such a proceeding necessarily entails.

READING BRANCH.

TRANSACTIONS OF THE READING PATHOLOGICAL SOCIETY.

By Frederick G. Harcourt, Esq.

[*Read July 13th*, 1859.]

Introductory Remarks.

Mr. President and Gentlemen,—The distinguished position which, through your kindness, I find myself occupying, and the prominent part which, at your request, I am about to take in this evening's proceedings, remind me but too forcibly of the truth of the Shakesperian adage, which tells us that, whilst some men are born great, others achieve greatness, and others have greatness thrust upon them. I consider this latter part of the quotation to be particularly applicable to myself, in that it has devolved upon me to have the honour of delivering the Retrospective Address on the present occasion.

Having but for a comparatively short period enjoyed the privileges and pleasure of being numbered amongst the members of your Society, I confess it was a duty I was little prepared for, and an honour I still less expected. But having been informed by our much respected Honorary Secretary, Dr. Woodhouse, that by rotation the duty of delivering this address devolved upon me—unqualified as I felt myself for this most responsible duty, and much as I wished that some other member of our Society more capable of doing justice to the occasion than myself, had been appointed, I also felt I should not only be wanting in courtesy, but wanting in gratitude, to the members of a society from whom I have derived so much pleasure and instruction, if I declined a duty which others before me had so frequently, so cheerfully, and with so much advantage to the Society, performed. I must therefore request your indulgence whilst I proceed to enumerate the pathological specimens and recite the interesting papers which have been contributed during the past year. But before proceeding to the more immediate subject of this address, I must also request your permission to congratulate you on the satisfactory—I may indeed say, the flourishing—state of our Society.

Dating its origin from the 13th of June 1841, we are consequently on the threshold of its nineteenth year. If therefore we are not the largest, at any rate I think the Society may congratulate itself upon being the most ancient of the kind in the kingdom. I think this is a fact of which Reading men ought to be proud, and more especially those connected with the Royal Berkshire Hospital, to the erection of which, doubtless, this Society owes its origin.

And if our members have not been increasing rapidly, at least they have been gradually, and I believe at this present time we number more than at any previous period of our history—fifty-five—and whilst we number more, thanks be to Almighty Providence we have no such painful duty to perform as to record the death, during the past year, of any of our members. I earnestly hope that this cheering, this happy announcement, may be the privilege of those who will doubtless succeed me in the discharge of this pleasurable, but, at the same time, responsible duty for many years to come.

Remembering, then, gentlemen, that we are met here this evening to celebrate the eighteenth anniversary of the Society, I think it would be a work of supererogation on my part to allude to the objects and purposes which this Society, and societies like this, have in view, or to dilate upon the great results and advantages which have accrued, and necessarily must accrue, to the advancement of medical and surgical science. These are facts which have so frequently been brought before you, and impressed upon you in language far more impassioned and more eloquent than any I can bring to my aid this evening—that they must be as familiar to you as "household words." At the same time I cannot refrain from telling you how cheering and how welcome are these annual *réunions*, and how we ought to cherish societies like these, whose main object after all is to bring cultivated and honourable minds into actual communion with each other, thereby giving rise to mutual respect and esteem for each other, and encouraging the reciprocation of the best feelings of our nature amongst those who are travelling the same great road of life together.

Indeed, I can truly say I always regret when circumstances will not permit me to attend your monthly meetings; for whenever I have had the opportunity of so doing I have always felt if I have not left them a better, at least I have a wiser man; and with regard to these annual *réunions*, I shall ever regard them as red letter days in the history of my professional career, and can only compare them to oases in the deserts—as bright spots to cheer us on in the toilsome and anxious discharge of our high and noble mission.

With these preliminary remarks, I will now proceed to the more immediate subject of this address, and shall follow the plan which my predecessors have generally adopted, by dividing the papers, first, into those which apply to medicine; and secondly, those which apply to surgery; and these again I shall arrange in reference to the various systems of the economy to which they belong.

I.—Diseases of the Nervous System.

These will occupy but a short period of our time, as I have but one morbid specimen to allude to, and no paper to relate.

Abscess of the Brain. Mr. Fernie, on November 17th, presented a case of abscess of the brain, occurring in a boy who was brought into the hospital and died the same night, having suffered intense headache during the hours he lived within the hospital.

There was no history with the case. He was nearly blind; partially paralysed, and had extensive disease of the lower jaw. There was a large abscess in the base of the right lobe of the brain, holding three or four ounces of greenish pus. The arachnoid at the base of the brain was thickened and opaque; the dura mater healthy. The brain surrounding the abscess was normal, and there was no connection between the necrosed jaw and the abscess.

[*To be continued.*]

British Medical Journal.

SATURDAY, SEPTEMBER 17th, 1859.

HYSTERICAL RELIGION.

We use this term with the deepest veneration for all that truly belongs to religion. But, in its common acceptation, the word religion includes often much that does not belong to it. It is not within our province as medical journalists to enter on a strict definition of the term: there are, however, certain phenomena occasionally exhibited, which are by many regarded as religious in their character, but which, to the physician as well as to the enlightened theologian, are the mere results of disorder of mind, and often of body.

Occurrences of this kind are not new in history. The learned Hecker, in his treatise on the *Dancing Mania* of the Middle Ages, has recorded in instructive language the account of a series of epidemic phenomena, consisting in the corporeal manifestation of a diseased mental condition, which the superstition of the age dignified often with the name of religion. The special form of disease there described—an epidemic

chorea of an intense kind—has become a thing of the past; but, even in the present century, and in this enlightened country, there occur now and then epidemic phenomena, which, though in reality resulting from the co-operation of a disordered mind and a diseased body, are by the over-zealous and ignorant regarded as the results of an extraordinary influence of the sacred spirit of religion. This is a lamentable fact; but it is so, and the excessive manifestations of feeling, of which we sometimes hear as taking place in religious communities, irresistibly carry back the mind to the ravings of the Mænades and Corybantes of antiquity, and to the mad zeal of the priests of Baal, who "cried aloud, and cut themselves after their manner with knives and lancets, till the blood gushed out upon them."

To the psychologist and physician, these pseudo-religious epidemics offer a study full of interest. As they are now presented to our view, it is impossible not to see in them, in an intense degree, the workings of disease both of mind and of body. Without attempting to deny that a community of people may from time to time, and with benefit, experience an unaccustomed development of religious feeling, we must express our conviction—and it is one which must be agreed in by every sound-minded physician, clergyman, and layman—that the outrageous scenes which are related as sometimes occurring in places of public worship, of members of the congregation exercising their voices and limbs in the most unearthly manner, until, perhaps, bodily prostration incapacitates them from the performance of the duties of their daily life, are utterly inconsistent with the very principles of that religion which is professed to be taught to the people, and under the influence of which they are imagined to act.

In the narratives of these so-called conversions, certain facts now and then appear which render the cases at once clear to the physician, and point out the individuals as subjects for pity rather than for congratulation. The attentive readers of Hecker's account of the Dancing Mania can have arrived at no other conclusion, than that the phenomena described by him were various modifications of the diseased condition which, comprehensively, we call hysteria: and, though it does not appear always on the face of his narrative, there can be little doubt that in a number of instances a state of the body existed, which rendered it the too willing organ of an unenlightened mind. Speaking of a convulsive epidemic, which at one time broke out in a chapel at Redruth in Cornwall, he significantly observes: "It seized none but persons of the lowest education;" and we know, that the general hygiene of persons of this class is generally not of the best. In a recently published pamphlet* on the "religious revival" which is described as taking place in the north of Ireland, the author, who had visited the district with the laudable object of obtaining reliable information on a subject so intimately connected with his calling, says, in speaking of his visit to a meeting-house "famous for cases":—

"The preacher, before giving out his text, requested that if any cases occurred the congregation would be quiet, and leave it to the office-bearers of the church, who had made full preparation for their reception. While the preacher was urging, with the peculiar pointing of the hand before described, 'Your case is as bad as hell can make it,' a poor girl cried and fell, In reproving the excitement which followed, the preacher said 'God is doing His work in that individual.' When the sermon closed, I obtained admission to the room to which this girl had been carried, pursuant to the arrangements announced by the preacher. The room was small, and very narrow and stifling, no air, no water was there. A more pitiable sight I never saw. This girl was about 15 years of age, or perhaps a year or two older. Her frame was weak and thin; her small hands stained and ground with hard work; her skin delicate and transparent; her hair and eyelashes long and dark; her neck marked with scrofula; with a highly intellectual face, seldom seen in her class of life except in weakly girls, and now made painfully interesting by the unearthly expression of cataleptic hysteria. Every movement of the head and hands, every expression of the countenance, every moan, was markedly hysterical. She had previously been struggling and screaming. She was now quiet; her lips sometimes moving, but inaudibly. She had spoken of the devil catching souls to throw them into hell, crying, 'Away! you shan't have mine:' just the last impression made upon her failing mind. I learned that this was the third attack that this poor girl had had in a short time; each being more severe than the former, so readily does the habit grow. I could have wept to see this sad disease superadded, in the name of religion and of the Holy Ghost, to a poor weak frame, a scrofulus habit, and a life of toil."

The case here related by Archdeacon Stopford may be used as the key to a number of others which are supposed to arise from a development of religious influence. In another part of his pamphlet, he speaks positively of the hygienic condition of the subjects of these cases.

"The diet of the mill-girls often consists wholly of bread and tea. . . . At work for thirteen hours, they are then kept, often till long past midnight, in crowded and ill-ventilated assemblies, subjected to the greatest excitement. I have heard them singing after one o'clock in the morning."

But the reference to a work on the subject by a clergyman—a man, too, who writes evidently with highly enlightened views—leads us to consider the part taken by the ministers of religion themselves, in reference to the manifestations to which we have alluded.

In the first place, it is too obvious that the hysterical phenomena are often encouraged, under the idea that they are the outpourings of a mind filled with religious fervour. In the language—profane, we must call it—of the preacher alluded to by Archdeacon Stopford, "God is doing his work in them." Hecker, in recording from an English author the history of the religious epidemic in Cornwall, to which we have already referred, says:—

"The clergy, when, in the course of their sermons they perceived that persons were thus seized, earnestly exhorted them to confess their sins, and zealously endeavoured to convince them that they were by nature enemies to Christ; that the anger of God had therefore fallen upon them; and that if death should surprise them in the midst of their sins, the eternal torments of hell would be their portion. The over excited congregation upon this repeated their words, which naturally must have increased the fury of their convulsive attacks. When the discourse had produced its full effect, the preacher changed his subject; reminded those who were suffering of the power of the Saviour, as well as of the grace of God, and represented to them in glowing colours the joys of heaven. Upon this a remarkable reaction sooner or later took place. Those who were in convulsions felt themselves raised from the lowest depths of misery and despair to the most exalted bliss, and triumphantly shouted out that their bonds were loosed, their

* The Work and the Counterwork: or, the Religious Revival in Belfast. With an Explanation of the Physical Phenomena. By Edward A. Stopford, Archdeacon of Meath. Pp. 92. Dublin: Hodges, Smith, and Co. 1859.

sins were forgiven, and that they were translated to the wonderful freedom of the children of God. In the mean time their convulsions continued, and they remained during this condition so abstracted from every earthly thought, that they stayed two, and sometimes three, days and nights together in the chapels, agitatated all the time by spasmodic movements, and taking neither repose nor nourishment."

Archdeacon Stopford gives even a more revolting picture than this of the proceedings at Belfast. He says that "hysteria, in connection with revivalism, is now intentionally produced and propagated by man;" that "hundreds of mill-girls in Belfast have prayed, and are praying, to be 'struck';" that "there can be no doubt that in places of worship which have become famous through their hysterical cases, or in which hysteria is prayed for, the production of it is an object desired and aimed at in the preaching."

Is it not monstrous, that such a state of profound ignorance (if not of something worse) should prevail as to lead to the deliberate propagation of a diseased condition? and still more so, that the manifestation of this condition should be palmed off on the people as the direct and beneficent act of the Deity?

Turning to another part of Archdeacon Stopford's pamphlet, we find him expressing a most judicious view as to the course which ought to be taken. When a hysterical cry, he says, breaks out in a place of worship, the clergyman may at once stop it by the exercise of calm and quiet authority.

"If such a cry arise, let the clergyman stop his discourse, and say instantly, in the calm voice of one who knows that he must be obeyed, 'I will not let you cry.' The words must be thus absolute; anything of the nature of an appeal or an entreaty will probably give increased vigour to the cry."

The phenomenon is purely emotional, and is to be restrained in its commencement by the will of the preacher. Possibly, too, a kind of feeling of awe may operate beneficially; as it apparently did in the case of the Shetland minister mentioned by Hecker, who put an effectual stop to the interruptions frequently produced in his sermons by cases of cataleptiform hysteria, by threatening to have the patients immersed in a fresh-water lake adjoining his kirk.

Archdeacon Stopford fully recognises the important aid which the medical profession might afford in the treatment of this epidemic hysteria, but laments that there is a tendency to exclude this assistance rather than to employ it.

"I fear there will be few medical reports upon a subject so interesting to the medical and clerical professions. I heartily wish also that the medical instruction necessary for the clergy on this subject should be afforded to them by members of the medical profession, who alone are truly competent to give it. But I believe it to be necessary that the clergy should first be awakened to a sense of the value of such instruction, and the necessity of seeking for it. When so sought for I believe, from my own experience, that it will be cordially afforded. My task is only to lead to the desire for it; and, in the meantime, to give to my brethren that which they have especially asked me for, some light, dim as it may be, on the state of things which they have to deal with at the present moment."

We have brought forward this subject, as one of interest to the medical as well as to the clerical profession. The amount of mischief is great that is done where weakly excitable frames, worn out with bodily toil, and sparely fed, are exposed to the mental influence of designing or injudicious men. That the clergyman to whose work we have referred in this article, has taken a correct view of the duty of his profession in the case which has been described, is manifest; and it is to be trusted that his example will lead to a strict and judicious cooperation between the clergy and the members of the medical profession, in all instances where such phenomena as those which have been described as occurring in Belfast may break out.

THE WEEK.

We are able to state, on good authority, that an important change is about to be made in the examinational system of the University of St. Andrew's. It has been the liberal principle of this University, for years past, to admit to examination all *qualified* medical men. Many men of great eminence, who might never have attained to the highest honours of medicine, have thus been admitted to them; while the profession as a body has been materially elevated. What is more, the examinational test was every year improving in the University; and a great, free, and enlightened principle was becoming fully developed. It is with deep regret that we have to state that the change in prospect to which we have alluded, is likely to destroy wholesale these immense advantages. If the newly proposed alteration be carried out by the Lords Commissioners, no person will be allowed to go up for examination at the St. Andrew's Board, unless he has had twelve months residence in the city of St. Andrew's as a student. The meaning of this change is evidently to favour the other Universities of Scotland, which already, by an absurd exclusiveness, demand residence. While we are bound to record this threatened innovation, we hope that, as an actual fact, it may be averted. Meanwhile, let the doctors of St. Andrew's be up and doing!

The warrant which was issued some time ago for regulating the rank and pay of the medical officers of Her Majesty's Indian Army has not, it appears, given such satisfaction as did the analogous documents having reference to the Army and Navy. There lies before us a pamphlet, printed at Calcutta, entitled *A Comparative Statement of the Medical Services of Her Majesty's Indian and English Armies, as affected by the New Warrants.* It is there complained, that the Indian Warrant does not place the Indian and English medical services on a par; that the rate of promotion in the Indian service is exceedingly slow, without any compensating provision; that the exceptional promotions of assistant-surgeons for distinguished service are to carry with them brevet rank only, while in the English army they carry substantive rank; and that the retiring and furlough allowances in the Indian forces are inferior to those in the British army. The writer of the pamphlet reasonably enough urges that, in consideration of his term of service being spent within the tropics, the Indian medical officer is entitled at least to an equality of privileges with those enjoyed by the medical officer of the British army. We cannot imagine but that it was the intention of the framers of the Indian Medical Warrant to do justice to those concerned; and we earnestly hope that nothing will prevent the removal of any grievances which may be felt by our brethren in the Eastern possessions of this empire, and on account of which they may have just ground of complaint.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

A List of the Members of the British Medical Association will shortly be published in the Journal. Gentlemen whose designations or addresses, as given in the lists published on July 24th and October 9th, 1858, and June 18th, 1859, are inaccurate, will oblige by at once forwarding the necessary corrections to Dr. Williams, Worcester, or Dr. Henry, 37, Great Queen Street, London, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
East York and North Lincoln. [General Meeting.]	Beverley Arms, Beverley.	Thursday, Sept. 22nd, 2½ P.M.
South Midland. [Ordinary Meeting.]	Swan Hotel, Leighton Buzzard.	Thurs., Oct. 6th, 2 P.M.

SOUTH-EASTERN BRANCH:

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

The first of the third series of the Rochester, Maidstone, Gravesend, and Dartford district meetings, in connection with the South-Eastern Branch of the British Medical Association, will be held at the Crown Inn, Rochester, on Friday, September 30th, 1859, at 5.15 P.M.

The members and their friends will dine together after the meeting, at 7 P.M. precisely.

Gentlemen intending to dine, are requested to give an intimation to that effect to Dr. Martin of Rochester, or Mr. Dulvey of Brompton, on or before Monday, September 26th. Dinner tickets, five shillings, exclusive of wine.

Trains will leave for London and all stations on the North Kent Line at 9.30, and for Maidstone at 10.30.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham, September 1859.

Editor's Letter Box.

THE MEDICAL PROFESSION IN CORNWALL.

Letter from Edward Daniell, Esq.

Sir,—By some unaccountable mischance, I omitted, when reading the Journal of August 20th, to notice a remark of Dr. Littleton to the members of the Cornwall Medical Society, charging me with casting great indignities on the profession in Cornwall. But for the kindness of a friend, this charge might never have come to my knowledge: and the pages of the Journal would have recorded, without contradiction, a statement entirely at variance with every feeling of my heart, and with the whole tenor of my address, which aimed throughout to elevate and not to depress the profession. Surely Dr. Littleton could not have read my address carefully; otherwise he would never put so unfavourable a construction on a passage which has no reference to the *legitimate* profession, however it may refer to the popular heresies of the day.

If Dr. Littleton will kindly refer to the passage which has offended him, he will find that I was speaking of a certain Cornish clergyman, whose excess of benevolence led him to quit the especial duties of his own high calling, in order to pen an extraordinary address to his parishioners, assuming an interference with their bodily infirmities as well as with their souls' sickness. I have no recollection of describing the people of Cornwall as a set of Bœotians; nor will it be so found in my address. I should belie my own heart if I did so, and do violence to the strong feeling of affection and esteem which I have for a valuable friend, a clergyman in that county, who in the early stages of my life was my friend and enlightened adviser; a man who would not be influenced by

"Doctrines fashioned to the varying hour,"

whether theological or medical.

The passage in my address which, I apprehend, wounded Dr. Littleton, would not have done so but for a small error—the substituting the definite article *the* for the indefinite article *a*. Let the passage be read, "*a* benighted region," etc., and I think Dr. Littleton will allow it is not far from the truth. The clergyman employed his churchwardens to distribute, at the church doors, on a Sunday, a homœopathic address from himself to his parishioners. Was such an act as this any part of his duty? or was it the duty of the churchwardens to distribute the address? But I need not rake up these ashes. I refer Dr. Littleton to the Journal for April 24th, 1858, and May 22nd; and then I would ask him whether there was any grievous wrong in charging the particular locality as singularly benighted. I would have charged my own town with darkness had it given me such indications.

In our beautiful Liturgy, we are taught to pray against all "False doctrine, heresy, and schism." If a clergyman meets with a person who is tainted with false doctrine, heresy, and schism, does he not deplore his darkness? Aye; but it will be said, that this refers to his soul's safety. True; but the heretic may have confidence in his false doctrines, and settle down upon them. So may the heretic in physic; but he is nevertheless a heretic, and we have as much right as the clergyman to deplore the apostasy, and say that the man is benighted, and all too who are "partakers of his plagues."

One word more: If by inadvertence I have in any way wounded Dr. Littleton or his medical brethren in Cornwall, I pray them to accept my expression of sincere regret, and assure them that I can have no just grounds for any charge against them, nor did I ever dream of making one.

I am, etc., Edward Daniell.

Newport Pagnell, September 12th, 1859.

EVIDENCE IN CORONERS' COURTS.

Letter from William Falshaw, M.D.

Sir,—Impelled by a sense of duty to myself and to the profession, I forward the particulars of a coroner's inquest, lately held in this neighbourhood. The inquiry was conducted in a very irregular manner, and the jury returned a verdict which was not warranted by evidence, and which cannot fail to prove highly dangerous to society and mischievous to medical science.

On the night of last January 3rd, a woman, named Hannah Wood, aged 35 years, single, was taken suddenly ill after retiring to bed, and died in an hour, or from that to an hour and a quarter. The duration of her illness was not more than an hour and a quarter She retired to bed in her usual health, and soon afterwards gave an epileptic shriek. It was not an unusual thing for her to awake out of her first sleep in a state of great alarm, and with a shriek; but generally she was soon pacified. On this occasion, however, she appeared alarmingly ill, and was soon surrounded by friends and neighbours, who watched her closely and never left her till she died. The symptoms were of an anomalous character. She suffered great internal pain, and perhaps the most striking symptoms were a peculiarly anxious countenance, expressive of pain, and a rapidly sinking pulse. In consequence of the obscure nature of the case, other symptoms were especially looked for—the symptoms of poisoning. But the case was altogether irreconcilable with any known poison. There were neither retching, vomiting, purging, delirium, convulsions, nor coma. The pupils were neither contracted nor dilated, although the eye was restless. She retained her mental faculties to the last moment. (I may mention that brandy was administered to her by one of the attendants).

At the time of death she was four months advanced in pregnancy; but no one had the slightest suspicion of the fact save one individual, the father of the child; and it was in consequence of a statement made by this man three months after the woman's death that an inquiry was instituted. It appears that he had, at her request, gone to a quack doctor in the neighbourhood, and obtained some medicine for her. What it was he did not know, for she had written the name of it on a paper and he was unable to read it. Her sudden death, however, seems to have made such an impression on his mind, that after

a lapse of three months he stated his belief that she had died from poison. It turned out in evidence that the deceased had consulted several women as to the best method of procuring abortion (stating that the information was for another person). That she had taken several medicines at their suggestion, such as *hiera picra*, etc.; but these failing, she was recommended to get a certain drug from the above mentioned quack doctor, which was done some time before her death. I mention these circumstances to show that there is no proof that the woman intended destroying herself; the public, and I think the jury, were under the impression that whatever she took on the night of her death was done with the object of procuring abortion. But there was no evidence to prove that the woman took anything on that night; and, I ask, is it likely that she would *delay* taking the medicine received from the quack, and which she thought would surely produce abortion? She had already taken drugs without producing the desired effect, and the difficulty of concealing her pregnancy was daily increasing. I therefore maintain it is more likely she would swallow her medicine at once than keep it in her possession several weeks.

On April 6th the body was exhumed. The abdominal viscera, secured in the usual manner, were transmitted to Mr. Calvert, of Manchester, for analysis; and an inquiry at once opened before Mr. Sellers, deputy coroner. I have no intention to say one word in disparagement of the legal or scientific acquirements of these gentlemen (indeed, I could not if I wished); but this I do maintain, that neither of them manifested any acquaintance with the science of medical jurisprudence, and particularly the duties of a medical jurist, and the rules which ought to have guided him in making a report of his analysis for a coroner's jury.

Notwithstanding the fact that I was the *only* medical man that saw the deceased during her brief illness, and moreover the *nearest* to her, I neither received the coroner's order to make a *post mortem* examination of the body, nor to attend his court to give evidence. I did attend at the fag-end of the proceedings, at the request of Mr. Calvert. Mr. Calvert seems to have complained a good deal of the want of medical evidence; he said that, had he been informed of the manner of her illness, or death, he might have been able to say what the exact poison was that caused her death. And the reiteration of the remark "want of medical evidence," etc., was not very pleasant, as it gave the public outside the impression that I had been guilty of some culpable neglect. If one of the most important witnesses that could have appeared before the jury was not forthcoming, if there was complete absence of medical evidence, and if the analytical chemist was crippled in his researches in consequence of that absence, where was the fault? Surely it was in consequence of unjustifiable neglect of duty on the part of the coroner. And I must state that when I was called, at the request of Mr. Calvert, it was at a time when he could and ought not to have been influenced by any evidence I could give; and I may remark that it is quite unreasonable, even for a man of Mr. Calvert's penetration, to expect that I, or any other medical man, should be able to describe symptoms which never existed.

The verdict of the jury was founded on the evidence of Mr. Calvert. He is reported to have said that he commenced to test the stomach and its contents for corrosive mineral poison, and he enumerated the most important metallic irritant poisons, but failed in finding any. He then devoted the remaining portion of the stomach, etc., to a search for a vegetable alkaloid; and I must confess that the various chemical manipulations required to find out this alkaloid were given with a detailed minuteness which must have been highly interesting to a country jury, but which was quite unnecessary; for a reporter is not called upon to display his erudition, but to make himself understood. However, after considerable labour, he at last finds what he conceives to be an alkaloid, but the quantity is so small that he is unable to say what it is—nay, he does not even demonstrate it to be a poison, and, for anything known to the contrary, it may have been quite innocuous.

Now, the evidence altogether tended otherwise than to confirm the report that the woman had died from poison; and, although Mr. Calvert did not detect poison, he is reported to have made the following extraordinary statement:—"He was, however, of opinion that the deceased came to her death by taking some violent alkaloid poison, an exceedingly small portion of which would be sufficient to cause death. The violent irritation which he observed at the entrance of the stomach confirmed him in the opinion that death must have resulted from a violent alkaloid poison. He was certain that the alkaloid was not strychnia, but was disposed to consider it belladonna."

May I ask if any medical witness, having a knowledge of the physiological actions of remedies on the one hand, and an acquaintance with *post mortem* appearances on the other, would, on oath, have adventured such a statement? And may I further ask, does belladonna, or its alkaloid, atropia, usually prove fatal in an hour and a quarter? Can a case be given where they proved fatal without producing great and characteristic disturbance of the functions of the brain? Is it likely that a poison can produce violent inflammation of the stomach without inducing retching and vomiting? and is it not possible that brandy, administered before death, might produce an inflammatory appearance of the stomach? The impression, however, prevails that the woman was poisoned by belladonna.

The jury, after a short deliberation, returned the following verdict:—"That the deceased came to her death by some virulent vegetable alkaloid; but whether administered by herself or others there is no evidence to show." This verdict, I maintain, is entirely fallacious and indefensible, for the following reasons:—

1. Because there is no evidence to show that the deceased ever obtained a deadly poison.
2. Because there were no symptoms of poisoning during life.
3. Because there was no evidence to prove that poison was detected after death.
4. Because there was no medical evidence in support of the verdict.
5. Because the manner and duration of the illness were quite irreconcileable with the only poison that was mentioned, viz., belladonna.
6. Because during the inquiry there was no attempt made to ascertain "if there was any other cause of death."

To say the least, there was a doubt, a reasonable, substantial doubt; and therefore the jury ought (to borrow an expression from you) to have acted in accordance with the universally recognised principles of English justice. It was one of those sudden and mysterious deaths which every now and then occur, and which is beyond the power of man to solve, and ought, therefore to be left to that inevitable and unerring judgment which no cunning can evade, and no ingenuity avert.

I am, etc., William Falshaw.

Ramsbottom, September 8th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Copland, James C., Esq., Surgeon, Brightlingsea, on Sept. 3.
*Cox, Arthur, Esq., Long Buckby, on September 6. (Twins.)
*Granville, J. Mortimer, M.D., Bristol, on September 7.
Hensley, F. J., M.D., Spring Gardens, on September 8.
Squire, S. N., Esq., Surgeon, Wivenhoe, on Sept. 7.

Of daughters, the wives of—

*Ashley, W. H., M.D., Ladbroke Square, on Sept. 11.
Prance, R. R., M.D., Hampstead, on Sept. 6.

MARRIAGES.

*Cornwall, John, Esq., of Ashcott, Somerset, to Sarah E., eldest daughter of the late J. P. Hodgson, Esq., of Battersea, on Sept. 8.

Harper, A., Esq., Controller of the Customs Fund, to Lydia, younger daughter of J. M. Camplin, M.D., of Islington, at Highbury, on Sept. 6.

Mackenzie, John I., Esq., Surgeon, to Emily E., only child of the late Captain Rebenack, H.E.I.C.S., on Sept. 13.

Plowman, Wm. T., M.D., to Catherine A., second daughter of H. Hardstaff, Esq., of Hactre Court, Somerset, on September 5.

Scoresby-Jackson, R. E., M.D., of Edinburgh, to Elizabeth White, only child of Sir Wm. Johnston, of Kirkhill, on September 14.

Tanner, T. H., M.D., to Mary W., only daughter of J. Roberts, Esq., of Bayswater, on Sept. 10.

DEATHS.

Hughes, Joseph H., Esq., Surgeon R.N., at Islington, aged 87, on Sept. 3.

Irwin. On September 4th, at Killiney, Ireland, Charlotte, second daughter of the late H. Irwin, M.D., Deputy Inspector-General of Military Hospitals.

APPOINTMENTS.

Brown, Henry, Esq., and Ellison, James, Esq., appointed, jointly, Surgeon and Apothecary in Ordinary to Her Majesty's Household at Windsor.

PASS LISTS.

Apothecaries' Hall. Licentiates admitted on *Thursday, September 8th*, 1859:—

Howse, Wm., Burford
Lever, Reginald C., Army
Moore, Thomas, Hales Owen
Park, John S., Ballarat
White, Fras. T., Rawreth, Essex

The following gentleman, on the same day, passed his first examination:—

Colbeck, Thomas Wm., Kensington

HEALTH OF LONDON—SEPTEMBER 10th, 1859.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys .. 875 / Girls .. 826	1701	1111
Average of corresponding weeks 1849-58		1531	1102

Scarlatina and diphtheria became more fatal, but the deaths by fever and diarrhœa decreased; so that the deaths by zymotic diseases amounted to 386, the same number as last week. Of diarrhœa, 148; of cholera, two persons died. A retired plant-broker, aged 69, died of cholera, said to be Asiatic, at 24, Princes Street, Mile End Old Town. A merchant's wife, of the age of 36, died of cholera on board of the *Moselle*, shortly after it had passed Gravesend. The attack was fatal in twelve hours. She had suffered from choleraic diarrhœa at Rostock, and left that place in rather a weak state; went on board the steamer at Hamburgh on Friday night at 12 o'clock; was attacked by cholera on Sunday morning at about 11 o'clock, and died soon after 11 o'clock at night.

Barometer:

Highest (Sat.) 30.009; lowest (Tues.) 29.648; mean 29.841 in.

Thermometer:

In sun—highest (Mon.) 91°; lowest (Sun. & Tues.) 68°.
In shade—highest (Th.) 72°; lowest (Sun. & Mon.) 46.5°.
Mean—58°; difference from mean of 43 yrs. + 0.1°.
Range—during week, 25.5°; mean daily, 19.0°.

Mean humidity of air (*saturation*=100), 73.

Mean direction of wind, S.W.—Rain in inches, 0.35.

LONDON MEDICAL REGISTRATION ASSOCIATION.

At the last meeting of the General Committee, held at the office of the Association, No. 5, Charing Cross, on Wednesday evening, September 7th, Mr. F. Dover in the Chair, a large amount of important correspondence was read and considered. The accessions of members were numerous, and several county and other Medical Registration Associations in different parts of England had sent subscriptions, and joined the central body, the advice and assistance of which they now asked, for the purpose of putting down quacks in their several localities. In a letter written to Dr. Ladd, by the Secretary of one of the county Associations, appeared the following passage:—

"A resolution requests me to inquire of you whether (in the event of evidence and funds being supplied by the local Association) the London Association will undertake our prosecutions, so as to do away with the inconveniences of local practitioners becoming the prosecutors. It was thought that if the cases in our district were submitted to the London Association for opinion as to the advisability of prosecuting, the requisite funds and evidence could be obtained here if it were thought that the cases were legally suitable for prosecution. The difficulties connected with the interpretation of the Medical Act, and the confessedly imperfect state of the printed Register, make us slow in commencing any prosecution, except under good legal advice. It was determined that I should lay before you the particulars of two cases, asking your advice concerning them."

These instances—viz. of a herbalist and a fully-blown homœopathic practitioner—were then briefly detailed. Dr. Ladd was authorised to write in reply, asking to be furnished with full particulars of the cases in question, and of the amount of evidence attainable.

The secretary of a similar body writes:—"Every medical man hereabouts fully appreciates the services of the London Association"; which, he says, will probably be joined individually by the members of the body he represented, their Association being but a small one.

The secretary of a third—the South Cheshire Association—says:—"I am instructed to express a cordial assent to the project of the co-operation of the central and local Registration Associations, and to forward a subscription," etc.

From the secretary of a fourth—the Bristol Medical Registration Association—was sent a copy of the following printed resolution, dated August 4th:—"At a meeting of the members of the medical profession, held this day, it has been determined to form a Medical Registration Association in this city, in connexion with and a branch of the Parent Association in London." A subsequent letter, dated August 20th, states that, "at a meeting of the Bristol Medical Registration Association, it was resolved at once to affiliate it to the London Association."

Other communications requested that legal gentlemen should be dispatched from London by the Association to watch important cases in which unqualified practitioners had become involved; and, in fact, would fain place an amount of work in the hands of the Committee and Secretaries of the London Association, for the whole of which, unfortunately, they have not at present funds at command.

A letter was read from Dr. Francis Hawkins, addressed to Dr. Ladd, and intimating that foreign degrees, obtained after the 1st of October, 1858, whether by examination or not, would not be officially registered. An extract from this letter to such an effect appeared in the *Lancet* of last week, as did the correspondence of Mr. Rymer with the honorary secretary relative to the assumption by dentists of the title of "surgeon"-dentists. In his first letter, Mr. Rymer was disposed to provoke a prosecution nominally against himself, for the purpose of trying, in a court of law, the right of dentists to the above designation: but in his second letter, read at this meeting, he stated that the College of Dentists would prefer that the matter should be settled by arbitration; a difficult undertaking, however, since no arbitration could be made binding, or in any way effective unless voluntarily submitted to.

Letters were read from several persons to whom "warnings" had been sent by the honorary secretary, notifying that they had renounced the title of "surgeon," to which they were not legally entitled; and some members of the committee instanced other cases, within their personal knowledge, of individuals who had received "warning letters," having similarly abandoned improperly assumed designations.

Amongst the resolutions passed, was one requesting the honorary secretary, Dr. Ladd, to draw up, in the name of the Association, a memorial to the council of the College of Surgeons, in reference to the projected examinations of dentists at this college, and expressive of a hope that the interests of members of the college will be so far considered that the diploma to be granted to dentists will not entitle them to use the title of "surgeon," nor to appear on the medical Register.

The funds of the London Medical Registration Association are now, according to the weekly financial reports, not only steadily, but rapidly augmenting; but the expenses of prosecutions, etc., have been heavy, and, aware of how much has to be done in the cause of the profession, the cry is still, at the committee-room, "*Plus d'argent.*"

At the meeting on Wednesday last, the 14th instant, Mr. Jones, of Mount Street, the prosecutor of Watters and Edwards, at the Lambeth Police Court, attended by appointment, together with Mr. Smith, of Pall Mall, who has been active in endeavouring to obtain for Mr. Jones some recompense from the profession for the heavy expenses and loss which that prosecution entailed upon him. The committee of the Association readily agreed to head with a subscription of five guineas the list of those who desire to reimburse Mr. Jones, and they trust that the example will be followed by all the haters of quackery.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

NOTICE.—DR. WYNTER will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, MR. THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—MR. J. A. LOCKING; MR. H. TERRY, JUN.; DR. FALSHAW; DR. W. CAMPS; MR. I. HARRINSON; DR. PROBART; DR. H. SALTER; DR. MARTYN; DR. JOHN W. GOODWIN; MR. E. GARRAWAY; MR. C. J. EVANS; DR. JAMES RUSSELL; MR. T. HOLMES; DR. J. B. NEVINS; MR. FRED. G. HARCOURT; DR. LIONEL BEALE, DR. HERBERT BARKER; DR. W. F. WADE; MR. DULVEY; and MR. W. MARTIN.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. An Account of the Life, Lectures, and Writings of William Cullen, M.D. Professor of the Practice of Physic in the University of Edinburgh. By John Thomson, M.D. In Two Volumes. Edinburgh: Blackwood and Son. 1859.

ADVERTISEMENTS.

Liverpool Royal Infirmary School
OF MEDICINE.

SESSION OF 1859-60.

The INTRODUCTORY ADDRESS will be delivered by Dr. COLLINGWOOD, on October 1st, at Two p.m.

LECTURES—WINTER SESSION.

Principles and Practice of Surgery .....Mr. Long.
Principles and Practice of Medicine.....Dr. Inman.
Anatomy and Physiology ..... } Mr. Fletcher and
Pathology, Descriptive & Surgical Anatomy } Mr. Waters.
Chemistry and Pharmacy.....Dr. Edwards.
The Dissecting Room is Open Daily, from Eight a.m. to Six p.m.

SUMMER SESSION.

Midwifery and Diseases of Women .....Mr. Batty.
Diseases of Children.....Mr. Grimsdale.
Materia Medica and Therapeutics .....Dr. Nevins.
Medical Jurisprudence .....Dr. Cameron.
Toxicology .....Dr. Edwards.
Botany .....Dr. Collingwood.
Ophthalmic Medicine and Surgery .....Dr. H. Taylor.
Practical Chemistry .....Dr. Edwards.
Pathological Anatomy .....Dr. Broadbent.

In addition to the Prizes in each Class, the following EXHIBITIONS are offered for competition annually:

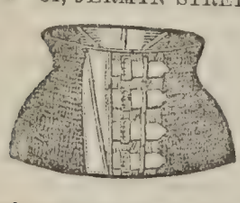
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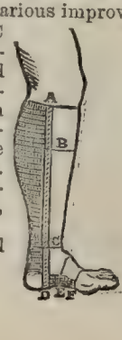
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Grosvenor Place School of Medicine.
No. 1, GROSVENOR PLACE (adjoining St. GEORGE'S HOSPITAL).
WINTER SESSION 1859-60.

LECTURES.

The Introductory Lecture will be delivered on Monday, October 3rd, at Three o'Clock, p.m., by Dr. COCKLE.

General Anatomy and Physiology—Dr. Richardson.
Descriptive and Surgical Anatomy—Dr. Halford and Mr. Lawson.
Practical Anatomy—Mr. Pittard.
Chemistry—Dr. Thudichum.
Principles and Practice of Medicine—Dr. Cockle and Dr. Leared.
Principles and Practice of Surgery—Mr. Spencer Wells & Mr. Adams.

FEES. General Fee to all the Lectures required by the Universities of London and St. Andrew's, the Royal College of Surgeons of England, and the Society of Apothecaries, 35 Guineas.

Special Arrangements may be made for any one of the Examining Boards.

Prizes and Honorary Certificates will be awarded for general proficiency at the termination of the Session.

The Microscope is used to illustrate the Lectures and Demonstrations.

The Dissecting Room and Museum of Anatomy are open to the Students during daylight, where their Studies are superintended by the Lecturers on Anatomy and Mr. PITTARD.

The Lecturer on Chemistry has a Private Laboratory, where Students are instructed in Analytical and Physiological Chemistry.

Instruction in Pathological Anatomy is given by the Lecturer on Physiology.

Further information may be obtained at the School, 1, Grosvenor Place; of Dr. RICHARDSON, 12, Hinde Street, Manchester Square, W.; or at the Residences of the different Lecturers.

Bristol Medical School.--The Winter
SESSION 1859-60 will commence on Monday, October 3rd. The following Courses of Lectures will be delivered:—

Medicine—Dr. Brittan.
Surgery—Mr. Clark and Mr. Prichard.
Descriptive and Surgical Anatomy—Mr. Coe and Mr. Leonard.
General Anatomy and Physiology—Dr. Martyn and Dr. Fripp.
Chemistry—Mr. Herapath.
Superintendence of Dissections—Mr. C. Leonard, Mr. T. E. Clark, and Mr. H. Ormerod.

At the conclusion of the Session, Prizes will be awarded in accordance with the regulations of the School.

Certificates of attendance upon the Lectures delivered at this School qualify for Examinations at the Royal College of Surgeons, the Apothecaries' Hall, the University of London, the Army, Navy, and India Boards.

Fee for unlimited attendance upon all the Courses of Lectures (except Practical Chemistry), 45 Guineas.

Students from a distance can be provided with board and lodging under the recommendation of the Faculty of the School.

Information upon all particulars may be obtained upon application to the Honorary Secretary.

HENRY EDWARD FRIPP, M.D., Hon. Sec.
Medical School, Old Park, Bristol, Sept. 7, 1859.

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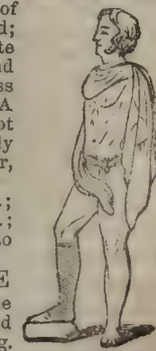


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ELASTIC STOCKINGS for VARICOSE VEINS, and all cases of Weakness and Swelling of the Legs, Sprains, etc. They are porous, light in texture, and inexpensive, and are drawn on like an ordinary stocking. Price from 7s. 6d. to 16s.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXLIII.] LONDON: SATURDAY, SEPTEMBER 24, 1859. [NEW SERIES.

Addresses and Papers

READ AT THE

TWENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LIVERPOOL, JULY 27th, 28th, and 29th*, 1859.]

ON THE INTERNAL EMPLOYMENT OF MEDICINES IN VAPOUR.

By J. BIRKBECK NEVINS, M.D.Lond., Lecturer on Materia Medica in the Liverpool Royal Infirmary School of Medicine.

THE subject of the present paper is one which I had the honour of bringing before the Medical Society of this town (Liverpool) some time since; and to the members of that Society who then heard it, I must offer an apology for something so like a twice-told tale; but the favourable manner in which it was then received encourages me to hope that they will pardon some inevitable degree of repetition, whilst I trust that the addition of extended experience, and also some variety in the mode of applying remedies in this manner, will be accepted by them as my excuse.

There are several diseases which are constitutional in their commencement, and are at first most suitably treated by constitutional remedies, but which become chiefly local in their later stages, and would at this time be most effectually relieved by topical remedies. Such a case is acute bronchitis—which at first affects the constitution generally, whilst in its later stages, we have often few constitutional symptoms, and the chief complaint of the patient arises from the copious secretion from the bronchial membrane, and the cough which is excited by the effort to get rid of it. In this chronic stage of bronchitis, then, we have chiefly a local disorder, yet it is one which we are generally obliged to treat by constitutional remedies only, from the difficulty of applying topical agents to the lining membrane of the air passages. The profession has long been familiar with the change of treatment adopted when acute inflammation of the bladder subsides into the state of chronic catarrh of the organ. In the first instance, antiphlogistics, opium and diluents, are used; but when the disease has become chronic, injections of alum or other astringents into the bladder are employed with the greatest benefit. Upon the same principle, I lately made a patient inhale an impalpably fine powder of alum, gum, and morphia, in the manner brought before the Liverpool Medical Society by Mr. Bickerton, and in four and twenty hours the expectoration was reduced from above a pint and a half daily to nearly half the amount, with corresponding benefit to the patient.

Again, there is a class of diseases situated in organs so difficult of access, that we are frequently obliged to resort to counterirritation in the neighbourhood, or to other methods of cure more or less inefficient, from our inability to apply our remedies to the affected surface itself. Such are chronic affections of the chordæ vocales, the Eustachian tubes, the frontal sinuses, and the passages in the nose. In these cases, we are generally unable to apply our remedies locally, and we therefore resort to blistering in the neighbourhood, injections which we have but little hope of directing with accuracy to the part affected, and other means which we feel to be more or less unsatisfactory.

It is to meet such cases as these that the method I propose to lay before you offers considerable advantages; for if we can obtain our curative agent in the state of vapour, it may then be applied topically to every part which is traversed by the air we breathe; and may, therefore, be made to pass over a diseased laryngeal surface, by every effort of inspiration and subsequent expiration; or it may be passed through the nose by expiration through that organ; or driven into the Eustachian tubes or the frontal sinuses by forced efforts at expiration when the mouth and nostrils are closed, so as to prevent the actual escape of the air.

I propose now to mention a few cases illustrative of the general principle here laid down.

A patient had suffered from complete loss of voice for above a year, not being able to speak above a whisper; the affection was evidently purely local, probably dependent upon a thickened condition of the chordæ vocales. She had no pain or any constitutional symptoms, and had long since given up treatment. She used the mercurial cigarette, to be described hereafter, for a month, and perfectly recovered. A patient in the last stage of phthisis suffered from pain in the larynx, and utter inability to sleep for days and nights together, from the incessant cough and expectoration. Other treatment had been without avail; and I then made him inhale the vapour of strong nitric acid poured into a saucer, and placed near his mouth. He soon experienced relief from it; the pain abated, and the cough ceased to such an extent that he obtained some hours of refreshing sleep. He continued to adopt this means of relief at intervals until his death.

The trouble and annoyance of strong nitric acid in the neighbourhood of a sick bed are, however, so great, that the inhalation of the nitrous acid fumes obtained by the combustion of nitrate of potash is far preferable, and is easily accomplished. A young lady, who suffered much distress from the cough in a rather advanced stage of phthisis, and could only lie on one side, found far more relief from the inhalation of the fumes arising from brown touch paper burning in the bottom of a breakfast cup, and held near to her mouth or far from it as her own comfort dictated, than she did from the employment of cough medicines, the local application of the solution of nitrate of silver, or any other means which she had employed.

In a very chronic case of offensive discharge from the nostrils, with a sense of uneasiness in the frontal sinuses, the patient was quite cured in about a month by the use of the mercurial cigarettes. He held his nose after taking a mouthful of the smoke into his mouth, and then forced it into his nostrils, in the manner sometimes practised by accomplished smokers.

Another patient, who suffered from polypus in the nose, and had been operated upon in London by Mr. Fergusson, and subsequently in this town by myself, is now able to keep the disposition to form fresh polypi in check, by smoking the cigarette, and expelling the smoke through his nose, when he feels uneasiness which warns him that he has to fear a recurrence of the disease.

In the treatment of the form of deafness which is dependent upon an obstructed Eustachian tube, I have increasingly numerous cases in which the smoke forced into the tympanum from the throat, gradually restores the sense of hearing. The circumstance which first led me to adopt this method was hearing a deaf patient on one occasion remark that, when he was sneezing the day before, he heard perfectly; the violent effort appeared for the moment to have dilated the Eustachian tube, and hearing was the result. I have at present under my care a patient who has been deaf for seven years, and he has benefited more by this method of treatment than by any other. In this case, however, simple brown touch paper made into cigars appears to be of more service than the mercurial cigarettes.

Such is an outline of the cases likely to be benefited by this mode of treatment, and the various methods in which it may be employed. It offers a reasonable appearance of advantage in what are often very intractable diseases; and in bringing it more prominently before the profession, it is with the hope that it may prove a useful addition, in however small a degree, to the remedial agents at present in our possession. Modifica-

tions of the method itself, and the employment of other agents capable of being converted into the form of vapour will, no doubt, suggest themselves to the experienced practitioner, if he is satisfied by the results of trial that the principle itself is a beneficial one.

I use, for making the mercurial cigarettes, fifteen grains of nitrate of mercury, fifteen minims of strong nitric acid, and six drachms, or as much as may be sufficient, of water.

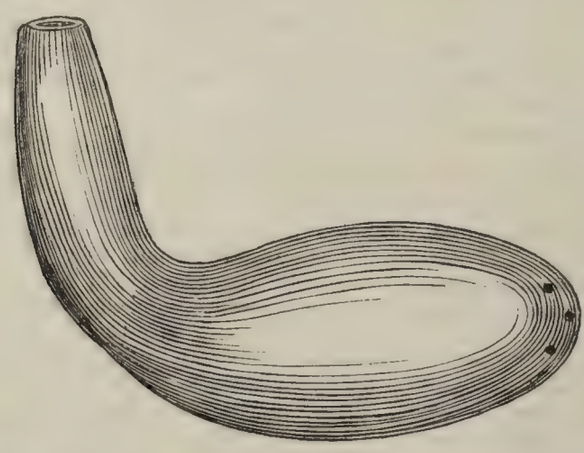
Dissolve the nitrate in the nitric acid diluted with the water, and aided by a gentle heat (such as the top of an oven), and soak in the solution thick white blotting paper (eight inches by six). Divide it into eight slips, which are to be rolled round a quill or pencil into cigarettes before they are quite dry, and gummed along the edge. If the paper is quite dry before it is rolled, it becomes brittle, and breaks in the folding.

There are various modifications of this mode of employing medicines mentioned in *L'Art de formuler*, by MM. Trousseau and Reveil, from which work I obtained the suggestion in the first instance.

VESICO-VAGINAL FISTULA OF FIFTEEN YEARS DURATION: SUCCESSFUL EMPLOYMENT OF A PESSARY.

By J. Birkbeck Nevins, M.D.Lond.

The patient for whom I employed the accompanying pessary had suffered from a vesico-vaginal fistula for fifteen years, during which period she had never been dry, day or night. She had been operated upon twice by suture previous to coming under my care; and, although she had been less wet than before the operations, the fistulous opening was still large enough to admit a goose-quill, and was situated about an inch in front of the cervix uteri. It appeared to me that cure by further operation was not to be calculated upon, for the last operation had been performed by a surgeon of great manual dexterity and experience in such cases; but I thought it possible that a pessary might be made of such a shape as to act like a plug when applied to the fistulous opening, and retained against it by the ordinary contractile power of the vagina. I therefore sought for some material which should be capable of being readily moulded into the form of the vagina, by being pressed, whilst soft, into that canal, and should still retain its form after being withdrawn from it. After several failures, I found the best material to be fresh made dough, rendered still tougher and drier by having as much whitening worked into it as it would admit of without becoming crumbly. I then made this by hand into a form resembling a solid uterine speculum; and, having oiled it externally, pressed it with some degree of force into the vagina, so as to distend it moderately. The pessary thus formed retained its figure sufficiently to admit of a wax cast being made from it, which the patient wore for two or three days, with complete relief from the involuntary discharge of urine. The pessary, when thus made, was, however, retained with difficulty in the vagina, which contracted upon it in such a manner as to cause its expulsion. I therefore altered the



form, as shown in the accompanying sketch, by increasing the thickness in the centre, and diminishing it near the end; so that the sphincter vaginæ might contract upon it, and retain it in position, instead of expelling it as before. I also added the perpendicular portion in front, which furnished sufficient surface for a napkin to press against when applied round the hips, and so assist in its retention.

The mould thus finished was then cast in hollow gutta percha by Messrs. Johnson of this town (Liverpool); and the pessary was so light as to be worn without the slightest uneasiness by the patient, who left the sick ward dry and comfortable for the first time since the commencement of her intractable malady. She withdraws the instrument two or three times a day, and pours a stream of clean water through the holes with which it is pierced; and at these times empties the bladder with ease, which has retained the whole of the urine secreted during the interval.

The perpendicular portion in front appears not unlikely to cause irritation and excitement; but the patient stated that she never suffered in this manner; and I have reason to think that she spoke the truth, from her character and general behaviour. It is evident that the dimensions of the instrument may require varying in other cases, so as to suit the figure of the patient; but, the general principle of mechanical pressure by means of a suitable pessary having been successfully used, the form of the instrument will be easily adapted to the requirements of each particular case by the surgeon in attendance upon it.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

CHARING CROSS HOSPITAL.

CASES OF SYNOVIAL TUMOURS.

Under the care of R. Barwell, Esq.

Case I. Mary Liskeard, aged 39, a washerwoman, applied at the Charing Cross Hospital, on June 9th, 1858, on account of a painful swelling of the thumb, which she attributed to a sprain. The tumour was situated at the front of the thumb, was spindle-shaped, extending from the distal end of the first phalanx upwards among the muscles of the thumb to the wrist; it was superficial at both extremities, and deep among the muscles of the ball of the thumb in its middle. It was not tender, although motion of the thumb was very painful. It fluctuated from end to end, without crepitation. It was evidently dropsy of the sheath of the flexor longus pollicis tendon; and from the absence of crepitation, it seemed that there were none of the little millet-seed bodies generally found when flexor tendons are the seat of such disease. Various counterirritants were employed with little if any benefit. The tumour was then punctured with a fine tenotomy knife. The opening in the skin was very small, and made at some distance from the tumour on the wrist; the opening in the sac was made larger by a careful sweep of the knife. The fluid which escaped from the wound was little thicker than ordinary serum. Pressure was applied and kept up for some days; but the tumour returned.

July 14th. A small trocar was introduced at the lower end of the tumour, and two drachms of alum solution were injected; the solution was squeezed out again in three minutes. The tumour again returned.

August 2nd. The injection was repeated, and allowed to remain five minutes in the sac. Some pain was felt, but no evil result followed, and the tumour did not return; although, on August 20th, when Mr. Barwell last saw her, there appeared some thickening about the tendon.

Case II. James Newell, aged 15, was brought to Mr. Barwell with a tumour in the groin. The swelling was situated at the external abdominal ring, and had all the appearance of a tense hernia; but it was so tender, that the boy shrunk at the slightest touch, and it was impossible to examine it properly. He was sent to the ward that he might lie down; but still he shrunk and kicked when the tumour was touched, so much, that chloroform was administered to allow of a proper examination, and if it were a hernia, to enable it to be reduced. When he was under the influence of the anæsthetic, so that the tumour could be fairly handled, it presented a resiliency different to that of an ordinary hernia, also an obscure sensation of fluctuation. With some difficulty, Mr. Barwell examined it by transmitted light, and found that it

was translucent. About half an ounce of clear serum was drawn off with a fine trocar. The fluid contained abundant albumen, contrary to what some authors have affirmed to be the case in hydrocele of the cord. The tumour has not returned.

Case III. L. D., a gentleman of good constitution, applied to Mr. Barwell on February 8th, 1858, on account of a tumour on the back of the leg. The tumour was found to be situated in the popliteal space, at the side of the biceps tendon; it was of about the size of a large walnut, superficial, painless, rather tense, and fluctuated. It was evidently a synovial sac, probably originally connected with the sheath of the tendon above named. Various counterirritants were applied without benefit; in fact, the tumour continued to increase. Mr. Barwell punctured it, making but a very small opening, squeezed out the fluid (a thin clear serum), and applied pressure. The sac, however, filled again, and the tumour became larger than before. He examined it again most carefully, with the intention of discovering whether any communication existed between the sac and the sheath of the tendon from which he supposed it to originate, and found that such was not the case. He therefore proposed to inject the tumour with a solution of alum; the proposition was accepted, and the operation was performed with the finest trocar. The solution was of the strength of two grains to the ounce; and, after it had remained in the sac five minutes, care was taken to squeeze it out entirely. But little pain was felt at the time. Firm pressure was kept up for three days, and then removed. The tumour has not reappeared.

It may be remarked, with reference to the first and third cases, that Mr. Barwell considers alum solution preferable to iodine as an injection for synovial tumours, since it acts as an astringent, without altering the constituents of the tissues to the same degree, and therefore giving a greater chance of adhesion.

ST. GEORGE'S HOSPITAL.

I. TWO CASES OF FOREIGN BODIES IN THE NOSTRIL.

Under the care of Prescott Hewett, Esq.

Two little operations, witnessed here the other day, will be found of some practical interest, as showing the length of time during which foreign bodies may remain in the nose without exciting any mischief, and as giving a caution that, in children, we should always examine these cases minutely for foreign bodies when, as is frequently the case, a discharge goes on for any length of time from the nose without any obvious cause, and is not alleviated by the remedies employed. Both the patients were little boys, about six or seven years of age, under the care of Mr. Prescott Hewett. The first came with the history (although, as it afterwards proved, not a correct one) of a foreign body. He was said to have passed a plum-stone up his nose. This was supposed to have taken place a year ago. On examination, some foreign substance could be recognised with the probe high up in the nostril, wedged against the spongy bones. It was impossible to deal with it till chloroform had been given; and, this having been done, a long screw (more than an inch in length) was with some difficulty extracted. The child soon recovered. The other had been under the care of various practitioners for the last three years, on account of "discharge from the nose", "ozæna", etc.; but without any suspicion being entertained of a foreign body being present. On examination, Mr. Hewett recognised at the top of the nostril a black looking substance, which seemed hardly like a portion of the natural tissues. The child was therefore put under the influence of chloroform, and a small black button (such as is used on boots) was extracted. The ozœna and discharge from the nose soon disappeared.

II. FLEXION OF THE FOREARM IN WOUND OF THE PALMAR ARCH: SUCCESSFUL.

Under the care of H. C. Johnson, Esq.

[*From Notes by* E. Venning, Esq., *House-Surgeon.*]

Henry Luthull, aged 6 years, a schoolboy, was admitted on August 23rd, and the following history was given by a surgeon who had previously seen him. A week before his admission, he was cutting something with a sharp knife, which slipped and cut him just over the region of the superficial palmar arch of the right hand. There was a great amount of hæmorrhage at the time, but the mother did not take him to a surgeon until six days had elapsed after the injury. During this time there was every night severe hæmorrhage, and the mother at length becoming frightened by the bleeding, took him to a surgeon, who, finding bleeding was then going on, exposed the wound, and turned out a considerable amount of clot which was in the wound, and tried to take up the ends of the bleeding vessel, but failing to do so (on account of the parts being in a sloughy state), he brought him up to the hospital.

On admission, the wound having been bandaged up by the surgeon before his admission, and there being no bleeding, Mr. Venning merely sent him to bed, determining to watch for bleeding. On going round the wards on the night of the 23rd, about 10 P.M., Mr. Venning found hæmorrhage had again commenced; he, therefore, flexed the forearm upon the arm, and bandaged it up in that position, and the hæmorrhage immediately ceased. He did not take off the compress which had been applied before admission.

Aug. 24th. Early this morning, the night nurse had allowed the little patient to sit up, and had taken off the bandages, so that, about 12 o'clock, P.M., hæmorrhage had again commenced, and, therefore, soon afterwards, the forearm was again flexed upon the arm, and strapped up in this position; strict orders being given that the strapping was not to be removed, and that the patient was to be kept still in bed.

Aug. 25th. No more hæmorrhage had occurred; the arm was still kept flexed.

Aug. 27th. The compress was removed to-day, as there had been no more bleeding. The wound was healing nicely. Water dressing was applied, and flexion was still kept up.

Aug. 29th. There had been no return of the hæmorrhage.

Sept. 1st. The compress was removed to-day; the wound was quite healed; the strapping was removed, and the patient was allowed to get up and use the arm.

Sept. 2nd. The wound was entirely healed; the patient was much stronger, and was discharged next day.

The reader will find another successful case of the same treatment, also from St. George's, at p. 665; and another case has since occurred, and is still under treatment, where profuse bleeding from the radial artery in a case of amputation of the thumb has been hitherto controlled by somewhat similar means. All this seems to show the value of this simple and easy method of treatment.

Original Communications.

DIPHTHERIA.

By William Newman, M.B.Lond., Fulbeck.

Since March 1st, 1858, I have met with nineteen cases of diphtheria—limiting the term strictly to those instances in which there has been present the fibrinous exudation on the surface of the tonsils, palate, or wall of the pharynx, with the coincident constitutional symptoms; not in any way referring to a much larger class of cases exhibiting sometimes specks of exudation matter, but running the course of ordinary sore-throat, or merging ultimately into well marked tonsillitis.

I will classify my remarks according to the *resumé* given in the Journal of June 25th.

1. *Sex and Age.* Of the 19 cases, 11 were females, and 8 males, so that *sex* would seem to have but little, if any, influence. More than half the cases (ten out of nineteen) were under ten years of age; thus—

Under 1 year	0	Between 15 and 20	2
Between 1 and 5	4	Between 20 and 30	2
Between 5 and 10	6	Between 30 and 40	1
Between 10 and 15	2	Between 40 and 45	2

2. *Occupation* appeared to have little influence; in-door and out-door were alike attacked. Thus, in adults—one was the wife of a farmer; two were domestic servants in good houses; three were farm labourers; and one was a labourer's wife.

Residences were fairly good in certainly the majority. One death, of a female, aged 10, occurred in a house with ill placed and ill drained privy.

Food or clothing were fairly good in all; excellent in several instances.

Air. The purity or impurity appeared to exercise very little influence. The disease showed itself alike in low and damp situations, and in those high and bleak.

3. Every variety of weather contributed its share of cases; but no exact meteorological register was kept.

4. *Contagion.* Some facts would seem to favour this view; *e.g.*, a boy, aged 19, brought the disease from a village eight miles away, where many cases had occurred, to his home. There had been no prior disease in the house or in the village. A sister and brother had the disease not very severely. Two female children, aged 12 and 10, residing next door in the same block of houses, exhibited the disease severely; the youngest of the two died in two days. All these cases occurred within ten days.—A maid servant, aged 30, had the disease. Her mistress, aged 33, and two children (a boy, aged 6, and a girl of 5), showed the disease within ten days. All were recovering, when another maid servant, aged 25, also took the disease, went home on its appearance, and died within a week.

5. *Scarlatina.* Nothing occurred to prove any connection between the two diseases. Several of the children and nearly all the adults had had scarlatina prior to the occurrence of diphtheria. In one family (not quoted in the list, but personally known to me), three children had diphtheria in turn, and all died from the disease—all of them having two years previously been the subjects of undoubted scarlatina.

6. The *symptoms* attendant on the first appearance of the disease have almost uniformly been those of extreme depression, with consequently more or less of febrile reaction. External swelling of the neck has not usually been observed as a very early symptom; nor is dysphagia early in its appearance or actually necessary in the course of the disease. In one well marked case of a child, aged 4 (dying rapidly with extension of disease to the air-passages), there was never any dysphagia whatever. I am almost disposed to give as the very first local symptom (and the statement is borne out by at least two of the cases in the table) the existence of marked œdema both of the uvula and tonsils—the mucous membrane appearing to be infiltrated with serous exudation, and then studded by the characteristic lymph deposit.

7. *Exudation.* In by far the majority of cases, the exudation was present when the patient was first seen. In the few instances where the progress of the disease could be fairly watched, it came on from the first to the third day after the first complaint of illness.

8. *Microscopic examination* of the effused material in three cases gave no evidence of fungoid growth.

9. *Albumen in the urine* existed in one instance, but was not found in the other instances. Various accidental complications were noted in some of the cases.

10. *Treatment.* I have never resorted to salines, diaphoretics, or, in short, to lowering treatment of any kind; but, on the other hand, have freely given tonics, *e.g.*, tincture of sesquichloride of iron, in doses of ten to twenty minims every four hours; or bark with ammonia; stimulants, as sherry in full quantity, either with or without water, or good beer; nutriment in the shape of beef-tea, essence of meat, arrowroot.

Local Applications. I believe the best to be the strong hydrochloric acid, applied freely, in the first instance, to the parts affected, and repeated if necessary; and followed by the use of gargle of two drachms of hydrochloric acid and an ounce of glycerine with seven ounces of water.

11. *Tracheotomy.* I have no evidence on this point. One child, a girl, aged 4, died from disease invading the air-tubes; but tracheotomy was not permitted.

12. The *mortality* was 2 out of 19, or 10·52 per cent.

13. No *post mortem* examinations were made.

The disease in question is not only worthy of note in its ordinary course, for its danger to life from the exhaustion attendant on it; but also for the varied sequelæ which may show themselves, either as the disease subsides, or even after an apparent though partial recovery.

Sloughing of the cheek (interior), unconnected with the throat-affection by any direct continuity of surface, was observed in a girl aged 12; and subacute inflammation of the mucous membrane of the nose and mouth, lasting for some weeks, in the same child.

Affections in which the nerves principally suffered were very common. Aphonia, lasting some weeks, occurred in a boy aged 7. Paralysis of the portio dura, coming on directly after the subsidence of the disease, on the side most affected, was observed in a female, aged 45. Coincident with this, there were paralysis of the laryngeal and pharyngeal branches of the vagus, and numbness of the hands and feet. Loss of power over the muscles of the palate occurred in a boy aged 7.

Excessive and long continued general debility was seen in several of the cases; coexistent with it was very complete anæmia in two of the cases—a girl aged 7, and a boy aged 5.

Tubercular disease of the lungs was called into activity in one of the adult cases.

Of skin-diseases, eczema, impetigo, etc., were observed, with formation of numerous and even large abscesses on almost every part of the body.

The whole of these results may be cited as proofs of the deficient power in the system, with, in some of the cases, local manifestations of the constitutional disorder. Whether the affections of the nerves point to any special element in the disease itself, would seem as yet a matter of uncertainty.

CATARRH.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

Dr. Copland says of catarrh, "Although the most common of all diseases, there are few which are less understood, or have called forth a greater diversity of opinion." He defines it as a specific irritation of the nasal and adjacent mucous surface, which may run on to catarrhal bronchitis. In another place, he writes, "It is not pure inflammation, but an irritation of a specific or peculiar kind, attended by slightly increased vascularity, afflux of the circulating fluids, and augmented secretion." He does not sanction the application of the term catarrh to all affections of mucous surfaces attended with sero-mucous discharge. Neither does he assent to the opinion that the "defluxion is a consequence of the suppression of the cutaneous perspiration arising out of the irritation which the secretion retained in the circulation produces upon the cephalic and pulmonic mucous surfaces." He infers that the causes of catarrh affect primarily the organic nerves supplying the surface principally disordered, and through them, the system generally.

Dr. Watson simply speaks of catarrh as a "moderate degree of inflammation."

Trousseau says, "The catarrhal state and the inflammatory are different, though in some measure allied (*voisins*). The first is distinguished from the second by the circumstance that its accompanying irritations do not terminate by suppuration. Their character is an extreme superficiality, a singular mobility, and diffusion." Again, he speaks of the inflammations even in the severest forms of catarrhal fever as "quasi-inflammatory, false, or bastard." Grave pneumonias, attending such states, are rather an acute stuffing of the lungs (like that of the nasal cavities) than a real pneumonia, which can fairly be attacked by venesection. He recognises very plainly the existence of a nervous element in the disorder which crops out (so to speak) very notably in influenzal catarrh.

Neither Rokitansky nor Virchow seem to recognise catarrhal inflammation as specially different from the same process in other parts.

Catarrhal disorder, for the most part, consists of a general affection, and a local. The latter shows itself in a hyperæmic state, more or less verging into downright inflammation of one or more mucous membranes, attended sooner or later with mucous, muco-purulent, or muco-watery exudation. The former consists of various febrile phenomena; it may be of brief duration, or but slightly marked. More particularly we may describe the general disorder as varying from slight chilliness, and subsequent febricitation, with some depression, to a well marked pyrexial condition, with initiatory rigors, followed by rapid, excited pulse, hot skin, thirst, and oppression; or, as is often the case in the present day, the patient chiefly complains of depression and pains in the head and limbs; feels as if beat and bruised, or sore all over, with a cool skin and languid pulse.

The picture of the local affection will of course vary according to its site. Its general features are the above mentioned phlegmasial action, together with certain morbid sensations, and induced movements, often of reflex character. We will describe these more particularly:—As to the *inflammation.* The vessels of the inflamed part are more or less filled and distended with blood, so that the surface presents, in extreme cases, a full red colour. Microscopically examined, it is seen that the congestion most affects the superficial vessels, the terminal capillary loops, which alone may appear filled with blood. Sometimes small extravasations take place, mostly on the surface; but also interstitially. Judging from what we can observe in the conjunctiva, we may believe that the blood in the vessels is not in a state of actual stasis; at least, not during the earlier period of the inflammation. A full venesection will for the time

so relieve the loaded vessels of a scarlet conjunctiva that the membrane resumes its natural paleness. What it does in this case we may suppose it would also effect in a severe bronchitis or pneumonia.

The injection of the blood vessels causes more or less tumefaction of the membrane, which is further increased by interstitial exudation, or in the compound mucous membranes (*e.g.*, gastric or intestinal), by increased formation of epithelium in the follicles. In chronic catarrh the hyperæmia may be more of a dusky red, of a venous tint, or it may lessen so much as to be almost imperceptible, being, in fact, dissipated entirely in the copious exudation.

Exudation. The exudation in the catarrh is chiefly on the free surface of the membrane; submucous effusion belongs essentially to more deeply seated and graver disorders. This distinction seems to me worth establishing as a limitation of the term catarrh; although there is no doubt that the most pure catarrhal inflammation passes into the deep seated by insensible grades. Thus, I would not name a case of purulent ophthalmia, with notable chemosis, conjunctival catarrh; nor a case of œdema of the glottis, laryngeal catarrh. It is to be borne in mind that submucous exudation is much more likely to occur when the areolar tissue in that situation is abundant or lax. Another limitation of catarrh is afforded by the change of the exudation to fibrinous matter, constituting the false membranes of croup and diphtheritis. We shall not attempt to discuss here the special causes of this change; but only point it out as a state manifestly different from that of catarrh.

The truly catarrhal exudations consist of blood-plasma, modified by its transition through a homogeneous membrane, and by the influence of the superjacent epithelial cells. The most essential constituent is the sticky, glutinous, tenacious substance which is the product of all mucous membranes, and gives its name to them. There can scarce be any doubt that this is modified albumen, though the chemist cannot reverse the process of vital chemistry and reconvert it, or obtain albumen from it. It contains less nitrogen (12·82 : 15·67) and more oxygen (28·11 : 22·36) than albumen, and is rich in the chlorides of alkalies. In part at least it seems probable that it is produced by the cells of the surface from which it is effused, which elaborate it in their interior. According to another view, the mucous stuff is formed from the blood-plasma as a complementary product to the epithelial cells. Catarrhal exudation always contains albumen mingled with the mucous fluid, and the same is the case with analogous productions, as synovia, and the contents of colloid cysts. The corpuscles present in morbid mucus are for the most part identical with those of pus, they are often, however, mingled with various forms of immature epithelial cells, or cells with granulous contents, or actual glomeruli. Blood-corpuscles may also be present, even in notable quantity, and sometimes minute fibrinous films. It is very worthy of notice that in the severer grades of inflammation catarrhal mucus is eminently adhesive, so much so that it can scarcely be shaken out of the porringer containing it. In this state it is also much more transparent and more scanty than any subsequent period. The transparency in a great measure depends on the absence or paucity of the multitudinous corpuscles which are crowded together in the more opaque varieties. In nasal catarrh the exudation at the outset is often remarkably watery and copious. It is not clear upon what this peculiarity depends; but it may be surmised that the large venous plexuses which underlie the mucous membrane are not unconcerned in it.

While this watery flow continues it would seem that there is rather a straining off of fluid from the blood vessels than a secretion. The latter faculty, implying an active condition of the cells covering the surface, is not restored until the flux begins to decline. The instances of the Malphigian renal tufts, and of the pulmonic air cell plexuses afford proof that simple capillary membranes in their normal state may prevent effusion of all but the saline and watery parts of the blood. When the normal filtering power is deranged by continuance of the hyperæmic stress, albuminous fluid next escapes; or even fibrinous and red corpuscles. The quantity of aqueous fluid which escapes from the renal capillaries varies very greatly we know with the state of the nervous force, being often remarkably increased when this is lowered. These remarks elucidate in some measure the peculiarity of the nasal catarrhal exudation first adverted to. They show that the filtration, taking place through homogenous capillary membranes, may vary greatly, according to circumstances with which we are as yet insufficiently acquainted; one of which, however, of prime importance, is evidently the degree of strain to which they are subjected by the blood current. The mucus which lines the pyloric region of the stomach in gastric catarrh is often very closely adherent and tenacious, and is peculiar in not containing, so far as I have seen, any other corpuscles than detached epithelial particles. The mucus passed in dysenteric purging contains, at least in the earlier periods, numerous nuclear corpuscles, probably derived from the Lieberkühn follicles; but not pus globules. These, no doubt, are present at a later period, and in the severer cases. The mucus from the bladder and urinary passages easily becomes quite puriform, and always contains multitudes of pus corpuscles. The uterine mucus tends to be puriform in about the same degree as the bronchial. It is always notably alkaline. The vaginal secretion is remarkably acid, and when excessive in quantity is of a much more watery quality.

However, as Dr. Tyler Smith describes it, the cervical uterine "secretion" may be so profuse and watery that the traces of viscidity are nearly lost.

It is tolerably constant to find the catarrhal exudations in chronic cases attended with much debility and want of tone—profuse and watery. Perhaps the best instance of this is the flux called bronchorrhœa. Pyrosis, in my opinion, is a very analogous discharge from the gastric mucous surface. The pain preceding the gush, the copiousness of the discharge, and the absence of the disorder in mercurial and neuralgic salivation prevent me from assenting to the opinion that pyrosis results from deglutition of much saliva. In both these instances the capillary walls must be in a different state, as regards filtering power, from that existing in chronic bronchitis, with profuse muco-purulent secretion; or gastric catarrh, with tenacious mucous exudation. The state conditionating the then passive flux must be similar to that of the renal tufts in low nerve disorder.

Sensation. The sensations, the dysæsthesiæ, attending catarrh, are familiar to all. In the eye there is that of grit between the lids, with more or less stiffness and redness. In nasal catarrh, there are stuffing, heat, dryness, impairment of smell, perhaps gravative headache: in bronchial catarrh, sense of soreness or rawness, heat, and tightness in the chest: in gastric there is tenderness on pressure, and pain at the epigastrium, or between the shoulders, thirst, loss of appetite, perhaps nausea: in intestinal, abdominal uneasiness and griping: in vesical, frequent calls to micturition, "shooting, throbbing pains in the region of the bladder," increased by pressure, dysuria: in urethral, scalding in micturition, heat, pain and tenderness in the part: in uterine catarrh, pelvic uneasiness, sense of weight and bearing down, pain and aching in the loins.

Induced Movements. The induced movements are as follows: In the eye, more or less spasmodic contraction of the orbicularis palpebrarum: in the nasal cavities, sneezing, or voluntary expulsory efforts: in bronchial catarrh, cough: in gastric, vomiting: in intestinal, diarrhœa, or hurried peristaltic action: in vesical, frequent micturition.

Fever. Febrile movement often forms a part of catarrh. In the majority of cases, at the present day, it is either from the outset decidedly asthenic, or tends speedily in that direction; but it may often be of an opposite character. In influenzal catarrh the asthenic quality is strongly marked. The state of the secretions has nothing very constant in catarrh. The perspiration may be temporarily suppressed or not. In the first case its restoration in the freest manner by no means insures improvement. The urine may be high coloured and turbid if there is notable pyrexia; often it is apparently normal. The bowels are usually relaxed if the intestinal tract is affected.

Causes. The causes of catarrh are certainly manifold. Not to insist on the fact that mechanical irritation will produce catarrhal inflammation of a mucous surface, there is good ground for the statement that the disorder in its general form, and with local inflammation, may be occasioned by atmospheric influences or by exposure to damp cold after the prolonged action of relaxing heat.

Dr. Watson states that errors in diet in some persons, occasioning dyspepsia, always produce catarrh. The gouty poison will give rise to bronchial catarrh, as in a case recently under my care. So do the peculiar emanations from hay in some persons of special idiosyncrasy. The poison of measles produces commonly well marked catarrhal effects. Again, as regards nasal catarrh at least, I am satisfied it may come on without the action of cold or epidemic influence, or any discoverable cause. The disorder seems to originate *per se*. The following points seem to be well ascertained. Mere cold, however severe, does not induce catarrh, in fact, when climatic it seems to have the opposite effect, and to diminish the liability

of the system to be affected in this way. The beneficial effect of the cold shower, or douche bath, is an instance of the same kind.* The high temperature of a tropical climate is no protection against catarrh; colds and coughs, though not so common as in England, are by no means unfrequent in India. This I state on the authority of several residents whom I questioned as to the circumstance. I had lately under my care an elderly gentleman, with chronic bronchial and nasal catarrh which commenced in India. Diarrhœa, one of the most frequent of tropical diseases, in most cases is simply intestinal catarrh.† So far from affording immunity, prolonged heat evidently predisposes to catarrh by enfeebling the system, just as cold has the opposite effect. Bakers, and other workmen whose occupations expose them to vicissitudes of heat and cold, are more than usually prone to catarrh.

Dr. Copland remarks, "It should not be overlooked also, that sudden change from a low to a high temperature, or from a very dry to a very moist air, and even the being more than commonly over heated, without any very apparent chill or exposure to cold subsequently in any form, will often produce catarrh. This is especially the case if the exposure to warmth be sudden, after an impression of cold of some continuance, as the coming into an over-heated apartment out of a cold and moist atmosphere—the instantaneous transmission from a raw air of about 32° to a dry air of upwards of 70°. The production of catarrh by peculiar atmospheric influences (influenzal), independent of the effect of temperature, is a striking phenomenon. It seems natural to attribute it to the reception of some aerial poison into the system, though whether this be a material thing, as a deleterious gas, or whether it be an influence, as, *e.g.*, some peculiar electric state which affects the nervous system in a perturbing manner, can scarcely be determined. The very sudden, wide spread invasion, and the characteristic protraction of influenza seem more like the effects of the latter kind of cause than the former.

Pathological Relations. The diseases with which catarrh appears to have decided affinity are rheumatism, malarious disorder, and some superficial cutaneous eruptions. Dr. Copland says, "Of the more pure complications of rheumatism, none are so frequent as those with catarrhal fever, or simple catarrh." Again, "Rheumatism generally proceeds from the same or very similar causes to those which produce catarrh; they are both also often present at the same time and in the same person, and the epidemic prevalence of both is not uncommon." I have recently observed the occurrence of well-marked herpes labialis in connection with pretty sharp rheumatic pains, no trace of catarrh existing.

This eruption Dr. Salter considers as positively conclusive of the presence of catarrh. I do not entirely agree with him, but there is no doubt that it very often does accompany the catarrhal state. Its occurrence in rheumatism is therefore an indication of affinity. It is generally in the less severe and marked instances of either disorder that we observe the co-existence of rheumatism and catarrh; for when one is fully developed it absorbs, so to speak, the other. This is what might have been expected in diseases alike in essence and mode of action, but differing in locality.

The affinity between catarrh and malarious disorder is indicated by the following circumstances. Dysentery and diarrhœa, both unquestionably common results of malaria, are as often almost the consequences of the causes of catarrh. (Vide the case of the army at Dettingen, quoted by Dr. Watson from Sir J. Pringle, vol. ii, p. 474.) Influenza has been observed by Huxham, Cleghorn, Petrie, and H. Greenhow, to show a decided relation to remittent or intermittent fever. The first named authority states that influenza frequently, after two or three days, ran into a quotidian, or tertian. Dr. Greenhow says, "The influenza of 1847 very often assumed an aguish character; excerbations of the disease, preceded by anomalous pains, cough, rigors, heat and sweating, with loaded urine, recurring periodically, at tertian or quartan intervals." The pains which accompany the invasion of catarrh are truly neuralgic, indicating the especial concernment of the nervous system. The same is the import of the remarkable prostration of influenza, which in rare cases assumes the form of actual paralysis, as in a case which I have recorded in this Journal, April 16th, 1859. As there is much evidence to show that malarious disorder prominently affects the nervous system, the two maladies in this respect manifest a resemblance to each other.* In ague, and in catarrhal fever there occur general febrile disorder and local hyperæmia, the latter being sometimes awanting, or very slight; and not in any case originating the former. Again, dysentery, the result of malaria, is often a substantive inflammation with excited pyrexia, just as bronchitis from catarrhal influence is with its fever.

Between catarrhal inflammations and such skin eruptions as diffuse eczema, there is a manifest resemblance. The acute or sthenic stages, and the chronic or asthenic, are quite analogous. In both there is either inflammation of, or flux from, a tegumentary surface; but in one case it is from an inner, in the other from an outer. Eczema is just such an inflammation of the skin, as catarrh is of a mucous membrane; both affections are superficial and spreading, attended with free exudation; and differ from phlegmonous or croupous inflammation. In respect of its causes, there is not often any observable connection between eczema and catarrh; but another vesicular disorder, herpes, is, as already observed, a very frequent attendant upon catarrh.

Pathology. The pathology of catarrh is of much interest to inquire into, not only on account of the frequency of the disease, its occasional severity, and its relation to other diseases, but because the advance of scientific knowledge seems to render it possible to gain a clearer and better understanding of its various phenomena. Let us take an ordinary case for examination.

A person is exposed to damp cold, and soon after begins to feel shivery and depressed, to have tightness of chest, some dyspnœa, cough; in short, has a bronchial catarrh, which proceeds, with a certain amount of pyrexia in the earlier periods, and in the latter with gradual diminution and cessation of the mucous exudation. In such a case, a morbid impression has been made on the general cutaneous sensory surface; perhaps particularly on the anterior thoracic part—the chest, as popularly termed. This, it may be presumed, is communicated through the spinal cord to the sympathetic ganglia, from whence the vaso-motor nerves of the tracheal and bronchial arteries originate. The morbid impression causes more or less paralysis of these ganglia, or, through them, of the vaso-motor nerves derived from them. A state is thus set up in the membrane lining the air passages characterised by hyperæmia, heat, and hurried nutritive actions. (Vide Bernard's description, *Leçons sur le Systeme nerveux, grand sympath.* vol. ii.) This lighting upon a predisposed part, gives rise to inflammation and exudation. If the individual continues to be exposed to the cause, viz., damp and chill air, the morbid impression is intensified, and the disease aggravated. Under these circumstances it may extend much beyond its original seat, and pass into catarrhal pneumonia. The same effect, *i.e.*, the extensive spread of the disease, may take place if the morbid impression meet with a high state of prédisposition in the bronchial lining membrane and that of the pulmonary air-cells. We cannot explain in what this predisposition consists. We know it means a proneness in the nutritive processes to be deranged from their normal state. That it really exists in certain persons, and at certain periods, we are sure from the very different facility with which the skin and other parts are affected by various agents in different individuals. One skin can with difficulty be inflamed by a mustard poultice or blister, another is very easily. One person's stomach is irritated by a minute dose of arsenic, another's can bear a much larger. A low degree of power in the vaso-motor nerves, and an abundance of liquor sanguinis in the blood vessels, are probably also elements of the predisposition. The kind of inflammation set up in the part will depend on the state of the tissue. If its excitability be low and weak, the inflammation will be asthenic; if it be considerable and vivacious, the morbid action will be sthenic. In the former case nerve tonics may be used with advantage, in the latter they will only increase the tissue irritation.

Pyrexia may be set up either by the original morbid impression, involving all the vaso-motor nerves of the system in a greater or less degree, or by the irritation of the inflamed part being reflected upon the same nerves and paralysing them in a way of inhibition. Increased action of the heart may be produced partly by the increased heat of the blood acting as a

* In a paper on Catarrh (*vide Lancet*, July 4th and 11th, 1857), I have quoted some convincing proofs of this.

† In the annual return of the European General Hospital at Bombay, out of 1093 cases of all kinds, medical and surgical, there are 7 cases of acute catarrh, 7 of asthma, 13 of acute and 8 of chronic bronchitis, 53 of acute dysentery and 7 of chronic, 37 of acute and 28 of chronic rheumatism, and 87 of diarrhœa. (*Transactions of the Medical and Physical Society of Bombay*, 1855.)

* The replacement of neuralgia by ague and *vice versâ*, the curative effect of mental excitants, and of quinine, whose action is undoubtedly chiefly on the nervous system, the occurrence of hemiplegia (temporary) in connection with ague attacks, as well as of cardiac paralysis, forcibly declare the especial implication of the nervous system by the malarious poison.

stimulant to its muscular tissue, partly by the paresis of its vaso-motor nerves occasioning hyperæsthesia, and hurry of its nutrition. The chilliness and shivering of the initiatory period point to a temporary excitement of the vaso-motor nerves, soon succeeded by exhaustion and debility; this excitement will induce contraction of the superficial arteries and a feeling of cold, or rather, actual lowering of temperature. If, however, the catarrhal phenomena result from the reception of a poison into the blood, or the operation of some influence which may be supposed to act at once on the whole nervous system, the process will be somewhat different. The vaso-motor nerves will be directly enfeebled, as well as the cardiac and musculo-motor, though in a less degree. The paresis of the cardiac may be sufficient to cause syncope, and that of the musculo-motor actual, if not complete, paralysis. In analogous cases it appears as if the encephalon was affected, and hemiplegia, or so-called simple apoplexy occurs. The sensory nerves are tormented with neuralgic pains, they seeming in most cases to express their enfeeblement by the cry of pain. The tissues generally feel the enfeebling influence, and the phlegmasiæ that are produced are mostly, if not always, asthenic.

This asthenic state depends upon the debility of the tissues of the affected part, which are so prostrated as to be unable to react powerfully under the hyperæmia and disturbance of their normal nutrition.

Another view that has been taken as to the pathology of cold-excited catarrh is, that the blood is poisoned by the retention of some element of suppressed perspiration. This seems to me refuted by the circumstance that the most complete diaphoresis is no certain remedy for such catarrh.

Special Remarks. In common ophthalmic catarrh the effect of cold as an exciting cause is very marked. The popular term "a blast of cold in the eye," is probably quite correct, describing as it does a sudden morbid impression producing effects of some continuance. This impression cannot, we may be almost sure, directly touch the mucous surface that becomes inflamed, as that remains constantly applied against the globe of the eye. It is probably made on the exposed part of the membrane.

In ordinary nasal catarrh I have been able very positively to observe some circumstances influencing the flux. Fatigue has had the most marked effect in increasing the flow, rest and food in restraining it. Free ingestion of liquids did not increase it. The cold of a mountain top lessened the flow decidedly. In the outset the thin flux sometimes pours from one nostril alone; after a day or two it has ceased in the first affected, and commenced in the other. A dry, troublesome, tickling, nocturnal cough, an evident neurosis, sometimes terminates nasal catarrh.

Tonsillitis is notoriously a common result of a catarrhal stroke. It requires notice that the swelling of the part is chiefly dependent on submucous hyperæmia and exudation. The tonsil is composed, not so much of mucous follicles as of a dense layer of nuclei, holding the same relation to the buccal and faucial lining as the solitary glands and Peyer's patches do to that of the ileum. The increase and hypertrophy of this submucous deposit produces the enlargement.

In *Pharyngeal Catarrh* the follicles are apt to be affected, and to secrete tenacious muco-pus. This morbid secretion often becomes habitual, especially in tipplers.

Laryngeal and Tracheal Catarrh are very common, and give rise to severe irritating cough, which it is important not to mistake for bronchial in respect to the application of local remedies. The alteration of voice is, of course, the most diagnostic sign of the former.

Bronchial Catarrh, and Catarrhal Pneumonia have their proper auscultatory signs, which it is needless to detail. In Walshe's or Watson's works the student will find all he needs. Only I would repeat the cautions: (1) Not to estimate the severity and peril of an attack of catarrh by the loudness of the râles (the most perilous cases may produce very little râle, because the tubes are to a great extent clogged up); but by the extinction of the respiratory murmur and the blueness of the lips. (2) Never to trust merely to the auscultatory phenomena to the neglect of the general. The latter may be alone capable of giving information as to the import of the former.

Gastric Catarrh is infinitely common, quite as much so as bronchial, and proceeds from the same general causes, as well as from the irritation of indigestible food, and the like. It produces in many cases the tough, tenacious mucus before noticed, which of itself must prove a mechanical hindrance to digestion by enveloping the food and keeping it from the access of the gastric juice. It chiefly affects the papillæ and the superficial parts of the gastric tubules; but in severer cases may probably extend more deeply, and produce alteration and separation of the glandular epithelium. The vessels that run between and surround the orifice of the tubules on the surface are always more congested; and from their rupture blood may be extravasated and mingled with the exudation. Slaty discoloration of the gastric mucous membrane proceeds also from the escape of blood, or of its colouring matter, into the tubes, or their interstices.

With regard to *duodenal catarrh*, I must join heartily with Bamberger in believing that it is a most difficult thing, in the vast majority of cases, to diagnose its existence. It is, however, always worth considering whether, in cases of icterus, the outflow of bile may not be prevented by catarrh of the duodenum implicating the bile-duct, and closing its narrow orifice by swelling of the membrane. Local tenderness on pressure is almost the only sign that can be esteemed of much value to determine this question, except the result of tentative treatment, as applying a blister to the right hypochondrium.

The diagnosis between *catarrh of the small* and of the *large intestine*, is stated by Bamberger as resting on the following points:—1. The pain in the case of the large intestine is attended with tormina and tenesmus, and is more severe than it is when the small intestine suffers: the pain then is duller, or may be quite absent. 2. The pain on external pressure is felt in the regions occupied by the colon when the large intestine is affected—*i. e.*, the lateral and upper; in catarrh of the small intestine, it is felt in the middle and lower. 3. Vomiting occurs much more often and severely when the small intestine is affected, than when the large is. 4. General nutrition and the health suffer more in disease of the small than of the large intestine (*cæteris paribus*). 5. Collection of exuded fluid in the small intestine causes dulness and gurgling murmurs in the mid-abdominal region; in the colon, the same signs will be found in the regions it occupies. 6. In catarrh of the large intestine, the fluid stools have more the fæcal character, or consist in great part of glassy mucus in small or large lumps, or of puriform fluid. The admixture of pure or recognisable blood generally indicates the occurrence of dysentery. If the upper part of the small intestine alone is affected, diarrhœa may be quite absent; if the disease extends to the ileum, the stools consist of a yellowish green, or greyish yellow green, flocculent fluid, depositing a sediment on standing.

In *vesical catarrh*, the influence of cold as an exciting cause is acknowledged by Mr. Coulson; it is frequently produced by mechanical causes, as the irritation of a calculus; and by certain drugs, as cantharides; and is also a common consequence of injury to the spinal cord, producing paralysis of its nerves. In the latter case, the inflammation is no doubt the result of vaso-motor nerve paralysis, reacted upon and aggravated by the urine, rendered alkaline by the effused mucus. The result of loss of nervous power in this instance is worth noting, with respect to the general pathology of catarrh. It seems reasonable to conclude that cold must induce a similar state of the vaso-motor nerves as results from injury to the spinal cord. Mechanical irritation, and the action of irritant poisons, as cantharides, seem, on the other hand, to operate directly on the tissue.

Urethritis, in its milder grades, may be termed urethral catarrh; it passes beyond this stage when submucous exudation takes place, as in the origination of stricture. In the male, urethral catarrh is rare, except as the result of infection. I have, however, seen a similar affection, though slight, and confined to the mucous lining of the prepuce (gonorr. ext.), in a healthy male child, where all other causes were positively excluded, except such as occasion common catarrh in other parts. The inflammation and puriform discharge have occurred on several occasions. In female children, as is well known, a catarrhal inflammation of the vulva and adjacent vagina is far from uncommon, and is quite independent of any specific disease. Gouty poison in the blood may excite urethral catarrh, just as it does bronchial.

Uterine catarrh, in the majority of cases, depends on the common influences causative of the general disorder, rather than upon any local irritation. Its treatment assimilates it wholly to catarrh of other parts.

Treatment. The first object in dealing with a case of catarrh, supposing it to be of sthenic character, is to arrest the morbid excitement, and stay the local attraction of blood. For this purpose, we resort to various means which seem chiefly to operate on the tissue of the part affected. One of the first to be noticed is local blood-letting, which certainly has no small power as a tissue-sedative. This is manifested not only when there is a direct vascular communication with the inflamed

part, but when a serous cavity intervenes, and widely separates the vascular plexuses of the cutaneous surface and the subjacent mucous. It is beyond all question that leeches to the epigastrium relieve an inflamed gastric membrane; but surely no one will imagine that this relief depends on any withdrawal of blood from the engorged gastric capillaries. General bleeding may be of service, if the heart's action, as evidenced by a firm pulse, is over-powerful; but it is of no much avail as a tissue-sedative alone. In some instances, we have drugs which exert a decided sedative action on the inflamed membrane. In inflammation of the air-passages, antimony or ipecacuan; in enteric catarrh, hydrargyrum cum cretâ and Dover's powder; in dysentery, ipecacuan; in tonsillitis, an emetic,—are all means of well proved efficacy. It must be confessed this list is a short one, and we should be glad to be able to enlarge and amend it. We have no reliable tissue-sedative for ophthalmic or nasal catarrh, for vesical, or urethral. In the former, we have a valuable substitute for internal remedies in the application of nitrate of silver collyria, of various degrees of strength. The arrest of severe purulent conjunctival inflammation by the application of solid lunar caustic, or Mr. Guthrie's ten-grain ointment, is a striking therapeutical fact. It is a clear proof of the vital power of an inflamed tissue being modified and altered by a means directly addressed to it. Vaginal catarrh may be dealt with sometimes in the same way; and so, according to some, may urethral. Counterirritation by blisters, turpentine stupes, mustard poultices, etc., is a valuable means of tranquillising the morbid excitement in the inflamed tissue; but it does not find its opportunity until the force of the disease is somewhat broken, or unless it be of semi-asthenic character from the outset, or is not yet fully established. The turpentine stupe is an especial favourite with me, and may be used with advantage much earlier than a blister. It may probably act to some extent as a beneficial stimulus to the cutaneous nerves, propagating through them an impression to the sympathetic ganglia and vaso-motor nerves, which obviates and nullifies the original morbid impression. A blister should seldom be applied until all fever has nearly subsided. Perpetual poultices or fomentations are often of great service in the treatment of the earlier stages of catarrh. The proceeding of incubation, as it is termed by M. Guyot (which consists in exposing diseased parts, ulcerated or inflamed, to a dry (?) heat of 96° or thereabouts), is described by him as having the effect of dissipating pain, inflammatory redness, and swelling. Heat, in fact, seems to have a general relaxing and sedative effect; it causes very positively relaxation of the contractile tissues of arteries, and it seems to act in an analogous manner upon other parts. Cold has the opposite effect, inducing reaction and elevated temperature; while heat leaves the part or the system with a diminished caloric-producing faculty.

For the purpose of allaying tissue-irritation, alkalies with their vegetable salts, as well as the so-called neutral, are remedies worthy of notice. They seem to act beneficially on all mucous surfaces when inflamed, excepting the intestinal canal, which the neutral and vegetable salts are apt to irritate. When freely administered, these agents have also a decided effect in calming the action of the heart, and in promoting the excretion of retained matters. Hydrocyanic acid is often a valuable adjunct to these remedies, and acts in the same direction. Opium, or other sedatives, may often be conjoined with antimony, mercury, or ipecacuan; and their action thereby be rendered much more safe and easy. Independently of this auxiliary action, opium in some cases by itself appears to exert power as a tissue-sedative. This effect may be produced through the nerves, but it is certainly not confined to them.

If the state of the affected part or system be one of depression, rather than of excitement—*i. e.*, if the state be asthenic—we have recourse to various means of more or less stimulating or toning quality. These act beneficially by rousing the languid vaso-motor nerves, contracting the arteries, and so both diminishing the afflux of blood to hyperæmic parts, and quieting the hurried nutritive actions that ensue when the controlling nerves are paralysed. At the same time, they raise the often impaired power of the cerebro-spinal nervous system. Of this class we may enumerate carbonate of ammonia, the ethers, valerian, arnica, sumbul, as especially acting on the cerebro-spinal nervous system as stimulants or excitants, rather than as tonics. They may be usefully combined with salines where we wish to have but a moderate effect. On the other hand, when the signs of depression are predominant, we give them full play. Quinine, strychnine, nitric acid, the sulphates of iron and copper, the muriate and pernitrate of iron, are mostly appropriate to cases of asthenic mucous or muco-serous flux, and may be often advantageously associated with a little opium. In cases not admitting of the use of these latter tonics, the balsams, squill, turpentine, copaiba, are often very useful. Their mode of action seems to be of the same kind as that of the stronger tonics, but they are better adapted for peculiar states and special tissues. Thus copaiba has eminently an influence over the bladder, urethra, and rectum; balsam of Peru, squill, and Canadian balsam, on the bronchial membrane. A remedy of the same class is ergot, which Dr. Churchill has found efficient in some cases of uterine catarrh. The especial advantage of all these is, that they suitably stimulate and tone the delicate nervous tissue in cases where, from one cause or other, the stronger tonics would irritate, and so fail of their desired effect.

Astringents are appropriate to all cases where the exudation is mainly of the nature of passive flux; *i. e.*, where the tissues are in a languid state, not prone to irritation. The action of astringents is probably mainly expended on the capillaries, rendering their delicate membrane firmer, and less permeable by fluids or corpuscles. I am aware that I am here touching on the oft debated question of diapedesis; but I am supported in the view, that red corpuscles do pass through the walls of capillaries and small arteries and veins, by Virchow's positive testimony, based upon actual observation. He states that openings may be seen in vessels through which red globules escape in single file, and which again close completely (*Handbuch der Speciellen Pathologie und Therapie*, p. 231); and, at p. 237, he refers the escape of the menstrual blood to a diminished cohesion of the vessels of the mucous surface. This diminished cohesion, which would of course favour the escape of mucous or serous fluid, is just what astringents correct, whether they be locally applied, or carried in the blood-currents. It is clear that it will be judicious practice in any case where the large open quality of the pulse conveys the information that the arteries are uncontracted, to administer at the same time a nervine tonic, so as, if possible, to diminish the local supply of blood, and so relieve the weak capillaries from undue strain or pressure of the current. Gallic acid, tannin and all the vegetable preparations containing it, alum, and iron alum, are our best astringent remedies. The influence of cold, also, ought not to be omitted, though this is exerted rather on the small arteries than on the capillaries. When locally applied, it will produce, of course, a local effect; but it may also operate on remote parts by the impression it makes on a sensory surface being propagated as a stimulus to the arteries of the seat of internal disorder through the medium of the nervous centres and connected vaso-motor nerves.

The foregoing exposition is presented rather as an attempt to colligate familiar facts than to educe new. I believe in the grouping of these several morbid conditions. I have strictly followed natural affinities, and it appears to me some gain to be able to regard a number of ordinary phenomena from the same point of view. He must, I hold, have a better comprehension of individual cases of disease who contemplates them always as far as possible with reference to the great pathological families to which they belong, and to their mutual affinities, than he whose attention is taken up with hair-splitting distinctions which Nature for the most part entirely ignores.

STRICTURE OF THE ŒSOPHAGUS.

By Robert Batty, Esq., Liverpool.

The subjoined case of œsophageal stricture may prove interesting more from the manner of death, and symptoms preceding it, than from any additional light which it throws upon the usual treatment and pathology of such cases. It occurred in the private practice of Mr. Bickersteth (through whose kindness I am enabled to give, briefly, the history of the patient), and was brought under my notice only two days previous to the fatal termination.

Kate W., aged 19, of apparently vigorous constitution, consulted Mr. Bickersteth about two years ago, complaining of symptoms of dysphagia. A bougie was passed with ease into the stomach. Her general health was good, and although she was not apparently of an hysterical temperament, yet her state seemed to indicate the existence of spasmodic affection of the tube dependent upon some obscure emotional cause rather than that of any organic change of structure. She herself persisted that food in a solid form did not reach the stomach; but as the bougie passed without difficulty and the food did not return, this was regarded as a morbid impression.

From that period till this year she had sought advice from different surgeons, both in this town and in London. She stated that none of them ever attempted to pass a bougie; they merely prescribed for her; and it may therefore be presumed that they adopted the view of the affection being spasmodic.

On August 16th, she again consulted Mr. Bickersteth. She had lost but little flesh, and presented no appearance of tendency to emaciation. She still declared that food did not enter the stomach. Some bread soaked in water was given her, which she swallowed; but affirmed that it did not seem "to go down properly." A bougie was again used; but this time it was distinctly arrested at the lower part of the œsophagus, a little above the cardiac orifice of the stomach; but upon slight pressure being made it passed easily onwards. Before the instrument was removed, she vomited the bread and water by its side. Upon its withdrawal, it was observed that the instrument was tightly grasped throughout the whole of the canal. No blood followed, and she walked home (a few hundred yards distance) suffering no particular inconvenience.

In about two hours Mr. Bickersteth was hurriedly sent for, and found her in a state of collapse, with cold extremities, fluttering, feeble pulse, and a clammy state of the surface. From these symptoms she rallied upon the administration of stimulants, which were swallowed with reluctance and difficulty, and on the application of external heat.

She was seen again at five P.M., when she complained of tenderness upon the right side of the neck, near the mesial line, and immediately above the clavicle. Some leeches were applied. She was rather restless, and apprehensive of choking; but there was no anxiety of countenance.

At eleven P.M., emphysema, in the region just indicated, was discovered—the crackling of air in the areolar tissue being palpable. The respiration was somewhat embarrassed, but no abnormal sounds were discovered upon stethoscopic examination of the lungs. A copious secretion of clear mucus provoked cough; which act, however, she avoided, as it produced dull burning pain, referred to the intrascapular region.

August 17th. The emphysema had extended over the upper part of the thorax and lower part of the face, and her pulse was much accelerated. She was ordered small quantities of stimulants and beef-tea; but there was great disinclination to swallow, and the pain in the back before alluded to, increased when she did so, and also on coughing.

August 18th. The emphysema had extended very considerably; the whole face and neck being much swollen, and the eyes nearly closed. An erysipelatous blush was also seen upon the neck and upper part of the chest.

August 19th. The same condition continued; but a rash of rose-coloured patches also appeared over the whole body. She remained very restless and apprehensive. Quinine, with fifteen minims of tincture of opium, was ordered every four hours, and as much nourishment as she could be persuaded to take. No vomiting had occurred; indeed, from the commencement of her ailments this had never been present as a symptom. The bowels had been duly relieved by enemata. On this evening I saw her for Mr. Bickersteth, and was informed that she had been less restless since taking the medicine, but that otherwise her condition was as before. The neck and chest were dredged with flour.

August 20th. There was no improvement, and the erysipelatous state of the neck and chest had not altered. The sounds of respiration were normal, but the breathing was short, from the pain experienced on expanding the chest.

At seven P.M., I was hurriedly called to the patient, and found her more restless than hitherto and complaining bitterly. I induced her to cough up a considerable amount of mucus which had accumulated in the larynx and trachea; but she did not seem to suffer to any extent; in fact, nothing at all equal to the distress produced by the same act in a pleuritic case. I gave twenty minims of Battley's solution of opium, in addition to the fifteen of laudanum she had taken as her ordinary dose.

At eleven P.M., she had slept. She appeared relieved. The sensation and dread of choking continued. Her pulse was rapid and more feeble, and she was very unwilling to swallow anything.

At three P.M., on August 21st, she died.

Thirty hours after death the body was examined. It presented no emaciation. There was general tumefaction of the face and thorax, and indistinct crepitation over the neck and breast. The cellular texture of the neck was found infiltrated with sero-purulent fluid and distended with gas. Both the pericardiac and pleural cavities contained a small quantity of bloody serum. The lungs were healthy, but somewhat congested. The trachea, with the œsophagus and stomach, were carefully removed. A mass of soft grumous tubercular substance, of the size of a large fig, flattened from before backwards, was found adhering to, and incorporated with, the posterior wall of the œsophagus, a little below the level of the cricoid cartilage. A similar deposition, but softer, and infiltrated with pus, extended downwards, behind the œsophagus, as far as the cardiac orifice. The walls of the œsophagus were generally hypertrophied, chiefly posteriorly, at some places not being less than half an inch in thickness. Just above the cardiac orifice the canal was distinctly contracted, not admitting the passage of the finger. The stricture was annular and of cartilaginous hardness, not exceeding a quarter of an inch in width. The mucous lining was fissured longitudinally at the point of stricture. The stomach contained a quantity of red-coloured serous fluid.

Remarks. Cases of œsophageal stricture are fortunately rare. In this instance the patient was spared the lingering death by slow starvation, which is the ordinary mode of fatal termination. The stricture itself had not attained that degree of contraction which would prevent food from entering its ordinary receptacle. No sac-like pouches were found above the narrowed part, indicating that lodgment of food, distending the tube, had existed, and this will account for the absence of vomiting; but the amount of disorganisation of the posterior wall of the œsophagus and the structures behind it, evidently of long existence, was sufficient to explain all the difficulty of deglutition.

It is most probable that, upon the passage of the bougie on the 18th of August, rupture of the tube had occurred, allowing of communication between the œsophagus and the suppurating textures behind. No opening, however, could be clearly made out; but the extreme collapse mentioned would favour this view, and adopting it, the emphysema is accounted for by presuming that gas, generated in the stomach, passed from the œsophagus into the cellular tissue behind, and, under the expulsive efforts of coughing, etc., was forced into the tissues of the neck and thorax.

The occurrence of the erysipelatous tinge, and the eruption over the body, were considered diagnostic of a poisoned state of the blood; and the amount of pus discovered, under conditions favourable to absorption, confirmed this opinion.

A stimulating treatment was adopted; but death anticipated the establishment of more marked symptoms of pyæmia.

Transactions of Branches.

READING BRANCH.

TRANSACTIONS OF THE READING PATHOLOGICAL SOCIETY.

By Frederick G. Harcourt, Esq.

[*Continued from page 762.*]

II.—Diseases of the Respiratory and Circulating Organs.

Disease of Heart: Pneumonia: Coagula in Heart and in left Jugular and Subclavian Veins. On August 25th, 1858, Mr. Walford presented the case of a woman, named Susan Cresswell, aged 33, who died on July 17th, 1858, and whom he saw only three days before death, with disease of the heart, and some pneumonic condition of portions of the lungs.

About four A.M. she was seized with violent and continued pain in the left arm, with great œdema of the whole limb, and discoloration, accompanied by frequent vomiting and restlessness. The pulsation of the radial artery could not be felt. She lived about fifty hours after this seizure.

The previous history of the case, obtained from Mr. Dryland, was as follows:—

She was a married woman, but separated from her husband for the last five years. She was of spare habit and dark complexion. During the ten years she lived with her husband she only had one child, and at the time of her lying-in with this child was seized with convulsions which lasted forty-eight hours; and she remained ill for some months afterwards. She had always enjoyed tolerably good health with one exception, when she was supposed to be suffering from heart disease, and spat a considerable quantity of blood. She had never suffered from rheumatism; but her mother suffered much from it, and was supposed to have died of disease of the heart.

She first came under Mr. Dryland's notice in November 1857, when she was suffering from an attack of acute nephritis and

hæmaturia. This attack yielded to the usual remedies, and she was quite restored to health by the middle of December.

On June 14th, 1858, she again came under Mr. Dryland's notice.

She had given birth to an illegitimate child three weeks previously, was looking extremely pale and thin, and appeared to feel her unfortunate position very keenly, as she had lately been a great professor of religion. She now complained of constant nausea, very great debility, and dull aching pains over the loins. The urine, which was small in quantity, was also dark coloured and turbid, and yielded large quantities of albumen to the usual tests.

She was treated with counter irritants and tonics by day, and diaphoretics by night; her strength being kept up by strong beef-tea and occasionally port wine.

Towards the end of June, she began to suffer from great difficulty of breathing when in a recumbent posture, and became extremely restless. At this time, Dover's powder gave her some relief, and hydrocyanic acid sometimes allayed the sickness. On examining the chest, the sounds of the chest were found to be normal; but the action of the heart was extremely feeble and irregular, and the pulse almost imperceptible. Her feet and hands were always cold; and at about this time she also began to expectorate small quantities of blood. A systolic *bruit* might be heard pretty constantly.

At the commencement of July, the sickness and restlessness increased (no sleep being obtained without the use of narcotics); the legs and feet became œdematous; the urine became still less in quantity; and parts of the lungs appeared emphysematous. Quinine and sulphuric ether were the remedies now made use of. But on July 10th, having expressed a wish to go into the hospital, and not being able to attain this object, she was induced to go into the Infirmary of the Union House on July 14th, where she came under Mr. Walford's care. As before stated, she died in the Infirmary, on July 17th.

On making a *post mortem* examination, the right ventricle was found enlarged, and the lining membrane of both ventricles studded thickly with vegetations, some globular, some ovoid, of a brick-red colour, imbedded in the columnæ carneæ. This appearance is well described in the seventh volume of the *Transactions of the Pathological Society of London*, p. 152, and in Dr. Richardson's work on the *Coagulation of the Blood*. These coagula are found more frequently in cases of pneumonia accompanied with a low condition of the system, and in diseases of the heart. In addition, there was found a perfectly blocked condition of the subclavian and internal and external jugular veins, and of the smaller ones also; thus explaining satisfactorily the cause of the state of the left upper extremity. Mr. Walford, however, could not speak in like manner of the cause of the coagula. The kidneys were not materially affected, although the urine was albuminous, which some thought rendered it not improbable that the blood was deranged and easily coagulable.

In connexion with this case, Mr. Walford further alluded to the case of a Mrs. C. (aged 45, and the mother of eight children, the youngest four years old), whom he was requested to attend at 2 A.M. on the morning of April 6th, 1857. It was stated that she was suffering from an overflow of the monthly discharge; and, on Mr. Walford's arrival, he found the patient blanched and almost pulseless, the linen and bedclothes being saturated with blood. The history given was some irregularity and lengthening of the intervals during the last year; that the present appearance occurred nearly a fortnight previously, but had not been profuse until a short period before Mr. Walford was called in, and the patient's taking to her bed, when a tremendous gush took place.

On an examination *per vaginam*, Mr. Walford found that the discharge had ceased, but there was a small fibrinous substance in the mouth of the uterus. A sponge-tent was introduced, and a full dose of laudanum was immediately given: and this, in two hours after, was followed up by a mixture composed of secale, dilute sulphuric acid, and æther. chlor.; perfect rest being enjoined.

At 10 A.M., she had rallied, and had perceived but little discharge. Mr. Walford now attempted, but unsuccessfully, to secure the little round substance protruding from the mouth of the uterus by means of a pair of gullet forceps. Another sponge was therefore introduced, and the same mixture continued.

At 9 P.M., she was still improving; the sponge was again removed, washed, and again introduced. During the 7th and 8th, she continued gradually to get better. The discharge was now but very trivial, and what there was of a watery and greenish character; so that the use of the sponge was now discontinued. On the 9th, as the tongue was rather furred and slightly dry, and the countenance not quite so bright, and the bowels had only acted imperfectly from an enema, a blue pill and rhubarb draught were ordered; the vagina being from time to time syringed by the nurse; so that all in that respect was quite satisfactory. On the 10th, she complained of having passed a restless night, but attributed it to over-fatigue from talking. She also complained of a pain on the left hip, over the sciatic notch, with some feeling of numbness on that side. The pill and draughts not having acted sufficiently, an injection, containing castor oil and turpentine, was ordered; but so little anxiety was occasioned by her appearance, that a mixture of soda and lavender (as a placebo) was the only medicine prescribed. At 8 P.M., as she was still complaining of pain in the hip (which was not tender on pressure, and then presented no unnatural appearance), half a dozen pills, each containing half a grain of opium, were supplied; one to be taken every four hours.

On visiting her at 10 A.M. on the 11th, her appearance was much altered; the countenance was anxious, expressive of pain, faintness, and restlessness. The hip had become swollen, and presented a bright red colour, as if seized with erysipelas. Mr. Walford now thought the cause of the pain apparent; and that, if there was a grave condition of the system to be dealt with, it was also an intelligible one. At 3 o'clock on the same day, when Mr. Walford visited the patient again, he found the hip much more swollen; there were some vesicles forming here and there on the surface; and the limb had turned black. The swelling was tense, and so dark, that one could not hesitate to believe that extravasation of blood was going on. The limb was numb, with a sensation of "pins and needles". The patient was extremely pale, almost pulseless, restless, but collected. The most unfavourable opinion was now given; and, at 6 P.M., Mr. Walford visited the patient again, in company with Dr. Cowan; and all that could be said of her then state was, that it was in every respect aggravated. She continued collected, but gradually sank, and by 10 P.M. she had ceased to breathe.

Autopsy. At three P.M., on the 12th, in the presence of Dr. Cowan the abdominal cavity was laid open. A small quantity of serous fluid was found amongst the intestines, and an emphysematous condition of the cellular tissue behind the peritoneum. Not a trace of blood, however, could be found. The uterus was not fully contracted, and on cutting through it the cavity appeared more like the condition of a menstrual period than any other. No fibrinous substance was found. An incision was then carried from the middle of the crest of the ilium down to the trochanter major, and then gradually deepened until the ilium was reached. The gluteal muscles, major and medius, were altered in colour; not so red as muscle. They looked pale and yet tinged with red. Here and there shreds of blood could be seen; but no clot, and when the gluteus minimus was reached, its structure was that of healthy flesh. The discoloration had extended over the top of the thigh to the left labium of the vagina, and up to the middle of the back; and on cutting through the skin and cellular tissue, a large quantity of reddish serous fluid escaped; in fact, the skin and subjacent tissue seemed sodden with this fluid. The vesicles on the skin had much increased in size, one above the ilium being as large as a turkey's egg. On reflecting the integuments from the upper part of the thigh, the sartous muscle for four or five inches was infiltrated with blood. Lower down it was quite healthy. The hamstring muscles had a natural appearance, and the gluteal muscles were excited in all directions without coming upon the source of bleeding. The circumference of discoloration was followed out until a healthy boundary was reached. Mr. Walford also adds, so great was the tension that considerable difficulty was experienced in bringing the flaps together in the stitching.

Mr. Walford regarded this as a case of intersticial hæmorrhage; the phrase, he says, describes the condition, but tells us nothing more. It was confidently believed that a *post mortem* examination would reveal from what vessel the fatal hæmorrhage took place, but as has been already shown, no such revelation was the result. Within the ischiatic notch there was no sign of blood; outside of it, the glutei medius et major muscles soaked rather with the serum of blood than with blood, and robbed of their own blood, for they were pale. Neither was there any accident or injury to account for this condition.

Heart and Lungs of a drowned (?) Infant. On the same evening, Mr. Walford presented the heart and lungs of an

infant found in the Thames; for which a verdict of murder was returned lately against the mother. In addition to the other signs of violent death by drowning, portions of weed were found in the trachea and larger bronchial tube on the left side; grey specks of sand or mud being found in the lungs, and of weeds in the stomach, but no mention was made of weeds in the trachea.

Enlarged Thyroid Gland. On the 16th of December, Mr. Dryland presented an enlarged thyroid gland taken from a woman, aged 55. She died of bronchitis, not of suffocation. The gland did not appear to give her much inconvenience. The trachea was crooked from its usual course.

Aortic Aneurism: Death from Hæmorrhage into the Pericardium. On the 16th February, Dr. Cowan related the case of a gentleman he had recently seen, aged 36, who complained of pain under the lower third of his sternum. Dr. Cowan carefully examined him, but could make out nothing satisfactory. The next day, whilst dressing, his wife having left the bedroom for about five minutes, on her return, found him dead, looking pale in the highest degree. A *post mortem* examination discovered the pericardium distended as fully as possible with blood. In the aorta, at its junction with the ventricle, was a slight distention, which had burst at its apex, large enough to allow a sixpence to pass. The inner coat of the artery had given way, so that the outer became distended and then burst. Some spots of atheromatous deposits were observed in the course of the artery.

Pulmonary Congestion: Delirium Tremens: Gout: Incision above Inner Ankle. Dr. Cowan on the same evening mentioned, that he had seen a man, whose habits were intemperate, suffering with pulmonary congestion, delirium tremens, and gout. He was drowsy, the circulation very feeble, and there was great œdema in the limbs and throughout the system generally. Dr. Cowan recommended an incision, two inches in length, above the inner ankle in each leg down to the fascia. The quantity of discharge was immense, and in twenty-four hours he was comparatively comfortable. This practice has been recommended by Dr. Todd.

Enlarged Thymus Gland in a Case of Death from Hooping-cough. Mr. George May exhibited a thymus gland, taken from a child, aged 7 months, who died under a severe fit of hooping-cough. Two days previously, he recovered from a similar fit, under the influence of a warm bath; but, on the second occasion, he fell off suddenly and died. On a *post mortem* examination, the brain was found congested, and the thymus gland large, weighing five or six drachms. Death was attributed to a convulsive fit coming on during a fit of coughing.

III.—Diseases of the Abdomen, including those of the Alimentary Canal.

Rupture of Gall-Bladder: Escape of Gall-Stones. At the meeting on August 28th, Mr. Walford presented the gall-bladder of C. H., aged 64, who died after six days illness. He had vomiting and double reducible hernia. Peritonitis was expected, but not found after death. Lying on the false ribs, something gritty and rough was felt; and, on lifting up the liver, an opening was seen in the gall-bladder. On looking carefully at the edges, it appeared that they were ulcerated; and the only doubt of the fact was, that there was no peritonitis. Several small gall-stones were found in the neighbourhood. There was no constriction of any part of the alimentary canal, to account for the vomiting of the stercoraceous matter; yet the symptoms were thought by some to be more those of hernia than from effused bile.

The President (Mr. May) inquired if there existed any swollen contraction with dilatation, which would indicate ileus? This was answered in the negative.

Kameela. Mr. George May, jun., on the same evening, presented a specimen of the kameela, which he found most useful in the treatment of thread-worm. The dose is from half a drachm to three drachms; and he thinks it also useful in cases of tænia, where kousso and male fern have failed. The first dose is generally sufficient, but a second may be required. It kills the worms, and only affects the bowels slightly.

Purulent Vomiting. Mr. Sweeting, on the same evening, related the case of a young married woman whom he was requested to attend, and found vomiting large quantities of pus. There were symptoms of liver-disease, for which she had been under treatment. The next day, Mr. Sweeting discovered dulness on the whole of the right side. There was cough, with the expectoration of clear fœtid pus of a most disagreeable odour, which ceased, and again returned. She was much emaciated, and returned to Southampton, to her home.

Mr. Harrinson believed it to have been a case of diaphragmatic pleurisy; and that the gurgling pus, travelling up through the lung, might have been heard. In his opinion, she would probably recover; but there would be bulging of the side in the first instance, and subsequently contraction.

Scirrhus of the Rectum: Perforating Ulcer of the Ileum. On September 22nd, Dr. Cowan presented the portion of a rectum taken from a blacksmith, aged 48, who came under his care suffering from difficulty of defæcation, which was first overcome by castor oil. At length no action could be obtained, and he came into the hospital with evident obstruction. The abdomen became tympanitic, and vomiting of stercoraceous matter ensued. An O'Bierne's tube was passed with difficulty. The tender part was about six inches from the anus. He was put under calomel and opium, in grain doses every four hours, which quieted the vomiting, and relieved the distress. He remained comfortable for some days, being supported by beef-tea and wine. At length, one evening he was seized with violent pain in the abdomen, and all the depressing symptoms of rupture of the intestines. After death, an ulcer was found in the ileum, which perforated the coats of the bowel; and effusion into the peritoneum was the result. There was a well marked ring of scirrhus in the rectum, accounting for the pain occasioned by the passing of the tube.

This case is interesting, as showing the value of opium. Nothing in the previous history of the case could lead to the supposition of such a disease.

Intussusception. On Oct. 20th, Mr. Young presented a specimen of intussusception of six inches of the ileum, the cæcum, the ascending and transverse colon, into the descending colon, sigmoid flexure, and rectum, occurring in an infant nine months old, who was brought to him for vaccination on Sept. 27th. This had always been a delicate child, but appeared in his usual health on this occasion. On the evening of the same day, he was seized with convulsions, crying, and vomiting, which continued at intervals through the night. In the morning, the mother discovered that much bloody fluid had escaped from the anus. On Mr. Young's visiting him in the forenoon, he found him in a state resembling the collapse of cholera; but, on examining the anus, he found it patulous, with a tumour visible to the eye, at a distance of from half an inch to two inches within, which he could feel with his little finger. Death ensued twenty-eight hours after the commencement of the attack, Mr. Young having from the outset looked upon the case as quite hopeless; but, with a view of affording relief, anodynes, astringents, and antispasmodics, in the form of mixture and injections, were prescribed; and the failing strength was supported by wine, arrow-root, etc.

Autopsy. On opening the abdomen, four ounces of bloody serum were found in the cavity of the peritoneum; the intestines presenting no appearance of congestion or inflammation. The cæcum, ascending and transverse colon, were not visible, but were found forced down into the puckered descending colon and rectum near the anus. The commencement of the ascending colon was much thickened and congested; and lymph was deposited between the contiguous coats of the intestine, connecting them together. There was also a mass of enlarged mesenteric glands near the cæcum.

In remarking upon this case, Mr. Young considered, in the first place, that the convulsive attack was dependent upon the irritation arising from an overloaded stomach; and that the first invagination was produced by the straining during the attack; there being a predisposition to it, as evidenced by the smaller invagination found in the small intestines. The child had not suffered from diarrhœa previous to the convulsions; which is said by Rokitansky to be the chief predisposing cause. In the second place, that the case was remarkable from the rapidity with which it ran its course (twenty-eight hours); the shortest period in which such cases had proved fatal being *sixty hours*, as instanced in a case published in the *Transactions of the Pathological Society of London*, Third Session. The short duration of the case might be easily accounted for by the large quantity of blood which was passed in the discharge, the child appearing quite anæmic when first seen. This discharge of blood Mr. Young considered to be the characteristic symptom of the affection, especially when accompanied by great peristaltic action of the bowels. The patulous condition of the sphincter ani was doubtless produced by the vertical fibres of the lower part of the rectum acting upon the sphincter, in consequence of the violent peristaltic action, thus preventing its contraction. Lastly, notwithstanding a large portion of the mesentery was torn through, there was no *internal* hæmor-

rhage—doubtless to be accounted for by the internal coats of the vessels contracting when torn across.

Mr. May inquired what was the most rational mode of treatment to be adopted in these cases, with any prospect of success, supposing success possible?

Mr. Harrinson replied, that many cases of successful treatment by the injection of air with a bellows were upon record.

Mr. May said that, after the injection of air had failed, opium should be given, to quiet the peristaltic action; and referred to a case in which a young man passed five inches of the half circle of the intestine by sloughing, and is now living.

Hydatids in the Liver. Mr. Breech presented the hydatids (a few out of one hundred) which he found in the liver of a woman, who complained but little until six months before her death, when she became slightly jaundiced. The liver appeared to have degenerated into two large abscesses; one, occupying the right lobe, filled with pus; the other, the left, filled with serum, the hydatids floating in it. There was not more than an inch and a half of liver left. There was a peculiar vibration on percussion, as if struck on a wire, which he supposed to be the hydatids striking against each other. The gall-bladder was filled with stones. There was no communication between these abscesses of the liver, stomach, or intestines. She had constant vomiting till death. The stomach was forced down by the tumour to the pubes.

Mr. Geo. May said, in reference to a question how hydatids were formed in the system, that the ova of the tapeworm were proved to be converted into hydatids, and taken up into the blood. An hydatid is proved to be converted into a tapeworm. Sheep are liable to hydatids in the liver and brain, producing "rot" and staggers, when placed in water-meadows at the end of summer. Mice likewise are subject to hydatids, and cats devouring them are found to have tænia peculiar to the cat. In Germany, hydatids have been given to animals, and found in the intestines.

Biliary Calculus ejected by Vomiting. Mr. Breech, on the same evening, presented a biliary calculus, weighing half a drachm, which was ejected by a woman vomiting in his presence. Another of the same size was afterwards vomited. The patient had suffered from spasms six hours before the stones were vomited.

Mr. May referred to a very large biliary calculus presented by Dr. Cowan some years ago, which was voided *per anum*, without ordinary suffering, although it was as large as a hen's egg; and said that the symptoms in all cases of biliary calculi were alike, whether it was the soft one, not larger than a pea, found in the liver, consisting of cholesterine, and which never entered the gall-bladder; or the hard one coming from the ductus communus choledochus.

Pseudo-Tumours in the Abdomen. On the same evening, Dr. Cowan further related the case of a gentleman who had always difficulties with his bowels, and in whose abdomen there was supposed to be a series of tumours, but which, on minute examination, turned out to be muscular swelling, and which, on fixing his attention and making him breathe freely, entirely disappeared. He was a lean and highly nervous man, and had been constantly in the habit of straining at stool. Dr. Cowan thought he might be a subject of malignant disease.

Ulceration of the Intestines: Pulmonary Tubercle. On Dec. 16th, Dr. Woodhouse exhibited the intestines of a woman who died in the hospital, of tuberculosis. Large patches of ulceration were numerously scattered over the whole extent of the canal. The upper portion of both lungs contained tubercles.

IV.—Diseases of the Genito-Urinary Organs.

Sabulous Deposit in the Bladder. On September 22nd, 1858, Mr. George May exhibited the portion of a bladder taken from a man who had been an in-patient of the Hospital. He had been sent in under the impression that he had stone in the bladder. The sound indicated roughness, but no distinct signs of calculus could be found. The man left; and, after death, an examination discovered the mucous membrane of the bladder thickly covered with sabulous deposits.

Disorganisation of Suprarenal Capsules. On February 16th, 1859, Mr. Moxhay presented the suprarenal capsules of a man aged 40. When seen the day before his death, he was vomiting incessantly, and much depressed. Mr. Moxhay could not make out the cause; and a *post mortem examination* found the capsules completely disorganised, but no evidence of mischief in any other organ.

Renal Mulberry Calculus. On March 16th, Dr. Woodhouse exhibited a minute mulberry calculus, about the size of the head of a common pin, which, under a magnifier, showed distinctly the nodulated surface resembling the mulberry. It was passed by a gentleman, after causing agonising pain in the left kidney, extending along the ureter to the glans penis. After taking an anodyne, the patient felt something give way in the side, which was followed by instant relief to his sufferings; and, on the following morning, the specimen exhibited was found in the urinal.

Mr. Young said he had a similar case in the right kidney, which was relieved by anodynes, and afterwards by alkalies.

V.—Diseases of the Reproductive Organs.

Case of Uterine Hydatids. On March 16th, 1859, Mr. Young presented a specimen of uterine hydatids from Mrs. G., who, after a watery discharge, which lasted three or four weeks, had a discharge of hydatids. The patient was forty-five years old. The catamenia were interrupted for three months. After this mass was expelled, a few detached shreds came away. There was slight enlargement of the abdomen, and the mammæ were increased.

The question was asked, Were these cases the result of impregnation? The general opinion was that they were.

Monstrosity. On December 16th, Dr. Burnett presented a monstrosity—an infant with one body, one head, four ears, two eyes, one nose, two occiputs, four arms, and four legs. The specimen was ordered to be preserved.

Hernia in the Umbilical Cord. On February 16th, Mr. George May presented a portion of an umbilical cord, taken from a child who survived eight days. He noticed a ventral hernia in the cord. On the seventh day, the child was seized with excessive pain and symptoms of sinking. On slitting open the swelling, the intestine was found adherent. The specimen was ordered to be preserved.

Tuberculous Deposition in an Infant. Mr. George May, on the same evening, presented a portion of a liver taken from a child fourteen months old, dying from effusion on the brain, and with symptoms indicative of tubercular deposition, which was observed in the liver, lungs, and mesenteric glands. There was much effusion into the ventricles of the brain. The child had a fœtid discharge from one of its ears, which did not appear in any way connected with the brain.

Case of Placenta Prævia. On March 16th, 1859, Mr. Moxhay read the following interesting case:—On February 6th, he was called to Mrs. H., aged about 35, an anæmic delicate woman. He found her flooding to a considerable extent, with obscure pains; and could only reach the os uteri with the fore and middle fingers of the left hand, by which, with slight difficulty, he could feel the placenta entirely covering it. He enjoined rest in the recumbent posture; and left her under the care of a nurse, with strict injunctions to watch and report.

On March 6th, he was again summoned, on account of hæmorrhage. There had been some indistinct pains, and the os was dilated to the size of a half-crown. A large portion of the placenta was felt posteriorly, but anteriorly there was a small portion of the membranes covering the head. The bleeding being considerable, he punctured the membranes and plugged the vagina, removing the plug occasionally for examinations. On one of these occasions, he found that the cord had descended, and was in danger of pressure. The plug had somewhat retarded the hæmorrhage. In the evening, he found the os dilated sufficiently to admit of turning. He quickly delivered her of a premature fœtus, which soon breathed under Dr. M. Hall's method, but died on the fifth day, from want of the natural sustenance. The mother suffered from severe tendency to faint, but is at length doing well.

Narrow Os Uteri. On the same evening, Mr. Walford related a case in which he found the os uteri no larger than a split pea, and with complete disappearance of the cervix. After a persistence of labour pains for about ten hours, it began to open; and, twelve hours after the commencement of labour, it was of the size of a crown-piece.

Dr. Woodhouse inquired what was the effect of induration and enlargement of the cervix uteri on the progress of labour; and whether any difficulty arose in its expansion from the hardened and hypertrophied state of it prior to conception?

Mr. Harrinson said, that this condition generally disappeared before labour set in, and that pregnancy was the best cure for it. Abortion was liable to take place in such cases, and it was said to be prevented by the application of caustic.

Abortion. Dr. Woodhouse, on the same evening, related a case of a lady to whom he was called, suffering from all the symptoms of approaching abortion, which was relieved for a time by anodynes and rest. After three or four days, the

threatening returned, and a four months fœtus was expelled, with the membranes and cord surrounded by the liquor amnii, but no placenta. This was retained, and came away in shreds afterwards; for the uterus became so exquisitely tender, and the os was so far out of reach, as to preclude any attempt to extract it. A blister was applied over the epigastrium, and hydrargyrum cum cretâ and Dover's powder were given until the gums became tender. She ultimately recovered, but has not been pregnant since, though the catamenia are quite normal.

Fibrous Tumour of the Uterus. On May 18th, Mr. Young presented a case of fibrous tumour of the uterus, with Bright's disease of the kidneys, taken from Mrs. M., aged 38. From the history of the case, it appeared she had led a somewhat irregular life since her husband's death. She had suffered from a tumour in the abdomen for some years, which occupied principally the right iliac region. For the last eighteen months before her death, she had suffered from great difficulty of breathing, accompanied with cough, which was relieved by free expectoration. She also suffered from anasarca of both lower extremities. She died from exhaustion consequent upon disease of the lungs.

A *post mortem* examination was made twenty-four hours after death. On opening the thorax, both lungs were found to be adherent to the parietes by old adhesions, but more particularly on the right side. There was more serum than usual in the cavity of the pleura. The lungs, when incised, were found to be studded with tubercular deposit, and in some parts emphysematous. In the abdominal cavity, all the organs appeared to be healthy, with the exceptions of the kidneys and uterus. Both kidneys were very large, and presented good specimens of Bright's disease. The uterus was also much enlarged; and, on making an incision into it, it was found to depend upon a fibrous tumour, which was developed principally in the right side of that organ. The specimen was presented to the Hospital Museum.

Death after Labour, from Toxæmia. On September 22nd, 1858, Dr. Cowan related the case of a lady who, a fortnight after her premature confinement of a seven months child, was seized with fainting, difficulty of breathing, and rapid and fluttering pulse. These symptoms occurred on the Monday, but passed off under the use of wine. They returned with persistence on the following Friday; and when Dr. Cowan saw her, at about 7 P.M., they were as above stated. The abdomen was soft; there was no discharge from the vagina; and there was a hot and perspiring skin. The breathing continued as rapid as possible, and she took nourishment freely. During Dr. Cowan's interview with the medical attendant, she was seized again with faintness; and, on his returning to the room, he found the patient dead. There was no evidence of puerperal fever; and, in Dr. Cowan's opinion, the only cause that could be ascribed for this distressing occurrence was, that some poisonous matter had been absorbed from the uterus, which did not manifest itself in any way by discharge.

Pelvic Abscess. Mr. G. May presented, on November 17th, a specimen taken from Mrs. A., an in-patient of the Royal Berkshire Hospital, suffering with pelvic abscess. There was an opening under Poupart's ligament. She left the hospital without benefit; and, after a short time, was seized with convulsions, and died. There was an abscess of the pelvis, extending up the psoas muscle to a carious vertebra, which was considered to be the primary cause of disease, though overlooked at first. There was also an abscess in one of the ovaries, communicating with the bladder. The liver was of an opaque yellow colour, breaking down on the slightest touch; and was an extreme instance of fatty degeneration occurring in protracted and debilitating diseases.

[*To be continued.*]

The Fiske Fund Prize. The trustees of the Fiske fund, at the annual meeting of the Rhode Island Medical Society, held in Providence, June 1st, 1859, announced that the premium of two hundred dollars, offered by them, in 1858, for the best dissertation on "*The effect of the use of alcoholic liquors in tubercular disease, or in constitutions predisposed to such disease,*" had been awarded to John Bell, M.D., of New York. The following subjects were proposed for 1860:—1. Diphtheria, its nature and treatment, with an account of the history of its prevalence in different countries. 2. The morbid effects of retention in the blood of the elements of the urinary secretion. For the best dissertation on either of these subjects, the trustees will pay the sum of one hundred dollars.

British Medical Journal.

SATURDAY, SEPTEMBER 24th, 1859.

DO BAD SMELLS CAUSE DISEASE?

The tendency of the human mind to rest satisfied with any belief that is authoritatively asserted, is too well known to require any comment. Philosophers of all kinds are no more exempt than other people from this easy style of dealing with difficult problems. Medicine is, we think, especially chargeable with cherishing pet answers to questions that force themselves unkindly on her; and we think that the way in which she has made up her mind as to the causes of various kinds of fevers is an example of this style of cutting the Gordian knot.

Of late years, it must have struck all our readers that pig-styes, dirty pools of water, open privies, ash-heaps, etc., have been declared highly criminal, and on all occasions even adjudged guilty of producing any kind of fever or bowel complaint that may have broken out in their neighbourhood. If a child happen to suffer typhus in a farmhouse, it is the mixen at the end of the barton that caused it. If an epidemic of English cholera befall a village, it is traced to the duck-pond by the road-side. If in a wealthy household the inmates are stricken with diphtheria, some open sewer close at hand has, as a matter of course, been the cause. So accustomed are we to hear this sort of reasoning resorted to on all occasions, that one feels a little difficulty in expressing doubts as to the certainty with which the effect is thus unhesitatingly traced to its cause. Nevertheless, we think there is at least sufficient evidence to cause reflecting minds to pause ere they give in their adhesion to the general opinion, and thus shut their eyes to further research and inquiry. Dr. Watson has, we know, stated it as his distinct opinion "*that neither animal nor vegetable decomposition is sufficient to generate fever of any kind*"; and the researches of Dr. Guy and other observers have certainly gone some way to support that opinion.

Dr. Guy, in his very interesting contribution to the *Journal of the Statistical Society*, on the Health of Nightmen, Scavengers, and Dustmen, gives us a mass of statistical facts which, it must be confessed, run counter to the generally received opinion, that foul animal or vegetable emanations are the fruitful source of disease. This class of men without doubt spend their days in the very midst of filth of all kinds. He says:—

"In most of the laystalls or dustmen's yards, every species of refuse matter is collected and deposited—night-soil, the decomposing refuse of markets, the sweepings of narrow streets and courts, the sour smelling grains from breweries, the surface-soil of the leading thoroughfares, and the ashes from the houses."

This heterogeneous mass the scavengers or "hill" people have to sort or to pass through sieves, so that the emanations arising therefrom must be brought into intimate relation with their lungs and skin. If fever and diarrhœa are so clearly traceable to the vicinity of these so-called noxious materials, surely the scavengers ought to be a poor fever-stricken race. A medical examination, however, of this class of workmen as compared with brickmakers and bricklayers' labourers, proves

that the scavenger is comparatively exempt from disease. Thus, among a number of men examined in each of the three classes, it appeared that the numbers attacked by fever were, among the scavengers, 8 per cent.; among the bricklayers' labourers, 35·5 per cent.; and among brickmakers, 21·5 per cent.

This result seems extraordinary enough; but it may be argued that these men do not live in the laystalls or dustyards, and therefore that their exemption from fever may be attributable to this; but what can be said, if the master dustmen and their families, who live all their lives in the midst of these heaps of so-called fever-nests, are healthy? Dr. Guy says—

"I do not think that, whether in town or country, such another body of men (as master dustmen) could be brought together except by selection; and it is not going too far to assert of them that, if the comparison were limited to the inhabitants of London, or our large towns, no score of selected tradesmen could be found to match the same number of scavengers brought casually together."

Unless we suppose that the scavengers get used to this so-called miasmatic atmosphere, or that after a time it no longer affects them, we cannot see how the foul emanation theory can hold water. Nature cannot work in one place differently from another. Nightsoil must be just as deadly in an open yard in London as in the country. But here we have the experiment tried on a larger scale, of a whole class of men subjected to foul emanations, and yet they are far from being an unhealthy race, and are not nearly so prone to fever or bowel-disease as the brickmaker's labourers.

We are far from wishing it to be understood, however, that we do not consider foul emanations as dangerous or baneful under any circumstances. In our opinion, they become noxious when much concentrated. Our houses, for instance, are built on the principle of a bell-glass; and our drains and privies, and all other impurities, if allowed to give off a deleterious miasma, most certainly do become most virulent sources of disease. But, in the open air, we think it very doubtful whether these emanations are ever the cause of injury to man.

Let us watch with Dr. McWilliam a still more gigantic experiment on the health of the Thames waterside people, which has been going on for years, and is still proceeding. The whole sewage of two millions and a half of people has within the last ten years been turned into the metropolitan stream. Year by year its waters have become more contaminated, and its smell more disgusting. It should follow, that the health of the waterside community is proportionately decreasing; that febrile complaints, cholera and diarrhœa, are alarmingly on the advance. But what is the real state of the case? Dr. McWilliam, in his Report for the year 1858 on the health of the Water Guard and Waterside Officers of Her Majesty's Customs, says:—

"As respects bowel affections, in which I include diarrhœa, choleraic diarrhœa, dysentery, etc., the types of those forms of disease, which in this country noxious exhalations are commonly supposed to originate, we find the additions during the four hot months of the past year from this class of complaints 26·3 below the average of the corresponding period of the three previous years, and 73 less than those of 1857."

The quantity of putrescent animal and vegetable matter in the Thames has been going on increasing; but the illness generally attributed to the emanations arising therefrom has been decreasing! We know that many will urge that all the combustibles (if we may use the term) being thus accumulated, it only requires the match to be applied, to find epidemics raging like wildfire. But, the year before last, cholera did break out on the banks of the Lea, and there died out, apparently from want of sustenance. This year, according to the *Lancet*, cholera, veritable Asiatic cholera, has been on board the *Dreadnought;* yet it has not spread, and there seems no likelihood of its doing so for this season at least. As Dr. McWilliam truly says, "It is nowhere sustained by evidence that the stench from the river or docks, however noisome, was in any way productive of disease." It is true that one waterman, in June last, was said to have died of Asiatic cholera, and that his death was ascribed to river-poisoning; but, as the eminent observer whom we have just quoted correctly remarks, "it is opposed to all analogy, and to the usual order of nature, and therefore entirely unphilosophical, to suppose that a cause so extensively diffused should have been so singularly limited in its effect."

Greatly doubting, as we do, the alleged ill effects of foul emanations in the open air upon human life, we nevertheless do not think that the crusade against filth should for one moment be relaxed. A bad smell may be no more unhealthy than a bad taste; but we should, if possible, avoid the one as much as the other. What we should above all things avoid, however, is the falling into the error of supposing that bad smells are the indubitable sources of many puzzling diseases, and of thus hardening our minds against investigations of the kind which were instituted a year or two ago by Dr. Barker, and which, when completely carried out, will enable us to decide what the noxious principles are which make all the difference between an unpleasant and a malarious odour.

THE WEEK.

Professional expectation is beginning to be excited with regard to the intentions of the Consiliarii of the College of Physicians, in the forthcoming election of Fellows. It will be remembered that the list presented in June to the Comitia Majora was disapproved of, on the grounds, we believe, that many of the Licentiates had been passed over to whom the Fellowship was due, while several of comparatively inferior claims were nominated to the latter honour; and it was then resolved to adjourn the election to October. Now that the time is close at hand, we must express a hope that there will be no repetition of former errors. Above all, if the reputation for fairness and liberality which the College has begun to acquire for itself is to be retained, care must be taken to avoid doing anything which may give rise to charges of cliquism and favouritism, or of disregard of the wishes of the body of Fellows at large. What is wanted is an equally proportioned distribution of the honours of the Fellowship, both among the Licentiates of old standing, and among those who have entered the College under the provisions of the year of grace. We are quite aware that, in making a selection, the Consiliarii have a difficult part to perform—an impossible one, indeed, if they endeavour to please everybody; but they can make a much better list of candidates to be recommended for the Fellowship than that which was set aside by the Comitia Majora at the meeting in June; and we trust they will do so.

The members of the Medical Registration Association in Birmingham have resolved that none but orthodox practitioners shall belong to their body: and the homœopaths are very angry at being excluded. In the report of the proceedings at the formation of the Association at p. 784, there is a letter of remonstrance from some gentlemen of the globulistic school: and, since then, they have published in the local press an "Address to the Members of the Birmingham and Midland Counties Medical Registration Association," long enough to occupy a closely printed page of this Journal. We think that the Birmingham medical men have done quite right in keeping the homœopaths out of their Association. As regards ignorant and unregistered pretenders to medicine, it will be the duty of the Association to see that they are brought to justice; but they are not, *per contra*, obliged to fraternise with every one whose name is on the Register. In that list there are the names of men, whose medical creed is so utterly at variance with that of their brethren, that any attempt at community of action in medical matters of any kind must be a mere mockery. We trust that the resolution come to at the meeting to which we have alluded, will remain unshaken. As one of the speakers remarked, the homœopaths may, if they please, form an association for themselves, and no one would think of molesting them; but we do not see how the members of the Birmingham Medical Registration Association, or of any similar body, could consistently place before the public the spectacle of an offensive and defensive alliance with those whose professional principles and practice they lose no opportunity of denouncing as fallacious and mischievous.

A country practitioner in France recently prescribed santonine for some children who had worms. The eldest, aged 7, who was the first to take the medicine, died in convulsions at the end of a few hours. On being analysed, five-sixths of the supposed santonine were found to be strychnine. The shop where the drug was bought was in a deplorable state; poisons were mixed with other substances, and the sale of the drugs was entrusted to a most illiterate shopman. The case was brought before the correctional tribunal at Tongres. The charge alleged against the practitioner was, that he had not analysed and verified the purity of his drugs. The tribunal condemned the druggist to a month's imprisonment, a fine of 200 *francs* (£8), and half the costs; the shopman to fifteen days imprisonment, a fine of 100 *francs* (£4), and one-fourth of the costs; the practitioner to a fine of 50 *francs* (£2), and one-fourth of the costs. The former two had appealed against the sentence.

THE MEDICAL COUNCIL.

BRANCH COUNCIL FOR IRELAND.

Wednesday, July 20th, 1859.

Present:—Dr. Leet, in the Chair; Dr. Smith, Dr. Williams, Dr. Stokes, Dr. Apjohn, and Dr. Corrigan; Dr. Maunsell, *Registrar*.

The minutes of last meeting were approved and signed.

Read—Letter from the Royal College of Surgeons, enclosing a copy of an opinion given by Mr. Lawson, Q.C., respecting Licences in Surgery granted by the University of Dublin.

Read—Letter from the same College, enclosing correspondence respecting disqualifications, affecting Irish and Scotch Surgeons, in regard to Poor-Law Medical Offices in England.

Read—Letter from the King and Queen's College of Physicians, enclosing a copy of a letter addressed by the Apothecaries' Hall of Ireland to the Director-General of the Army Medical Department.

James Apjohn.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South Midland. [Ordinary Meeting.]	Swan Hotel, Leighton Buzzard.	Thurs., Oct. 6th, 2 P.M.

SOUTH-EASTERN BRANCH:

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

The first of the third series of the Rochester, Maidstone, Gravesend, and Dartford district meetings, in connection with the South-Eastern Branch of the British Medical Association, will be held at the Crown Inn, Rochester, on Friday, September 30th, 1859, at 5.15 P.M.

The members and their friends will dine together after the meeting, at 7 P.M. precisely.

Gentlemen intending to dine, are requested to give an intimation to that effect to Dr. Martin of Rochester, or Mr. Dulvey of Brompton, on or before Monday, September 26th. Dinner tickets, five shillings, exclusive of wine.

Trains will leave for London and all stations on the North Kent Line at 9.30, and for Maidstone at 10.30.

James Dulvey, *Honorary Secretary*.

Brompton, Chatham, September 1859.

Editor's Letter Box.

EXPERIMENTS ON HEALTHY SUBJECTS.

Sir,—Your Journal of August 27th contains a report of the transactions of the Medical and Chirurgical Society, and in it an abstract of a paper by Dr. Fuller, on the Administration of Belladonna, and on certain causes which modify its action. It is there observed that, with a view of having the matter tested with children on a larger scale than is possible at St. George's Hospital, the author requested a friend, who is attached to a large public institution for children, to administer it cautiously, in gradually increasing doses. Accordingly, to eleven children, varying in age from three to six, the medicine was given. These children were all in good health.

I do not enlarge upon the effect of the medicine, my object being to draw attention to the fact itself. Surely you cannot justify experiments with a known deadly poison on any healthy subject, more especially on poor helpless children, who, in consequence of the inability of their friends to support them, are entrusted to the supposed kind and Christian care of the managers of a charitable institution. I much fear, if medical men resort to such practices to obtain knowledge which may be applied even to the most useful and benevolent purposes, our profession, hitherto known and respected for the high principles of Christian philanthropy by which its members are actuated, will lose the confidence and respect of the public, and sink into well merited and universal detestation.

Should there be a mistake in the quotation, you will perhaps kindly put your readers right, that we may not remain under an erroneous impression of the conduct of a learned member of the profession. If the quotation is correct, a word from you may have a salutary effect in preventing a repetition of such unwarrantable and wicked experiments, the mere suspicion of which must cause intense distress to those who, from poverty or any other cause, have been induced to entrust their children to those who have hitherto professed to treat their adopted children with the same consideration as they would their own. What parent, even if a medical man, would willingly subject his healthy child to such experiments as those mentioned above?

I am, etc., Senex.

Sept. 15th, 1859.

HYSTERIA IN CONNEXION WITH RELIGION.

Sir,—I have read with much interest your leading article in last week's Journal, headed "Hysterical Religion". In the general tone of that article I recognise your usual candour; and, to a large extent, I agree with your conclusions. But, feeling as I do that the movement now in progress in Ireland, and in the west of Scotland, is one of very great importance, as well as most powerful in its effect on the public mind, I desire much that you had qualified the statement of your own opinion regarding it by a reference to *the smallness of the proportion* which the number of cases in which persons are affected with hysterical symptoms bears to that of those who pass through mental emotions of the most agitating kind without manifesting any such symptoms.

I could have wished, also, that you had referred to the wonderful *moral transformation* which has already been produced, in not a few communities formerly characterised by the prevalence in them of all kinds of evil—a transformation obviously connected with the great movement in question.

I have not been in any place where the religious excitement prevails; but I have listened to the statements of many men, some of them physicians, well qualified to form a sound judgment, who have seen much of it in Ireland. From their reports, I am thoroughly convinced that its effects on the great scale are productive only of the highest good; and that the occasional outbursts of hysteria, to which you refer as associated with it, are not worthy of notice, excepting as curious psychological phenomena, rather to be expected than wondered at.

I believe that very few ministers have done anything to encourage the manifestations which you condemn; and it consists with my knowledge, that some medical men in Ireland have uttered, through the press, the same warnings which you yourself have given, and even suggested the same treatment of the public displays as you have—without, however, in any degree appearing to call in question the reality or the importance of the great work of moral reformation in progress around them.

Let us not shut our eyes to a great good, on account of a little evil that may be incidentally associated with it. Let us rejoice that He who sometimes, in his inscrutable providence, lets loose upon us the terrible pestilence, is pleased also, at other times, to shed forth a benign influence, the effects of which are spiritual health, peace of conscience, righteousness, joy, and love.

Let all Christian physicians carefully watch this movement, and be ready to aid in repressing accidental outbursts of hysteria, while they do what they can to strengthen the hands of their clerical brethren. I am, etc., Scotus.

Sept. 20th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of a son, the wife of—

Haviland, A., Esq., Surgeon, Bridgewater, on Sept. 19.

Of daughters, the wives of—

Browne, Robert, Esq., Surgeon 83rd Regiment, at Nusserabad, on August 4th.

*Cockey, Edmund, Esq., Frome, on September 20.

Shaw, James, Esq., Surgeon, at Bangalore, on Aug. 11.

*Steele, A. B., Esq., Liverpool, on Sept. 9.

MARRIAGES.

Dempster, T. E., Esq., late Superintending Surgeon Bengal Army, to Frances, eldest daughter of the late G. Clark, Esq., of Dorchester, on Sept. 13.

Sanders, A., Esq., Surgeon, of Cheltenham, to Frances, only daughter of W. L. Wheeler, Esq., of Northfleet, on September 14th.

Newham, Thomas, M.D., to Maria Louisa, elder daughter of D. T. Willis, Esq., both of Winslow, on September 15th.

Thompson, J. J., Esq., Assistant-Surgeon Ceylon Rifles, to Isabella, eldest daughter of Lieut.-Col. A. Watson, at Point de Galle, on July 28th.

*Wilson, John H., M.D., Liverpool, to Sarah Ann, youngest daughter of the late S. Preston, Esq., of Lancaster, on August 31st.

DEATHS.

Bailey. On September 16th, aged 73, Maria, wife of *H. W. Bailey, Esq., Thetford.

May. On September 15th, aged 3, Arthur Edward, only son of *A. P. May, Esq., Great Crosby, Liverpool.

APPOINTMENTS.

Bracey, Charles J., Esq., appointed Medical Tutor to Sydenham College, Birmingham.

PASS LISTS.

Apothecaries' Hall. Licentiates admitted on *Thursday, September 15th*, 1859:—

Cresswell, Alfred, Ballarat
Dowell, Robert, Hinderwell
Leach, James, Shaw, Oldham
Nunn, John R., Bedford
Rummin, George, Bath
Thompson, Abraham, Gosforth
Trend, Theophilus W., Bridgewater

The following gentlemen, on the same day, passed their first examination:—

Gayton, William, Spitalfields
Pechey, William Crisp, Walthamstow.

HEALTH OF LONDON—SEPTEMBER 17th, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... {Boys .. 802 / Girls .. 805}	1607 ..	1092
Average of corresponding weeks 1849-58 ..	1506 ..	1039

Among the causes of death were—small-pox, 36; scarlatina, 92 (an increase from 68); diphtheria, 21; diarrhœa, 82 (decrease from 148); cholera or choleraic diarrhœa, 5. The registers will enable the public to judge whether an increase of mortality is produced by the strikes in London among persons in the building trades. Of bricklayers, two died in the week, of bricklayers' wives, one, of bricklayers' children, five; of carpenters, three died, of carpenters' wives, five, of carpenters' children, sixteen; of painters, six died, of painters' wives, one, of painters' children, twelve; of plasterers, one died, of plasterers' children, two.

Barometer:

Highest (Sun.) 30.18; lowest (Fri.) 29.31; mean 29.658 in.

Thermometer:

In sun—highest (Mon.) 95.2°; lowest (Wed.) 61°.
In shade—highest (Mon.) 73.2°; lowest (Mon.) 41.5°.
Mean—53.8°; difference from mean of 43 yrs.—3.1°.
Range—during week, 31.7°; mean daily, 20.7°.

Mean humidity of air (*saturation*=100), 79.

Mean direction of wind, variable.—Rain in inches, 0.83.

BIRMINGHAM MEDICAL REGISTRATION ASSOCIATION.

A general meeting of the medical practitioners of Birmingham and the Midland Counties was held at the Town Hall, on September 2nd, for the purpose of carrying out the resolutions adopted at the preliminary meeting, held at the Dispensary, regarding the formation of a Medical Registration Association.

Dr. Heslop was called to the Chair.

Mr. Spratly, the honorary secretary, read the resolutions of the preliminary meeting, and those agreed to by the Committee with reference to the management of the Association.

Mr. Postgate moved—"That a Medical Association be formed, to be called the Birmingham and Midland Counties Registration Association, for the purpose of assisting the Registrar in securing a complete registration of duly qualified practitioners, and for protecting the profession and public against illegal practice, and when necessary, for watching the working of the new Medical Act."

Dr. Hinds, in seconding the resolution, said they were much indebted to those gentlemen who had taken the initiative in forming a Registration Society. He would, however, impress upon his brother practitioners that their object was not the extinction or suppression of quackery, but simply to draw a broad line of distinction between quackery and that of legal and legitimate practice. Their object should be to carry on the

Association in accordance with the spirit of the age, upon a liberal and enlightened policy, not making it merely a prosecuting Society; but one in all respects calculated to elevate the tone and character of the profession, and ensure to the public all the benefits resulting from sound and honourable practice.

The resolution was put and carried unanimously.

The Chairman proposed the second resolution—"That all orthodox practitioners of medicine and surgery, residing in Birmingham and the surrounding districts, who are entitled to be registered under the new Medical Act, shall be eligible as members."

The Chairman said as that was an important resolution, it would no doubt elicit discussion, and he should be glad to hear the opinions of any gentlemen present upon the subject. The following letter, bearing upon the term "orthodox," had been addressed to Dr. Bell Fletcher:—

"Birmingham Homœopathic Hospital, 2, Upper Priory, September 1st, 1859.

"Dear Sir—An advertisement having appeared in the public papers of the proceedings connected with the formation of a Medical Registration Society, we have observed that one resolution states that only *orthodox* medical men are eligible for membership. The fact of our not having received any invitation to take part in the formation of the Association, while other medical men in the district have received such invitation, and the circumstance that an impression prevails among the public that the term 'orthodox' has been purposely made use of in order to exclude homœopathic practitioners, induces us to request of you, as chairman of the meeting, an explanation of the matter. Being legally qualified and duly registered medical men, does our approval of the homœopathic system of medicine, and our open practice of it, disqualify us from becoming members of the proposed Medical Association, founded, as that Association is, professedly for public objects, and based, as it is, on an Act of Parliament, which expressly discourages disqualification on the ground of difference of medical creed and practice?

"We are, dear sir, your's faithfully,

"George Fearon, Joseph Lawrence,
"W. A. Parsons, Henry Robertson,

"*Medical Officers of the Birmingham Homœopathic Hospital and Dispensary.*"

"To Dr. Bell Fletcher."

Mr. Yates seconded the resolution.

Mr. Postgate said the term "orthodox" was one that could be much criticised, and which admitted of a variety of interpretations. He should move that the words "legally qualified" be substituted for "orthodox." He thought they should admit into the Association all duly qualified practitioners, those who were entitled to be upon the Register, and whose names were duly entered by the Registrar.

Mr. Gamgee seconded the amendment. It was all but impossible to define what "orthodoxy" meant with reference to the profession. He for one should not oppose heresy, although always ready to uphold the truth; but knowing that what had been termed the heresies of the world had proved it greatest truths—knowing that the heresy of to-day had often been the orthodoxy of to-morrow, and remembering that the profession were at first the bitterest opponents of Harvey and other heretics—that the College of Physicians had tried to crush the Apothecaries, and that the tendency to be a persecuting body had always been a stigma upon the profession, he could not think of excluding from the Association those whom the law had duly recognised. If they were to have a perfect registration let them have one, and conduct the Society efficiently, and it would no doubt be productive of great benefit. He did not like the idea of prosecution, but if they did prosecute all, let them by all means prosecute the villains who infested the country, and, by their misrepresentations, preyed upon and robbed the poor. In excluding those whom the act recognised they were not carrying out its spirit or intention. He wished it to be distinctly understood that he did not feel or express any sympathy with the branch called homœopathy; but medical men too frequently made the mistake of regarding those who differed from them as dishonourable men, whereas, he knew there were many able and conscientious practitioners among the homœopaths, and he should not like to see them excluded.

Mr. Yates said the subject was discussed at the preliminary meeting, and it was considered desirable that allopathic practitioners only should be members of the Association. Homœopathic practitioners might form an Association amongst themselves. There could be no doubt the term "orthodox" was intended to confine the Society to gentlemen belonging to the allopathic branch.

Mr. Pemberton suggested that the word "registered" would be a better term for the amendment than "legally qualified." While entertaining the greatest contempt for the practice of homœopathy, he felt it would be inconsistent with the name of their Society, whose main feature was that of registration, if they prevented registered practitioners from being members. He would thank Dr. Heslop to inform the meeting of the view taken upon the subject by the London Medical Registration Society.

The Chairman said, the word "orthodox" was used in the London resolutions; and Dr. Ladd, the Secretary of the Society, in a letter addressed to Mr. Spratly, had said, "Keep out the homœopaths by some such rule as we have". The rule or resolution referred to was as follows:—"That all practitioners of *orthodox* medicine, who are entitled to be registered under the new Medical Act, shall be eligible as members."

Mr. Pemberton expressed himself satisfied, adding that, as the London Medical Society used the word "orthodox", he should vote for the original resolution.

Dr. Anthony said, the practitioners referred to were no doubt qualified to be registered under the Medical Act, but he objected to their admission into the Society.

The amendment, having been put, was lost, only the hands of the proposer and seconder being held up in its favour; and, with these two exceptions, the original resolution was carried unanimously.

The rules and regulations drawn up by the Provisional Committee for the management of the Association were then submitted and discussed *seriatim*, and unanimously adopted. The following resolution was carried unanimously:—

"That the election of members be referred to the General Committee, and take place by ballot, if necessary; and that the votes of a majority of those present shall be necessary for the admission of candidates for membership."

The Chairman said that, although he should have to submit the next resolution, he disagreed entirely with it, and felt confident that it would not be adopted. It was as follows:—

"That it shall be the duty of the Vigilance Committee to investigate all cases brought before them of persons practising in otherwise than an orthodox manner, and to report thereon to the General Committee."

If they were to discuss the opinions of persons practising in other than an orthodox manner, they would get into great difficulties. That was not the object of the Society; and the passing of such a resolution would make the profession a bye-word in Birmingham.

Mr. Yates moved, and Mr. Pemberton seconded, the following resolution, in lieu of that submitted from the chair; and, on being put to the meeting, it was carried unanimously.

"That it shall be the duty of the Vigilance Committee from time to time to lay before the General Committee the names of such individuals as appear to be practising without a proper qualification, and therefore not entitled to be entered upon the Register."

The following gentlemen were unanimously elected officers of the Society:—*President:* Dr. Bell Fletcher. *Vice-Presidents:* E. Moore, Esq. (Hales Owen), Dr. Anthony and G. Taylor, Esq. (Birmingham), and W. E. Johnson, Esq. (Dudley). *Committee:* Dr. Heslop, Messrs. Berry, D. W. Crompton, J. Carter, Bartleet, Oliver Pemberton, George Yates, Charles Townsend, Bindley, W. C. Freer, Woody (Tamworth), John Houghton (Dudley), J. Postgate, Meeke, Yelioly, Warnock, Bassett, Yarwood, R. Jordan, Burbury, George Jones, Cartwright, and Smith (Redditch). *Treasurer:* E. Chesshire, Esq. *Hon. Secretary:* S. Spratly, Esq.

The Chairman then proposed a vote of thanks to the Provisional Committee for the time and labour they had bestowed in furtherance of the object in view; and to Mr. Spratly, for the valuable services he had rendered in the formation of the Society.

The motion, having been seconded, was carried unanimously.

Mr. Postgate proposed a vote of thanks to the Chairman.

The motion, having been seconded, was carried unanimously; after which Dr. Heslop briefly returned thanks, and the meeting separated.

Accident to Baron Liebig. Baron Liebig, the eminent chemist, broke his leg at Passau on September 5th. He is reported to be doing well.

The Military Hospital at Netley. In a recent article on this hospital in the *Times*, the following remarks occur in reference to the locality of the institution:—"The question of the sanitary fitness of the spot selected for the hospital appears never to have been thought of until the building itself was considerably advanced, when the subject was forced on the attention of the authorities in the most disagreeable manner, by the presence of a heavy foul smell when the tide went out, and left some hundred acres of black mud in front of the building exposed to the rays of a summer sun. The discussions to which this unpleasing discovery gave rise, both in the House of Commons and in medical journals, will doubtless be in the recollection of our readers. From the conflicting statements which were then brought before the public, it appeared, on the one hand, that the site was one of the best and most salubrious in the kingdom. The mud, it was contended, was not mud at all, but an inorganic deposit, the smell from which, if not positively wholesome, was at least not injurious. On the other side, it was as distinctly asserted that the whole *locale* was unfavourable, the exhalations from the mud almost poisonous; and the site, therefore, as a matter of course, one of the very worst places that could have been chosen for the erection of an hospital. A sanitary commission of the most eminent medical and scientific men, who were appointed to decide upon the question, by no means tended to clear up the doubts. The mud left by the tide on the banks of the Southampton Water, and about the presence of which in front of the hospital there could, one would think, be no dispute at all, was examined, measured, smelt, and analysed, when, as might have been expected, almost every member of the commission came to a different conclusion, and left the dispute pretty much as they had found it. There can be no doubt, however, that those who did arrive at an opinion in favour of the site were considerably influenced by the fact that the hospital was half built, and it was too late to come to any other decision respecting it. If the same commission had been appointed to inquire into the sanitary conditions of the spot before it was finally decided on, we suspect their reports would have been unanimously against it; for medical authorities of all shades of opinion are at least agreed on one point, viz., that in choosing sites for hospitals, river-banks and estuary-shores should in all cases be carefully avoided. Not only is this great hospital built upon the banks of a very muddy estuary, but there are other local causes which especially render the choice unwise and improper. The die is now, however, effectually cast; for upwards of £200,000 are already spent, and the building is half finished. The country must therefore make the best of a bad bargain, give £200,000 or £300,000 more to complete the edifice, and rely on the rather feeble hope that the authorities will be wiser next time..... As regards that very vexed question, the healthiness of the site, perhaps, after all, the best evidence can be obtained from those who live near the spot, or who have been engaged upon the building since its commencement. From these sources it would appear that during summer, when the tide is out, and, above all, when vessels, resting on the mud, disturb it, there is a very perceptibly unpleasant odour in and round the place. This, however, is the least part, as the chief inconvenience is felt when the wind blows from Southamptom, and brings down the miasma of the whole sewage of that town, which flows out upon the river mud about a mile above the building. All these facts, however, were known and pointed out before an acre was purchased or a stone laid..... The whole edifice is of the most expensive and substantial description, the only fault about it being that it is where it is; and, as this is exactly the fault which never can be remedied or improved, the country must submit to it with the best grace it can."

The Sale of Poisons. One of the objects of legislation is the protection of the people, not only from dangers that may arise through attacks of lawlessness and violence upon them, but from accidents to which their own ignorance may subject them, or which a rash and thoughtless course of conduct may bring about. Hence, while laws are passed forbidding the carrying of concealed weapons, and guaranteeing protection to life and limb, it is felt that some measures should be adopted to remove the means of suicide, and the substances which may be pernicious to life, from the hands of the ignorant and thoughtless. Still, very little is done in our land that shall prevent the free access of the unprofessional to the deadliest poisons. These are procurable without being subjected to annoying questions as to the uses for which they are intended. Persons, altogether unknown to the dispensing apothecary, purchase, hourly, quantities of deadly material that may be the means of death to themselves or their enemies. Children, and those who are perfectly irresponsible, can procure opium and its preparations, purchase arsenic—for the destruction of rats—and obtain the powerful preparations of strychnia and cyanogen. This is an evil which all must admit. The question is, how can it be checked? and this question is a difficult one to answer in a country where liberty is interpreted, by the demagogue, to mean freedom to do as each one pleases. The cry is raised; when prohibitory laws are attempted, that an effort is made to infringe the liberty of the subject, and in this way the best efforts of good men are crushed. In England, a step was taken in the right direction when the "Act to regulate the sale of arsenic" was passed, June 5th, 1851. Each person selling the article was obliged to keep a record of its sale, the name of the purchaser, and that of the witness in whose presence it was sold. The purchaser was to be known to the vendor, or to be certified to by those who were known. Furthermore, no sale of arsenic was to be made in less quantity than ten pounds, unless it was mixed with soot or indigo in the proportion of one ounce of soot, or half an ounce of indigo, to one pound of arsenic, in order that the colour of the article might be of avail in arousing suspicion with those to whom it might be administered with homicidal intent. Such an Act, although not meeting all the requirements of the case, yet was immeasurably in advance of anything of the kind promulgated by proper authority in America. We need this, and more, because our laws do not demand any preliminary training from those who are licensed to vend drugs. Any illiterate person, with us, can take up the business of the pharmaceutist, and, through his ignorance, endanger the lives of a whole district in his putting up of prescriptions. A pharmaceutical education is not demanded of him who *professes* a knowledge of the intricate business of pharmacy. He may be as ignorant as the veriest boor, and yet is authorised by law to do exactly that which the most accomplished pharmaceutist can do. There must be some legal regulations connected with the practice of pharmacy, and the medical profession should leave no stone unturned that may lie in the way of the passage of such regulations. Duty to themselves and society, requires their untiring efforts in this direction. But even where such knowledge exists, there must be prohibitory laws as regards the indiscriminate sale of deadly poisons. (*American Medical Monthly*, August 1859.)

Royal College of Surgeons. The library of this institution will re-open on Saturday, October 1st, and the museum on the following Monday.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Mr. J. V. Solomon; Dr. J. B. Nevins; Mr. Alfred Fleischmann; Mr. F. Jones; Mr. J. Ware; Dr. J. H. Wilson; Mr. J. Cornwall; Mr. F. G. Harcourt; Mr. T. Holmes; Dr. Sloane; Dr. C. Handfield Jones; Dr. Wm. Newman; Mr. Edmund Cockey; Mr. Samuel Spratly; Dr. G. M. Humphry; Dr. C. Collingwood; and Dr. W. O. Markham.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. A Guide to the Treatment of Diseases of the Skin: with Suggestions for their Prevention; for the Use of the Student and General Practitioner. Illustrated by Cases. By *Thomas Hunt, F.R.C.S. Fourth Edition. London: T. Richards. 1859.
2. A Domestic Practice of Homœopathy. By G. Calvert Holland, M.D.Edin. Part I. Edinburgh: Thos. C. Jack. 1859.
3. Homœopathy and Hydropathy impartially appreciated; with Notes illustrative of the Influence of the Mind on the Body. By Edwin Lee, M.D. Fourth Edition, enlarged. London: Churchill. 1859.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

LEICESTER INFIRMARY.

I. NEURALGIA OF THE BRACHIAL PLEXUS SIMULATING WASTING PALSY.

By JOHN SLOANE, M.D., House-Surgeon to the Infirmary.*

IT is now well known that there is a form of paralysis associated with wasting of the muscles involved, without loss of sensibility and without any lesion in the brain or spinal cord, or impregnation of the system with lead. Bell and others in this country many years ago published cases of this disease, about which, however, we knew little until the valuable observations of M. Cruveilhier were promulgated. Since that period, many cases have been recorded, and much important information acquired. Last year, Dr. Roberts, of Manchester, published a very able and elaborate essay on this lesion, from observations made on one hundred and five cases, five of which had fallen under his own notice, and the others had been recorded by various writers in this country and abroad. Several names have been applied to this affection; successive observers changing the name in accordance with their views concerning its nature; but the terms wasting palsy and Cruveilhier's atrophy, adopted by Dr. Roberts, appear to be the least objectionable. The case which I shall now describe was at first believed to be wasting palsy, which it closely resembled for a considerable time; but as it progressed, symptoms appeared foreign to this disease, which induced us to alter our diagnosis.

June 7th, 1858. Joseph Sutton, aged 60, of Enderby, was admitted into the Leicester Infirmary, under the care of Dr. Shaw. The patient is a farm-labourer, of healthy parentage, who has suffered no privations. His habits have been temperate of late; formerly they were intemperate. He is a muscular strong-looking man.

In last October, after pulling up mangold for a week, during which, while at work, his left forearm was constantly wet, he was seized with a "violent pain" in the left shoulder, the left side of his neck, and in the outside of the arm as far as the elbow; movements of the upper arm were attended with much pain. The pain was equally severe during the day and night. It continued unabated till a fortnight ago; since then it has gradually lessened; and now he has very little pain. The improvement began immediately after his return from the Ashby-de-la-Zouch Baths, where he had been under treatment for three weeks. He received no perceptible benefit during his stay at the Baths.

On looking at his left arm, it is seen to be much more slender than the right; the deltoid is wasted; and a groove is observable between the upper margin of the glenoid cavity and the head of the humerus. He has no pain anywhere. He can swing his left hand backwards and forwards, or outwards and inwards, the limb being extended. He is unable to flex the elbow or to move the hand more than a foot in any direction from the outside of his thigh, where it hangs when he is standing, except by swinging, when the increase of motion thus gained enables him to move the hand about two feet. Motion in the wrists and in the joints of the fingers and thumbs, is perfect. In the middle of the arm, the circumference of the left is one inch and a quarter less than that of the right. Two inches below the upper extremity of the olecranon, the left arm is a quarter of an inch less in circumference than the right. Sensation is normal in the left upper extremity. He has not been able to work since his seizure with his left arm; but has fed himself and done other necessary acts with his right hand. The head of the left humerus is a little lower, and projects slightly forward, as compared to the right. Passive motion is as extensive in the left as in the right shoulder and elbow. Some grating is perceptible on moving the left shoulder; but he states that there is no pain. He has been deaf in the right ear since he was a boy; his memory is bad. In all other respects he is in perfect health.

He was ordered to have the affected arm galvanised twice a week, and to have a stimulating liniment applied every morning. He was also to take a tonic mixture, and to use the paralysed limb as much as possible. He derived no benefit from the treatment; and was discharged on August 10th, having been instructed to show himself at the Infirmary occasionally.

November 23rd. Sensation was impaired considerably in the region of the left deltoid; to a less degree in other parts of the arm. Sensation was normal in the forearm, and in the region of the neck above the scapula and clavicle, also in the scapular region. In the parts in which sensation is impaired he has a feeling of numbness. He could excite no muscular contractions in the deltoid by the galvanic current; this muscle seems to have disappeared. He could excite muscular contractions in the biceps and triceps by galvanism. He has had no cramps in his shoulder or arm. Muscular vibrations, that is, convulsive action confined to bundles of muscular fibres, not involving the whole muscle, were not excited in the affected parts by filliping or tickling the skin, by sudden exposure to the air, nor by galvanism. No other change or symptom worthy of notice had occurred since the previous report.

January 15th, 1859. The sensibility of the arm is less acute on the outer than on the inner aspect; least acute in the deltoid region. He has been losing sensation gradually in the parts described since he was in the Infirmary last summer.

March 15th. Sutton's sister called to-day to inform me that six weeks ago he suddenly lost the use of all his limbs, having been previously in his usual state of health. He gradually sank, and died five days after this attack, apparently retaining his cerebral functions unimpaired to the last. He was perfectly conscious, and conversed with his sister an hour before death. His urine during these five days required to be drawn off.

In answer to a note, I received the following information from my friend, Mr. Beresford, of Narborough. "The statement," he writes, "given to you by Joseph Sutton's friends is very nearly correct. He suddenly lost the use of the lower extremities and left arm, and also all power over the bladder and rectum. The following day the right arm became paralysed, and remained so till death took place, four or five days afterwards. His cerebral functions were not at all impaired, nor was there any contraction of the muscles of the face. I saw the man but once; but an assistant furnished me with the enclosed particulars."

REMARKS. What was the nature of the disease from which this man suffered? When he first came under observation at the infirmary, he presented all the essential symptoms of wasting palsy. There was wasting of several muscles, without any diminution of tactile sensibility, and apparently without any co-existing disease of the brain or spinal cord. Pain such as he had suffered, is frequently observed in Cruveilhier's atrophy.

As the case progressed, sensation became much impaired, and there was a feeling of numbness in the affected parts. According to Dr. Roberts, in 102 of the 105 recorded cases of wasting palsy, sensibility remained unimpaired; of the remaining three, one had a little numbness of the finger-ends, which soon passed off; a second had a sense of numbness in the index and middle

* In common with other house-surgeons of hospitals in this country, I have been requested by the Committee of Council of the British Medical Association to publish in the JOURNAL such cases as I might consider interesting. In compliance with this request, I shall in future send for publication reports of the important cases observed at this Infirmary.

fingers; but "the skin of the finger continued very tender to the touch;" and to the third, objects "felt flatter than natural." The very marked loss of sensibility which subsequently occurred in Sutton's arm showed that his disease was not wasting palsy.

Was it some affection of the brachial plexus, causing, first, pain and paralysis of motion, and afterwards loss of sensibility? In sciatica, which I mention as a typical form of neuralgia, the pain, as is well known, is increased by movements of the affected limb, which emaciates when the disease has been severe and of long standing.

Romberg states that "In the consideration of the prognosis of sciatica, we must remember the possibility of a supervention of paralysis. We do not possess many instances of complete recovery; an increased sensibility, or a dull sense of numbness generally continues for a considerable time in the affected leg." He mentions the case of a woman who, shortly after delivery with forceps, was seized with severe sciatica, from the pain of which she recovered in a fortnight; but anæsthesia of the sole of the foot remained so that she did not feel the insertion of a needle. (Romberg *On Diseases of the Nervous System*, vol. i, Sydenham Society's Translation.)

Valleix says that "The wasting of the limb only occurs in very severe cases; the semi-paralysis on which Cotugno insisted is seen still more rarely, and only in those cases where the neuralgia has been of long standing." (*Traité des Névralgies.*) The wasting of the deltoid and muscles of the upper arm which occurred in Sutton was doubtless caused by want of exercise. As movement of this portion of the limb was attended with much pain, quietude would of course be maintained, and wasting of the muscles resulted, such as we observe in the vicinity of anchylosed joints, or in limbs completely paralysed. I believe that the gradual loss of tactile sensibility after the disappearance of the pain was very peculiar; but the writers on neuralgia, to whose works I have access, seldom give detailed accounts of their cases, and in the few instances described at length in which paralysis resulted, it is not stated whether paralysis of sensibility existed, as well as that of motion. In my own experience I have never before seen a case of neuralgia terminating in paralysis.

There remains another way of accounting for this man's symptoms. They may be ascribed to disease of the spinal cord. There can be no doubt that lesion of the spinal cord was the cause of the symptoms in the last and fatal seizure in which he lost the use of all his limbs, and all power over the bladder and rectum—the cerebral functions remaining unimpaired. But I do not know any spinal disease in which there is, at first, pain with muscular atrophy, and afterwards impaired sensibility in the proximal half of an extremity, the distal half not being involved. I have not been able to find any case of spinal disease recorded in which there was even an approach to such symptoms. On this point I am glad to have the opinion of such an able observer as Dr. Roberts of Manchester, who, in his work previously referred to, states "That he is not cognisant of any injury or disease, undoubtedly located in the spinal cord, which affects the shoulders and upper arms, and leaves the fore arms and hands untouched."

I believe this patient suffered from brachial neuralgia of a very severe character, which induced wasting of the muscles from want of exercise, succeeded by partial anæsthesia. He was finally seized with some lesion of the spinal cord, which rapidly caused death.

The interesting part of the case is the great similarity it had for a considerable time to wasting palsy, and it was on this account that I was induced to bring it under the notice of the profession.

II. WASTING PALSY.

By John Sloane, M.D., House-Surgeon.

January 12th, 1859. Thomas Armstrong, aged 68, residing at Rothley, was admitted as out-patient, under the care of Mr. Benfield. Armstrong is a frame-work knitter, of healthy parentage, who was formerly a hard drinker, but he has been temperate for the last nine years. He states that he has suffered no privations, and has had no previous illness. He is a red-nosed, florid, grey-haired man, of healthy aspect.

About two years ago, he began to experience loss of power in his left thumb. He has been becoming worse ever since. He moves the left thumb more slowly than the right, but in other respects he can effect the normal movements. When at work he grasps a portion of the machinery with his left thumb and fingers of his left hand. He finds his thumb slip, and he has difficulty in raising it from the machinery. He is thus rendered almost incapable of following his employment. The muscles of the ball of the left thumb are wasted, as compared with those of the right. Sensation is normal in the left thumb and elsewhere. There is no visible wasting of the muscles of the left forearm.

I could not satisfy myself that there was any difference in the contraction of the muscles of the balls of the thumbs under the influence of galvanism. He has no cramps nor muscular twitching in the affected part. He began to be deaf sixteen years ago. He has been since gradually becoming worse, and is now almost perfectly deaf.

He was ordered to be galvanised twice a week in the part affected. He attended regularly for a fortnight, when, as he was very anxious to be enabled to resume his employment, I attached to the end of the left thumb a band of India rubber, which was fixed to a strap passing round the wrist. The power of flexing the left thumb was thus much increased. The patient did not attend afterwards.

Remarks. There is no doubt that this was a case of wasting palsy affecting the muscles of the ball of the left thumb. There was the paralysis associated with muscular atrophy without sensation being impaired, and without any lesion of the brain or spinal cord, or of the joints in the vicinity of the wasted part. The disease in this case, as is frequently observed, progressed very slowly. The ball of the thumb is very liable to be the part first affected by wasting palsy.

In one hundred of the cases collected by Dr. Roberts, the starting point of the disease is mentioned, and in twelve of these, the ball of one or both thumbs was first involved, and in twenty others the starting point is said to have been in one or both hands. In some of these it is not unlikely that the disease first appeared in the thenar eminences.

ST. MARY'S HOSPITAL.

ACUTE PURPURA: VENESECTION: RECOVERY.

Under the care of J. Alderson, M.D.

[*Communicated by* Linington Ash, Esq., *House-Surgeon.*]

Ellen O'B., aged 29, married, was admitted May 25th, 1859. Three months previously, she was confined of her first child; the labour was a natural one; she made a good recovery, and within three weeks was filling the situation of wet nurse, where she was accustomed to live much better than usual. She was quite well three days prior to her admission, and went to bed feeling as well as usual. During the early part of the night, she awoke with a painful sensation in her legs, as of needles running into them: this continuing, prevented sleep; and, on examining them in the morning, the legs were covered with blotches. She dressed, and continued at her work for some hours, by which time her knees and ankles had become red, swollen, and painful, so that she had to take to her bed. On the following day, her arms had become similarly affected. She suffered much from thirst and feverishness. She had begun to menstruate about ten days previously to this attack.

On admission, her countenance was expressive of suffering. Pulse 120, full, hard, and incompressible. The tongue was coated and cracked, but moist. The skin, which was hot and dry, presented, on various parts of her body (but most of all on the extremities) numerous blotches or ecchymoses, varying in size from a pin's head to that of a florin. The patches were distinctly raised above the surrounding integuments, and varied in colour from bright red to black; those of recent date being brilliant red, whilst the older ones were disappearing with a bruised appearance. Firm pressure neither relieved them of their contents nor altered their colour. Her breasts were very full and tense with milk. The bowels were costive. The sounds of the heart and lungs were natural. She was ordered a brisk purgative immediately, and a few drops of laudanum at night.

May 26th. She did not sleep for pain, and was very restless. She had great pain in the wrists and ankles. There is a large increase in the number of the spots, chiefly on the back and nates. The dorsum of the left foot appears as if largely bruised. The tongue is foul; the pulse 120, full, and hard. There is a slight tinge of blood in the saliva, streaking it. The skin is hot and dry; there is no acid smell. The countenance is anxious. The bowels are no freely open. The breasts were ordered to be drawn, and rubbed with digestive ointment. She was ordered to have an enema immediately.

℞ Potassæ bicarb. ℈j; mistur. potassæ effervesc. ʒj. M. Fiat haustus 4tis horis sumendus.

℞ Calomel. gr. iij; confect. opii gr. iv. M. Fiat pilula hac nocte sumenda.

Cras mane sumat misturæ sennæ ʒij.

She was ordered to be bled to ten ounces.

May 27th. She did not sleep last night, although the pains have not been so bad since she was bled. The joints are less tender. There are fresh spots over the chest, but those of older date are disappearing. The skin is cooler and more moist; the tongue is cleaner; the bowels are still costive; pulse 100, softer; the throat is sore. The enema was repeated, and a hydrochloric acid gargle was ordered.

May 28th. She slept a little, and feels much better. The right hand is much swollen and painful; the feet are less so. The skin is hot and moist; there is less eruption; the colour of many blotches is less red; others are of various colours. These last are not raised. The tongue is coated in the centre. She complains of thirst and vomiting, with slight abdominal pain and tenderness. The bowels have not been open for two days. Her urine is copious, acid, not albuminous. Pulse 100, more compressible. Eight leeches were ordered to be applied to the abdomen, and to be followed by fomentation. Three minims of dilute hydrocyanic acid were added to each dose of the medicine.

May 29th. She slept better. The joints are free from pain, but still slightly swollen. She vomited a greenish coloured fluid, with mucus and half-digested milk; no sarcinæ. There is pain in the hypogastric region, increased by pressure. The bowels are not open. The breasts are soft, and free from pain. The abdomen, since the fomentation, has been covered with eruption—not in blotches, but one uniform mass of red papillæ of blood, slightly raised. The rest of the eruption is losing its colour. There is no pain in the purpuric eruption, except on the abdomen.

May 30th. No fresh spots of eruption have appeared; the former ones are assuming a bruised appearance. She has no vomiting or pain in the hypogastric region. The pain in the joints has returned, and prevented sleep. Pulse 120, strong, and full.

June 2nd. She has been improving since last note. The eruptions have nearly all disappeared, leaving brownish marks behind. The bowels have been rather purged for the last few days. She was ordered to have compound chalk and opium powder occasionally; an ounce of decoction of cinchona three times a day; and better diet.

June 16th. Since last note, she has complained only of pain in the joints, relieved by leeching. She has been taking meat and porter for some days. There has been no appearance of the eruption till last night, when she felt a stinging sensation in the left groin, where there is to be seen now a patch of extravasated blood, as large as the palm of the hand, distinctly raised above the level of the skin, and surrounded with an areola of greenish yellow. She complains of much pain in the right arm and shoulder. The pulse is 110, weak. In other respects, she is quite well.

℞ Acidi hydrochlorici ♏i; infusi rosæ comp. ʒi. M. Fiat haustus ter die sumendus.

The bark was omitted; the diet was continued.

June 17th. The colour of the patch of blood is going off, with a bruised appearance. There are a few petechiæ on the calves of the legs.

June 18th. After walking down the ward, she complained of pain referred to the left popliteal space. This part presents now (three hours afterwards) a distinct bruised appearance.

June 20th. No further extravasation has occurred. She expresses herself as feeling better, and is able to walk about again. She still complains of rheumatic pain, worse at night, principally in the right arm. She is improving in general appearance.

June 22nd. Several spots of purpura have appeared on both calves. Her general health is improving. She was ordered to take half an ounce of lemon-juice three times a day.

July 4th. Since the last report, she has gone on progressing most satisfactorily. The pains in her limbs have not been constant, and now she is almost free from them. A few spots of purpura have shown themselves in various parts of her body, principally about the legs and knees. She sleeps and eats well. She has continued the lemon-juice, and has taken a fibrinous diet.

She was soon afterwards discharged, cured.

ST. GEORGE'S HOSPITAL.

FOREIGN BODY IN THE NOSE.

Under the care of Prescott Hewett, Esq.

A third case, in addition to the two reported in last week's Journal, presented itself the other day at St. George's Hospital, in which a little child had been suffering from discharge from the nose for a considerable time, without known cause. Mr. Hewett, in examining the child, fancied that he could detect something unnatural in the nose; but the child struggled and cried so that he could not be certain of it until chloroform had been given, when a shaving of wood, about five inches long, rolled up, and looking at first sight like a piece of ribband, was extracted.

The occurrence of three cases so close together, shows how common a cause of discharge from the nose this is in children; and, therefore, the importance of a more careful examination than is usually given to such cases.

WESTMINSTER HOSPITAL.

STRANGULATED INGUINAL HERNIA: OPERATION: PERSISTENCE OF CONSTIPATION AND VOMITING: DIARRHŒA: PYÆMIA: RECOVERY.

Under the care of W. A. Hillman, Esq.

[*Abridged from Notes by* W. N. Pell, Esq., *House-Surgeon to the Hospital.*]

S. H., aged 31, an omnibus conductor, admitted August 22nd, 1859, states that he had a hernial protrusion in the left groin eight or nine months ago, for which he came to this Hospital and had the protrusion returned. He has not worn a truss since this occurrence, and there has usually been a fulness of the inguinal canal of that side. On August 21st, whilst carrying his child, after long walking, the swelling became suddenly much larger, and extended downwards into the scrotum, giving rise to considerable pain and vomiting.

On admission, there was a large oblique inguinal hernia on the left side, distending the scrotum and the inguinal canal. The taxis was employed by the house-surgeon whilst the patient was in a hot bath, but without effecting any diminution in the swelling. Mr. Hillman, on being sent for, finding the tumour excessively tense and painful, the abdomen tender on pressure, and the patient in great suffering, with a cold clammy skin and a slow and feeble pulse, determined to operate immediately, without any further preliminary treatment.

Chloroform having been administered, an incision, three inches in length, was made over the upper portion of the swelling, extending about equally above and below the internal abdominal ring. An attempt was made, by successive division of the coverings, to return the contents without opening the hernial sac; but as this was found impracticable, the sac was opened, and the stricture (situated in the neck of the sac itself) having been divided, the hernial contents (which consisted of a very large quantity of omentum, and a long loop of small intestine, with scarcely any serous liquid) were returned into the abdominal cavity.

The intestine and omentum were both much congested, but did not present any gangrenous appearance or odour. The inguinal canal was ascertained to be perfectly clear, and the wound was brought together by stitches, compress, and bandage. The patient expressed himself as much relieved by the operation.

No action of the bowels occurred until the tenth day after the operation; the vomiting meanwhile continuing unchecked by the remedies employed (effervescing draughts, hydrocyanic acid, chloric ether with sulphuric acid, ice, turpentine and mustard fomentations), attended with considerable distension of the abdomen, a weak and rapid pulse, a dry and brown tongue, with considerable prostration, the patient being apparently kept alive only by the free administration of brandy, of which as much as twenty ounces were frequently given during the twenty-four hours.

On the tenth day after the operation the bowels were slightly relieved, and on the eleventh there were several copious dark-coloured evacuations, containing abundance of bile. The vomiting now became much lessened.

During the next three days there was considerable diarrhœa, and numerous pustules and blebs of various sizes made their appearance over the body, especially over the lower part of the back, and the little fingers of both hands presented much the appearance of severe whitlows.

The purulent matter was allowed to escape by incisions made into the larger pustules and into the fingers.

He is now (September 23rd) slowly recovering from a state of great prostration, under the use of nutritious diet and quinine.

Remarks. The chief features of interest in the case thus briefly outlined, are—

1. The total absence of any evacuations *per anum* until the tenth day after the operation.

2. The persistence of the vomiting for fifteen days after the operation; the vomited matters being distinctly fæcal during a portion of the time.

3. The occurrence of pyæmic symptoms with deposits of pus, in patches of various sizes, under the cuticle, over a great portion of the body, and the symmetrical crippling of the little fingers of both hands from purulent inflammation.

The result of the case seems to show the advisability of withholding any secondary operative procedure in the way of opening out the wound again for the purpose of further exploration, the operator feeling satisfied that the constriction has been sufficiently divided, and the protruded parts have been completely returned into the abdomen.

MIDDLESEX HOSPITAL.

HÆMATOCELE.

Under the care of A. Shaw, Esq.

S. E., aged 45, a bricklayer, was admitted into the Middlesex Hospital, under Mr. Shaw's care, on August 9th, 1859, for a tumour in the right scrotum.

Five months ago, he began to observe what appeared to him an enlargement of the testicle. The swelling gradually, without pain, increased to the size of his closed fist. A surgeon, to whom he applied, after examining the tumour in the dark with a candle, proposed to lance it for him; but as he suffered little inconvenience from it, he declined to have that done. On a Sunday, eight days before his admission, while sitting, and in the act of crossing his right leg over the left knee, he felt a sudden pain in the part. During that night, the swelling gradually enlarged to twice its former size; the scrotum also became blue; but he had no pain worth noticing. He continued at his work as usual; all that he did was to cover the swelling during the night with wet cloths; and in about three days it had returned to its former size. The builder's strike having commenced about that time, he thought it a good opportunity for having his complaint cured.

The tumour, on his admission, was of the size of a closed fist: it was irregularly globular, being at its upper part somewhat square shaped, owing to lobes slightly projecting from it. The situation of the testicle could not be exactly ascertained by its figure; but from the peculiar pain produced from pressure, it was supposed to be at the back part and low down. In front of the tumour fluctuation was perceived, but in a most indistinct manner, and that chiefly where the lobes projected. The cord was sound. He had scarcely any pain. On examination of the tumour in the dark, with a lighted candle, no transparency could be detected, whether by looking through a tubular stethoscope, or in the common way, without that assistance.

The treatment consisted for the first week in elevating the parts on a pillow, and keeping them constantly moist with a lotion of hydrochlorate of ammonia. For the following six days, mercurial ointment was applied; and that was succeeded, for a similar period, by the ointment of iodide of lead. No perceptible diminution of the tumour was observed.

August 29th. A puncture was made with an exploring needle in a prominent part of the tumour, in front, while fluctuation was the most distinctly felt; and as blood ran along the groove, the trocar for hydrocele was next introduced, when an ounce and a half of dark coloured blood was drawn off.

September 2nd. The tumour, which had been slightly reduced in size by the tapping, has regained its former dimensions. Mr. Shaw this day laid open the sac by an incision in the length of the tumour, of two inches in extent, commencing from the point of the former puncture. The walls were thick and dense. There immediately escaped from the sac three or four ounces of fluid dark coloured blood. The finger having been introduced through the wound into the cavity, a soft elastic mass, with smooth surface, like jelly, could be felt adhering apparently to the interior of the sac. This was not disturbed. A poultice was applied.

September 4th. Till to-day, broken down clots of blood have been discharged somewhat copiously into the poultice; and from the diminution of the tumour, the scrotum has become flaccid. No inflammation has been set up.

September 13th. Since blood has ceased to be discharged the matter which comes from the wound is sero-purulent. The quantity has been gradually diminishing, and now amounts to only a few drachms in the day. A poultice of cotton wool was ordered to be used.

September 20th. The testicle and scrotum have returned to nearly their natural condition. The former is a little enlarged, but otherwise appears healthy. The discharge has ceased, and the wound is closed.

September 27th. He left the Hospital cured.

Original Communications.

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF CARDIAC DISEASES.

By W. O. Markham, M.D., F.R.C.P., Physician to St. Mary's Hospital, London.

IV.—Physical Signs of Pericarditis.

We have seen, in speaking of the causes of pericarditis, that the disease presents itself to us under two distinct forms, viz.: rheumatic and non-rheumatic. This is a fact which should be kept in mind in considering the diagnosis of the disease; for we shall find that the signs and symptoms of the two forms of pericarditis differ much the one from the other. In non-rheumatic pericarditis, the inflammation is generally of a latent kind, being insidious both in its origin and in its progress, and from an absence of all local symptoms of its presence, not unfrequently entirely escapes observation during life. In rheumatic pericarditis, on the other hand, we observe the inflammation in its typical form, and note the characteristic signs and symptoms which attend it. Local signs of the disease—viz., more or less pain and a feeling of oppression about the præcordia—are usually present, if not always in the earlier at least in the later stages of its course. Even in rheumatic pericarditis, however, the local and general symptoms do not, as a rule, give us the earliest information of the existence of the inflammation. We carefully watch for its physical signs in all cases of acute rheumatism, and it is the stethoscope which first apprizes us of its presence. Acute local pain, moreover, as I have elsewhere endeavoured to show, is not a usual or necessary accompaniment of simple pericarditis, but depends rather upon the pleuritis, which so often accompanies pericarditis. When, indeed, as often happens, local pain is absent, we may assume that the pericarditis is not associated with pleurisy. It is well, however, to be aware that in some cases, even when pain exists, it may be overlooked, in consequence of the severity of the associated arthritic element of the rheumatic fever.

The Heart's Sounds, Impulse, etc. At the very onset of the inflammation, the heart's sounds are generally louder, and its impulse stronger and more extensively felt over the præcordia, than natural. The force and rapidity of its action are, we may assume, increased by the local irritation, as well as by the general febrile condition of the patient. But as the inflammation advances, and when exudation gathers in the pericardium, the movements of the organ become feebler; its impulse irregular and trembling; and its sounds at last weak and altered in character, or superseded by morbid sounds. When a considerable quantity of effusion has taken place into the pericardium, and the patient lies recumbent, the heart naturally gravitates to the back of the pericardium; and, in consequence of this, a considerable quantity of fluid is interposed between it and the thoracic walls. Under such circumstances, the natural sounds and the impulse of the heart may become very weak, so as sometimes to be almost imperceptible. And the reason of this is, that the heart's movements are impeded by the mechanical pressure of the effusion upon it. The contractility of the muscular structure, moreover, is affected by the near contact of the inflammatory process which

is going on in the serous membrane; its nutrition and its vitality being thereby impaired; the result of which is, that the organ is at last partially paralysed. When the heart is thus paralysed, we may infer that a small amount of exudation will have as enfeebling an effect upon it, as a much larger amount would have under ordinary conditions—that is, so long as its muscular force remained intact and vigorous. However, we must not forget that a heart already hypertrophied, may become the seat of pericardial inflammation; and in such case, we may expect the sounds and impulse to remain loud and distinct, even when a considerable amount of effusion exists in the sac.

The physical signs characteristic of pericarditis are: double or single friction-sound heard over the præcordial region, and increase of dulness on percussion there. Occasionally, though very rarely, a tactile fremitus also is perceptible to the hand at the same part.

Friction-Sound. A double or single friction-sound heard over the heart, synchronous with its movements, and confined to the præcordial region, is the surest diagnostic sign we possess of the presence of pericarditis. It is, indeed, the first positive sign which enables us to determine with certainty the local character of the inflammation. Fever, præcordial pain or tenderness, and all the other general symptoms of pericarditis, may exist; yet, until this friction-sound be heard, we cannot with certainty affirm that the pericardium is attacked. The friction-sound appears at a very early stage of the inflammation; it may remain audible through the whole period of the existence of the inflammation; or it may be heard at the commencement, rapidly pass away, and appear once again when absorption of the fluid part of the exudation has taken place. The friction-sound usually accompanies both the systole and the diastole of the heart; occasionally it is heard during the systole only; in some very rare cases, only during the diastole. The smallest amount of lymph exuded on the surfaces of the pericardial membrane, will, I believe, give occasion to the friction-sound during the heart's movements, provided no fluid come between them; it is not impossible, indeed, that mere dryness of the pericardial surfaces may be sufficient for its production.*

The loudness and character of the friction-sound are modified by several accidental circumstances. Thus, the intensity of the sound depends not only upon the roughness of the surface of the fibrinous deposit, but also upon the area of roughened surfaces which rub upon each other; upon the force of the heart's action; and upon the amount of fluid effused into the sac. These accidents necessarily modify the loudness and clearness of the sound; but still, with rare exceptions, its essential character is ever that of a rubbing sound. Whatever particular well-known sound fancy may please to liken it to, it is still a friction-sound, bearing but one import to the physician's ear. Its varieties are only degrees of the same sound, embracing the gentlest rubbing, and reaching up to a rough creaking and even scratching sound.

Conditions necessary for the Production of the Friction-Sound. We may gather from the above what are the conditions requisite for the production of the friction-sound; viz., the deposition of solid or semi-solid matters on the surface of the membrane; the contact of its opposing surfaces; and a certain degree of force in the action of the heart. Serous, hæmorrhagic, or purulent effusions, will not of themselves occasion a friction-sound; nor will the sound arise when the heart's action is very feeble, nor whenever such an amount of effusion is present as suffices to prevent the surfaces coming in contact, and so rubbing on each other—a condition, indeed, which very rarely obtains in a complete manner; that is, at all parts of the pericardium.

What amount of effusion suffices, in any given case, to prevent the production of a friction-sound, cannot be determined. The size of the heart itself; the amount of solid deposit on the serous surfaces; the weak or strong action of the organ; the situation of the plastic deposit;—these, and other circumstances, which cannot be decided with any degree of certainty in such cases, necessarily modify the result. This much, however, appears certain, that (to use the words of Dr. Walshe) "no conceivable amount of fluid will of necessity totally annul friction-sound." When the quantity of serous fluid is large, the friction-sound, if it still exist, will be heard chiefly about the base of the heart and the large vessels; and here the sound often lingers, when it is no longer audible over other parts of the præcordial region. The reason of this no doubt is, that the opposing surfaces of the membrane are less liable to be separated by the fluid around the roots of the great vessels and at the base of the heart, than at other parts of the organ.

Sometimes, although very rarely, friction-sound does not avail us as a sign; for it may be absent altogether, or it may have been present and passed away before the patient comes under our observation. Its duration is uncertain; it may disappear after a few days, and it may remain constantly present for very many days together. It terminates either with the death of the patient, or in adhesion of the pericardial surfaces, or in the resolution of the inflammation; and, probably, sometimes in the formation of "white spots".

Difference between Endocardial Murmurs and Pericardial Friction-Sounds. It is in certain rare cases difficult, if not impossible, to distinguish the pericardial friction sound from an endocardial murmur. A great authority in stethoscopy asserts, indeed, that there is no kind of endocardial murmur (with the exception of the whistling murmur) which may not resemble a pericardial friction-sound. We certainly not unfrequently meet with cases in which the most practised ear will hardly venture to draw the difference or decide the nature of the murmur from the mere character of its sounds. In such cases, we must endeavour to enlighten our diagnosis by other signs: we must judge of the nature of the sound by the period of its occurrence, and by the presence or absence of coexisting signs of endocardial disease. The friction-sound is generally double; it does not coincide exactly with the heart's sounds; it commences rather *before* the systolic sound is heard; and, as a rule, it is not audible in the direction of the current of the blood flowing along the vessels out of the heart. The friction-sounds, moreover, do not replace the heart's natural sounds, except when they are so loud as to overpower them; their duration is variable and limited; they change their seat; they vanish and reappear; they are generally confined to the præcordial region; and they vary in force and situation from day to day. Pressure of the stethoscope, also, as Dr. Sibson has shown, increases the intensity of the pericardial friction-sound in certain cases, but does not, he says, affect an endocardial murmur.

This later remark, however, must not be received as invariably true, and all these differential signs, indeed, must be accepted with a certain degree of caution, and for the following reasons: An endocardial murmur may be, and very frequently is, present in pericarditis, and may thus, consequently, complicate the pericardial friction-sounds.* The heart's action may be so rapid, that the relation in time of the pericardial murmur to the heart's sounds cannot be determined. A pericardial friction sound, again, may be heard beyond the præcordial region; thus, I have heard a friction-sound precisely resembling, as far as the ear could judge, a rough aortic systolic bruit, conveyed up to the top of the sternum, in a case where, after death, the aorta and its valves were found perfectly sound, but the base of the heart and the vessels covered with much roughened lymph.

The other signs, also, proposed for the recognition of the pericardial friction sound, are modified by accidental circumstances, by the force of the heart, the quantity of fluid effusion, etc. Even pressure by the stethoscope does not appear to be an infallible sign. Dr. Walshe states that he has heard a mitral murmur increased in force by it; and it seems very probable, that pressure over the site of the pulmonary artery will in some cases excite or increase a murmur there. It must also be remembered that the effects of the pressure can hardly be made to bear upon the pericardial surfaces in persons advanced in life, and in whom the walls of the thorax are firm and unyielding. Neither can the pressure be exerted upon the affected parts, except when it can be made to bear directly against the roughened surfaces of the pericardium, and therefore not in cases where the friction-sounds proceed from the sides and back parts of the heart.

* This fact is drawn in part from analogy. I once distinctly heard pleuritic friction sounds in a lad, the subject of pyæmia, a few hours before his death. The very thin layer of lymph—however readily seen when looked for—which occasioned the sounds, would, I believe, have been passed over unnoticed, except for the fact of the friction having been heard during life. Let any one close his ear with the hollow of one hand, and rub over the back of it with a finger of the other, and he will find that the gentlest friction he can practise is plainly appreciable by the ear.

* Dr. Watson says, according to his experience, that pericarditis is invariably complicated with endocarditis. It must, however, be remembered, that a systolic bruit at the apex of the heart and over its aortic valves is not unfrequently present in many acute febrile affections, and disappear with the fever. The presence of such a murmur, therefore, in the course of rheumatic pericarditis, is no sure sign of endocarditis. A mitral systolic bruit, on the other hand, is, I think, almost invariably a sign of endocarditis under such circumstances; and, unlike the aortic bruit just spoken of, is rarely found to disappear with the cessation of the rheumatic pericarditis.

A pericardial friction-sound may also be confounded with an exo-pericardial friction-sound, arising from the rubbing of the outer surface of the pericardium against some opposing surface of the pulmonary pleura, when this is covered with plastic exudation. Hence, there appears to be no absolute sign by which these murmurs may be distinguished the one from the other in every case.

Sounds—certain bronchial râles, for example—which sometimes resemble friction-murmurs, often arise within the lungs; these, however, and likewise pleuritic friction-sounds, are readily distinguished from pericardial friction-sounds by the circumstance of their cessation during the arrestment of the respiratory movements.

A blowing murmur—endocardial—is occasionally observed along the aorta, and over the left ventricle, in cases of pericarditis, in which, after death, no valvular lesion is found to exist. The cause of such a murmur may be attributed either to pressure upon the aorta, produced by the exudation of lymph upon it; or to the loss of its elasticity, or some other alteration of its coats, caused by the inflammatory process; or to irregular action in the heart's muscular movements, involving those of its columnæ carneæ, whereby the function of the auriculo-ventricular valves is rendered, temporarily, incomplete; or again, it may possibly, I have thought, be ascribed to the pericardial adhesions, these being of such a character as to prevent the walls of the heart, and consequently the columnæ carneæ, from freely contracting, so that the mitral orifice is left partially unclosed during the heart's systole.

Pericarditis: Percussion Signs. Effusion into the pericardium increases the ordinary degree of præcordial percussion dulness, but not always in proportion to the amount of fluid present. When the effusion is very considerable the percussion may be extensively dull, reaching over the greater portion of the anterior surface of the left side of the thorax, and considerably beyond the right border of the sternum. Increased resistance, also, is, in such case, felt by the finger on percussion. The dulness arising from pericardial effusion is more marked than that which arises from hypertrophy and dilatation of the heart. Practised from day to day, percussion often enables us to follow the increase or diminution of the fluid in the pericardium; it does not, however, give us any accurate information as to the actual amount of effusion which has taken place. There are, indeed, several sources of error, which may mislead us in judging of the amount of effusion by percussion; and these it is well to note. A small amount of pericardial effusion, for instance, may be associated with hypertrophy of the heart, with malignant disease, with enlargement of the left lobe of the liver, with aneurism of the aorta, with condensation of the lung,* and with pleuritic effusion; and consequently the extent of the præcordial dull percussion-sound may, in such cases, be increased out of proportion to the amount of pericardial effusion. A careful analysis of the signs and symptoms present, however, will generally enable us to come to a tolerably correct diagnosis as to the nature of the coexisting diseases, and thereby prevent our falling into the errors referred to.

On the other hand, where there is emphysema of the lungs, or consolidation of the posterior parts of the lungs, the anterior parts being inordinately extended,† and consequently overlapping the heart to an unusual extent; or when the lungs are adherent to the thoracic walls in front of the pericardium; or where there is atrophy of the heart,—the amount of effusion present may appear, on percussion, to be less than it really is. An inflated stomach, also, often modifies considerably the percussion sound over the præcordial region.

As a general rule, we find in health that about two and a half to three inches of the heart's surface is uncovered by the lungs. This uncovered surface may be rudely likened to a triangle. A line drawn perpendicularly down, and somewhat to the left of the centre of the sternum, from about the fourth to the sixth or seventh rib, defines the position of the anterior edge of the right lung, and constitutes the right side of the triangle; its left side is an irregular oblique line, corresponding to the anterior border of the left lung, and drawn from the fourth left sterno-costal articulation, downwards through the cartilages of the fifth and sixth ribs; these two lines meet above, directly beneath the level of the fourth rib; the base joins the sides above the cartilages of the sixth rib.

The dull percussion is often ill-defined at the base of the triangle, because the left lobe of the liver in many persons lies in close contact (the diaphragm intervening) with the lower border of the heart.

Between this surface of the heart and the thoracic walls, only fat and intercellular tissue naturally intervene; hence, when dulness on percussion exists beyond the limits here indicated, we may suspect an abnormal condition of the parts beneath. The dulness in itself, of course simply indicates that solid or fluid matters, containing no air, exist beneath the thoracic walls in those parts where a certain amount of air ought naturally to be present; the diagnostic value of the dulness must be decided by other signs.

The extent of dull percussion-sound varies during respiration and expiration: on a full and deep inspiration, when the lungs almost wholly cover the pericardium, the dulness is hardly perceptible; on a deep expiration it becomes proportionally increased.

The fluid effusion collects, in the first instance, about the base of the heart and the roots of the great vessels; and it is in their situation that the abnormal dulness is first observed; but as the quantity of effusion increases, the dulness reaches across to the right, or beyond the right border, of the sternum, upwards towards the clavicle, and towards the left lateral region —that is, in the direction of the heart's breadth; the heart, being heavier, sinks downwards and backwards in the pericardium when the patient lies recumbent; and its apex is pressed somewhat to the left of its natural position.

We gather from the above that increased præcordial dulness is, in itself, no certain sign of pericardial effusion; but, judged of by the light of other signs, it becomes so. Pericardial effusion commences at the anterior, pleuritic effusion at the back and sides of the thorax. In hypertrophy of the heart, the pericardial dulness is not so well marked, nor is the resistance so complete as in pericardial effusion. And besides this, hypertrophy has its special signs to distinguish it; in effusion the dulness commences suddenly and increases most markedly in an upward direction; in hypertrophy, downward and towards the left side, or in the direction of that particular part of the heart which is enlarged. In fact, there are very few instances in which the careful observer can be deceived in his diagnosis, especially if he has watched the progress of the pericardial inflammation from its commencement.

Enlargement of the liver, particularly of its left lobe, occasionally pushes the heart upwards and to the left; encroaching on the præcordial region, and increasing much the præcordial dulness. Such an enlargement of the liver would hardly fail of being recognised.*

It is not necessary to refer particularly to the other abnormal conditions which may produce increased præcordial percussion dulness; their coexisting symptoms will generally enable us to distinguish between them and the pericardial effusion.

Together with the friction-sound, and other signs of pericardial effusion, a *fremitus* is sometimes, but not often, felt over the præcordial region when the hand is laid thereon. It is doubtless occasioned by the same cause as that which gives rise to the friction-sound. It has been observed in cases in which effusion of lymph has taken place external to the pericardium, whereby the pericardium has been united to the thoracic walls.

In young subjects, and in those in whom the elasticity of the ribs and their cartilages permit of it, a bulging of the præcordial region is sometimes observed where the pericardial effusion is considerable.

Distension of the external jugular veins is not unfrequently observed in the advanced stages of pericarditis, and when present it indicates obstruction to the circulation of the blood through the heart; the degree of the distension is, in fact, a good test of the amount of the impediment. When the veins do not collapse, but remain constantly distended during inspiration and expiration, we may be sure that the circulation is seriously obstructed.

[*To be continued.*]

* Pneumonic consolidation of the parts of the lungs which overlap and surround the pericardium, very frequently coexists with pericarditis—being, apparently, excited by the contiguity of the pericarditis. Such consolidation will, of course, of itself occasion increase of the præcordial dull percussion-sound.

† I have observed cases of this nature after death, where the anterior border of the right lung, in consequence of the respiration being carried on by the anterior portions of the lungs, lay far over the distended pericardium, and imparted a clear sound to moderately forcible percussion over the sternum; and this, too, even when the distended pericardium reached beyond the right border of the sternum.

* Dr. Graves (Lecture II, 164) relates a case of this kind, where the base of the heart was pushed up as high as the first intercostal space by the left lobe of the liver, and fluid suddenly effused in the abdomen.

EXCERPTS FROM DAILY PRACTICE.

By T. Herbert Barker, M.D., F.R.C.S., Bedford.

II.—Case of Abortion between the Third and Fourth Month, ending fatally from Intractable Vomiting and Diarrhœa. Note of a Second Case in which Poisoning was suspected.

The first of the following cases differs somewhat from the last one reported in the Journal for July 30th. It shows that even abortion may not be sufficient to save life in cases where the irritation produced by pregnancy has excited severe systemic disturbance.

On August 28th, 1858, Mrs. H., aged 42, the mother of a large family, aborted in the fourth month of her pregnancy. She was not under my care at the time of the abortion, for she had left this neighbourhood to visit London. I learned, however, that a week before the abortion, she was seized with violent diarrhœa and vomiting, which continued unchecked up to the period when the fœtus was thrown off. The abortion had been preceded and followed by considerable hæmorrhage. Recovery was never fairly established, the intestinal irritation continuing all the time. Unfortunately, she determined to return home while yet suffering from the disturbance of the alimentary system and consequent depression, and was conveyed directly from her bed-room to the railway station. The last seven miles of her journey was in an open gig, and she was exposed to heavy rain.

As soon as she reached home, eight days after the abortion, I was sent for, and found her suffering purely from gastro-intestinal symptoms. She was frequently vomiting, the vomited matters consisting of the ingesta, with a considerable quantity of bile of the usual green colour. No food could be retained, and her exhaustion was extreme. But the most intractable symptom was diarrhœa. This was persistent, in spite of every treatment. The motions were as frequent as ten or twelve in the twelve hours; and the matters excreted were copious, liquid, somewhat deeply tinged and offensive, occasionally containing shreds of mucus. She complained of but little pain, except a burning sensation in the epigastrium; and occasionally, in the cardiac region, of acute darting pains, to which she had been liable for some years. There was no tenderness on pressure of the abdomen. The pulse was 112, small and feeble. The tongue was moist, slightly furred, and red at the tip. The skin was moderately warm. Thirst was excessive.

In this case I used every variety of treatment, relying chiefly on astringents. In the list of remedies given, with every care, were catechu, kino, iron in the form of tincture and the persesquinitrate, the mineral acids, and opium in every shape. Opiate suppositories, and starch and laudanum enemata, were freely used, but without avail. Food, in any form, and medicines appeared sometimes rather to increase than to lessen the symptoms. The vomiting was distressing, and the diarrhœa profuse, as though the entire system were being drained of its fluids. The countenance became indescribably pinched and anxious. In spite of a liberal supply of brandy, carbonate of ammonia, ether, etc., she gradually sank, and died from sheer exhaustion, precisely fourteen days after the abortion.

Remarks. In my last reported case, we saw that abortion saved the life of the patient by stopping the gastro-intestinal mischief. In this case, although abortion occurred, a fatal result ensued from the intestinal flux and the vomiting. The case, therefore, tells rather against than for the practice of producing abortion. It is nevertheless to be borne in mind, that the patient was subjected to unfavourable conditions after the delivery; that is to say, she travelled a great many miles, and was exposed to rain, while in a condition but ill fitted to bear these risks.

The second point of interest is, that medicinal measures of the astringent type—pushed to the fullest extent and with every care—proved utterly unavailing. They neither arrested the vomiting nor checked the diarrhœa. Some of the medicines, particularly the cretaceous astringents, seemed to me to increase the mischief and to cause pain. Indeed, it has never been my lot to witness a case in which all medicinal and dietetic treatment was more tenaciously resisted.

If—as one of our judges recently intimated in his most extraordinary charge to the jury—inamenability to all treatment constitutes a ground of suspicion of foul play, here was a case for the gravest suspicion. Nothing can be weaker, more illogical, or more dangerous, than such a dogma.

This case differs slightly from the previous one in regard to symptoms. In the preceding case, the symptoms were of the dysenteric type. In the present they were, I should say, rather of the choleraic type. In both, nevertheless, shreds of membrane were thrown off. In the preceding case there was tenesmus; in this, that symptom was absent, the matters ejected being passed without effort or pain. In the preceding case, the patient made no complaint of burning pain in the stomach; in this case that symptom was a distressing one. These are the differences: they are minor in kind, but deserve attention. In one grand respect the cases are intimately allied; that is to say, the gastro-intestinal symptoms had their origin in uterine irritation, and in that alone.

There is every reason to believe that the connection between really serious and even fatal disturbance of the gastro-intestinal mucous membrane and pregnancy, is more common than has been suspected. Since my former case was forwarded to the Journal, several recorded cases have been referred to. In a letter by Drs. Richardson, Thudichum, and Webb, upon the case of Isabella Bankes, these authors show that this connection has been so frequently observed on the other side of the Atlantic, that it has led to the announcement of this subject for prize competition. This prize was awarded to Dr. David Hutchinson, for an excellent essay, in which he has brought together many valuable facts. The connection of dysentery and pregnancy has been noted by Guillemeau, Mauriceau, Shaw, Denman, Burns, and others of our early obstetric writers. In 1848, Dr. Churchill published the history of a case, which, in some points, is like the one which occurred in my practice. A case by Mr. Edmunds was fatal after the miscarriage; the diseased action had been thoroughly set up, and the dysenteric symptoms continued in spite of everything. Another fatal case has occurred in the practice of Dr. Freeman, of Plymouth. Vomiting alone, without either diarrhœa or dysentery, has proved fatal during pregnancy. Dr. Tyler Smith has met with such cases. M. Cartaya, in an essay, *Vomissements incoercibles pendant la Grossesse*, has collected fifty-eight cases, twenty-four of which proved fatal to the mother. Professor Stoltz, of Vienna, records eleven fatal cases. In 1855, a discussion took place in the Academy of Medicine in Paris, on the propriety of producing abortion in these extreme cases.*

The resemblance of these cases of sympathetic gastro-intestinal mischief to irritant poisoning, has been so striking in some instances, as to have led to suspicion. In two cases, indeed, referred to by Dr. Tyler Smith and Dr. Richard Quain, the suspicion was so strong, that the ejecta were submitted to chemical examination. These facts remind me that two years ago a lady was repeatedly under my care, with severe attacks of sickness and diarrhœa, during the very earliest period of pregnancy. Several circumstances in this case rather puzzled me, and led me to suspect that the gastric symptoms were not solely the result of the pregnancy. This lady had never suffered from sickness during any previous pregnancy; it was not in the least restricted to the morning, but common at all times, but mostly after food; and whether at rest, or otherwise. The sickness was not accompanied with acidity in any shape; but it invariably preceded severe diarrhœa, as though the stomach rejected some offending material, a portion of which afterwards passed through the intestinal track, and caused mischief there. These attacks were perfectly amenable to treatment. A soothing mode of medicinal treatment, diet, and regimen, with quiet, always relieved; the attacks were, nevertheless, frequently repeated, and severe, producing considerable constitutional disturbance. Within the first four months and a half of pregnancy, this lady was under my care as many as seven times with attacks of sickness and diarrhœa of the character described above. After I had seen her through four attacks, the idea of irritant poisoning from some source or other certainly crossed my mind; and I mentioned my suspicion to the husband. We carefully examined the kitchen, but could not find anything improperly used for culinary purposes, and there our suspicions ceased. Every subsequent attack was regarded as a not common phase of sympathetic stomachic and intestinal affection, which would probably cease before long. This was the result; for, after the first half of pregnancy, she never had another attack.

* A Letter to the Right Hon. Sir G. C. Lewis, Bart., M.P., Her Majesty's Chief Secretary of State for the Home Department, from three of the medical witnesses for the defence in the case of Thomas Smethurst. In the references given above, I have followed the writers in this letter.

With these facts before us, it behoves us to act with great caution where pregnancy is present; for there can be no doubt that now and then we meet with physiological and pathological effects, which are quite beyond the common beaten track of observation, and which can only be duly appreciated when the fact that pregnancy exists is itself known.

It has been urged by some professional men, that while these peculiar symptoms incident to pregnancy are possible, they are not common. I admit the fact; and I admit it on twenty years of active experience. But it strikes me, from the same experience, that cases of irritant poisoning are much less common; and I have sufficient confidence in my countrymen and women to believe that this view is correct. Any way, I am very happy that, in my cases, I brought no one up to trial for a life; and I submit that medicine will soon be called Moloch, if many similar cases, because they resist remedies, are to be set up as illustrations of slow poisoning by felonious administration.

[*To be continued.*]

ON THE TREATMENT OF ASTHMA BY SEDATIVES.

By HYDE SALTER, M.D., F.R.S., Fellow of the Royal College of Physicians, and Assistant-Physician to Charing Cross Hospital.

Tobacco: Stramonium: Chloroform: Opium: Lobelia: Indian Hemp: Æther.

The recognition of the nervous nature of asthma, of the paroxysmal character of its symptoms; of the fact that the air-passages were in a state of spasm; that a part at least of its essential pathology appeared to be a morbid susceptibility to certain stimuli; that many of its exciting causes were such as exalted nervous irritability; that the subjects of it were commonly individuals of quick and mobile nervous systems;—these, and analogous considerations, long ago suggested the use of sedatives both for the prevention and alleviation of the asthmatic paroxysm.

The *modus operandi* of sedatives, both in the cure and prevention of asthma, is doubtless by allaying nervous irritability; destroying for the time that morbid sensitiveness of the pulmonary nervous system that constitutes so essential a part of the disease. And whilst, on the one hand, it is the nervous theory of asthma that has suggested the use of sedatives, their efficacy on the other—the immediate and perfect relief that follows the use of some of them—is among the best proofs we have of the correctness of this nervous interpretation of the phenomena of the disease.

Of all the classes of remedies used in asthma, I think that sedatives constitute the most numerous. I wish I could say that they excelled others in efficacy as much as they do in numbers. But they are of very unequal power; for while one or two of them are of very great value, others appear to be of little worth, and some even prejudicial. Chloroform, for example, is, in my opinion, one of the most valuable remedies for asthma that we possess; the inhalation of its vapour putting a stop to the asthmatic paroxysm more speedily and more certainly than anything else I know. Opium, on the other hand, I have found, as far as my experience has gone, positively worthless.

Moreover, with regard to sedatives, asthma exhibits very strongly its characteristic caprice;—stramonium smoking is, to some patients, an infallible cure, while others might just as well smoke so much sawdust, and not only receive no benefit, but experience no result of any kind from it.

The principal remedies of this class are:—

I. Tobacco, in sedative doses; II. Chloroform; III. Opium; IV. Stramonium; V. Lobelia; VI. Indian Hemp; VII. Æther, in sedative doses.

Of some of these I have had very little practical experience. I will speak of those of which I have, and first of—

I. Tobacco. I have, in a previous paper, spoken of tobacco as a depressant. But tobacco as a sedative is quite another thing. The dose is different; the physiological effects are different; the principle of the cure is entirely different. In smoking with the view of producing depression, the individual must be unaccustomed to the drug, or the tobacco very strong, or the dose very large; in smoking for sedation none of these is necessary. For tobacco to cure asthma as a depressant it must produce collapse; as a sedative it merely produces that composing and comforting condition with which smokers are so familiar. As a depressant it renders spasm impossible by knocking down nervous power (doubtless by poisoning the nervous centres); as a sedative, by temporarily effacing a morbid sensitiveness to certain stimuli, and inducing a normal indifference and tolerance of them. Any one may experience the sedative effects of tobacco, and all smokers do habitually; but the production of its full depressant action is almost impossible in those who have long accustomed themselves to its use; in others, however, as in women and children, it is so easy, that the difficulty is to prevent sedation from running into depression. It is for this reason that it is necessary, in administering tobacco as a sedative only, to the uninitiated, the delicate, or the young, to give the very mildest form, in carefully measured quantities, and to insist on its slow and deliberate exhibition.

It is of the sedative use alone of tobacco that I am now speaking.

Asthmatics are very commonly smokers, and many of them find in the habit an almost unfailing antidote to their disease. But in almost all the cases that I have met with, it is rather as a prophylactic that it is used—to secure immunity when under dangerous circumstances, or to meet the first threatenings of an attack—than as a veritable curative to cut short spasm.

II. Chloroform. One of the most powerful and speediest remedies which we possess for asthma, to which I should, perhaps, give the first place of all, is chloroform. It is, of course, a comparatively recent remedy; but its marked physiological effects early suggested its appropriateness, and the result has fully justified the trial. I have not had many opportunities of witnessing its effects personally, because when asthmatic patients consult one they are generally not suffering from the disease at the time; but in the cases in which I have witnessed it I have been very much struck with the completeness of the control which it exercises over the asthmatic condition, and with the absence of all danger in its administration, provided the asthma is of the uncomplicated spasmodic form. If the only source of dyspnœa is bronchial spasm, it seems to me that it may be as safely given to an asthmatic in the height of a paroxysm as to a healthy person.

I shall not easily forget the first case in which I administered it. A poor woman was brought into King's College Hospital at the time that I was house-physician there, supposed to be dying by those who brought her in. She was quite unable to move, and could barely speak; but it was easy to perceive, from the violent action of the respiratory muscles and the loud wheezing that accompanied it, that the suffocation from which she was suffering was of the asthmatic kind. I at once administered chloroform. After a few whiffs the spasm began to yield, and before I had given her enough to make her insensible it had quite subsided and her breathing was free. In ten minutes after entering it she left the hospital—well.

Even in asthma with bronchitis I have known it, if carefully administered, of great service, by getting rid of the asthmatic element of the dyspnœa, and so putting a stop to one of the sources of suffering, and one of the causes of pulmonary congestion and bronchial exudation; and at the same time, by relaxing the constricted air passages, facilitating the discharge of the accumulated mucus. In chronic bronchitis I have seen at least half of the dyspnœa vanish on its administration, showing how much of the symptoms were due to spasm. I think its usefulness in these cases has been overlooked, and that, if carefully and tentatively given, it might be tried in them without risk. Certainly for the time the patient is placed under much better circumstances, even as far as the bronchitis goes.

The sooner it is given after the commencement of an attack the better, for if the spasm has existed for some time it is apt to recur as soon as the influence of the chloroform passes off. The plan recommended by Dr. Russell Reynolds, of recurring to it at the first indications of an attack is, I think, a very good one, for the spasm yields with much greater facility, and is cut short while it is in so incipient a state that the treatment is virtually preventive. He mentions the case of a young lady (*Lancet*, October 29th, 1853) who, by inhaling a few drops on her handkerchief whenever an attack threatened, at once averted it, and was thus virtually cured of her troublesome complaint.

Dr. Walshe says he has seen three results of chloroform inhalation, administered during a fit of asthma, and pushed to narcotism;—"Total relaxation of the spasm during the continuance of insensibility, with the immediate return of dyspnœa on the restoration of consciousness; gradual return of the difficult breathing as consciousness is restored; and suspension, or at least mitigation, of the paroxysm for the time being." The last effect he has found the rarest of the three; but, on

the other hand, the temporary relief afforded by chloroform is sometimes more complete and more rapid than that afforded by any other agent.

As in all other cases, so in asthma, the patient should never administer the chloroform himself. Dr. Todd's remarks on this point are so judicious, and enforced by so striking an example, that I cannot forbear quoting them. "In the administration of chloroform," he says, "I would give you this twofold caution:—First, to give it gradually and cautiously, and not in a full dose, not to produce insensibility, especially if there be anything like blueness of the surface; because, though remedial to asthma, it will tend to increase the very consequences which are most to be feared from the circulation of venous blood. Secondly, to impress on your patient that he must never give it to himself, nor without the presence of a medical man. The following case was related in the papers the other day:—A person who was in the habit of curing his attacks of asthma by inhaling chloroform, when administering it to himself one day, and when in a state of half subjection to its influence, in order to produce the full effect placed his handkerchief on the table and buried his mouth in it; his insensibility became deeper and deeper, till at last he was too far gone to raise his head. He therefore continued inspiring it; his coma became more and more profound; and, a short time after, he was found in that position quite dead." (*Medical Gazette*, Dec. 1850.)

III. Opium. To opium in asthma I have myself a great objection. I do not mean to impugn the correctness of those who profess to have seen benefit derived from it; all I would say is, that I am not certain I have ever seen it do good; that I have often seen it do harm; and that I should have antecedently expected, from its known physiological action, that it would be prejudicial, and tend to increase the very condition for which it is given. I have endeavoured to show that sleep favours asthma; and that it does so on account of the ascendancy that excito-motory action then acquires. The heavier and more oppressed the patient is the intenser does the asthmatic spasm become; and, on the other hand, the wider awake and more vigilant he is—the more exalted sense and will—the more readily does it yield, so that often simple rousing is enough to stop an attack that was gradually creeping on the sleeper.

Anything, therefore, that soporises aggravates the asthmatic tendency. Now this is exactly what opium does. What we want in asthma is a sedative that, like stramonium, sedates but does not narcotise; or one that, like chloroform, goes much further, and produces universal muscular relaxation. And not only does opium act prejudicially by tending to exalt reflex action in proportion to the drowsiness and lethargy it produces, but, by lowering sensibility, it prevents that acute and prompt perception of respiratory arrears which is the normal stimulus to those extraordinary breathing efforts which are necessary to restore the balance.

But, beyond this, opium seems to have a specific tendency to excite involuntary muscular action, and induce a tendency to spasm. The exact explanation of this will depend upon the theory of muscular contraction that is adopted; and into this at present disputed physiological question, I will not enter. If, then, I had been asked, antecedently to all experience, whether opium would be useful in asthma, I should have replied, on the strength of the spasm-theory of the disease, that it would not.

But I would not let any theoretical objection run counter to clinical evidence; and if experience said "give opium", no theory should prevent my recommending it. My own experience, however, coincides with these objections; and I am disposed to think that the frequency with which it is given in asthma depends upon an unthinking following of routine and a want of close and exact observation. Not only have I often seen asthma worse for it when given during the fit, but I have seen it brought on when it did not previously exist. An asthmatic gentleman, in whom I have often watched this, and who is frequently obliged to resort to opium on account of colic, never takes it without being rendered more or less asthmatic by it, however free from the disease he may have previously been.

I would say, then, prefer any other sedative to opium; and, unless there is some special complication that indicates it, never give it at all.

IV. Stramonium. The smoking of the datura as a remedy for asthma was introduced in 1802, from India, by General Gent, and soon obtained, as new remedies are apt to, the reputation of being specific and infallible—every body with any shortness of breathing was smoking stramonium. Its use, however, has illustrated the general inapplicability of any one remedy to all cases of a disease, and the special caprice of asthma; and time has shaken it into its proper place, and assigned it its true worth;—that its original reputation greatly exaggerated its merits, but that it has undoubted though very unequal value, and will probably always maintain its place amongst the real remedies of asthma.

Perhaps no drug has been given with more contradictory results, and perhaps in no way is the caprice of asthma better illustrated than in its effects in different cases. In some it is *the* remedy; in the majority of cases, as ordinarily used, it seems utterly inoperative, and in some positively injurious.

"Sometimes," writes Dr. Watson, "it calms the paroxysm like a charm. The late Dr. Babington told me of a patient of his, who had been grievously harassed by asthma for a series of years, but who declared to him, after he had made a fair trial of stramonium, that he no longer 'cared a fig' for his asthma, which he could always stop in a moment. So a Mr. Sills, in a collection of communications relative to the datura stramonium, published in London in 1811, states that he had been a great sufferer from asthma; that the fits continued, with short interruptions, from thirty-six hours to three days and nights successively, during which time he had often, in the seeming agonies of death, given himself over, and even wished for that termination to his miseries. But, having at length discovered the virtues of stramonium, he uses this strong language. 'In truth, the asthma is destroyed. I never experience any ill effects whatever from the use of the remedy; and I would rather be without life than without stramonium.'"

Among several striking cases of the efficacy of stramonium, communicated by Dr. Gooch of Croydon, I will quote the following:—"Mr. L., 22 years old, for the last four years has had great difficulty in breathing, attended by wheezing and cough, which attack him suddenly, when in bed or at meals, disabling him from his business, and sometimes continuing more than a week. It occasionally seizes him so violently that he is unable to speak, and appears to be threatened with instant suffocation. He has had much medical advice, without receiving material benefit. He now smoked the thorn-apple, swallowing the saliva and smoke; by these means the fit terminates in a few minutes. He smokes every day, even when the fit does not occur. Sometimes it attacks him while dining in company; in which case he retires, smokes a pipeful, and returns to his friends breathing freely." I might go on quoting cases *ad libitum*, but must content myself with referring the reader to many very interesting and striking ones in the seventh and eighth volumes of the *Edinburgh Medical and Surgical Journal*, the twenty-sixth volume of the *Medical and Physical Journal*, and the various medical journals published at the early part of the present century.

In most of the cases that I have personally witnessed, it has given only temporary relief—mitigated rather than cured the spasm; but, in a case recently communicated to me, its effects appear to be nearly as striking as in the cases I have just quoted. The patient was what is commonly termed a "martyr to gout", and suffered most severely from asthma. He could not walk, in consequence of the gouty state of his legs and feet; and one of his amusements was to pick the chalk out of his fingers with a knife! "I remember," continues my informant, "one day, when I was at his house, he came home in his little hand-carriage, in which it was his wont to be wheeled about, and, on being helped into the parlour, he was in such a state from a violent attack of his asthma that he could not speak, but made signs to his daughter, by pointing to a cupboard, that she should reach him his pipe of stramonium. She lighted it, and, after he had taken a few whiffs, the breathing became relieved, and he was able to speak; and, after a few more, the spasm and oppression so completely vanished that he could converse as well as usual."

On the other hand, one is always being disappointed with it; in a large percentage of cases it does no good at all, and in some has been said to prove injurious, and in a few instances fatal. Dr. Bree tried it in eighty-two cases; in fifty-eight of these it had no permanent effect, and in the remaining twenty-four it acted injuriously. General Gent, who was instrumental in introducing the practice, fell a victim to it. Aggravation of the dyspnœa, paralytic tremblings, epilepsy, headache, and apoplexy, are some of the evils said to have been induced in some of the cases above referred to.

To what are these contradictory results to be attributed? Partly, doubtless, to the caprice of the disease, which behaves in the most irregular way to all remedies; but partly, I think, to the mode of preparation and drying of the drug. An asthmatic patient of mine informed me that while he received great

benefit from stramonium grown and dried by a relative of his, that which he gets at the shops does him no good whatever. He sent me a specimen of this home-prepared stramonium, and certainly it was a very different thing, both in appearance and smell, from what one commonly sees: it had not lost its fresh greenness, nor the genuine solanaceous smell. I think, therefore, asthmatics would do wisely to grow and prepare their own stramonium. Part, too, may depend on the time at which it is administered; stramonium, like other remedies, will cut short an incipient spasm, while over one that has been long established it has but little power. The great thing is to give it in time; and for that purpose, since the patient in general is awoke from his sleep by the paroxysm, he should put his pipe, already filled, with the means of lighting it, by his bedside over night, so that on awaking with the dyspnœa he might immediately use it.

My friend Dr. Bullar of Southampton tells me that he has seen benefit from the inhaling (not the mere smoking) of stramonium smoke. "A year ago," he writes, "I met with an old asthmatic, who had cured himself and relieved many others by using *cold* stramonium-smoke. He smoked the stramonium as you do tobacco, then puffed the smoke into a tumbler, and then inhaled the cold smoke into his lungs. I am now attending an asthmatic lady, who could not inhale the hot smoke, but who inhales the cold smoke in this way with great relief."

The same plan of *inhaling*, I find mentioned in a very interesting case in the *Edinburgh Medical and Surgical Journal*, as far back as 1811. The patient says:—"The way in which I employ this remedy is thus: I fill a common tobacco-pipe with the stramonium cut in small pieces, and inhale the smoke as much as possible into the lungs, which causes heat and pain about the fauces and throat, and I am obliged to breathe once or twice before I can inhale it again, when I draw in the smoke; and so on alternately till the herb is consumed, which occupies about half an hour, once a day. The saliva I swallow." Now this is introducing the drug in a different, and certainly more powerful, way than by simply smoking it, and one well worth trying. By ordinary smoking absorption takes place by the oral surface only; here it is introduced into the lungs themselves and absorbed by the respiratory surface, whose absorbent powers exceed those probably of any other surface of the body. Besides, it has the advantage of being applied to the very part affected.

There are several species of datura in use, of which that commonly employed in this country, the *datura stramonium*, appears to be the least powerful. The *datura ferox*, which was first introduced by General Gent, seems to be much stronger. The *datura tatula*, from which what are called stramonium cigars are made, appears also to be stronger.

The seeds are much more powerful than the other parts of the plant; their analysis yields more than three times as much of the active principle, daturia. My friend Dr. Alexander of St. Helena, where spasmodic asthma appears to be rather common, informs me that, while he has found the smoking of the leaves almost worthless, he finds the smoking of the seeds a most efficient and powerful remedy; and that whereas he was disposed before he tried the seeds to regard the reputation of stramonium as a myth, he has since their employment come to the conclusion that it is one of the most satisfactory of the remedies of asthma. He states, however, that the effects of the seeds are so powerful, that great care is necessary in their administration; they should be smoked in very small and gradually increasing quantities, and their effects closely watched. He has seen, on two or three occasions, alarming symptoms supervene on their use. I have not yet tried the remedy of smoking the seeds, but I shall certainly do so. I do not see why the leaves should not be steeped in a decoction of the seeds, dried, and then smoked, so as to administer by smoking reliable preparation of an uniform strength.

Exhibition by smoking certainly appears to have some advantages; absorption by the oral surface, especially if combined with inhalation, is sufficiently rapid, and at the same time gradual and more regulable than by the stomach. One would rather either take or give any preparation of the *solanaceæ* by smoking than by swallowing. One feels, with regard to such ticklish remedies, the full force of the *facilis descensus* and its alternative. Nevertheless, I frequently give the extract, and often with marked benefit. It should be commenced, I think, in quarter-grain doses, gradually increased to a grain or a grain and a half. The Edinburgh preparation—an alcoholic, and not a watery extract—is the best and most reliable, the active principle, daturia, being very soluble in alcohol, but very sparingly so in water. The tincture may also be given in from ten-minim to twenty-minim doses every four hours, gradually increased till it occasions some obvious effect on the system.

I may say, in conclusion, with regard to this drug, that its great value in some cases would, in spite of its too frequent impotence, always induce me to give it a trial in cases in which it had not been tried; that I do not believe it is attended with any danger except from the most egregious over-dosing; that, since the common fault is want of power, I should prefer the stronger forms, the *ferox* and *tatula*, giving them tentatively and carefully; that inhalation of the smoke and swallowing the saliva may be advantageously combined with the ordinary method of smoking; and that it cannot be given too early in an attack. I think it does more in the way of prevention than cure; I think I have seen better results from the long continued practice of smoking a pipe of it the last thing at night, whether an attack of it is threatening or not, than by waiting until a paroxysm comes on. I have seen this nightly pipe, the last thing before going to bed, apparently keep the disease at bay for an indefinite time, as long as it was continued, but followed by its immediate reappearance as soon as it was left off. The stramonium seems to leave for some hours a state of nervous system in which the asthma is not likely to come on; and, since its invasion is almost always at night, a pipe at bedtime conducts and guards the patient through the critical time. I should say, then, let this always be one part of its administration; and keep up the practice of smoking it the last thing at night for some months after the disease appears to have yielded, so as to completely break through the habit.

v. Lobelia. Of lobelia I can say but very little; and the reason I can say so little is, that, being doubtful of its really doing any good, I have for some time ceased to prescribe it. But I have lately heard of some successful cases of its employment by medical friends; and I am inclined to think that my want of success, and the want of success that has generally attended its use in this country, has depended upon not giving it in sufficiently large doses. I have never given it in larger doses than from fifteen minims to half a drachm; but I find that in America, where it is much more used than in this country, and has a high reputation as an almost unfailing specific in spasmodic asthma, they give it in vastly larger doses; they consider half an ounce a full dose, but recommend two drachms every two or three hours till some decided effect is manifested. In many successful cases on record it has been given in small antispasmodic doses;* but I am inclined to think its great success among the Americans, and in Dr. Elliotson's hands, and in many cases which I find scattered about in the journals, depends upon its having been given in doses producing the characteristic depressant action of the drug. In fact, the condition that a large dose produces is such as I should think no asthma could resist; it is almost identical with tobacco-poisoning—giddiness, faintness, sickness, cold sweat, and complete muscular relaxation. I should have the most perfect faith in its value in asthma when producing such symptoms as these; but they are not the symptoms one likes to produce in one's patients, and cannot be considered devoid of danger. I see no objection, however, to Dr. Elliotson's plan of giving frequent small and gradually increased doses. He recommends ten minims every quarter or half hour, increasing each dose a minim till the disease yields, or it seems to disagree with the patient. If this last should be the case, and vomiting and headache come on, the medicine must be left off for a time, and continued when the headache, etc., is removed, not increasing the dose beyond the last given.

One circumstance that makes it the more necessary to be careful of overdosing a patient, and that strongly inculcates commencement with small doses, is that different individuals tolerate it in such different quantities. Dr. Elliotson states that in some instances a single minim will produce sickness, while in other cases, on the contrary, sixty or even ninety drops were taken for a dose. He mentions a young lady who, being subject to spasmodic asthma, always carried ninety drops of the tincture in a small phial; this dose she swallowed whenever an attack of the disease came on. He mentions, also, the following extraordinary and almost incredible case:—"A medical man, suffering from asthma, having failed to obtain his usual relief from his usual dose of the tincture, increased it to fifty-minim doses, which he took every hour for twenty-four

* "I have, for upwards of two years past, been afflicted with inveterate asthma, which deprived me of natural rest, and the spasmodic effects of which were frequent and most distressing. When I found these paroxysms coming on, I took fifteen drops of tincture of lobelia, which invariably gave me immediate relief, although previously to my using this remedy the violent fits often lasted for hours." (*London Medical Gazette*, vol. iii.)

hours. Experiencing but little relief he added a minim to each dose till it reached seventy-five minims; this he took for forty-eight hours, and the disease was relieved. His pulse was becoming intermittent, perspiration broke out over the body, and he became languid; small doses of ammonia soon restored him to his usual state. In the last four days this man must have taken twelve ounces of the tincture." (*Lancet*, vol. ii, p. 144.)

Another circumstance that makes it the more necessary to be careful not to administer this drug in undue quantities is, that different specimens of it differ so much in strength. Dr. Elliotson complains of this, and assigns it to faulty preparation. But the Americans say that the plant itself varies very much in strength, depending chiefly upon the situation in which it has grown; that which has grown in damp situations being rank and strong, while that which has grown in dry places is almost inert. But I must not say any more on a medicine about which I began by saying I could say nothing.

VI. Indian Hemp. The Indian hemp, *cannabis sativa*, is much given in India as an anti-asthmatic, and among the natives has a great reputation. I can easily imagine from its physiological action that its reputation is well deserved. It is at once a stimulant and a sedative. I should be inclined to think it would act best in small stimulant doses. Given in this way it produces the same effects as coffee, only in a more marked degree—it exhilarates, imparts great activity and intensity to the intellectual faculties, and exalts the functions of animal life. In any case in which coffee is useful, I should expect that Indian hemp would be so in a greater degree. I think in large doses it might even do harm, from its hypnotic tendency. In this respect, there is the same objection to it as to opium. I can say nothing of it from my own personal experience; I have never given it, nor seen a case of asthma in which it has been given.

VII. Æther. Æther is mentioned as a remedy by almost all writers on asthma. I have never seen but one case in which it did any good, though I have given it in scores of cases. In that case it acted, and always had acted, like a charm. I cannot say that in any other case I ever saw it do a particle of good, and think I have often seen it produce a disagreeable oppression, and even increase the spasm. Others speak well of it; but that is the result of my experience.

Reviews and Notices.

On Wounds and Injuries of the Eye. By White Cooper, F.R.C.S., Oculist to the Queen; Ophthalmic Surgeon to St. Mary's Hospital; etc. London: Churchill. 1859.

The author, when in charge of difficult and anxious cases, had often felt the want of an English work specially devoted to this subject. In the present volume, he has attempted to supply this hiatus in ophthalmology, by presenting to the profession ten chapters which are replete with important clinical information derived from his own practice and that of his *confrères* who are or have been engaged in the cultivation of the same branch of surgery. The work is illustrated by numerous cases, spirited woodcuts, and some coloured drawings. The latter evince a marked advance, as works of art, upon anything of the kind which has yet been published in the text-books of this country.

In respect to the treatment of inflammation, which engages so large a share of the attention of ophthalmic surgeons, Mr. Cooper appears to be eclectic, avoiding, on the one hand, the excesses in depletion and mercurialisation which characterise the therapeuticism of the followers of the Beer school, and, on the other, the premature and almost universal administration of tonics which marks the practice of what may be termed the modern Brunonians.

As an instance of the author's treatment, we adduce the following case:—A pallid sickly-looking shoemaker applied to Mr. Cooper on July 2. Six weeks previously, a particle of iron from a blacksmith's anvil had become imbedded in the cornea of the right eye, where it remained. The palpebræ were much swollen and congested; the conjunctiva, sclerotica, and cornea, were acutely inflamed. The foreign body lay imbedded in the cornea, surrounded by infiltrated pus; and the anterior chamber was half-filled with pus. Intense pain in the eye and head deprived the patient of sleep, and of the ability to labour. There were great debility, a weak pulse, and foul tongue. Mr. Cooper extracted the foreign body, ordered two leeches to the neighbourhood of the eye, a warm poultice, and frequent fomentations; three grains of calomel immediately; an aperient draught after the expiration of six hours; six grains of Dover's powder every night. The patient was not seen again till July 9th. The pus had then entirely disappeared from the cornea; the iris and pupil had become distinctly visible; there was asthenic congestion of the sclerotica. He was ordered powder of cinchona and bicarbonate of soda, five grains of each, to be taken three times a day, with nutritious diet; the bowels to be regulated by sulphate of soda. A blister was applied behind the ear. In six days afterwards, merely a slight film marked the seat of injury to the cornea; the eye was well.

In illustration of the importance of a full and complete examination before deciding against the presence of a foreign body, the author relates the case of a tradesman who, while walking in the street, *felt something strike into his right eye, with acute pain.* He consulted two surgeons, who bled and salivated him. Five weeks after the accident, much debilitated, still in pain, and with gums so sore that he could not eat, the patient applied to the North London Eye Infirmary, where, for the first time since the accident, the upper lid was everted, and a fragment of cinder, of the size of a pin's head, found firmly adherent to its conjunctiva. A rapid recovery followed its removal.

When a foreign body is impacted in the upper *cul-de-sac* of the conjunctiva, the symptoms are those of chronic inflammation. The conjunctivæ or palpebræ become thickened, and the papillæ hypertrophied, sometimes to an enormous extent; the conjunctiva oculi participates in the thickening; and a thick yellow discharge agglutinates the lashes, accumulates at the canthi, and thus renders the eye an object of disgust. When this is seen, especially when there is the appearance of fulness about the upper lid some time after a foreign body has entered the eye, a full examination should be insisted on. The subsidence of pain often misleads. The patient feels sure that the body has "worked out", and dislikes the idea of the lid being everted; but that is the proper course to adopt. If, on turning the lid, a fungous-looking mass is exposed, the particle will most probably be found impacted in its centre; if hidden in the fold of reflection, the hypertrophy of the papillæ will be strong evidence of its presence.

In the second chapter, the author treats of Foreign Bodies in the Eyeball. The gravity of the injury will vary with the size and situation of the foreign body. It is singular how tolerant some eyes are of substances which enter the *anterior* chamber; indeed, the number of recorded instances is great in which bodies have there remained, and become encysted, without material injury to the eye. A chip of metal may be driven with such force and velocity as to pass through the cornea, the wound closing behind it so instantaneously as to retain the aqueous humour. The wound made by a penetrating fragment of percussion-cap is a clean incised one, and the vision is not destroyed immediately in those cases in which the cap has gone through the sclerotica, and has not injured the transparent parts of the eye. The lodgment of a foreign body in the *crystalline lens* is rare. Mr. Cooper gives four cases, three of which occurred in the practice of continental surgeons. The danger of leaving a foreign body in such a position is forcibly illustrated by a case which occurred in the practice of Dr. Jacob. A piece of copper cap remained on the lens of a little boy for two or three years, without exciting irritation. The lens became absorbed, the foreign body remaining entangled in the opaque capsule. In a year afterwards, the chambers were

filled with blood, as if from recent injury. The pupil was dilated, the eye was spoiled, and the cap had disappeared. We presume these latter changes were discovered after the blood had been removed by absorption or paracentesis. If a foreign body pass to the back of the iris, the consequences are serious; atrophy of the globe was the result in a case which occurred in the practice of our author. In an instance which came under our observation, and in which we extracted the foreign body nine years after its intrusion, the eye was of normal size and tension, but perfectly amaurotic.

If a chip of metal have lodged in the vitreous humour, without wounding the lens or its capsule, it will be readily discovered by the ophthalmoscope, unless it is buried in a position which cannot be brought into view.

Mr. Cooper considers change of colour in the iris to be one of the most distinctive indications of a foreign body being lodged in the eye. Looking upon this symptom as common to all injuries of the eye in which the iris has partaken of the vascular disturbance, we are in the habit of relying for a diagnosis upon a minute inquiry into all the circumstances which attended the accident, and the subsequent behaviour of the eye. The longer the time which has elapsed since the accident, the more easy is the formation of a correct opinion. When, after the injury, the patient suffers a recurrence of what has been termed neuralgic ophthalmia, which cannot be referred to constitutional or external causes, we predict the presence of a foreign body in the eyeball, even although the natural efforts may have already extruded a particle of metal. The only disease that simulates this class of cases is neuroma of one of the ciliary nerves.

In reference to the atrophy which affects eyes in which a foreign body is lodged, the author remarks, that it occasionally, though rarely, happens that a globe which has been softened again becomes plump, and there may be an increase in the perception of large objects; but useful vision is not to be expected.

Mr. Cooper advises the removal of the foreign body, wherever situated, if it be practicable; and lays down rules for the guidance of the surgeon in the performance of the operation. He does not consider the presence of inflammation, which he regards as an effort of nature to throw off the foreign body, to contraindicate an operation. When a foreign body in the iris is encysted, and not creative of irritation, he does not interfere.

The importance of anæsthesia by chloroform, in the first examination of a case in which the extraneous body is hidden, and the value of cannula-forceps (which, by the way, require considerable experience in their use on the part of the surgeon), are emphatically indicated.

For clinical examples of the connexion of epilepsy with injuries of the globe (p. 56), we must refer the reader to the work itself.

The section on Gun-shot Wounds presents, without question, the best account of the subject in the English language. After a gun-shot injury, the first thing to be done is to carefully cleanse the eye; and then a full and satisfactory examination should be made (if necessary, while the patient is under chloroform), to ascertain the nature and extent of the injury. An ecchymosis should be carefully inspected, lest a wound be concealed by the effused blood. It is important to ascertain, if possible, the relative position of the injured and the injuring parties when the accident occurred, and especially the direction of the patient's face at the moment. A shot crossing obliquely, and striking the inner or nasal side of the eye, will almost certainly penetrate; a shot striking the external side has a better chance of glancing, in which case it will cut a groove in the conjunctiva.

In determining whether or not a shot has pierced the eye, the following points have to be considered: the weight of the shot, the distance from which it was discharged, the position of the eye, and the direction whence the shot came. Mr. Cooper wisely cautions the surgeon to give in such cases a guarded prognosis, remarking that a slight graze may detach the retina, and cause hopeless amaurosis. The shot may merely penetrate the cornea, and drop into the anterior chamber, the eye receiving no permanent injury. The author gives a minute account of the appearances presented by an eye immediately after a shot has penetrated it.

The chapter is concluded by an interesting selection of cases, with observations, in which a bullet had entered the eye or the neighbouring parts.

The length to which this article has extended warns us that we must draw our extracts to a conclusion; we therefore content ourselves by stating that the fourth and fifth chapters are devoted to Incised and Punctured Wounds; the sixth, to Contusions and their Effects; the seventh, to Rupture of the Eyeball, Dislocation of the Lens, and Dislocation of the Eyeball; the eighth, to Intraocular Hæmorrhage; and the ninth, to Burns and Chemical Injuries.

In the tenth and last chapter, the author considers Sympathetic Ophthalmia—a disease which has received considerable elucidation as to its pathology and treatment from English provincial surgeons. In evidence of this, we may remark that Mr. Barton of Manchester originated the plan of removing the front of a disorganised globe for the cure of the sympathetic irritation which had been produced by the lodgment of a fragment of percussion cap; Mr. Prichard of Bristol first applied the operation of extirpating the contents of the orbit to the treatment of *all* cases of sympathetic disorder; and in the same year (1854) and Journal in which these views were promulgated, Mr. Solomon of Birmingham indicated an important point in the prognosis of traumatic ophthalmia, namely, that so long as the inflammation extends no deeper than the iris, the fellow-organ is rarely, if ever, sympathetically implicated. He also first pointed out that the absence of pain and inflammation in a diseased and collapsed globe does not prevent the second eye from becoming affected. Our author's observations may be advantageously consulted by those who seek information on this highly important subject.

In drawing this notice to a close, we must express our hearty commendation of Mr. White Cooper's work. In style, it is agreeable and unaffected, therefore the more easily read, and, what is all important, the more likely to instruct. As a guide to the management of the class of cases of which it treats, it is thoroughly honest and efficient. Moreover, we consider that a more able exposition of the doctrines of the new school of ophthalmic surgery, than Mr. White Cooper's work on *Wounds and Injuries of the Eye*, has not emanated from the medical press of this country.

Lectures on the Diseases of Infancy and Childhood. By Charles West, M.D., Fellow of the Royal College of Physicians: Examiner in Midwifery at the Royal College of Surgeons of England; etc. Fourth Edition, revised and enlarged. Pp. 755. London: Longman, Green, Longman, and Roberts. 1859.

Dr. West's *Lectures* have long gained a high reputation: and we have much pleasure in announcing to our readers the appearance of a fourth edition, revised and enlarged, of this standard work. Since the appearance of the first edition, about eleven years ago, the experience of the author has doubled: so that, whereas the lectures at first were founded on six hundred observations and one hundred and eighty dissections made among nearly fourteen thousand children, they now embody the results of nine hundred observations, and two hundred and eighty-eight *post mortem* examinations made among nearly thirty thousand children, who during the past twenty years have been under his care.

British Medical Journal.

SATURDAY, OCTOBER 1st, 1859.

DEATH OF WILLIAM PULTENEY ALISON, M.D., D.C.L.Oxon., F.R.S.E.

EMERITUS PROFESSOR OF MEDICINE IN THE UNIVERSITY OF EDINBURGH; AND LATE PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION.

This worthy and distinguished man died at Colinton, near Edinburgh, on September 22nd, at the age of 69. From the infirm state of health in which Dr. Alison had been for some time, the melancholy announcement we now have to make will cause little surprise: but we are sure that every one who has known him personally or by his actions, and especially that numerous body of medical men who in past years have had the benefit of his teaching and advice, will not the less deeply regret the departure from among us of so eminent and excellent a man. It would be impossible to point to any member of our profession more universally beloved and respected in his life, or one whose memory will be more cherished after his death. A brief sketch of Professor Alison's career appears in another page.

OUR MINING POPULATION.

As a large number of our associates are engaged in practice among the mining population, it will perhaps not be out of place to call attention to the extraordinary rate of mortality which prevails among this class of the community. The fork-grinders of Sheffield are notorious for pursuing the most deadly occupation in existence; and closely following upon their track we find the very large population employed in procuring minerals from the bowels of the earth. This population numbers upwards of three hundred thousand souls; it is, therefore, of serious moment to find that, on the average, upwards of 50 per cent. of the deaths are from pulmonary disease—consumption proving the chief agent of destruction.

A pamphlet, just published by our associate Mr. R. Q. Couch of Penzance, has drawn our attention to the deplorable condition of the Cornish miners, which, we regret to say, appears to be as destructive to life as that of the coal-mines. Thoracic disease, according to tables drawn up by him for the years ranging from 1837 to 1857 inclusive, is 50 per cent. more fatal among miners than among the population of the neighbourhood otherwise employed. This is certainly a most startling fact, and one which loudly calls for the interference of government.

There can be little doubt that, as a rule, mines in this country are wretchedly ventilated. In nearly all cases—even in the best managed pits—the miners, whether of metals or of coal, work in a very high temperature which enervates them to the last degree: but, in addition to this source of disease, the method of exit from the Cornish mines is in itself peculiarly adapted to complete the exhaustion which the foul hot air of the mines has commenced. Unlike the coal-miner, who is lifted to the surface bodily in the cage, the tin or copper-miner of Cornwall has to drag his weary limbs up thousands of feet of almost perpendicular ladders. It is calculated that, in many of the mines, the unhappy workman, after a hard day's work, has to climb an ascent equal to the height of Cader Idris! In two or three of the mines, it is true, a "man-machine" has been introduced, which lifts the man from stage to stage until he emerges from the mouth of the pit; but such machines are the exceptions rather than the rule. And, when he toilfully reaches the pit's mouth, sweating from an atmosphere frequently at 90°, he finds himself in winter, exposed to a bitter wind far below freezing point. Can it be wondered at that pulmonary diseases are the scourge of the mining population?

We are compelled to say that they manage these things better abroad. In the country about Aix-la-Chapelle, large buildings are observable for miles before reaching them. These are vast wooden structures, which enclose the mouth of the pit entirely, where the miner finds some protection from the outside air, and where he can change his clothes, and thus fit himself to bear the change of atmosphere. Why should the miner in England not receive a similar protection? Lady Basset, who owns the mines at Camborne, in Cornwall, has established warm baths, in which the miner can wash himself after his labours, and this without a farthing of expense, inasmuch as the waste steam is employed. Her example, however, we regret to say, is not followed; and some of the wealthiest proprietors of mines in the county continue to draw colossal fortunes from the life-blood of their people.

Not only do we find that the Cornish miners themselves are a most unhealthy race, but their children, who have never entered the mines, are equally so. Mr. Couch, in his interesting pamphlet, shews that, among children under five years of age, the mortality of the offspring of miners is much greater than among the children of parents following other occupations. This, of course, is to be expected: the exhausted tree sends forth sickly shoots.

But where, we ask, is all this frightful waste of life to end? If we turn our attention to the coal-measures, we shall find that matters are no better there. The Registrar-General here comes to our aid, with some very interesting results drawn from an immense number of returns touching the occupation of coal-miners.

Among this class, the mortality, and consequently the expectation of life, follow an inverse ratio to that of the population at large. In the whole community, out of 100,000 persons alive at the age of eighteen, the number is not reduced to one-half till after the age of sixty-three; while out of the same number of pitmen alive at eighteen, one-half of the whole will have died off in their sixtieth year. The mortality is singularly intense, at the earlier ages, among coal-miners; for while, among the general lives of England and Wales at the age of eighteen the deaths are 0·750 in 1000, in the corresponding year

the loss among miners is more than one per cent. Out of the ordinary population, one in one hundred and thirty-three die, while of pitmen, one in ninety-seven perish in their nineteenth year. The general expectancy of life, or probability of living at that age, is about forty-one years; while that of pitmen is about thirty-nine. While the various tables of ordinary mortality and expectation of life proceed in a uniform manner from youth to age, those for miners show that the mortality decreases from eighteen to thirty-one, to such an extent that the mortality at that age is considerably below that of the whole population. Of ordinary lives, one in every ninety-five dies in the thirty-second year; while only one in one hundred and seventeen, among miners, perishes at that period. Thus, the probability that the person will survive the next year is greater, among miners, at thirty-one than at eighteen, and the mortality of persons of the latter age employed in pits, is equal to that experienced by others at thirty-one; on the other hand, the pitmen who have arrived at the age of thirty-two, experience less mortality than other ordinary lives eight years younger, and continue to hold greater intensity of life for a long period afterwards. Among the ordinary population of 100,000 persons alive at the age of eighteen, there are 46,015 living at sixty-five; at the same age, out of a similar number, there are only 39,687 pitmen—the difference being owing to the excessive mortality in mines during the younger ages of the persons employed therein. At the age of seventy, there are remaining of ordinary lives, 34,901; of pitmen, 28,895. Of these last, 1,032 live to the age of ninety-two, while of ordinary lives there are only 717 remaining.

Notwithstanding this disposition to longevity on the part of pitmen, it is asserted also that this class shows a very large amount of sickness at every period, and an increased sickness with advance of years. At the age of twenty, miners experience an average sickness of forty-six per cent. more than the general class. At age thirty they have seventy per cent., at forty years seventy-eight per cent., at fifty years seventy-six per cent. more than the average sickness of the general class of lives.

These are facts which the *millionaire* proprietor of mines, as he stirs his blazing fire, would do well to ponder. What a mass of misery do these figures indicate! At fifty years of age, the poor pitman has endured 76 per cent. more than the ordinary amount of sickness among the general population! It is, indeed, hard to believe that a race of men can be found to forsake the face of day and the cheerful companionship of their fellows, for the purpose of living all their days the lives of moles, and of degrading their physical health to the lowest endurable point. We smile at the absurdities of caste, as we witness its workings in India; but is not the spirit of caste as inexorable in free England? How otherwise can we account for a whole class of people thus devoting themselves to a miserable life and an early death for the sake of their fellows? If the poor miner cannot help himself; if the necessities of his position are such that he cannot escape from the craft of his fathers, the Government should at least see that he exercises it as freely as possible from all preventable causes of disease, by means of a strict supervision, which at present it so deplorably neglects to establish.

THE WEEK.

Captain McClintock's return in the *Fox* yacht, and the conclusive results of his search for the remains of the lost Franklin Expedition, give to British perseverance another claim to the title "indomitable", and afford another proof that, with the Briton, to fail implies success. But, amidst the congratulations attendant on the completion of a task that has so often been attempted, and the regrets at the confirmation of our worst anticipations with regard to the fate of Sir John Franklin's gallant crews, we must not forget that a member of our own profession urged with untiring pertinacity upon the authorities, so long as there was a chance of rescuing a single survivor, the adoption of a plan of relief which events have proved would have been attended with the happiest results; and subsequently, after the hope of saving life had become vain, with equal pertinacity urged a similar plan of search for the remains of the missing expedition. To Dr. King belongs the honour of pointing out the true path to the final resting-place of the Franklin Expedition. In February 1847, Dr. King wrote to the authorities, to state his fears for the safety of the expedition, volunteering his services to conduct by the Great Fish River a party for its relief. Again and again was this offer of service repeated. The authorities were, of course, deaf to Dr. King's arguments. Not deterred by official obduracy, or rather stimulated by it, Dr. King has during the past ten or twelve years done his utmost to keep the public mind interested in the fate of his lost countrymen; agitating at one and the same time in the cause of humanity and of national honour. So lately as December 1856, Dr. King, in co-operation with Captain Bedford Pim, proposed to the Government a joint land and sea expedition, which, humanly speaking, would have given, had it been permitted, the most complete elucidation to the Franklin mystery. Surely, for such perseverance in so noble a cause, Dr. King deserves some fitting tribute.

Some experiments regarding the alleged efficacy of curare (or woorara) in the treatment of tetanus have recently been brought before the Academy of Sciences in Paris. It seems that, some weeks ago, in the case of a soldier whose wound had caused tetanus, that the spasms were regularly appeased by the introduction of curare into the system; and that this occurred not only once or twice, but during the whole period of treatment, which lasted above a month. On the other hand, a patient, aged thirty-nine, had tetanus arising from compound fracture of the scapula. Curare was introduced into the arm, and into the integuments over the chest and the right shoulder, at intervals of from seven to ten minutes, without any alleviation of the symptoms. A portion of the same poison, given to a dog, produced the usual result. It is plain, then, that curare is not to be implicitly relied on as a remedy in tetanus. If, however, it be the fact that traumatic tetanus has really been alleviated by its use, its occasional failure should scarcely discourage a trial of its efficacy in other cases of this disease. The remedy is formidable; but the disease is more so, and justifies the use of the means. *Ad extremos morbos, extrema remedia*, is a maxim which has its legitimate application here.

Professor Faraday has directed attention to the means of purifying the water used in lighthouses. The inhabitants of these buildings, from their situation, are often more or less dependent on the supply of rainwater, which is gathered from leaden roofs, galleries, and gutters. The salt from the sea-spray which falls on these roofs forms a chloride of lead, a certain portion of which is dissolved in the rainwater passing over them, sometimes in such a quantity as to be injurious to health. To remedy this, Dr. Faraday recommends that a little whiting or powdered chalk be put into the cistern, the contents of which should be stirred occasionally after rain; the water may then be readily obtained in a perfectly fit state for all culinary and domestic purposes. Information of this kind has, at the instance of Dr. Faraday, already been supplied to a number of lighthouses: and he now publishes it as a fact of general utility.

THE LATE WILLIAM PULTENEY ALISON, M.D., D.C.L.Oxon., F.R.S.E.

VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION: EMERITUS PROFESSOR OF MEDICINE IN THE UNIVERSITY OF EDINBURGH.

William Pulteney Alison was born in 1790, and therefore, at his death, had reached the boundary of the allotted three score years and ten. His father was the Rev. Archibald Alison, an eloquent preacher, and author of the *Essay on Taste;* his mother was a member of the family of the Gregories, who have for centuries adorned the annals of Scotland with a succession of names, celebrated alike in science and literature. His brother is the distinguished historian of Europe, Sir Archibald Alison.

It is believed that Dr. Alison's early predilection was for a military life, and that it was only in deference to the urgent wishes of his father that he abandoned his intention of entering the army. Yet, through life, he continued to take a deep interest in everything pertaining to military affairs—was fond of perusing details of campaigns and battles, and watched with interest the progress of the wars which have happened in our own times. He entered on the study of the medical profession, to which he became deeply devoted, under most favourable auspices; his uncle, the celebrated Dr. James Gregory, holding then the highest rank as a physician, in Edinburgh, and occupying the chair of Practice of Physic in the University. He took his degree in 1811; and henceforward, with the exception of a short period spent in travelling on the Continent after the conclusion of the revolutionary war, he continued to exercise the duties of his profession in Edinburgh. As a dispensary physician, he had large opportunities of practising amongst the poor, to whom his time and services, and his means, were ever cheerfully and liberally devoted. He also became physician to the Royal Infirmary. When but a young man he assisted his uncle, Dr. Gregory, in the delivery of his course of lectures on the practice of physic. In 1820, he was appointed Professor of Medical Jurisprudence in the University. This chair, however, he only held for two years, when he was appointed colleague and successor to Dr. Andrew Duncan, senior, Professor of the Institutes of Medicine. For some years he gave part of the course, at the same time acting as one of the clinical professors. On the death of Dr. Duncan, he became sole Professor of the Institutes of Medicine, comprehending physiology, pathology, and therapeutics. The substance of his physiological lectures was afterwards published in the form of *Outlines of Physiology*, 1831.

After filling the chair of Institutes of Medicine, with great acceptance, for some years, on the chair of Practice of Physic becoming vacant, Dr. Alison was, by universal consent, pointed to as the man best qualified to fill it; accordingly, it was offered to him, spontaneously and unanimously, by the Town Council of Edinburgh. This was a new tax on the energies of the ever energetic man, who was always working as hard as a man could possibly be supposed to work, and yet, like all men of work, could always find time for more. A new course of lectures were now to be prepared; yet not altogether so, as his labours as a physician and as a clinical teacher, had been constantly accumulating for him materials for this course. These lectures, the substance of which was afterwards published as *Outlines of Pathology and Practice of Physic*, had the same characteristics as those on physiology—terse, condensed, inductive, full of solid reliable information. He was not a man to hazard hasty generalisations, and too great a lover of truth to give a false or undue colouring to anything he taught. He might, perhaps, have made his lectures more attractive to those who look only on the surface by another mode of treating the subjects; but he preferred the solid, the real, the true, at whatever cost, to that which only seems.

His practice as a physician continued steadily to increase, so that his time was becoming more valuable, yet did he not abate in his attention to the sick poor. Excepting an attack of fever, caught in the exercise of his profession, and an inflammatory attack at an earlier period, he had enjoyed excellent health. At dawn, he awoke, and read till it was time to rise. His early day was occupied with the reception of numerous patients; and as he performed his duties in the most conscientious and painstaking way in every case, he was often detained listening patiently to wearisome details, and prescribing for all who came till it was time, and often more than time, to keep his appointments in the town. Then came the hospital visit, which occupied fully an hour and a half—often two hours. Then came more visits, often up long fatiguing stairs, in the most destitute localities; then his systematic lectures, and, on certain days, clinical lectures; then more patients to see. All this time he fasted, so that when he came home to a late and irregular dinner, he was fatigued and hungry, and generally ate a hearty meal then.

His evenings were often occupied with visiting patients, and if not, with literary occupations. In these studies the midnight oil was consumed, and often, far into the morning he sat, and thus his hours of sleep were much too few. He loved work for its own sake, but still more because he hoped that the result of that work would increase the comfort and happiness of his fellow-men; and, thus influenced, he cared not to think of self.

Thirteen years ago, when in the full vigour of his intellect, and apparently strong in body—having attained the highest honours of his profession, and, in consequence of the death of Drs. Abercrombie and Davidson, left in possession of the lucrative field of consulting practice almost without a rival—Dr. Alison, whilst visiting the wards of the Infirmary, was unexpectedly struck down by epilepsy. Ever since then, at longer or shorter intervals, and in greater or less severity, these attacks have recurred, shattering by degrees a naturally strong constitution; until at length it has succumbed under the repeated shocks. For a number of years after his first seizure, Dr. Alison was able, in a modified degree, to continue his practice, his lectures, and his literary labours; but latterly he retired altogether from practice, and gave up his professorship without, unfortunately, any stipulation for a retiring allowance. Government, indeed, granted him a pension of £100; but surely this was niggardly recognition of the services of a man who had not only distinguished himself highly in the field of science, but had done the state good service by labours which resulted in benefit to thousands of his fellow-countrymen, whose sufferings, but for his exertions, might have continued to this day.

Rarely did Dr. Alison emerge, of late years, into public life from his retirement; yet the old indomitable spirit still lurked in his energetic bosom. Two years ago, when a question of great interest was being debated, viz., whether the change which of late years has taken place in the method of treatment of inflammatory diseases is due to a change in the character or type of disease, or to a change in our notions as to the nature of diseased action, and to our improved methods of distinguishing disease, Dr. Alison thought it his duty to come forth to do battle in defence of the change of type theory, which, in the Medico-Chirurgical Society, he argued vigorously, and so logically, by reference to the authority of past ages, and by reference to his own experience and that of those of the present day who have had the largest opportunities of observing and treating disease in every form. His last public appearance was in July 1858, when he presided over the annual meeting of the British Medical Association. Selected by the unanimous voice of the Association as the most worthy among the medical worthies of Scotland, he accepted the office, and threw all his remaining energy, as well as the good qualities of his heart, into the performance of its duties. The offer of the presidency made to him was a compliment justly due to his eminent position, and must have gratified him; but perhaps the effort was too great for his impaired strength. Certainly since that period his health has declined in an increased ratio.

The last days of this true philosopher were spent happily, in the retirement of his beautiful Tusculum, near Colinton. Ever and anon attacks of his malady interrupted his pursuits; but in the interval he read both medical and scientific works, and the lighter works of the day; wrote a good deal, and enjoyed the society of those devoted and attached relatives whose delight and whose life it was to minister to his comfort, and who now sincerely mourn his loss. Dr. Alison married his cousin, Miss Gregory, who, however, predeceased him some years, leaving no issue.

His writings on various topics in medicine, general science, social and political economy, etc., were numerous. His admirable pleadings for poor-law reform are worthy of being remembered. Pitched against such an opponent as Dr. Chalmers, he showed himself worthy of his foe; they were well matched both men of vigorous intellect, of strong steadiness of purpose, both actuated by feelings of the most sincere and ardent benevolence; but the practical and practicable gained the victory over the speculative and impracticable—the compulsory system of poor-law relief being more adapted for society as it is; the voluntary system for society as it might or should be. The former, supported by Dr. Alison, triumphed over the latter as supported by Dr. Chalmers; the result being the new system of poor-laws in Scotland, which, defective in some points as they undoubtedly are, must be confessed to be infinitely superior to the system which they supplanted.

To Dr. Alison, also, the Scotch are greatly indebted for the introduction, though tardy, of the system of registration of births, deaths, and marriages. He took an interest, too, in the question of medical reform. In the Association Medical Journal, for June 9th, 1854, there is a correspondence between him and Mr. Nunneley, of Leeds, on this subject. He advocated strongly the necessity of a liberal general education as the best training of the mind for professional studies, and as the best means of elevating the profession which he himself so adorned; and he happily lived to see, in the passing of the Medical Act, the dawning of a new and brighter day for the science and art of medicine.

Dr. Alison combined in his person the eminent physician, the earnest philosopher, the unwearied philanthropist, and the sincere christian. Respected and beloved by all classes, he was, in an especial manner, entitled to the appellation of the "friend of the poor." Dr. Alison has departed just as he lived, quietly and peacefully. We shall not soon look upon his like again. We shall long miss that massy, strongly built bodily frame, which seemed as if it could defy disease and infirmity; that countenance, beaming with intelligence and benevolence; that hand, open as day to melting charity; that kindly voice; that heart, so full of sympathy for human suffering; that vigorous, clear, manly, and persevering intellect, which was exercised untiringly for the good of his species. Of him it may be truly said—more, indeed, than of most men—"He rests from his labours, and his works do follow him." (Abridged from *Edinburgh Evening Courant*, September 24th.)

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

A List of the Members of the British Medical Association will shortly be published in the Journal. Gentlemen whose designations or addresses, as given in the lists published on July 24th and October 9th, 1858, and June 18th, 1859, are inaccurate, will oblige by at once forwarding the necessary corrections to Dr. Williams, Worcester, or Dr. Henry, 37, Great Queen Street, London, W.C.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Shropshire. [Annual Meeting.]	Raven Hotel, Shrewsbury.	Monday, Oct. 3rd, 2½ P.M.
South Midland. [Ordinary Meeting.]	Swan Hotel, Leighton Buzzard.	Thurs., Oct. 6th, 2 P.M.
Birmingham and Midland Counties. [Ordinary Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Oct. 13th, 6 P.M.

Midland Branch. The quarterly meeting of this Branch is postponed.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, September 1859.

Editor's Letter Box.

THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

Sir,—As it may interest many of your readers to be informed of the precise character of the examination for the diploma of Licentiate of the Royal College of Physicians of Edinburgh, which has to be passed by those members of the profession already in practice, who may be desirous of taking the Edinburgh diploma, I beg to hand you the Questions that were given to myself and to two other gentlemen, on Sept. 14th.

The examination consists of two parts; one in writing, the other *vivâ voce*, both on the same day. There are four examiners; the candidate is examined by each of the four in succession; each examiner takes about twenty-five minutes, and every question is noted, as is each reply to the question. The questions and replies, as well as the candidates' written paper, then have to go before the council; and with the council rests the granting or withholding the diploma. The examiners on the 14th were Drs. Paterson, Begbie, Wilson, and Duncan, and Dr. R. D. Haldane, Hon. Sec. The questions were:—

In writing. Describe Phlegmonous Erysipelas, its causes, symptoms, terminations, and treatment. Describe Epilepsy; its varieties, causes, symptoms, terminations, and treatment. Elaterium as a purgative. Tartar emetic as a diaphoretic.

Vivâ voce. What are the principal vegetable tonics of the pharmacopœia? How do they differ from each other? Separate the nine tonics from the astringent tonics. Name the vegetable tonics and their salts, which are also antiperiodics. The doses, characters, and the best mode of employing each of them. Name some mineral antiperiodic, and state the form in which you would employ it. State the symptoms which would attend the too long continuing use of arsenic. In suspected poisoning by arsenic, what tests would you employ? The relative value of Reinsch's and Marsh's tests, and apply them both? What vegetable salts are used instead of quinine? Describe chirayta and its effects. Describe a case of acute pneumonia; state the condition of the breathing, pulse, and sputa. The other general symptoms; its different stages in progress and recession; the stethoscopic signs and those by percussion. With what disease of the chest may pneumonia be confounded, and the differential diagnosis? Describe a case of bronchitis, with its several and stethoscopic signs. Describe the more prominent, general, and stethoscopic signs of pleurisy and phthisis. Describe the symptoms of acute rheumatism. What organs are very liable to become affected by rheumatism? What are the general causes of rheumatism? Do you consider it to be a blood disease, and why? Describe rheumatic delirium; and, if death ensues, state the condition of the brain? Describe a case of rheumatic pericarditis and endocarditis, and the pathology, as it refers to the valves and the membranes. Is the heart itself liable to rheumatic inflammation? Describe the stethoscopic signs and the general signs of acute rheumatic pericarditis. What would be your treatment? On what general condition would you treat a case of acute rheumatism? Name some of the plans of treatment that have been recommended, and what you consider to be their relative value. How does opium act in rheumatism, and especially in pericarditis? Describe the probable effects of bloodletting in rheumatism, and when you consider it to be an admissible remedy. Describe a case of cancer uteri. With what other diseases of the uterus would it be liable to be confounded? State the difference between ulcer of the cervix and cancer. State why it is sometimes dangerous to use the speculum in cancer uteri. What other affections of the uterus are attended with pain and floodings? Describe polypus and fibrous tumour. Write a prescription in Latin, and without abbreviations, for a case of diarrhœa in a child.

The above, with the exception of epilepsy, were the questions, as far as I can recollect them (and I wrote them down as soon as I left the college), proposed to and answered by myself. The other gentlemen had much the same sort of examination. I met two of the gentlemen afterwards. Instead of vegetable tonics, one had had the mineral tonics, especially the salts of iron. The other had had the diuretic medicines of the *Pharmacopœia*, their varieties, modes of action, etc. Instead of pneumonia, one had had fever, its varieties and complications; in the other, the affections of the kidneys, more especially Bright's disease, with the chief urinary deposits, and their tests, etc. Instead of uterine disease, the diseases of children, variola, rubeola, and scarlatina, were given.

The examination was conducted throughout in a very clear and gentlemanly manner. It was sufficiently minute fully to test the knowledge which the candidate possessed, and yet sufficiently practical for the candidate to feel that he had a fair field before him, and was not to be cramped into the detail of a mere scholastic exposition.

I have to apologise for the length of this letter; but not having seen a report of these examinations in any medical journal, I felt that it might interest some, if not all, to know what the examination really is. I am, etc.,

A Licentiate of Edinburgh.

Sept. 21st, 1859.

BENIGHTED REGIONS.

Letter from Thomas Littleton, M.B.

Sir,—If Mr. Daniell will refer to the Journal for 1858, Sept. 11th, p. 775, Sept. 25th, p. 815, and Oct. 2nd, p. 833, he will find that I am not the only person who considered that his remarks partook of the nature of an indignity offered to all the natives of Cornwall. He particularised them in his address (June 5th, p. 452) as "the benighted region of Cornwall", "with heads as empty as a drum."

Mr. Kempthorne's remarks met the approbation of all to whom they were addressed; and as they had not been noticed by Mr. Daniell in Mr. Kempthorne's unavoidable absence, I felt it incumbent on me to refer to the subject. This has given Mr. Daniell the opportunity to make, in the pages of this Journal, the gracious amends due to our county and to his own high position.

I may be allowed to differ from Mr. Daniell's opinion, that the appearance of homœopathy in a neighbourhood is a sufficient reason for considering it "a" benighted region. For, to pursue his own argument, if such be the case, then, wherever it receives most encouragement, that place we must fix upon as "the" benighted region of England. I believe, sir, that homœopathy is chiefly encouraged by a particular class in society. And, if my memory does not deceive me, you have in your editorial remarks already noticed the defects in their education.

It is truly surprising to observe the ignorance of men of this class in reference to subjects of such importance. They have hitherto chiefly furnished our statesmen, our admirals, and our generals; yet to them is due the fearful loss of life which ensued from dilatoriness in adopting the proper diet for our sailors, as mentioned by Sir J. Herschel, at p. 53 of his *Discourse on the Study of Natural Philosophy*.

Having had some practical acquaintance with the working of our present system in the late war, and with the results of such want of knowledge, and the consequent inability on the part of commanding officers to appreciate the value of any "recommendations" coming from medical officers, I take this occasion to observe, that your former remarks on this subject deserve to be again and again repeated, and with them the recommendation of Mr. Martin, that a medical gentleman, free from controul and answerable to Parliament alone, should accompany every army in the field in the capacity of Sanitary Commissioner. I am, etc.,

Thomas Littleton.

Saltash, Cornwall, Sept. 26th, 1859.

EXPERIMENTS ON HEALTHY SUBJECTS.

Sir,—In reply to the censures of "Senex," I am happy to be able to state that there is a mistake in the report to which he refers. The children in question were in "good health" *with the exception of a chronic skin disease*, and it was in order to test the alleged special action of belladonna upon the skin, that I was induced to administer it in the instances alluded to.

I should state that it produced no effect whatever upon the state of the skin.

I did not wantonly administer it to the subjects of a public institution, simply because they are defenceless objects of charity; but, as Senex might more charitably have perceived, because a large number of like cases affords the more accurate conditions under which to test a remedy. This remedy had been administered in large doses by Dr. Fuller before I ventured upon its use, in very small doses. No bad results would have ensued but for the dose having been, *per saltum*, quadrupled through the blunder of an attendant.

The above explanation will, I hope, serve to disarm the just indignation of "Senex."

I can further assure him that I would not give to any patient, rich or poor, any remedy that I would not administer to me or mine. I am, etc., "Censured."

September 26th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

*Brown, John D., M.D., Rochester, on Septembeer 22nd.
*Carpenter, Alfred, M.B., at Croydon, on September 27th.
Horton, Charles, M.D., Bromsgrove, lately.
*Oakley, Charles, Esq., Shrewsbury, on Sept. 24th.
Partridge, Richard, Esq., 17, New Street, on September 24.
Rowe, T. S., M.D., at Margate, on September 27th.

Of daughters, the wives of—

*Brinton, Wm., M.D., at 20, Brook Street, W., on Sept. 21.
Cockell, F. E., Esq., Surgeon, at Dalston, on Sept. 22nd.
*Newman, W., M.B., at Fulbeck, on September 20th.
Stevens, N. H., Esq., Surgeon, Finsbury Circus, on Sept. 26.
Priestley, W. O., M.D., at 31, Somerset St., on Sept. 23rd.

MARRIAGES.

Austen, John I., Esq., Old Charlton, to Margaret Maria, youngest daughter of George Lewis, M.D., of Wiesbaden, at Frankfort-on-the-Maine, on September 20th.

Dickinson, Jonathan, Esq., Surgeon, Middlesborough, to Margaret Ann, youngest daughter of the late John Clough, Esq., Gateshead, on September 21st.

Fisher, Charles H., M.D., of Sittingbourne, to Ellen, second daughter of H. Orfeur, Esq., of Yarmouth, at Bungay, on September 20th.

Heward, Thomas S., L.R.C.P.Ed., of Grosvenor Street, to Sarah, youngest daughter of the late Edward Robarts, Esq., of Chester, on September 27th.

McLorg, the Rev. Edward, to Mary Craven, daughter of the late Wm. Bannister, Esq., Surgeon Madras Army, on September 21st.

Scott, the Rev. Thomas S., curate of Penge, to Louisa, second daughter of *Allen Duke, M.D., of Chichester, on Sept. 27.

Williamson, James, M.D., London, to Emma, only daughter of the late N. B. Fisher, Esq., Surgeon, Bungay, on September 20th.

DEATHS.

*Alison, William P., M.D., F.R.S.E., at Colinton, Edinburgh, aged 69, on September 22nd.

Brown. On August 26, at Poona, aged 26, Catherine Louisa, wife of G. F. H. Brown, Esq., Assistant-Surgeon Bombay Army.

Domville. On September 24th, at Greenwich, aged 65, Mary Efford, widow of the late James Domville, M.D., Deputy Inspector of Hospitals and Fleets.

McCheane, Thomas, M.D., at Lyttelton, New Zealand, aged 37, on May 16th.

APPOINTMENTS.

*Hore, Henry A., Esq., appointed Surgeon, and *Leonard, Crosby, Esq., appointed Assistant-Surgeon, to the Bristol Volunteer Rifle Corps.

*Inman, Thomas, M.D.Lond., Physician to the Liverpool Northern Hospital, appointed Physician to the Liverpool Royal Infirmary.

HEALTH OF LONDON—SEPTEMBER 24TH, 1859.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys .. 886 / Girls .. 866	1752	.. 1058
Average of corresponding weeks 1849-58..		1572	.. 1031

The decrease in fatal cases of diarrhœa is shown by the numbers of the last three weeks, which were 148, 82, and 61. Of those returned as cholera or choleraic diarrhœa, last week gives only 3, and these occurred to infants. Scarlatina destroyed 83 lives. Small-pox was fatal last week in 23 cases; syphilis in 10; delirium tremens in 4; intemperance in 4. Five nonagenarians died, all women, the oldest of whom was 96 years, and died at the Female Almshouses, Whitechapel. Of bricklayers, 3 died last week, of bricklayers' children, 7; of carpenters, 6 died, of carpenters' wives, 7, of carpenters' children, 25; of painters, 3 died, of painters' children, 12; of plasterers' children, 2 died. At the census of 1851, there were in London 13,919 bricklayers; 23,453 carpenters; 15,369 painters; 4,378 plasterers.

Barometer:

Highest (Sun.) 29.888; lowest (Wed.) 29.288; mean 29.652 in.

Thermometer:

In sun—highest (Sat.) 87.2°; lowest (Sun.) 68·0°.
In shade—highest (Sat.) 76°; lowest (Tues.) 41.5°.
Mean—56.5°; difference from mean of 43 yrs. +1°.
Range—during week, 34.5°; mean daily, 19.1°.

Mean humidity of air (*saturation*=100), 78.

Mean direction of wind, S.W.—Rain in inches, 0.64.

Army Medical Staff Corps. On Monday, an order was forwarded to all the military hospitals from the Medical Department, for a number of volunteers from the Medical Staff Corps for the Army Hospital Corps. The volunteers are to receive instruction for three months in the surgery at Chatham Garrison, to qualify themselves for compounding medicines. Those who are found to be qualified, after an examination by a board of officers, are to receive one shilling per day, in addition to their pay. Seven intelligent young men at Fort Pitt and at the Garrison Hospital, volunteered as soon as the order was read.

University of Edinburgh. Sir David Brewster has been elected, by the Town Council of Edinburgh, Principal of the University of Edinburgh. The appointment creates a vacancy in the principalship of the University of St. Andrews.

University of St. Andrews. The *Edinburgh Evening Courant* of September 24, says: We are requested to state that there is no authority whatever for the paragraph which has been going the rounds of the newspapers to the effect that "the Professors of this University have received notice that the Royal Commissioners intend to issue an ordinance requiring one year's residence from every candidate for a medical degree at that University."

A French Idea of Smoking in England. The *Athenæum* says, that "M. Bouisson, of Montpelier, has been wasting a fine imagination on the abuses of tobacco. Sylvester himself scarcely battered and shattered the pipe of peace with more acrimony than M. Bouisson, who calls upon his medical brethren throughout the world to lay down their own cigars, and menace every smoker of Cuba and Latakia with early death. His statistics are marvellous and appalling. For example, he denounces to us the fact, that in England 'boys smoke from 5 o'clock in the afternoon till 3 o'clock in the morning,' and that 'children of ten years old are known to consume *as many as forty cigars in a day.*'"

TO CORRESPONDENTS.

H. T. T. Apply to either of the Secretaries of the Metropolitan Counties Branch—Dr. Stewart, 74, Grosvenor Street, W.; or Dr. Henry, 37, Gt. Queen Street, W.C.

Communications have been received from:—Mr. T. W. Nunn; Dr. James Russell; Dr. Lionel Beale; Dr. E. Crisp; Mr. F. G. Harcourt; Dr. Hyde Salter; Dr. T. H. Jackson; Mr. W. Martin; Dr. W. Ogle; Dr. T. Herbert Barker; Dr. B. W. Richardson; Mr. Chas. Oakley; Mr. J. A. Metcalfe; Dr. W. O. Markham; Dr. Sloane; Mr. T. Holmes; Dr. T. Inman; Dr. T. Littleton; Dr. Humphry Sandwith; Mr. A. Prichard; Dr. F. J. Brown; Dr. Styrap; Mr. J. V. Solomon; Mr. James Reid; Mr. W. Martin; Dr. H. Goode; Censured; A Licentiate, Edin.; Dr. Thos. Sandwith; Mr. S. B. Farr; Dr. Whytehead; Mr. T. Taplin; Dr. Trevor Morris; The Secretaries of the Medical Schools of the London Hospital, St. Thomas's Hospital, and Westminster Hospital; and The Secretary of the College of Dentists.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. Lectures on the Diseases of Infancy and Childhood. By Charles West, M.D. 4th edition, revised and enlarged. London: Longmans. 1859.
2. A Statistical Investigation into the Mortality of the Miners in the District of Lelant. By *Richard Q. Couch, F.R.C.S.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXLV.] LONDON: SATURDAY, OCTOBER 8, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

FEVER: ACUTE HÆMORRHAGE FROM THE BOWELS: RECOVERY.

Under the care of W. O. MARKHAM, M.D.

[*From Notes by* LININGTON ASH, ESQ., *House-Surgeon.*]

THOS. K., aged 21, a butcher, was admitted on April 25th, under the care of Dr. Markham, with an attack of fever. He had never been ill since his childhood. He had been attacked with the premonitory symptoms of fever twelve days ago. At first he referred these to a cold, but in two days was obliged to lay up. He had hot skin, thirst, pain in the head and back, and purging of dark highly offensive fluid motions. On admission, the face was flushed; the countenance dull and inexpressive; the tongue dry, and coated with a thick whitish brown fur; the teeth were slightly covered with sordes; the conjunctiva were reddened; the skin hot and dry. The abdomen and lower part of the chest were covered with a rash much resembling that of scarlet fever, but of a less brilliant colour, disappearing on pressure. Urine scanty, of a deep amber colour, with deposit of lithates; acid; of specific gravity 1025. His bowels had been open twice. Pulse 130, weak, and compressible, but full. There was no abdominal pain, nor gurgling in the iliac regions. The sounds of the lungs and heart were healthy. He was ordered effervescing mixture every four hours, with milk and beef-tea.

Next day, the purging had somewhat diminished. There was both pain and gurgling in the right iliac region on pressure. He slept much. He was ordered a little wine, and ten grains of grey powder with four of Dover's powder twice a day. The purging much relieved by the powders, and he went on well till the morning of April 30th, when he passed about a pint of pure clotted blood. His pulse was much lowered by this, and his cheek blanched; but in other respects he did not appear the worse for it. There was no increase of pain in the iliac regions. He slept well. He was ordered to have a pound of ice, two pints of beef-tea, and two grains of acetate of lead with a quarter of a grain of opium every four hours. The other medicine was omitted.

May 2nd. There has been no return of hæmorrhage. He still complains of pain in the right iliac region. The tongue is clean on the tip and edges only. He is feverish and thirsty. Pulse 130, weak. He still is purged. The urine is scanty and red. He was ordered to take fifteen minims of dilute nitro-hydrochloric acid every three hours. The powders prescribed on April 25th were repeated, and the wine was continued.

May 5th. He is still purged; there is no blood in the motions. In other respects, he is much the same. A few characteristic typhoid spots (pimples) appeared on the abdomen. An ounce of mixture of chalk and opium, with half a drachm of tincture of kino, was prescribed to be taken after each motion.

May 7th. He has considerable pain in the right groin. The purging still continues; no more blood has appeared in the motions. He is feverish and thirsty. Pulse weak. Urine 1032, acid, red. Four leeches were applied to the right groin. The wine was omitted.

May 8th. The pain in the groin has been much relieved by the leeches. The purging is diminished.

May 10th. He is progressing favourably, but slowly, and is very weak. Three ounces of brandy were ordered. The purging is less. The tongue is cleaner in the centre. There are no spots. He sleeps well.

May 14th. He is more feverish; the tongue is coated; pulse quick and weak. He has had no return of the purging. He sleeps well; not too much. He has no abdominal pain. Wine instead of brandy was ordered; and an effervescing potash draught every four hours.

May 15th. The purging has not returned; he feels prostrated. Two grains of grey powder with four of Dover's powder were given immediately; and an ounce of quinine mixture, with fifteen minims of dilute nitric acid, three times a day.

May 16th. The purging has returned; the motions are fluid, dark, offensive, and copious. Pulse 109, very soft and compressible, regular. He sleeps well; perhaps too much. He expresses himself as feeling free from pain. He has no appetite for anything. The abdomen is tense and shrunken; there are no spots; no pain nor gurgling in the iliac regions. He was ordered to go on with the astringent mixture.

May 19th. He passed about a pint of clotted blood last night. The symptoms are much the same.

May 21st. The purging continues; he has passed some more blood in the motions to-day. The tongue is very red, dry, and shining, denuded of epithelium, and presents numerous specks resembling aphthæ. The pulse is 120, very soft and weak. The skin is hot and dry. He sleeps very much. The pupils are dilated, and active. His appetite is gone. The expression of his face is very vacant. He has no abdominal pain, nor tenderness. He was ordered to take an ounce of decoction of cinchona and five minims of tincture of opium three times a day.

May 23rd. He has had no return of the purging, but this morning early passed about a pint of fluid, consisting of nearly pure blood; and when seen at 10.20 A.M., it was found that a considerable quantity of clotted blood had been involuntarily passed under him. He lies on his side, with his knees bent, in a half-sleepy state. His face is pale and damp, with a cold sweat; the countenance is listless, and the pupils dilated; the lips are parched and brown. The tongue is red with aphthæ. The pulse is 120, weak, and occasionally irregular. There is extreme prostration. He was ordered to have, every four hours, three grains of acetate of lead, a quarter of a grain of extract of opium, and a drachm of dilute acetic acid; also ice and ice-jelly; and brandy instead of wine.

At 3 P.M., he passed a quart of fluid from the bowels, containing quite as much blood as in the morning. He is very weak and low. He lies lower in the bed. The heart-sounds are very low. Rhonchus is heard in both lungs.

May 24th. The bowels have been moved twice; he has passed dark offensive fluid, without blood; and feels better. His appearance is improved. The pulse is slightly fuller. He sleeps much. He takes his stimulants with much relish.

May 25th. He has had no return of the purging or hæmorrhage, and is somewhat relieved.

℞ Quinæ disulph. gr. ij; acidi tannici gr. v; acidi sulph. diluti ♏x; liquoris opii ♏vj; aquæ ʒi. M. Fiat haustus ter die sumendus.

There is a sore on his hip.

May 29th. He has been going on pretty well since the last note. To-day he does not feel so well, and has had some bilious vomiting. The skin is hot and dry; the tongue is preternaturally red and clean. The bowels are open once daily, and the stools natural. His breath is cold. He sleeps much, with the eyelids a little open. He is taking four ounces of wine, eight of brandy, a pound of beef-jelly, and two pints of beef-tea, daily, with some ice.

June 3rd. He is continuing to progress well, although the bed-sores have sloughed.

June 10th. He is still in rather a doubtful condition, not recovering so rapidly as might be expected. The countenance

is not very placid. The abdomen is tense, as if some irritation were present.

June 18th. He was restless, complaining of pain in the stomach. The tongue is coated. This pain was relieved, however, by a little castor oil. He was ordered some effervescing mixture, and to leave off other medicine. Tonics were soon afterwards given.

From this time he presented no peculiar symptoms, and was discharged nearly well on July 6th.

ST. GEORGE'S HOSPITAL.

EXCISION OF THE KNEE-JOINT: UNSUCCESSFUL: AMPUTATION: PHTHISIS.

Under the care of T. Tatum, Esq.

Elizabeth P., aged 24, was admitted under Mr. Tatum's care on August 18th, 1858, on account of ulceration of the cartilages of the knee. The history given of the affection was, that five years before her admission, she first noticed some pain in the right calf, which soon spread to the knee; and the symptoms had increased in severity ever since. She had not been able to walk upon it since the previous March. She had suffered of late from starting of the joint, especially at night. She had no idea of the cause of the affection, having never had rheumatism, and having no remembrance of any accident. The limb was perfectly straight, and she could not suffer the slightest movement of the joint. There was considerable enlargement about the knee. She said she had always enjoyed good health, and her aspect was healthy. It was, however, afterwards ascertained that the catamenia had not appeared for more than a year. The knee was at first blistered; then issues were made at each side, and kept open for two months. Calomel and opium were given in small doses; but it was necessary soon to omit it, and to order some wine daily, as her health began to suffer. Finally, as all local measures seemed unavailing, it was determined to remove the joint.

This was done on December 13th. A very thin section only of the femur and tibia was removed, as the patella appeared healthy, and the bones were only superficially ulcerated. The cartilages were removed in many places, and there were slight bands of adhesion between the bones.

She suffered grievously from sickness, probably the result of inhaling chloroform, for several days after the operation; but when this was checked she improved remarkably for a short time, and by the end of January almost the whole of the wound had cicatrised.

In the beginning of February, however, her health began to fail rapidly. She lost her appetite, and a slight cough was noticed. Still, the wounds were looking healthy, but they did not cicatrise.

Towards the end of February she had wholly lost her appetite, so that it was troublesome to her to take any food, and the knee began to be painful; the pain being referred principally to the patella. The discharge now increased, and gradually a tolerably large abscess formed, with fœtid discharge, evidently in connection with diseased bone. She fell into a hectic condition, with cough and night-sweats; but with no physical indication of a cavity in the lungs. As it was clear that she was being exhausted by the discharge, and as it was, although improbable, still within the bounds of possibility that amputation might save her life, the limb was removed on April 28th, by the flap operation.

A large suppurating cavity was discovered at the seat of the excision, and all the three bones were extensively carious. No process of repair could be traced as having occurred after the excision. She rallied for a time, and ultimately the stump healed perfectly; but her health gradually failed, and the symptoms of phthisis gradually became more unmistakable. She left the Hospital, by her own request, on August 11th, being then in the last stage of phthisis, and was last heard of a few days since, at which time she was still alive.

Remarks. The case of which we have given a brief outline was remarkable for the rapid and decided, but, unfortunately, only temporary improvement which followed the operation, and for the sudden accession of disease afterwards. It was further remarkable as an instance of local recovery from so severe an operation as amputation of the thigh, in a patient exhausted by long previous suffering, and the subject of fatal and rapidly increasing asphyxia.

The indications for excision in the first instance were most decided, and the appearance of the parts removed was most favourable for the prognosis. The case therefore is given, not as in any way making against the operation, still less as reflecting on the judgment of the operator, but as an example of those unsuccessful cases of excision, of which, in the natural and laudable anxiety which prevails to promote conservative surgery, we do not, perhaps, hear quite enough. It is, to say the least, highly probable that the statistical argument used by the advocates of excision of the knee, to show its advantages over amputation of the thigh, rests on very fallacious data—on a collection of cases, most of them reported precisely because they were successful: and which otherwise would not have been thought worth publishing.

We shall never be able to reason securely in such matters until we have a complete system of hospital statistics; and we can only look for such a system to the action of the boards of governors of our various large institutions, who ought to feel that the promotion of medical science is as legitimate an application of the funds entrusted to their care, as the things which minister more directly, but not less surely, to the patient's comfort and recovery.

The system would be necessarily a somewhat expensive one, and its results would not be immediately perceptible. It is useless to expect its establishment from the unpaid medical officers of the various charities; but we own that we are surprised to find none of them sufficiently impressed with a sense of its necessity, to make some public and persistent effort to force it on the attention of the governing bodies. How many points are there in medicine on which statistics are most useful! how little of such matter exists! and yet what a vast field our London hospitals afford! We do not despair some day of seeing a rational and uniform system replace the present era of carelessness and waste.

In connection with the above case, we have cited another, under Mr. Erichsen's care, at University College Hospital, where the operation was equally well indicated: but the result was rapidly fatal.

This, and another fatal case, which we reported some time ago, are, we believe, the only instances of death which have occurred in Mr. Erichsen's practice.

The case before us shows how great sometimes is the work of an excision, and how serious an operation it is, even in cases where everything seems favourable to it.

UNIVERSITY COLLEGE HOSPITAL.

I. EXCISION OF THE KNEE: DEATH.

Under the Care of J. Erichsen, Esq.

A man named Griffiths, aged 36, was admitted under the care of Mr. Erichsen. He was a farm labourer, rather delicate in aspect, but there was no history of phthisis or strumous affection in his family. About two years and a half ago, he first felt stiffness in the joint. Six months afterwards, this increased to pain, when iodine and poultices were applied, which relieved him. About last Christmas he again felt the stiffness, but with little or no pain, and was able to walk fifteen or twenty miles a-day; but two months ago, he first felt "a jumping sensation" at night, which used to wake him up. The swelling has since then been rapidly increasing, and there has been slight aching pain and loss of sleep, but not much loss of flesh or appetite, nor weakness. About Christmas, he lost the power of extending the joint perfectly, and found much relief in the half flexed position.

On admission, it was found that his appetite was good, his tongue clean, bowels regular, and sleep good; and he said that he felt "better than he ever did." The knee was bent at right angles; the patella was free and moveable. The whole joint was larger than the other (but it should be noticed that the muscles of the affected limb were somewhat atrophied). The swelling was more prominent above than below, and externally than internally; it reached to the lower limit of the ham, and there was soft and fluctuating; elsewhere it was firm, with tenderness on pressure only over the external part. The patient could only move the limb to a slight extent, but passive extension was possible to a rather greater angle. No grating was perceptible, and no cracking noise was heard or felt on movement; but the articulation was very lax. The measurements of the diseased limb were eighteen inches and a half over the patella, and sixteen inches and a half below it; those of the healthy limb fourteen and twelve inches respectively at the corresponding points. Pressure of the tibia and femur together caused great pain, and as the joint was

evidently filled with pus, which was extending down the back of the joint, and would soon find its way into the leg, and as the patient was very anxious to save the limb, it was decided to excise the joint.

Although the patient had the wasted look of phthisis, no physical signs of the disease were detected by the physician. The operation was performed on June 16th. A curved incision was made over the front of the joint, the flap turned up, and the patella dissected out. Nearly a pint of thin pus then gushed out of the joint. The articular ends of the bones were covered with thickened pulpy synovial membrane.

The upper surface of the tibia and the condyles of the femur were removed with Butcher's saw, and a softened patch at the posterior part of the tibia was gouged. One vessel required tying. The limb was then bandaged on McIntyre's splint, as modified by Mr. Price, but it was not finally put up till three hours after the operation. The ends of the bones being very vascular, some time was allowed for the bleeding to cease. The wound was then sponged; six sutures were introduced; the leg was bandaged on to the splint nearly as high as the knee, and the thigh kept firmly on the back splint by means of a padded splint and buckle. In this way the tendency of the lower end of the femur to ride forward was counteracted, and the upper end of the tibia was prevented from falling backwards by means of a pad covered with oiled silk. The whole apparatus was then swung. He dozed, with laudanum, during the night, but had no continuous sleep. He had frequent startings of the knee, and great pain. For some days he went on pretty well, complaining only of extreme weakness, for which quinine and stimulants with good diet were administered. On the 25th, rigor occurred, followed by severe sweating, with great depression, thirst, and restlessness. He went on sinking during the next two days, and died, without any fresh symptoms, on the 27th.

Post mortem examination showed tubercles in the apex of both lungs. There were no secondary deposits.

II. ABSCESS SITUATED WITHIN THE HEAD OF THE RIGHT TIBIA.

Under the Care of R. Quain, Esq.

[*Reported by* F. Winterbottom, Esq., *House-Surgeon.*]

Charles Johnston, aged 31, was admitted into the University College Hospital, May 3, 1859, under the care of Mr. Quain. He was a native of London; a painter by trade. His general health had been good. When twelve years of age he met with an accident whereby he severely twisted his right leg, and bruised the skin over the tibia. He was confined to bed for several weeks, and a number of openings made their appearance over the front of the upper end of the tibia, through which matter and pieces of bone were discharged. Four years and a-half afterwards, he fell down and hurt the right knee, causing considerable swelling and much pain in the head of the tibia. This was poulticed; an abscess formed and burst, and he recovered. Two years ago, while jumping over some barrels, he slipped, and again struck the head of the tibia against the rim of one of the barrels. He entered University College Hospital; the leg was poulticed, and he left well in a fortnight. The limb now remained perfectly well till four weeks ago, when he again began to feel pains in the same situation; these have continued to the present time.

Present state (May 8th). When both legs are laid bare, there is a marked difference perceptible between them; this seems to be confined, however, to the upper half of the tibia. The right one is considerably larger than the left, and is arched forwards, so that the upper part of the bone forms a convexity instead of the slight concavity usually present. When the prominent part of the tibia is pressed upon, the patient complains of great pain. He also states that there is a constant aching in it, and a throbbing sensation, which he compares to the feeling of a gathering in the finger. The patient does not sleep. His face expresses suffering: his appetite is bad. He has had distinct and repeated attacks of sweats and shivering, but none since he has been in the hospital.

May 10th. Mr. Quain made a crucial incision over the anterior and inner surface of the tibia, about two inches below the head, applied a trephine, and removed three-fourths of an inch diameter of the bone. A large quantity of pus immediately swelled up from the bone. The wound was plugged with lint, and a poultice was applied.

May 12th. He was already improved, and slept well. He had no pain in the limb, only a feeling of soreness.

June 14th. Since the above, the patient has been progressing most favourably. The wound is all but closed, and his general health is good. He was discharged, to attend as out-patient. Within a fortnight the wound had completely healed, and the man returned to his work.

Erratum. In the report of a case of strangulated inguinal hernia, under the care of Mr. Hillman at the Westminster Hospital, in the last number of the Journal (p. 789), an error occurs in the description of the operation. The incision is said to have extended "about equally below and above the *in*ternal abdominal ring." This is a misprint for *ex*ternal.

Original Communications.

ON SOME OBSCURE CASES IN MEDICINE.

By M. A. Robinson, Esq., Charing, President of the East Kent Medical Society.

[*Communicated to the Society, May* 1859.]

The most experienced practitioner will frequently meet with cases which present symptoms so extraordinary in themselves, so irregular in succession, or so unusually grouped that he fails to find their correct interpretation. Should a case of this kind terminate fortunately, he gives himself credit for an amount of skill, bearing, probably, too large a proportion to his real knowledge of the disease; while, should the result be otherwise, he waits with no little interest for the scalpel to reveal the value of the conjectures upon which he had founded his treatment. Unquestionably, much of the mystery which surrounds these obscure cases in medicine, proceeds from the natural difficulty attending all inquiries connected with phenomena occurring in the living body. But much also depends on causes within our control, and therefore more or less easily to be avoided. I may mention, for instance, a cursory method of examination which indolence or, less culpably, the hurry of business may lead us to adopt; also, our neglect to renew our fading remembrance of many important points of physiology and pathology, and to extend our acquaintance with discoveries in these and their collateral branches of knowledge, as they are published by their authors; while too often we allow the mind to be led captive by some seductive theory, under whose influence we place a false value on what we see and hear, and not unfrequently, dazzled by imaginary facts, are induced to give to "airy nothing," a name and consideration due only to some grave reality; and last, but not least, I must enumerate amongst the obstacles that beset our way in the toilsome pursuit of truth, a certain evil spirit of self satisfaction and conceit, which often deludes the practitioner into the belief that no one else can comprehend what has baffled his own understanding, and thus shuts him out from the useful light which the experience of another might afford.

This brief review of some of the elements which in many cases, I believe, tend greatly to darken their natural obscurity, is not suggested, as might be imagined, by remorseful meditations on my own mistakes in practice only, but by the recollection of many cases which have occurred in the practice of men of all grades in the profession, and during a very considerable period of time; and it is by a firm conviction that these influences are more prevalent and powerful than we like to own, that I am led to bring before your notice two cases which appear to me to exemplify the necessity of keeping in constant employ those faculties of the mind which are ever required for the elimination of the truth.

I think also that these considerations should lead us, in regarding the errors of our brethren, to cultivate with greater zeal than I fear is our wont, that "most excellent gift of charity," which ought to be as precious to the philosopher as it was to the apostle.

Case 1. The first case I have to mention is one of inflammation, occurring simultaneously, and with inadequate symptoms, in three of the most important serous membranes of the body, and in the lungs.

J. F., aged 32, on March 22nd, 1852, walked to my house, a distance of three miles, and complained of indications, not by any means severe, of influenza, which was then epidemic. He

had slight pleural pain, tightness of breath, and cough, with febrile symptoms. Auscultation and percussion, somewhat hurriedly employed, gave no alarm. Full doses of antimony were given, and he was desired to send should he feel worse. In three days I was informed that he felt better; but that the cough was more troublesome. A slight anodyne was prescribed, and I heard no more until the 31st, when I was hastily summoned, the messenger stating that my patient was in a fit. I found him completely comatose; and in twenty-four hours he died.

I was told by his friends that he had constantly reported himself as improving in health, and that on the morning of the fatal seizure he had risen soon after seven o'clock, taken his breakfast, and then walked out. He soon returned, went up stairs, lay on his bed, and never spoke again.

On inspecting the body, the result of extensive inflammation of the left pleura was found in the firm partial adhesions and fluid effused into the compartments thus formed. The left lung was likewise extensively disorganised, in the form of red and grey softening. The serous covering of the heart was overlaid with a deposit of lymph, and on opening the skull a similar deposit was seen beneath the arachnoid, completely enveloping the brain.

Case II. A farmer, in opulent circumstances, aged 42, stout, but muscular, strongly built, and having every appearance of robust health, in September 1849, first complained of certain uneasy sensations about the chest and epigastrium. The pulse was natural in every respect, the tongue was slightly furred; none of the bodily functions were impaired; indeed, the symptoms observable were only those of mild dyspepsia. The bowels being torpid, alteratives and aperients were given.

September 27th. The feelings of uneasiness had become actually painful, and were especially troublesome when lying in bed. The description given by the patient of his feelings was very indefinite; but he referred the pain chiefly to the left side of the chest, occasionally encircling the body on a level with the apex of the ensiform cartilage. There was no cough, no difficulty of breathing, and yet he complained occasionally of a feeling of tightness. The lungs were well filled at each respiration; the heart was healthy in its action; auscultation and percussion gave no sign. From the pains showing a disposition to increase at night, it was thought best to treat the symptoms as probably of a rheumatic character, and colchicum with magnesia was given. A certain amount of relief followed the use of these means, and being much occupied in business the patient made light of his ailment.

December 12th. The pains had now returned with increased force. At times he had passed the whole night without sleep; but in the day time he felt quite well, with perhaps an occasional twinge. The chest was again carefully examined; but the only result was a barely perceptible dulness of the left side on percussion. Leeches and stimulating embrocations were applied, and colchicum was given internally.

January 1850 was passed in tolerable comfort; but February 11th again brought a visit from the patient. He said that he had been much relieved by eating brown bread; but the pains were again troublesome, and appeared to be more easily defined as proceeding from a spot opposite the fourth or fifth dorsal vertebra. Auscultation again gave no sign. On the supposition that there might be a congested state of the great vessels, diuretics were prescribed, and some little benefit appeared to result from their use.

About March 10th an eminent London physician was consulted. He thought there was nothing the matter, and prescribed for the digestive organs, advising strict attention to diet. The patient was again relieved, the pains subsided, and so did some amount of mental anxiety which had begun to show itself. My own opinion at this time differed materially from that of the other gentlemen engaged in treating the case. The long persistence of the peculiar pains,—their becoming, though gradually, yet decidedly localised,—the fact of posture affecting them,—the freedom of the heart and lungs from all sign of disease,—appeared to point to the occurrence of some growth within the thorax, though as yet its relative position could not be ascertained. Soon after his visit to London, I again examined his chest, and this time was conscious of the existence of an exceedingly slight murmur; so slight, indeed, that I waited for another opportunity of examination before I ventured to make any deduction from it. Still it served to strengthen the suspicions I had begun to form respecting the nature of the case.

From October 10th, 1850, to May 22nd, 1851, I have no record of his state; but I believe that during that period he was tolerably free from any uncomfortable symptoms. At the latter date he again complained of being troubled by some of his old pain; but not in any great degree; and he believed himself to have quite recovered from his original disease.

In July 1851, he had a cough, and was treated with conium and expectorants. The expectoration was at times profuse, and the affection was regarded as bronchitis.

In September, I had the last opportunity of seeing him. He had been seized with violent cough, and sent for assistance in haste. When I arrived at his residence, the attack was over, and he declared himself to be as well as ever he was in his life. Not having seen him for many months, I made a careful exploration of the chest, and now heard distinctly a low deeply seated murmur, synchronous with the pulse, but certainly not proceeding from the heart. It could in my opinion only proceed from something affecting the current of blood through the aorta. The cough was most peculiar in sound, and strongly suggested the idea of some alteration having occurred in the calibre of the tracheal tube. The expectoration was *puriform*. but the lungs and bronchial tubes gave no sign of disease. The cough likewise was paroxysmal; and, judging from the patient's account, convulsive. My suspicions now assumed a more decided character; and I drew the conclusion that a growth of some kind existed in the posterior mediastinum in close relation with the aorta and the trachea; that it pressed on the latter so as considerably to affect its capacity; that suppuration had taken place in it; that a communication had been formed between the suppuratory cavity and the air tube; and that sooner or later the end would be death. I have little doubt that the patient had some notion of the unfavourable tendency of my opinion, as I was from that time carefully excluded from his presence, and saw him no more until, ten months afterwards, I was able at the *post mortem* examination of the body to point out to one of his attendants the precise condition I have named.

By the end of November, the state of the patient was such that the physician before consulted was called from London by telegraph. He pronounced the disease to be tracheal, and prescribed confinement to an apartment of regulated temperature, the local application of nitrate of silver, cod-liver oil to be taken internally, with a long continued course of mercury, opiates to relieve the paroxysms of coughing, and the strict observance of silence, as speaking seemed decidedly injurious. For six months this plan was faithfully carried out; and at the end of this period success apparently crowned the efforts of the physician, and the unwearied attention of a most devoted nurse. The cough gradually became less frequent and alarming; the patient actually grew fat and strong; and, grateful for restoration from so severe an affliction, once more mixed in business with the world. My own opinion, though freely questioned, remained unchanged. I still ventured to assert the inevitable result, and thus it happened.

On Tuesday, July 6th, 1852, he was at market, to all appearance in perfect health. The next day, whilst standing in his own parlour, he suddenly complained of feeling ill, said he was going, and in twenty minutes ceased to live.

I was fortunately permitted to inspect the body. The lungs and heart were sound, as I expected would be the case, some slight adhesion of the left pleura being the only morbid appearance connected with them. Closely united with the spinal column, from the fourth to about the sixth dorsal vertebra, was an aneurism of the descending aorta. Anteriorly, the tumour projected so as to put the trachea on the stretch, and alter the form of its tube to a remarkable degree. The proper coats of the vessel had disappeared, except at the lateral parts of the aneurism, where some strength of material was requisite to control the current of blood passing downwards. The channel for the vital fluid was thus bounded posteriorly by the bare and hollowed out bodies of the vertebræ, anteriorly by the laminated coagula, and laterally, and but for a very small space by the strong coats of the aorta, which, adherent behind to the bone, in front gradually thinned out into an exceedingly delicate membrane which covered the anterior convexity of the coagula. Beneath this membrane and upon the coagula lay a quantity, quite a tablespoonful, of well formed pus, while a small hole formed a communication between the cavity thus discovered, and the trachea, allowing in this manner the matter formed on the aneurism to drop as it were as circumstances might occur, into the respiratory tubes. There was no extravasation of blood, no escape of pus into the windpipe, to account for so sudden a death; and the immediate cause of this event is still unknown. The aorta was thickly lined throughout its extent with scales of calcareous deposit,

giving to the finger the sensation of passing over a nutmeg-grater, and its inner membrane was of a most brilliant scarlet hue.

ILLUSTRATION OF AN OBSCURE JOINT-AFFECTION.

By Alfred Fleischmann, Esq., Gresford Cottage, Wrexham.

John Davis, aged 2½ years, a strumous-looking child, delicate from birth, about four months ago, fell off a low wall. The injury he experienced appeared insignificant, and was forgotten in a day or two, till six weeks after the accident, he slightly halted in his walk; the defect increased, until he ceased to put one leg before the other, and progressed by crawling. Following the advice they received, the limb was poulticed; but the child getting worse, I was ultimately called in. He was lying on a bed wailing and listless, evidently ill, and independently, or concomitantly at least with the hip-affection, was suffering from what is so common in children, irritation of the alimentary (mucous) tract, evinced chiefly by a morbidly bright tongue, the papillæ standing out in relief, by constant irritable pricking of the mucous outlets of the body, by a varying appetite, and by remittent evening fever. This may or may not be attended with the presence of intestinal worms, very frequently not; it is easily cured by small doses of dilute nitric acid and an occasional alterative purge.

Proceeding to examine the faulty joint, I was struck with the peculiar attitude, on assuming the erect posture; the leg (the left) was somewhat advanced, but at the same time the *whole* plantar surface of the foot was in contact with the floor. Occasionally, the foot and leg were inverted, the sole of the foot resting high up upon the dorsum of the other. The buttock was flabby *and its fold absent*. There was tumefaction in the line of the inguinal canal, but no fluctuation or hernia. The left leg was about half an inch longer than the sound one, and I fancied slightly atrophied. There was uneasiness but not pain in abduction; eversion and percussion were borne without much flinching. The child never complained of actual pain, but spoke generally of his "poorly leg".

Was it a case of dislocation, morbus coxarius, or simply muscular and ligamentous debility? Although the crossing of one foot on the dorsum of the other is a prominent feature in a dislocation but not in hip-joint disease, it was clearly not the former; the movements of the limb, and freedom from lameness for some time after the fall, decided that. Was it incipient hip-disease? There was some tumefaction in the neighbourhood of the anterior aspect of the joint, there was slight lengthening of the limb, the gluteal fold was lost, and slight uneasiness was felt in abduction; but the great feature of the disease, actual *pain*, was wanting; no constant pain; no pain in forcible contact of the femoral head and the cotyloid cavity; no pain in rotation.

If it were morbus coxarius, much depended on taking it in an early stage; but I determined to improve the child's general condition and think over the case, before I condemned the patient to a long durance and the limb to a straight splint. I gave the mother charge to let it rest as much as possible, put it upon the medicine I before indicated, and saw it again in a week; I was much pleased to find the aspect of the child entirely changed; from being dull and listless, it was bright and intelligent; the signs and symptoms were all mitigated, and though it still limped and placed the limb in suspicious postures, he could bear his whole weight on the affected side without uneasiness or reluctance.

He was ordered a morning douche, and the acid was changed for cod-liver oil. He is now perfectly well.

Remarks. On a superficial examination, one might easily have given an opinion in favour of hip-joint disease. There is no department of surgery requiring more careful study, none where disease or injury is so often obscure or simulated, and none where more mistakes are oftener made, than in the different joint and bone affections. How often has an hysterical girl been leeched and blistered, and burnt and bullied, when a shower-bath would have cured her! How often has a knee been poulticed, when a hip should have been blistered; how often has a hip been blistered, when poultices should have been used; and how often have pulleys been used, when splints were required! As Dr. Druitt wittily says, it is rather an awkward mistake to order a young lady horse-exercise for hysteria, and then to find out that she is suffering from a carious spine.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY

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Lecture IV.

Urine in Disease. *Arrangement of the Subject. Diathesis.* Excess or Deficiency of Water and the Organic Constituents present in Health. *Excess of Water: Diabetes Insipidus: Deficiency of Water: Increased Acidity of Urine: Principles of Treatment: Nitric Acid in the Urine: Ammonia: on Detecting Urea in the Blood or Serum: on Detecting Ammonia in the Breath: Urea; Excess of Urea; Deficiency of Urea: Colouring Matter: Excess of Uric Acid and Urates: Principles of Treatment: Extractive Matters: General Remarks on the Increase of the Organic Constituents, with Analyses: Analyses of Urine in Chorea: Analyses of Urine in Skin-Disease.* Excess or Deficiency of the Inorganic Constituents present in Health. *Chloride of Sodium; its Diminution in Acute Inflammations: Sulphates; Increase in Cases of Chorea, Rheumatic Fever, etc.: Influence of Remedies: Alkaline Phosphates; Increased Secretion of Alkaline Phosphates in Inflammation of the Brain; Analyses; Earthy Phosphates; Increase in the Urine of Cases of Mollities Ossium; Analyses.*

Excess or Deficiency of Water and the Organic Constituents.

[*Continued from page 760.*]

Urea. From what has been already said with reference to the variations in the proportion of urea secreted, under different circumstances, in a state of health, it will be inferred that, in disease, the quantity of this constituent varies greatly. The total amount formed in a given time may be much greater or less than in health; and the proportion which this substance bears to the other organic constituents varies greatly in different cases.

Increase of Urea. The term "excess of urea" is not applied to those cases in which the total quantity excreted in the twenty-four hours is much greater than in health; but a specimen of urine which yields crystals of nitrate of urea when an equal bulk of nitric acid is added to it in the cold, without having been previously concentrated, is said to contain "excess of urea". The quantity of urea dissolved in the fluid is so great that a nitrate of urea is formed, and crystallises just as if the urine had been concentrated by evaporation. This result may be brought about in several ways. In cases in which but a small quantity of fluid is taken in proportion to the urea to be removed—when an unusually large amount of water escapes by the skin and other emunctories—and in cases in which an unusual amount of urea is formed in the organism, we shall frequently find excess of urea.

There is, however, another class of cases in which the urine often contains this excess of urea; and it is difficult to offer a satisfactory explanation of the excess. The patient is weak, and grows thin, in spite of taking a considerable quantity of the most nutritious food. He feels languid, and indisposed to take active exercise. In some cases, digestion is impaired; in others, the patient eats well, experiences no pain or uneasiness after food, and perhaps has a good appetite. Sometimes there is lumbar pain. It would seem that much of the albuminous substances in the blood, instead of being applied to the nutrition of the tissues, becomes too rapidly converted into urea, and is excreted. The waste of the tissues is not properly repaired, and the patient gets very thin. To refer these symptoms to the existence of a particular diathesis, appears to me no explanation of the nature of the case. The pathology of these remarkable cases has not yet been satisfactorily investigated. Mineral acids, rest, shower-baths, and good air, often do good; but some of these patients are not in the least benefited by remedies, and they continue for years very thin, passing

large quantities of highly concentrated urine, while the appetite remains good, and they digest a considerable quantity of nitrogenous foods. I am now trying, in one of these cases, which has resisted the usual plans of treatment, the effect of pepsine, with diminished quantity of meat, and a larger amount of farinaceous food. The condition often lasts for some years, and then the patient's health improves, and he gets quite well.

Dr. Golding Bird has drawn attention to the frequency of the occurrence of excess of urea with oxalate of lime. The quantity of oxalate of lime, however, is in all cases so very small that it is hardly possible to believe that the formation of this substance can be very important. We shall see that oxalate is one of the commonest urinary deposits; that it results from decomposition; that there is no reason for believing it to be indicative of any peculiar diathesis or habit of body. Excess of urea affords no explanation of the presence of oxalate of lime, nor this latter of urea. Each condition may exist without the other. *Cæteris paribus*, we should expect to find oxalate of lime most frequently present in specimens of highly concentrated urine.

Excess of urea is frequently found in the urine of persons suffering from acute febrile attacks. It is very common in cases of acute rheumatism, and is often met with in pneumonia and acute febrile conditions generally. In England, we meet with many of these cases; but, on the continent, they appear to be so rare that many authorities seem to doubt the truth of what English observers have stated with regard to this point. Lehmann, I think, states that he had not seen a case in which crystals of nitrate of urea were thrown down upon the addition of nitric acid, without previous concentration.

The amount of urea excreted is often very great. Vogel mentions a case of pyæmia in which 1235 grains of urea were removed in the course of twenty-four hours. Dr. Parkes obtained as much as 885 grains in a case of typhoid fever. These quantities are very great, if the patients were of the average weight of adult men; but, unfortunately, their weight was not recorded.

Urine containing excess of urea is generally perfectly clear, of rather a dark yellow colour, and of a strong urinous smell. Its specific gravity is about 1030, and it contains generally 50 or 60 grains, or more, of solid matter per 1000. At ordinary temperatures, an aqueous solution must contain at least 60 grains of urea per 1000, to form crystals of the nitrate upon the addition of nitric acid without previous evaporation; 50 grains of urea per 1000 hardly gave the slightest precipitate after the lapse of a considerable time. It would seem that the salts, extractive matters, etc., in urine, cause the crystallisation of the nitrate when even a smaller quantity of urea is present. It should be mentioned, that the above experiments were performed in the summer, in very hot weather. In one case, in which the urea readily crystallised on the addition of nitric acid, the urine had a specific gravity of 1028, and contained—

Analysis 2.

Water	940·18
Solid Matter	59·82
Organic Matter	50·57
Fixed Salts.	9·25

Much has already been said with regard to the circumstances which cause a diminished quantity of urea in health (page 368). I may remark here, that Dr. E. Smith holds that tea and coffee excite respiration and increase the quantity of carbonic acid; that tea increases waste, and excites every function in the body; and that it is, therefore, injurious to those who are not well fed. These conclusions are at variance with the results of the laborious investigations of Dr. Böcker, who found that tea caused a diminution in the quantity of perspiration, urea, and the fæces. He states that it does not influence the amount of carbonic acid formed, nor the frequency of the pulse or respiration; and that, when the diet was insufficient, tea prevented the loss of weight being so great as it would have been otherwise.

In chronic disease of the kidney, the urine is of very low specific gravity, and but a very small proportion of urea is excreted in the twenty-four hours. This arises from the alteration in the gland-structure, and the amount of urea separated may be regarded as a rough indication of the extent of the organ involved. In some cases, the morbid condition affects the whole structure; but in others the greater part of the kidney remains healthy. In the latter case, a fair amount of urea will be excreted; and, although the urine contains albumen, the case may be looked upon as a hopeful one.

In certain cases, urea almost entirely disappears from the urine, and is replaced by leucine and tyrosine. Frerichs mentions a case of acute yellow atrophy of the liver, in which only a trace of urea could be detected, while a very large quantity of leucine and tyrosine crystallised from the concentrated urine. (*Klinik der Leberkrankheiten. Erster band. Seite* 221.) In low forms of typhoid fever, the urine also frequently yields leucine and tyrosine in considerable quantity.

Colouring Matter. The variation of colour of the urine in disease is a matter of great interest; and, although the causes of the change, and the exact nature of the substances which give rise to the peculiar tints often observed, are not yet understood, still there are many valuable observations connected with this subject, some of which I propose to refer to in this place. The colour of urine depending upon blood-corpuscles will be discussed under the head of urinary deposits, and now I shall only refer to colouring matters formed in the body and excreted in *solution* in the urine. It should be observed, that pyrola, sumach, and some other substances, alter the colour of the urine. Dr. Hughes mentions cases of dark pigment occurring in the urine of patients taking iodine. These cases, however, are of course not dependent upon morbid changes in the organism.

The principal substance to which the colour of urine is due is probably derived from the blood-corpuscles, which are continually undergoing disintegration. This colouring matter becomes altered under different conditions. Much of it is converted into a colouring matter which is separated in the urine, and termed uræmatine (uraphæin, hæmaphine), which is soluble in ether, and, according to the researches of Dr. Harley, is a resinous body, agreeing in some of its characters with the biliary resins.

It is impossible to estimate directly the quantity of the colouring matter present; but Professor Vogel calculates the proportion by ascertaining how much water may be added to the urine to produce a particular tint, which is arbitrarily fixed as the unit of comparison. The quantity of this substance affords an indication of the activity of the disintegration of the blood-corpuscles. In typhoid fever and many other conditions, this disintegration takes place to such an extent as to produce an anæmic condition. In many acute diseases, a very large amount of colouring matter occurs in the urine. In the same cases, urea is not unfrequently present in excess, as in pneumonia, typhus fever, acute rheumatism, etc. The formation of the urine-pigment is intimately connected with the action of the liver; and, as is well known, in diseases of this organ, the urine is frequently very high coloured. Of course, I am speaking of colour independent of the colouring matter of the bile. The colour of the urine in diseases of the liver has been often remarked by physicians practising in India; and quite recently my friend Dr. Payne has made some interesting observations on this point, which will be found in the *Indian Annals of Medical Science* (Calcutta, Sept. 4th, 1858). In order to detect the colouring matter, Dr. Payne boils the urine, and then adds a drop of nitric acid. Various shades of colour are produced, but at last the mixture becomes of a ruby red. Deficiency of colouring matter occurs in many cases of anæmia. Sometimes the urine is as pale as water.

Heller's observations upon the colouring matter have been alluded to. This observer found more uroxanthine (which may be decomposed into indigo blue or uroglaucine, and indigo red or urrhodine) in the urine of persons suffering from diseases of the serous membranes, of the kidneys, and of the spinal marrow, than in the healthy secretion. Schunk, who first separated indigo blue and indigo red, and showed their identity with Heller's uroglaucine and urrhodine, found as much uroxanthine or indican in healthy as in morbid specimens of urine, and he detected it in the urine of thirty-nine persons out of forty. The quantity of this colouring matter is exceedingly small. Schunk, by working on the urine of two persons for several weeks, only obtained one grain of indigo blue.

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third of its volume of sulphuric acid, specific gravity 1830, is then allowed to subside to the lower part by letting it fall gradually down the side of the tube; the acid and urine should then be mixed well together. The colour produced varies from a faint pink or lilac to a deep indigo blue colour.

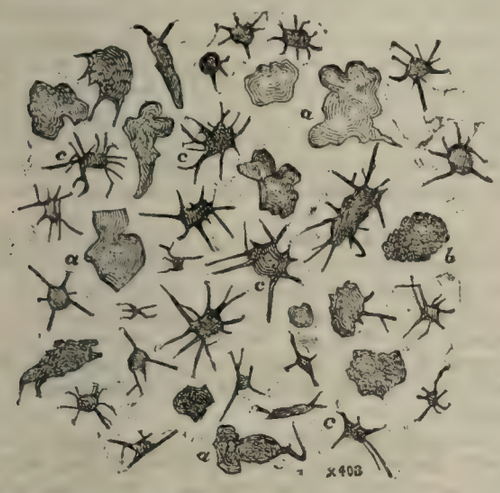


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Process. The serum was poured off, and a strong solution of diacetate of lead added to it as long as a precipitate was produced. The mixture was then thrown upon a linen filter, and the filtrate was brought to the boiling-point as rapidly as possible in a small flask, in order to coagulate the albumen that had not been precipitated by the lead salt. The solution was then filtered through paper into a vessel placed in cold water; and, when the liquid was cold, a slight excess of caustic ammonia was added. The deposit thus produced, when collected and slightly washed with water, was of a faint yellowish buff colour. The moist precipitate, upon being treated with excess of concentrated sulphuric acid, developed a distinct red colour, owing to the formation of indigo red. The colour was taken up by ether, after the acid had been neutralised by ammonia. The oxide of lead precipitate, from an ounce and a half of blood-serum from a man, forty-three years of age, suffering from acute pleurisy, struck with the acid a distinct lavender colour, which in half an hour passed into a deep red purple. (*On Indican in the Blood and Urine*, by J. A. Carter, M.D.; *Edinburgh Medical Journal*, August 1859.)

The Colouring Matter of the Blood-Corpuscles may be present in urine without any corpuscles. In many cases, owing to the rapid disintegration of blood-corpuscles, the serum is highly coloured. It is probable that the dissolved colouring matter may be sometimes excreted by the kidneys. As Dr. Thudichum has suggested, blood may escape from the vessels into the tubes of the kidney; and the corpuscles entangled in casts may gradually become disintegrated, and their colouring matter be dissolved by the urine afterwards. The hæmatoglobuline coagulates at a temperature of about 200°, while albumen is precipitated at a temperature a little above 140°. In this manner they may be distinguished.

There can be little doubt that both the colouring matter of the bile and of the urine are derived from that of the blood-corpuscles. The precise manner in which the change is accomplished has not yet been demonstrated, but it is not improbable that careful observations upon the urine in disease would lead to a solution of this question. That bile-acids and their salts were powerful solvents of blood-corpuscles, was long ago proved by Hühnefield, Plattner, and Simon; and it has lately been shown by Kühne that, by the action of the colourless biliary acids or their salts upon the blood-corpuscles, bile-colouring matter is produced. The bile-acids themselves are not converted into the colouring matter, as Frerichs held; for they pass through the system unchanged. Now, in certain cases where these processes are deranged, it is very probable that the blood-corpuscles are disintegrated in abnormal quantity, and rapidly converted into pigment, which escapes in the urine. The complicated mutual reactions which would ensue when varying proportions of biliary acids, hæmatine, and oxygen, are presented to each other in the living blood, would fully account for the different characters and tints which the colouring matters in urine assume in various cases. Professor Vogel gives a case in which the colour of the urine became very dark after the inhalation of arseniuretted hydrogen. Some experiments were made upon a dog, and it was found that the dark colour was due to the disintegration of blood-corpuscles. Albumen was present, but no blood-corpuscles could be detected. A similar disintegration of blood-corpuscles seems to take place in typhoid fever, and in several other diseases.

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By Frederick G. Harcourt, Esq.

[*Continued from page* 781.]

VII.—Malignant Diseases.

Three Cases of Cancer. On November 17th, Mr. Harrinson related the histories of three deaths from cancer which had occurred to him within the last few weeks. He presented a specimen of one, and gave a short account of the others.

Case 1. The first case was in a gentleman who had enjoyed unbroken health, with the exception of a winter cough and the infirmities incumbent on eighty-two years of age. For some years he had had an external pile, which latterly had become unusually large and painful, and had bled. He requested an examination of it. On inspection, Mr. Harrinson found a fungous mass, three-fourths of an inch long and half an inch wide, ulcerated, spongy, and granular. It presented an appearance which left, in Mr. Harrinson's opinion, no room for doubt as to its nature. In a few weeks, the patient directed Mr. Harrinson's attention to an inguinal gland on the left side, which annoyed him by its tenderness and surprised him by its

large quantities of highly concentrated urine, while the appetite remains good, and they digest a considerable quantity of nitrogenous foods. I am now trying, in one of these cases, which has resisted the usual plans of treatment, the effect of pepsine, with diminished quantity of meat, and a larger amount of farinaceous food. The condition often lasts for some years, and then the patient's health improves, and he gets quite well.

Dr. Golding Bird has drawn attention to the frequency of the occurrence of excess of urea with oxalate of lime. The quantity of oxalate of lime, however, is in all cases so very small that it is hardly possible to believe that the formation of this substance can be very important. We shall see that oxalate is one of the commonest urinary deposits; that it results from decomposition; that there is no reason for believing it to be indicative of any peculiar diathesis or habit of body. Excess of urea affords no explanation of the presence of oxalate of lime, nor this latter of urea. Each condition may exist without the other. *Cæteris paribus*, we should expect to find oxalate of lime most frequently present in specimens of highly concentrated urine.

Excess of urea is frequently found in the urine of persons suffering from acute febrile attacks. It is very common in cases of acute rheumatism, and is often met with in pneumonia and acute febrile conditions generally. In England, we meet with many of these cases; but, on the continent, they appear to be so rare that many authorities seem to doubt the truth of what English observers have stated with regard to this point. Lehmann, I think, states that he had not seen a case in which crystals of nitrate of urea were thrown down upon the addition of nitric acid, without previous concentration.

The amount of urea excreted is often very great. Vogel mentions a case of pyæmia in which 1235 grains of urea were removed in the course of twenty-four hours. Dr. Parkes obtained as much as 885 grains in a case of typhoid fever. These quantities are very great, if the patients were of the average weight of adult men; but, unfortunately, their weight was not recorded.

Urine containing excess of urea is generally perfectly clear, of rather a dark yellow colour, and of a strong urinous smell. Its specific gravity is about 1030, and it contains generally 50 or 60 grains, or more, of solid matter per 1000. At ordinary temperatures, an aqueous solution must contain at least 60 grains of urea per 1000, to form crystals of the nitrate upon the addition of nitric acid without previous evaporation; 50 grains of urea per 1000 hardly gave the slightest precipitate after the lapse of a considerable time. It would seem that the salts, extractive matters, etc., in urine, cause the crystallisation of the nitrate when even a smaller quantity of urea is present. It should be mentioned, that the above experiments were performed in the summer, in very hot weather. In one case, in which the urea readily crystallised on the addition of nitric acid, the urine had a specific gravity of 1028, and contained—

Analysis 2.

Water	940·18
Solid Matter	59·82
Organic Matter	50·57
Fixed Salts.	9·25

Much has already been said with regard to the circumstances which cause a diminished quantity of urea in health (page 368). I may remark here, that Dr. E. Smith holds that tea and coffee excite respiration and increase the quantity of carbonic acid; that tea increases waste, and excites every function in the body; and that it is, therefore, injurious to those who are not well fed. These conclusions are at variance with the results of the laborious investigations of Dr. Böcker, who found that tea caused a diminution in the quantity of perspiration, urea, and the fæces. He states that it does not influence the amount of carbonic acid formed, nor the frequency of the pulse or respiration; and that, when the diet was insufficient, tea prevented the loss of weight being so great as it would have been otherwise.

In chronic disease of the kidney, the urine is of very low specific gravity, and but a very small proportion of urea is excreted in the twenty-four hours. This arises from the alteration in the gland-structure, and the amount of urea separated may be regarded as a rough indication of the extent of the organ involved. In some cases, the morbid condition affects the whole structure; but in others the greater part of the kidney remains healthy. In the latter case, a fair amount of urea will be excreted; and, although the urine contains albumen, the case may be looked upon as a hopeful one.

In certain cases, urea almost entirely disappears from the urine, and is replaced by leucine and tyrosine. Frerichs mentions a case of acute yellow atrophy of the liver, in which only a trace of urea could be detected, while a very large quantity of leucine and tyrosine crystallised from the concentrated urine. (*Klinik der Leberkrankheiten. Erster band. Seite* 221.) In low forms of typhoid fever, the urine also frequently yields leucine and tyrosine in considerable quantity.

Colouring Matter. The variation of colour of the urine in disease is a matter of great interest; and, although the causes of the change, and the exact nature of the substances which give rise to the peculiar tints often observed, are not yet understood, still there are many valuable observations connected with this subject, some of which I propose to refer to in this place. The colour of urine depending upon blood-corpuscles will be discussed under the head of urinary deposits, and now I shall only refer to colouring matters formed in the body and excreted in *solution* in the urine. It should be observed, that pyrola, sumach, and some other substances, alter the colour of the urine. Dr. Hughes mentions cases of dark pigment occurring in the urine of patients taking iodine. These cases, however, are of course not dependent upon morbid changes in the organism.

The principal substance to which the colour of urine is due is probably derived from the blood-corpuscles, which are continually undergoing disintegration. This colouring matter becomes altered under different conditions. Much of it is converted into a colouring matter which is separated in the urine, and termed uræmatine (uraphæin, hæmaphine), which is soluble in ether, and, according to the researches of Dr. Harley, is a resinous body, agreeing in some of its characters with the biliary resins.

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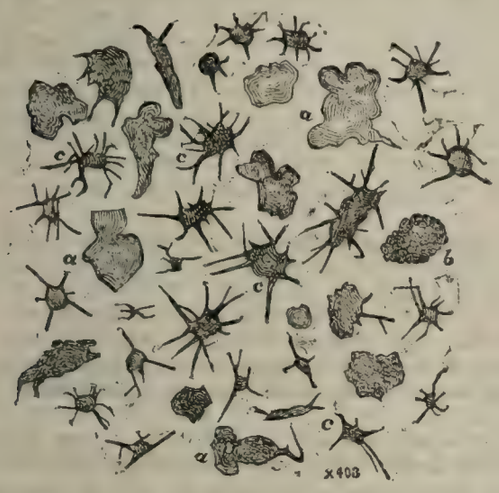


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which so much of the comfort of the patients depended, before the close of the current year. At present it seemed uncertain how much delay would intervene before the much desired object was attained. Dr. Miller concluded with some words of congratulation and encouragement to the students.

WESTMINSTER HOSPITAL.

Dr. J. Russell Reynolds delivered the introductory address on October 3. The aim of the student of medicine, he said, was so to learn the facts and laws of life on both health and disease, as to utilise this knowledge in every way, and to the highest degree, for his fellow men. The subject matter of his study, then, was "Life." There were many things with regard to which we knew much, although we might be unable to define them. Definition was more than a mere means of recognition, it was the statement of that which distinguished one object from all others. Definitions of life, although defective, indicated the directions along which investigation had proceeded, and a choice of one or the other would materially influence the nature of their study. But no one was satisfactory; and the value of the several different kinds of definition which had been attempted was in their directing special attention to some striking feature of life, and in their being regarded as finger-posts pointing towards some central truth as yet undiscovered. Life embraced much more than it sometimes appeared to do in the physiological handbook. In it was wrapped up the being and destiny of humanity. It was to be studied in the depths of consciousness as well as in the theatre or dissecting-room; it was to be seen in the hearts and minds of patients, as well as in their limbs and viscera. The measure of disease was not the physical signs thereof, not the wasting body, nor the fluttering pulse, but the degree to which it so told upon the mind and heart, the will and power of man, that it prevented him from doing the work in this world which it had been given him to do. The essence of life passed knowledge, but they might learn facts about it. They might know of life just that which they might know in regard of heat, light, electricity, etc. Fact was a word used in two senses. There were facts of nature and facts of science. The former were the actual occurrences. The correspondence between these two classes was not absolutely correct. The facts of nature were unchangeable; those of science changed year by year. For the observation of the fact of life great care, and also special education, were required, such as a knowledge of physics, chemistry, etc. Certain fallacies were to be avoided. Fancies were not to be taken for fact, mere fictions of the mind having no counterpart in nature. The words "hysteria" and "rheumatic" were daily used without even an approximation to a meaning, and without any shadow of belief that the aches and pains so denominated had any relation to that which was denoted by the words rheumatism and hysteria respectively. They were but the clothing of ignorance in verbal finery. Fact was not to be confounded with hypothesis. The latter was useful, and was constantly present in all systems of classification. As science advanced, the number of hypotheses diminished; but their presence was of great utility in forming provisional groups of phenomena, and probably they must always exist; but they were not to be confounded with fact, they were not to be at variance with fact, and they were to be only of such nature that their verification was possible by observation. Again, opinions were not facts, and must be distinctly separated from them. A want of this separation had been at the root of much evil arising during the course of judicial investigations in regard of suspected lunacy or poisoning. Scientific facts and opinions were given in evidence; neither element could be excluded; but they should be much more carefully distinguished from each other. Facts should not be confounded with half truths; neither those only on one side of a question, or parts of those on both sides. To rest contented with the former kind of half knowledge was the sign of prejudice; to them only the latter kind was the evidence of indifference. Besides the facts, there were the laws of life, and these were parts of the subject matter of medical study. There were two classes of law, namely, moral or social, and physical or natural; and these were, according to some authors, distinguished from each other by the presence of the idea of enactment in accordance with the will of a being or institution in the one class, and the absence of such idea from the other. The difference, however, did not lie here, but in the fact that the one class of laws could be broken by man, and that the other could not. In each class there were of necessity the ideas of will and coercion, for these were inseparable from the nature of law. Whensoever they had arrived at the discovery of a law, the irresistible belief was that they had discovered part of a plan which embraced more, and was other than the particular phenomena under consideration. Here sequence was not law. The generalisation of sequence was not necessarily the statement of a law. If Big Ben and his satellites kept true for centuries to come (unhappily not now the case), until the wellknown "traveller from New Zealand" commenced his sketch from a broken arch of London Bridge, this long-tried and invariable sequence would but demonstrate the existence of a law to the effect that a certain position of the sun was necessarily associated with a certain chiming of bells. Law was not to be assumed to exist from mere accidental coincidence, neither was it to be confounded with speculation, nor with statistical results of law. "The "numerical method" in studying disease was of much utility. By it error was eliminated, and the direction in which truth lay was pointed out; but the statement of a percentage was not the utterance of a law. The laws of nature were true at all magnitudes, times, and distances. The law of gravitation was true of two grains of sand, or of two planets in the solar system. The laws of probability in regard of railway accident, for example, may be true of different groups of ten thousand travellers; but applied to the individual in the same proportion, if he lose only a fraction of his finger-nail as the result of a collision, yet they knew he might lose his head. There was a certain point beyond which statistical laws became of necessity either untrue or absurd. If twenty-five per cent. suffered a particular symptom in a particular disease, an individual ought to present only a quarter of that symptom; but they said the chances were three to one against its appearance. In saying this, they showed that they had left the region of law, and had entered that of "probability." Statistics became true or uniform only when arrived at from such large numbers that all conditions of variations were included. They had, therefore, no direct application to the individual. If individual chances could be known beforehand, the law of probabilities would lose its value. For the reconsideration of your aim, no time was more appropriate than the commencement of a new period of your work; but if you advance in this work, in proportion to the rate of your progress will it become every year more important that you should take this review. For at every step in our upward progress towards some height of science the horizon widened, and with new wonders and new beauties there were new elements of confusion, and they might be baffled by the very largeness of the view. Passing onwards, they saw beyond some clear and hitherto limiting line. There were depths into which their vision could not penetrate further than to see that they contained, in lavish profusion, wonders and beauties equal to those around them. The summit of yesterday was but the starting-point of to-day's exertions, and, as the circle enlarged, it was at its circumference that the increase lay. The rate of increase was accelerated, and the objects that surrounded them seemed infinite and overwhelming by their largeness, their number, and the marvellous intricacy of their combination. Life was too short to see them all, and they must choose their path. They must leave much unseen, still more unthought of, and an infinitude unknown. For as they ascended still higher they caught glimpses of the far-off sea, the infinite, unfathomable unknown, that mighty ocean of unknown length that lay beyond and beneath all our knowings, which confounded and wrecked every venturous bark that launched forth upon its mighty waves,—that vast waste of waters, sometimes dreary and doleful as the grave, but at others bright and teeming as the sky; sometimes blazing with the sunlight, and again silent and sorrowful as the pale light of stars. It is only, said Dr. Reynolds, when we have attained and can look out from some height of science, that we begin to know how vast is the unknown, and how, compared with it, dwindle into nothingness the little stores we have gained. The mightiest of philosophers felt that he was but as a child gathering pebbles on the shore of that boundless sea. But we have to come down from these heights to everyday life and work, to know how to advance, and rejoice in the vision that each day's scientific progress yields, but at the same time to find among the wide fields of scientific fact those principles which shall guide us in the prosecution of our real life-work,—the alleviation of the sorrows and sufferings of humanity. These principles you must learn by means beside those of chemical experiments and dissection. You must learn them in the hearts and lives of your fellow-men. You must come to know the meaning of the infant's look; to understand the tone and teaching of its cry. You must appreciate the patience and long-suffering of woman, and the hardihood and rough exterior

of man. You must look and see beneath these, if you would measure the true degree of their affliction. You must learn to feel with and understand the feebleness of age, and gain all that is required for your ministration to its wants from those hints which come to you through the failing powers and closing avenues of a soul that has for a long time battled with a world too rough. True sympathy will reveal much to you that science cannot see. Wherever there is life, there is your field of study; wherever there is suffering, there is your field of work: and truly to relieve its burden, your spirit must be that of Him whose life was *the* perfect life, whose presence and word brought peace and health, and into whose work in this world it is our highest aim and highest dignity to enter.

GUY'S HOSPITAL.

The introductory lecture was delivered on October 1st, by Dr. Habershon. He spoke of the varied aspects of the medical profession, and referred to some of the reasons which induced many to join its ranks; as, for instance, the opportunities it afforded of acquiring position and honourable status in society, and of obtaining wealth or a competency in life. He then dwelt briefly upon the varied subjects of scientific inquiry within its sphere, and the interest of the allied sciences. It was then compared with other professions, in its laborious work and benevolent character having a reward in itself, and elevating man's noblest faculties whilst it benefited others; in its highest aspect, it was the pioneer of the gospel of Christ. The external benefits of the profession were then shown to be accompanied with intrinsic good to the practitioner of its science, and the mental culture and exercise which its study afforded were regarded as a superior attainment, and the source of greater satisfaction than the attainment of truth itself. The vigorous mental exercise in attaining knowledge, rather than the mere collation of facts, was represented to be the object of education. It was then shown that medicine had been influenced at every period of its history by the condition of science generally, as existing at that particular time; that the Greek and Roman philosophies had modified, in their time, medical opinions; that great advances in mathematical science had exerted their influence; the philosophy of Bacon had prepared the way for Sydenham, and the revival in other sciences had been simultaneous with the brilliant discoveries of Hunter. The development of general laws was then shown to have had a greater influence in other sciences, in enabling them to lay aside the encumbrances of earlier periods; modes of thought and research were regarded as receiving the impress of national peculiarities, and it was argued that in individual investigations the characteristics of each mind were manifested. The slower method of inductive philosophy was urged, rather than mere hasty generalisation; but the injury of incorrect statistics in misleading the mind, and retarding the advance of science, was also shown. The intimate connection of other sciences, those of mechanics and statics, of chemistry and of electricity, were then referred to, and man shown to be more than a mere mechanism—an intelligent, thinking being. The importance of bearing this fact in mind in the application of science to the treatment of disease, as well as in explaining the apparent uncertainties of daily practice, was dwelt upon. In the mode of commencing the study of the profession, the great desirability of not undertaking too much at once, but of doing everything well, and the right division of labour, were strongly urged. The value of self-reliance in thought, observation, and practice, and especially of sterling morality and true religion, in promoting earnestness in study, and happiness in life and heart, were dwelt upon. The stability of moral as well as of physical laws, and their certain results were alluded to; and, in conclusion, the lecturer adverted to the influence which one mind must ever exert upon another in the mutual intercourse of daily life and study.

MIDDLESEX HOSPITAL.

The inaugural address was delivered on October 3rd, by Mr. Mitchell Henry. After some preliminary remarks, he said that he would simply bring together those thoughts which naturally suggested themselves when they reflected that many amongst them were just now commencing the great business of their lives, the work for which all their previous education had been but a preparation—that work which, if they rightly interpreted the decrees of the Omnipotent, they came into the world to do. He had no hesitation in telling them that in most, if not in all respects, the mental and moral qualifications with which they must enter upon their campaign, if they would end it triumphantly, were precisely those that were essential to success in any calling of life. They might inquire, therefore, what qualities had attended the most distinguished men in all professions, in order to see whether there were not some one or more characteristics common to all. What was it, he would ask, that made Xavier and Schwartz, each in his respective church, the most glorious of missionaries; Luther the most formidable of reformers; Bunyan and Wesley among the most influential of religious teachers? What was it that inspired the courage and foreshadowed the successes of an Alexander, a Hannibal, a Cæsar, and a Napoleon? What was it that made Cromwell at once the most successful of generals and the wisest of statesmen? What was it that embalmed the memories of Socrates, and Newton, and Milton, and Johnson, and Herschell? What was it that gave the ermine to Eldon, and Thurlow, and Ellenborough? What was it that enabled Arkwright, and Watt, and Stephenson, to revolutionise the physical world? What was it that, in their own profession, had rendered the names of Sydenham, and Harvey, and Hunter, and Jenner, familiar as household words. It was—and it might be taken by the gentlemen before him as a most solemn truth, and the history of those men proclaimed it—that they possessed earnestness of purpose. So must it be with the students before him—so must it be with the students of divinity and law—so with the soldier and the merchant—so in every calling in life. This should be their motto, "Whatever thy hand findeth to do, do it with thy might; work while it is day; the night cometh when no man can work." "Now" was their day; let them perform their task with diligence and earnestness, and show that they were men. More than two thousand years ago, Socrates proclaimed, in language fitted for all time, "The best man, and most beloved by the gods, is he who, as a husbandman, performs all the duties of husbandry; as a surgeon, those of the medical art; in political life, his duty towards the commonwealth; but the man who does nothing well is neither useful, nor agreeable to the gods." Together with earnestness, they must bring a real love of truth—a quality scarcer, perhaps than even the former. The love of truth for its own sake was amidst the rarest of human endowments, yet without it no man could be truly great. The habit of looking at things straightforwardly in the face was, of all others, essential to the practitioner of medicine. Disease made no allowances. They could get no secrets from nature unless they interrogated her as honest as well as humble suitors. Earnestness in their work, and the habitual love of truth for its own sake, he took to be the general qualities which it was essential they should bring with them to the study of their profession, and especially to the study of medicine, which admitted not of bias or prejudice. Mr. Henry proceeded to impress upon the students, that in their medical practice they must, under all circumstances, first try to gain the confidence of their patients. A hesitating, awkward manner, or a fierce brusqueness, affected by some, were positive drawbacks to their usefulness. Their manners should be the reflex of their minds. If their minds were open, honest, noble, their manners would be frank, genial, sympathetic; but if their minds were narrow, ascetic, warped, and destitute of the kindly affections, they might depend upon it that their knowledge, however extensive, would lack that one thing which alone could render it available. In this respect medicine might almost be said to require an unborn aptitude in its votaries, as much as music or painting. They would meet with those who seemed to identify themselves with their patients, who learned to anticipate their wants, and, by a sort of intuitive consciousness, knew precisely what was required for their comfort or their ease. Such persons were said to have great tact; and when this was combined with great honesty, it became indeed a gift of priceless value. With reverence be it spoken, but that which most distinguished the human career of the Great Physician of all was his intense sympathy with the sufferings of our race, and in that sympathy, apart from all superhuman power, was to be found the secret whereby He tamed the lunatics, denizens of the tombs, who guarded the path so fiercely that no man save those might pass that way. And they would see the same thing now; for they might learn even how madness itself had yielded to the force of sympathy and love. In speaking of practice, he did not hesitate to declare that the ignorance of practical matters of some whom he had known to commence practice, was, to his mind, perfectly appalling. Of these men it might with truth be said that they "walked the hospitals," and that they made of those wards, which all who entered them would regard as consecrated by suffering, merely a pleasant lounge, in which the time might be wiled away in idle gossip, diversified

occasionally by those morning incidents which so often occur in practice. It was the constant habit of such persons to attribute their own deficiencies to the shortcomings of the governing bodies which regulated the details of medical education. At the present moment, excuses like these would be utterly idle and absurd, and he very much doubted whether they ever proceeded from those who, like his present audience, were determined to learn their profession in spite of difficulties. The lecturer concluded as follows :—"A nobler profession there is not in the world, for in it your lives may be passed in the exercise of that true religion which consists in visiting the fatherless and the widow, and in keeping yourselves unspotted from the world. When that great and good man, Dr. Prout, was told that he had but a few hours to live, he called for pen and paper, and occupied literally some of the last remaining moments of his life indicating directions for the guidance of complicated cases of disease which happened to be under his care. He did so because throughout a long life he had endeavoured so to live as never to be unprepared to die, and because he was actuated by a sense of duty, such as has so often proved the support of our countrymen in every variety of danger and distress. May duty, then, which actuated him, be our guiding star throughout our career. May this session now commenced prove to all a session of honest work, and as such an epitome of our lives, and so persevering in duty, when time has shaken us by the hand, and we know that death is not far behind, it may haply come to pass that at length, when our day too has come, and the great dread secret has been revealed, it may then be said of each of us, by those who yet survive, as was said of one of old, 'He was skilful enough to have lived still if knowledge could be set up against mortality.'"

ST. THOMAS'S HOSPITAL.

Dr. R. Dundas Thomson gave the introductory address on October 1st. He alluded to the fact of Cheselden, the celebrated surgeon, having delivered lectures at that institution upwards of a hundred and forty years ago. He congratulated the governors that their predecessors had made it an educational hospital, and taken the initiative in the formation of one of the oldest practical medical schools of England, thus preventing it from being superseded in the course of time by the sick-rooms of a parish workhouse. He pointed out that the science of medicine had one of the noblest ends in view. By the study of Nature's laws it professed to assist in prolonging man's existence on earth, and, therefore, in contributing essentially to human happiness. He showed that the test of a nation's prosperity was not to be sought in riches or conquest; but that where an educated, moral, and healthy people existed, there was prosperity, and there was longevity, the test of national happiness. True longevity, however, did not consist in the protraction of a few lives beyond the usual allotted span, but in an increase in the average duration of human existence. He combated the popular doctrine that life was uncertain, and offered evidence that the laws which regulate health and disease were as fixed as those which preside over the movements of the celestial spheres. He referred to the remarkable laws observed in regard to small-pox and cholera, which enabled us to foretell, out of a given number constantly sick, the exact number in each day who were destined to live or to die. From these even the sceptic might learn to believe in the future interpretation of the Divine aphorism, that not even a sparrow can fall to the earth without permission. Dr. Thompson briefly alluded to his own experiments on the composition of choleraic atmospheres, in which he had found animal life and matter which may have tended to propagate the disease; and exhibited drawings of the interesting observations of his colleague, Mr. Rainey, who had succeeded in artificially producing the structure of shells, and even of starch. He described the nature of cyene, and several modes by which it may be obtained, illustrating his remarks by experiment; and concluded by urging on the pupils about to enter on their studies the importance of labouring with all their might in their future avocations.

LONDON HOSPITAL.

The introductory lecture was delivered by Mr. G. Critchett. If there was one day of the year which deserved to be held especially sacred by the medical profession, or that combined more interesting recollections, more endearing associations, than another, it was that on which they met in their various medical schools to commence and inaugurate their winter studies. The medical profession was carrying on a great and noble work. Not only was disease combated and suffering allayed, but pestilence was traced to its lurking places, and the laws of health were enforced and explained. The important body of men who were toiling to accomplish all that were diminishing in number. Each year made sad havoc in their ranks, as they were constantly exposed to contagious diseases, and often went forth in the spirit of the missionary, encountering the death of the martyr. That was, therefore, an important day when the country sent up fresh recruits to fill the ranks of the profession, and supply the demands of the army, the navy, the merchant service, and the colonies. It was by the fresh infusion of young life, vigour, and enthusiasm, that the profession was from year to year renewed and sustained; and he, therefore, held out the hand of welcome to those who were now about to offer on its altar, for the first time, the sacrifice of their energies. Although none of them might desire to lift the veil or look into futurity, yet, speaking from his own experience, he could tell them that their success and happiness in a great measure depended upon themselves; and if they could only combine some of the settled convictions and strong will of a mature age with the buoyant elastic energy of youth, a fine result might be expected. Mr. Critchett then placed before the students his conception of a model student in the various stages of his life, leaving it to each of them to adopt the portions best suited to their peculiarities, and to appropriate such hints as might be profitable and suggestive. All the work of a student, he said, was not to be accomplished without a great deal of resolute will and self-denial—an abnegation of those pleasures which were at once the most seductive and the most vitiating. He did not wish to see the student deterring himself from rational enjoyment at suitable times. Ample sources of enjoyment were to be derived from the healthy exercise of the faculties, bodily and mental. Having sketched the career of a model student, Mr. Critchett followed him into professional life, of which he drew an able sketch, and concluded with some practical reflections.

British Medical Journal.

SATURDAY, OCTOBER 8th, 1859.

THE JOURNAL.

At the general meeting of the East York and North Lincoln Branch, the Journal question was discussed, and a resolution was agreed to which calls for a few words of comment. The resolution was as follows :—

"That in the opinion of this Branch the funds of the Association are injudiciously expended upon a *weekly* Journal, which is the sole cause of the present financial difficulty, and we believe that the existing debt would be most easily liquidated by a discontinuance of the weekly publication, by which also the number and usefulness of our society might be largely extended, and its general interests greatly furthered."

No question could be brought before the different branches of the Association more legitimately than the one referred to in the foregoing resolution. Shall the members of the Association be provided out of the funds which they furnish with a weekly, bi-weekly, monthly, or quarterly paper?—or shall the Journal give place henceforth to an annual volume of *Transactions?* or, lastly, shall ties of every kind whatsoever be severed which have heretofore held the different branches together, or, to use the words of Canning, shall we enact an heptarchy with respect to the Association? All these points were broached at the East York and North Lincoln Branch meeting, and some of them were actually proposed for adoption, and carried by the members present. And, first of all, let us observe that the chief motive for this desire for some change, appears to be the idea that this Journal is the cause of a

presumed financial difficulty. It is true that for some years past a debt has been hanging over the Association, but the speakers at the Branch appear to have overlooked the fact that this financial difficulty not only is not increasing, but is rapidly proceeding to the vanishing point; out of the £2000 that hung over our heads five years ago, but little more than £300 now remains. Surely, then, it cannot be said that we are suffering under a financial difficulty. The expenses of the Journal have been for some time past far beneath the income of the Association, as any member may satisfy himself by referring to the last two or three annual reports.

As far, then, as the question is a mere matter of funds, the resolution rather aims at matters as they stood years ago, than to the actual condition of the Association. But the question still remains, Is there any necessity for a weekly journal? We presume that some organ of the Association must be contemplated even by those who think a change would be beneficial in the frequency of its issue, always excepting "root and branch" members like Mr. Dix, who are for cutting everything adrift. Whether a change would be beneficial or otherwise, must be a matter of opinion. We may commit ourselves to some course that may lead in a very contrary direction to that contemplated by gentlemen who wish to reduce the subscription to the minimum point. Perhaps a glance at the past progress of the Association may throw some light upon the subject. From the year 1841 inclusive to 1846, the following were the numbers of the Association at each annual meeting:—

1841	1250
1842	?
1843	1628
1844	1784
1845	1927
1846	1856

Up to this last date, the Journal was on a very small scale, not bigger than *Chambers's Journal*. A volume of *Transactions* was, however, published annually. It will be observed, that during the whole period, with the exception of the last year, there was a very marked advance in the numbers of the Association. In 1847, however, it appears to have been the opinion of the members that a fortnightly issue would be beneficial to the Association; and, in consequence, fortnightly it became—with what result we shall see.

1847	1858
1848	1795
1849	1760
1850	1800
1851	?
1852	1629

Here we have the experiment tried of a departure from the weekly issue, and the sinking process established with a vengeance. Surely not much encouragement is to be derived from this retrospect. Where the numbers of the Association would have gone to, if this fearful declivity had continued, we leave the associates to guess. In the ensuing year, it was thought advisable to retrace the steps of the Journal, and it was brought to London, greatly enlarged, and with the following (as Mr. Dix would have it) lamentable result.

1853	1883
1854	2198
1855	2188

At this period of the rapidly rising condition of the Association, the discord which ultimately threatened to destroy it commenced, consequently we find the figures for a year or two receding:—

1856	2125
1857	2065

Since the promulgation of the new laws in the last-mentioned years, the progress of the Association has been again upwards.

1858	2180
1859	2310

At the present moment, then, the Association is far more powerful in numbers and influence than it ever has been hitherto. The Journal is nearly double its old size, and its expenses are far below the annual income. If, to use a homely phrase, "The proof of the pudding is in the eating," we really are at a loss to know what reason can be given for a change in the present form or manner of issue in the Journal. Would Mr. Churchill be discontented with such an increase in the circulation of the *Medical Times?* Would he argue from the fact of a steady rise in its numbers that it was becoming less popular. Possibly we shall be told that the Association increases in spite of the Journal. It would be very difficult to prove this, however, and we believe few of the Associates will feel inclined to attempt the task. If a retrospective glance at the progress of the Journal is unfavourable to a discontinuance of the weekly issue, can any thing be shown in the nature of periodical literature favourable to it? We think not. There can be little doubt that every year we live faster than the last. We cannot wait for the fruits of the mind to ripen leisurely; we must force them. It is notorious that the days of quarterlies are numbered; monthlies are even become too fossil for the age we live in; and weeklies are everywhere taking their place. We must have the experience of others brought up close to the day's work; and we believe firmly that to defer a paper, which could be only locally read, on an interesiing topic of the day, to the publication of an annual volume of *Transactions*, would be literally to entomb it. With regard to the "pet scheme" of Mr. Dix to reduce the Journal to a mere record of the proceedings of the Association, we really do not think it necessary to say one word, as we scarcely think he will find a dozen members of the Association to second his views. At all events, this we know full well, that such a periodical would share the fate of a volume we are familiar with, which sings the praises of Moses and Son.

THE WEEK.

At the Dumfries Circuit Court of Justiciary, on September 23, John Broatch, calling himself a surgeon, and residing at Ruthwell, Dumfriesshire, was placed at the bar before the Lord Justice Clerk (Inglis), and Lord Neaves, charged with making false or fraudulent representations for the purpose of wilfully procuring or attempting to procure himself to be registered as a Licentiate of the Royal College of Surgeons of Edinburgh. It appeared that, on the 23rd of December, the prisoner sent to Dr. William Robertson, Registrar of the Branch Medical Council for Scotland, the following declaration:—

"I John Broatch hereby declare that I am the person described as a Licentiate of the Royal College of Surgeons of Edinburgh in a Diploma dated March 1822 which I have personally submitted to the examination of James Murray

McCulloch M.D., a medical practitioner qualified for registration under the Medical Act and also to John Waugh Esq. Justice of the Peace for the County of Dumfries & magistrate of the Royal Burgh of Dumfries

"Sworn before me, John Waugh, *J.P.*

"Attested by me, James Murray McCulloch, M.D. &c.

"John Broatch Surgeon

"22nd Decr. 1858." "Ruthwell."

Thereupon, Dr. Robertson registered the prisoner's name, and transmitted a copy of the entry to Dr. Hawkins. It was sworn that no such name as that of Broatch was to be found in any record of the College of Surgeons for or near any time approaching the alleged date of the diploma. The defence set up was that the diploma had been obtained by the prisoner, but had been lost in 1826; and this he also told to Dr. McCulloch as a reason for not showing it to him when he signed the declaration. The jury found a verdict of guilty, with a recommendation to mercy; and the Lord Justice Clerk passed a sentence of three months imprisonment, remarking, that not only had the prisoner committed an offence himself, but he had implicated others, by imposing on a medical practitioner, who had so far forgotten his position as to aid and abet in the offence, and by deceiving a magistrate by obtaining an attestation which he never would have procured had circumstances been truly explained.

A great stir has lately been made in the scientific assemblies of Paris, regarding the application of a mixture of coal-tar and powdered gypsum as a disinfectant and deodoriser. The mixture is stated to consist of one hundred parts of plaster of Paris, mixed with from one to three parts of coal tar. It was introduced to the notice of the Academy of Sciences in July, by Messrs. Corne and Demeaux, two practitioners at Libos, in the department of the Lot and Garonne. Mr. Corne, it was alleged, observed that a mixture of coal-tar and plaster, in various proportions, had the property of deodorising fetid and putrifying matters; and he proposed its application to the deodorisation of the night-soil in Paris. Dr. Demeaux applied the powder to the offensive discharges from suppurating wounds and gangrenous ulcers, with success. A series of experiments were instituted at the Charité Hospital, under the superintendence of Professor Velpeau, who has given his aid to bring the alleged discovery into notice. An explanation of the mode of action of the powder has been sought to be given; and Messrs. Dumas and Burdell are of opinion that it owes its properties to its power of ozonising the air. The real value of the mixture has probably yet to be ascertained; but, in the mean time, it seems that there is little or no novelty in the alleged discovery. The antiseptic properties of tar were, as is well known, insisted on long ago by Bishop Berkeley. At a recent meeting of the Academy of Sciences, Dr. Bonnafont stated that the disinfectant properties of a mixture of coal-tar and gypsum were known so long ago as 1844 to M. Bayard, who received a silver medal for his communication on the subject; at the same time, he believed Messrs. Corne and Demeaux to have been ignorant of this fact, and accorded to them the merit of its application to wounds and ulcers. The *Edinburgh Medical Journal* for September, in commenting on the subject, remarks that the invention of Messrs. Corne and Demeaux, and its application, have been to a great extent anticipated in Great Britain. A composition, named McDougall's powder, which has been known and used for some time, bears a strong resemblance to the French preparation. It consists of carbolic sulphate of lime and magnesia, with five per cent. of carbolate of lime. It seems, therefore, that the efficacy of the powder, in both instances, is due to the carbolic acid, the principal antiseptic and deodorising ingredient in coal-tar.

An attack of diarrhœa last week broke out suddenly, among the inmates of the New Bailey Prison at Salford. On the night of Tuesday, September 27th, there were four prisoners in the hospital; but about three o'clock a considerable number were seized with diarrhœa, and the disease spread so rapidly that on the next (Wednesday) night there were 196 in hospital, of all ages and both sexes, including three of the prison officers. There were 64 women. On Thursday there was an addition of 40 cases, making in all 236, or just one half of the entire prisoners, who were 476 in number. During Thursday night, there were no fresh cases, and on Friday morning nearly the whole of the patients were so far recovered as to be judged fit for removal from hospital. Towards night, however, about fifty of them relapsed; but there were only five new cases among the male, and one among the female prisoners. No deaths are reported to have occurred. At the same time with the epidemic in the prison, cases of diarrhœa in the Hulme Cavalry Barracks were more than usually numerous; but on Friday there was no soldier in the hospital on account of diarrhœa or dysentery. No local cause appears assignable for the attack in the prison; the interior was not long ago whitewashed, and all was clean; the diet had undergone no change.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Oct. 20th, 6 P.M.

*** *Associates will observe that the day of meeting has been postponed one week—viz., from the 13th to the 20th Oct.*

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call attention to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, October 1859.

EAST YORK AND NORTH LINCOLN BRANCH: GENERAL MEETING.

A general meeting of this Branch was held at the Beverley Arms, Beverley, on Thursday, September 22nd, at half-past 2 p.m.; Thomas Sandwith, M.D. (Beverley), President, in the Chair. The following members were also present: J. P. Bell, M.D. (Hull); F. Calvert, Esq. (Beverley); Sir H. Cooper, M.D. (Hull); R. M. Craven, Esq. (Hull); O. Daly, M.D. (Hull); J. Dix, Esq. (Hull); H. Gibson, Esq. (Hull); J. Hill, Esq. (South Cave); J. F. Holden, Esq. (Hull); K. King, M.D. (Hull); J. A. Locking, Esq. (Hull); J. Morley, Esq. (Barton); H. Sandwith, M.D. (Hull); S. Watson, Esq. (Cottingham); and as visitors, A. O. Arden, Esq.; R. L. Sleight, Esq.; H. Munroe, M.D. (of Hull); and Dr. Walker (Beverley).

THE ASSOCIATION AND THE JOURNAL.

The financial condition of the Association was brought forward by Mr. Dix, who read the following remarks:—

Perhaps the most important topic discussed at the recent Liverpool meeting was the debt of the Association, which has been spoken of as the only cloud which cast a shadow over a gathering otherwise brilliant, happy, and successful in every respect. It is, no doubt, a very serious subject; it concerns us all individually; for, as a speaker well observed the other day, some time or other these liabilities must be discharged. Every well-wisher to the Association would be glad to know that this debt was cancelled; and the Council of the Association very naturally and properly brought forward a scheme for its liquidation. Their plan, which seems to have been considered the only feasible and practicable one, was to invite voluntary subscriptions; and Mr. Terry of Northampton appears to have volunteered to take active steps in soliciting donations. Accordingly, a letter from him, sent to Mr. Locking, in virtue of his position as Local Secretary, was brought under the notice of the Council of this Branch at our last meeting of Committee; and, in consequence of what then transpired, I introduce the subject for our consideration to-day; and, as my object is to elicit the opinions of others, rather than to give prominence to my own, I shall endeavour to make my remarks suggestive of discussion, not exhaustive of the whole matter.

I suppose that an honest man, on finding that his expenditure had exceeded his income, would first ask himself this question: How has the money gone—what has it all been spent about? This is a very short and simple question; and, in our case, the answer is as simple, and even shorter—viz., the Journal. This is a fact so obvious and indisputable that I need not dwell on it. Should any new member not quite understand it, I would merely refer him to the Treasurer's account, published at page 628 of the Journal, August 6th, 1859, from which it will be found that, with the exception of the meagre salary of the General Secretary, the whole amount of the subscriptions of our associates is expended on the Journal. But it seems to me that, at the Liverpool meeting, there existed a disinclination to look this fact fairly in the face: it was hinted at, rather than outspoken. Sir John Forbes, it is true, spoke of this debt as the natural and necessary condition of the Association, so long as we each received for our annual guinea a journal "as good as any other weekly journal which cost 33*s.* a year"; and he suggested that the cost of the Journal should be defrayed by a subscription distinct and separate from the subscription to the Association. Other members endeavoured to saddle the debt upon the Journal—undoubtedly the right horse—and make it pay for itself, by enforcing an extra charge for its postage.

Neither of these schemes was favourably received; but, during this discussion, surely this question must have presented itself to the minds of many then present,—What is this Journal, that we should expend so much thereon; which swallows up all our subscriptions, the whole of which are inadequate to its maintenance; and for the sake of which we have been for years past, and still remain, considerably in debt? I am surprised, I say, that this point was not openly mooted on that occasion; for surely it must have occurred to the minds of many. However this may have been, it is this aspect of the matter which I commend to your careful consideration to-day.

And first, I would ask, Is the weekly Journal (in its present costly shape) in any way essential to our existence as an Association? *Primâ facie*, one would really be led to think so, from the single circumstance that it has been maintained for so many years, at a cost considerably beyond the whole amount of our income;* and I have no doubt that this is the feeling of many of our associates, by some of whom the Journal has been spoken of as "the root and the sap of the Association". And yet I am not aware of any precedent, or of a single valid reason for this opinion. If there be any such reasons, they will probably be brought out during this discussion; but I for one shall hear them for the first time. Nor shall I be surprised to find that some will agree with me in considering this Journal as a sore let and hindrance to the extension of our members, and to our spread and power as an Association, as I shall presently show. My own feeling is, and has long been, that, so far from being of advantage to us, it is an incubus, and a stumbling-block in our path; and I proceed to give some reasons for the views I hold.

I am not aware that the opinions of the editor are of any greater force or value upon our affairs in general than those of any other individual member of the Association; but, at all events, in this matter he may be justly considered the mouthpiece of the Journal, and the counsel for the defence of its cause. Accordingly, I would ask your attention for a few moments to the leading article of June 25th, printed at page 506, headed "Medical Societies and our Branches". In it, the editor points out that "a number of isolated medical societies are in existence throughout the country, which might, with a little management, be induced to amalgamate with our Branches"; and then occurs this very opportune, though rather ominous sentence: "Now, there are doubtless very many members of local medical associations, who are deterred from joining Branches of our Association, although otherwise inclined to do so, for the reason that membership of the Association implies an annual guinea subscription." This statement is a truism. We are doubtless, all of us, conversant with examples; and it need not by any means be limited to "members of local medical associations", but may be taken to represent the position of a very considerable proportion of the profession at large. As a commentary thereon, let me ask, why is the annual subscription of the Association one guinea?

Now, I have already shown that, in a pecuniary sense, this guinea subscription and the Journal are convertible terms, inasmuch as the whole of the subscriptions are absorbed in the cost of the Journal;† and whatever other advantages attach to membership of the Association, they are either costless altogether, or, as in the case of the Branches, are made an extra charge over and above the yearly guinea subscription. Hence it follows (unless there is some flaw in my argument) that the Journal is the real obstacle to the enlistment of these outlying societies, and of numerous other medical brethren of various grades. I do not start this as a theory merely, but I put it to you, fellow-associates, individually,—Is there any one in this room who cannot call to mind some one friend or more—desirable as members, too—whom he could immediately induce to join the Association, were it not for the expense of the annual subscription, or—as we may fairly put it—the cost of the Journal? Still further to give this a practical shape, I do not hesitate, Mr. President, to announce myself responsible for at least half a dozen recruits on the terms I shall hereafter mention. One would almost imagine that some such feeling as this unconsciously arose in the mind of the editor himself when, in the same article, he goes on to advise that the law should be altered so as to allow of the institution of a new condition of semi-membership, so to speak; to wit, *local members*, with *local privileges*, for the cost of the *local subscription* only. Surely a more suicidal proposition never emanated from brain of editor; for, unless I am greatly mistaken, so soon as this becomes a law of the Association, so soon and so surely is his occupation gone.

According to my judgment, sir, it is the Branch meetings, and not the Journal, which might really and truly be designated "the root and sap of the Association". Who amongst us knows anything of the advantages of membership of the British Medical Association, beyond the benefit accruing from the membership of the Branch (*the* Journal, *of course, always excepted*)? Who amongst us would continue members of the Association at the cost of a yearly guinea, when for an annual half-crown we could have the full privileges of membership of the Branch?‡ These are not mere idle questions; they have a

* The annual income of the Association has for some years exceeded the expenditure on the Journal; and the comparison would be still more advantageous if all the subscriptions were punctually paid. The present debt is in reality a remainder of that which was due at the end of 1855, and which has since been steadily decreasing from nearly £2000 to £300.—Editor.

† Not so. Some portion of the income goes to meet the expenses of the General Council and the salary of the General Secretary, another to liquidate the old debt.—Editor.

‡ Mr. Dix takes a very limited view of the utility of Branch meetings. To

wide and important significance, because on the answer which each of us individually would make to them depends probably the views he would entertain on the general question which we are now considering; viz., the desirability or otherwise of continuing the publication of a weekly journal.

And this leads me to the consideration of the next division of my subject; viz., what is the actual value, pecuniary or otherwise, of this our much lauded periodical?

And first, what is the pecuniary value of the Journal? In a recent article, the editor deprecates what he calls "odorous comparisons"* between this and the other weekly journals; yet such comparisons we must make, for I know of no other way of estimating the money value of this or any other concern, than by looking to the state of the market as to the material offered and its price. Judged by this test, is our Journal worth a guinea a-year? With all due deference to the good-natured estimate of Sir John Forbes before mentioned, I humbly submit, that to most of us, it is very dear at the price.

The recipients of the Journal may be divided into two classes, viz., those who trust to the Journal alone for their information on medical matters, and those who read other periodicals. I hope the former are a very limited minority; but to them I would suggest, that theirs would not be a bad investment, except for this reason, that they are leaning on a bruised reed, that they are gradually retrograding and falling into the wake of science; and if, by taking the Journal, and it only, they are deluded into the belief that they are doing justice to themselves, or to their profession, I cannot but advise them to reconsider the matter, and endeavour to avail themselves of other avenues of information. To the others, I need not say, the value of the Journal must be estimated by the amount of original matter which it contains, *and which could not be read in other periodicals;* and that, so considered, a good deal of the Journal consists of stale news and unprofitable, which either has been or could be read elsewhere.

To analyse this subject, with a view to this discussion, I took up at a venture the Journal of August 20th; and I find therein four of its twenty pages devoted to a report of the proceedings of the medical council, which also appeared in the *Medical Times* and *Lancet* of the same date;† two pages of the transactions of the Medical and Chirurgical Society, the greater part of which had appeared almost word for word in the *Lancet* of August 6th (a fortnight before);‡ three pages about a certain Cornwall Medical Society, which (although printed under the head of Association Intelligence) so far as I can make out, is not a branch of the Association at all;§ and a leading article about "The Purification of the Serpentine"!!! which can scarcely be considered a medical matter at all, and is surely of no special interest to the members of the British Medical Association.‖ Nor is it likely that an article in our Journal, however laudable in intent or powerful in argument, would exercise any influence on the decision of the first Commissioner of Woods and Forests, as to which of the rival schemes he should adopt and patronize. Further on, we find near two pages more occupied by a notification of the accouchements of the wives of medical men, of the marriages and deaths in the profession (in each of which our fellow associates are duly spotted and starred*), and the pass lists of the College and Hall for the preceding weeks, a large proportion of which had appeared in the *Medical Times* and *Lancet* a week or two before.* Gentlemen, was not all this, to most of you, stale and unprofitable news? In fact, this seems to me to be one of the characteristics of the Journal, that it is always behind hand. A marked illustration of this is to be found in the reports of the proceedings and papers of the Royal Medical and Chirurgical Society, to which I have already alluded, and which I tested not in this number of the Journal only, but in several other numbers, and with the same results. A still more remarkable instance is the following. The Liverpool meeting was held on the 27th, 28th, and 29th of July. The Journal of the Association, our own organ, had no mention—not a word—of this important event in its issue of July 30th; although, unless I am greatly mistaken, an abstract of the whole proceedings appeared in the *Medical Times* of that date.† To proceed with my analysis—having already disposed of about twelve of the twenty pages—I do not say that there is no new or original matter. Under this head, I may direct your attention to a lecture by Dr. Lionel Beale on urine, *on which I should be delighted to hear the opinion of any one who has read it;*‡ a paper on pericarditis, by Dr. Markham, whose name is a guarantee for a useful and readable article, and some hospital reports, not without practical value. Nor must I omit to mention a little paragraph under the title of "The Week," which contains this important and interesting announcement, "the Colleges of Physicians and Surgeons of London have determined to form a joint board for the examination and licensing of the future general practitioners of this country." Here indeed was a piece of genuine news, in which Dr. Wynter had forestalled his brother editors. It has, however, this slight drawback—it was not true. Of course we have all heard that such a scheme is in contemplation, but it is even now still *sub judice*—so far, as I know, it is not even yet a *fait accompli*, and the premature announcement of August 20th ought to have taken the form of prophecy rather than of assertion.

This I believe to be a just analysis of this particular number of the Journal, which, as I took it up, not by choice or selection, but entirely at random, may, for aught I know, be taken as a fair sample of our weekly issue. Will any gentleman be so kind as to give an estimate of its pecuniary worth, either as compared with the other weeklies, or considered *per se?*

Next, let us briefly consider what are the other advantages which we, as an association, are supposed to derive from the Journal. It has been lately put before us as a recruiting element—as an inducement to non-subscribers to join our ranks (see the leader of June 25th to which I have before alluded.) Surely this was never seriously meant. Is there any one here who joined the Association for the sake of the Journal? or who knows any one who *did?* or who *will?* Some such deluded mortals there may be amongst our 2000 associates, and I hope they have been pleased with their bargain.§

Again, we are told that the Journal affords us great facilities for publishing our papers, for putting our ideas into print. Is not this a fallacy? Who can tell me what are these facilities or advantages? If a man has anything worth publishing, he need have no difficulty, so far as I am aware, in gaining admission into the best read periodicals; whereas, if his lucubrations are of no interest but to himself, 'tis but a dangerous privilege that he should have opportunity and inducement for publishing. Indeed, I have often thought that this is one of the disadvantages under which the editor of the Journal labours, viz., that he can have but little discretionary power in respect of the contributions of members of the Association. If he has any such power, he surely sometimes lacks discretion—of which I could point out plenty of examples—but I am anxious to avoid wounding the feelings of any one; my remarks are made with a far different object.

I have now enumerated all, as far as I know, of the assumed advantages of our weekly Journal, and what does it all amonnt to? I pause for a reply. We shall probably be told that it is as

the members of the locality in which they are held, they furnish the advantages of membership: but what renders them of still greater value, is the publication of their proceedings in the Journal, by which the entire Association is afforded an opportunity of becoming acquainted with the contributions to medical knowledge, or the opinions of any one of its sections.—Editor.

* Mr. Dix does not like the quotation "odorous comparisons". Perhaps he is not aware that it is Shakespearean. We refer him to *Much Ado About Nothing*, Act v, Scene 3.—Editor.

† Does Mr. Dix mean to say, that we ought not to publish reports of important public proceedings, because the other periodicals are likely to do the same thing at the same time? His argument would lead to the conclusion, that the *Daily News* or *Morning Post* should decline publishing reports of proceedings in Parliament, or in the courts of law, because every one could read them in the *Times*. Mr. Dix omits to observe, that this Journal was in advance of the other periodicals in the report of the proceedings of the Medical Council.—Editor.

‡ The subject of obtaining earlier reports of the Medical Societies has been under our consideration, with a view to amendment. It often has happened, that the small size of the Journal, and the pressure of other matter, have caused delay in the publishing of the reports.—Editor.

§ If Mr. Dix will read carefully the report of the proceedings of the Cornwall Medical Society, in the Journal of August 20th, he will find that it was resolved that "The Cornwall Medical Society shall still remain a sub-section of the British Medical Association, etc."—Editor.

‖ Is not a question of hygiene a medical matter, and therefore of more or less interest to the members of the Association.—Editor.

* Mr. Dix cannot have accurately examined the number of the Journal of which he speaks. His "nearly two pages" are in reality exactly one page, and consisted in part of matter thrust out from the previous number by the report of the Medical Council and other important topics.—Editor.

† Mr. Dix *is* greatly mistaken—no such report appeared in the *Medical Times* or *Lancet* of July 30.—Editor.

‡ The italics are Mr. Dix's. It will be observed, that his wish to hear an opinion was met (can we say gratified?) by the observations of Mr. Monroe in the course of the proceedings of the meeting. We must ask our readers—How can an editor be expected to provide good scientific matter for the Journal, if his attempts to do so are to be met with sneers?—Editor.

§ We fancy there are many more of these "deluded mortals" than Mr. Dix supposes. At all events, the increase of the Association has never been so great as since it has possessed a weekly organ.—Editor.

good as can be at the price it costs. I do not dispute this proposition. I dare say it is. But is it needed at all? Are not the other periodicals sufficient for all useful purposes? I don't deny that the Journal often furnishes us with good papers, but these we should get all the same if our Journal were blotted from existence. Indeed, I fear a useful paper often falls still-born, because it is published in the Journal, and my advice to men about to publish would be this; if you want to be read, don't send your paper to the Association Journal, for it is a well-known fact that its readers beyond the circle of members are very few.* It is to be feared that some even of our members *don't duly* study their Journal. How few care to preserve it? How few bind it and give it a place on their shelves? To a reading man, the superabundance of periodical literature is a nuisance, because it is absolutely necessary that he should see all that is written. Thus, so long as there are three weekly medical papers, three we must read more or less. Viewed in this light, is not our Journal a supernumerary and a nuisance?†

The most amusing speech in the debate on the debt at the Liverpool meeting was that of Dr. Henry, wherein he mildly suggests that each member should bring in a fresh subscriber. For what object? Not for the benefit of the new comer, but to add to the funds of the Association—to raise more money—and for what? To put into the maw of this insatiable all devouring Journal. The present Journal costs only about £2000 a year; for £3000 we could have a much improved Journal, but for £4000—he has "carefully calculated it from accurate data"—we might have a really magnificent Journal; its size could be permanently increased, and last, though not least, the paid contributors—of whom he, modest and disinterested man! is one—could be more liberally paid, and all this for a paltry £4000 a-year.‡ Does not this cool proposition raise in your minds this question—Does this Journal exist for the Association, or the Association for the Journal?

To speak more seriously, supposing, from an increase of subscribers, our Journal were so improved as to become the very best of all weekly medical periodicals, what good or useful purpose would it serve? We might increase the number of those to whom I have already alluded, who take the Journal and no other periodical, many of whom, in default of our Journal, would probably contribute to the support of the other established publications, and so we might inflict considerable damage on these publications (some we already do them, no doubt). We might become formidable competitors for public favour; we might even defeat the laudable and hitherto successful results of private enterprise. Is this, I ask, the mission of our Association? Is this the best use we could make of our funds? Yet for such an end we are invited to subscribe £4,000 a year.

Of course there is no necessary connection between the discontinuance of the Journal and a diminution of the annual guinea subscription. There are plenty of ways of spending any sum of money we may so raise; but in my humble opinion it would be difficult to spend it worse than at present. I would also remind you that I am but arguing against the Journal in its present expensive shape. A periodical of some sort we no doubt need, but it should be the organ of the Association alone, a cheap and simple record of our own transactions and proceedings. These are matters of detail, and subjects for future consideration; but I must confess that I have a strong feeling in favour of lowering the subscription, for I have already shown that all the present advantages of the Association, *except the* Journal, are costless, and I have given reasons for believing that if the cost of admission were lessened, the result would be that scarcely any eligible member of the profession would stand aloof from our Society; we might then become what I most earnestly long for, and hope to live to see, a *Universal Medical Association*, including within our ranks every respectable medical man.

I have already occupied too much of your time, and I must not now dilate upon the desirability of such an union; nor is it necessary, for it must be sufficiently obvious to every reflecting mind. Suffice it now to say that we should thus become a compact and organised body, banded together not merely for our own but for the public weal; and what, I ask, would so much assist us in assuming that position in the state which we have a right to claim, but have so long sought in vain; what would so much conduce to the advancement of our corporate interests, and to the honour and elevation of our noble but much undervalued profession?

I think, gentlemen, that these advantages can scarcely be over-rated, and I have now only to remind you that our Association offers an admirable and a ready-made nucleus for such a conglomeration, and *that the only obstacle is the* Journal. Let us, then, use our united endeavours to cast off this millstone from about our necks; and, as the first step in this direction, I beg the cordial and unanimous assent of the East York and North Lincoln Branch to the following resolution:—

"That in the opinion of this Branch the funds of the Association are injudiciously expended upon a *weekly* Journal, which is the sole cause of the present financial difficulty, and we believe that the existing debt would be most easily liquidated by a discontinuance of the weekly publication; by which also the number and usefulness of our Society might be largely extended, and its general interests greatly furthered."

Sir H. Cooper seconded the resolution so far as it went to condemn the *weekly* publication of the Journal. He referred to the appointment at Oxford many years ago, of a committee whose duty it was to consider the propriety of suspending or diminishing the frequency of publication of the Journal, or publishing transactions. After many months the opinion of each member was asked, and he (Sir H. Cooper) was the only one favourable to the suspension of the weekly issue of the Journal. He did not think Mr. Dix would find it easy to obtain the consent of a large number of the members who were accustomed to attend and vote at the annual meetings, as they were just the parties who wished for the continuance of the Journal as a vehicle for their opinions. Sir H. Cooper also referred to the complaint of the editor of want of contributions as an indication that there was no legitimate demand for so frequent a publication of the Journal.

Dr. Sandwith (Hull) thought, if the Journal were discontinued, it would be desirable to resume the publication of *Transactions*.

Dr. Munroe, a visitor, thought the Journal was improved, and that it was a disgrace that members did not send communications to the editor. He stated his wish to become a member of the Association next year for the purpose of taking the Journal. He considered the course of lectures by Beale was worth the money. The Journal should be issued weekly or fortnightly; or, in order to lessen expense, an arrangement might be made with the *Lancet* or *Medical Times*, so as to bring the proceedings of the Association under the notice of the profession without its pale.

The resolution was carried unanimously.

Dr. Sandwith (Hull) moved—

"That in the opinion of this meeting, an alteration of the form and frequency of publication of the Journal is desirable, so as not only to lessen the debt, but also to allow of the reissue of *Transactions*."

Mr. H. Gibson seconded the motion.

Mr. Dix expressed his gratification at the reception which his speech had met with, and at the cordial and unanimous assent which had been accorded to his resolution. He could not, however, support the addendum of Dr. Sandwith, because it militated against his pet scheme of a diminution of the subscription, with a view to a large increase of the members of the Association. This, however, he knew must be a subject for future consideration, and he believed that his chief object was sufficiently attained. The question had been fairly raised, and would no doubt attract the attention of other Branches, and he entertained sanguine hopes that a thorough ventilation of the subject would lead to good results. He trusted that they had that day taken the first step in a movement which would eventually tend to the advancement of the interests not of the Association alone, but of the medical profession at large.

The motion was carried.

COMMUNICATIONS.

The following communications were read.

1. Address on Antiquarian Pathology. By the President.
2. Case of Extirpation of Head and Neck of Femur in a case of Hip Disease. By R. M. Craven, Esq.

* We regret exceedingly to find, that on two occasions Mr. Dix has deliberately produced the abortion of two of his own literary offspring. *Vide* the Journal, of October 9, 1858, and January 1, 1859.—Editor.

† By all means let a man read a dozen periodicals if he pleases. But suppose he requires one only—and there are many with that moderate wish—does Mr. Dix mean to say that he is to pay £1:10 a year for that which he can procure for a guinea?

‡ Mr. Dix must be quoting from a treacherous memory. The concluding part of Dr. Henry's remarks, as reported in the Journal for August 6, was to the effect that the increase of the Members to 3,000 or 4,000 would, after paying all the expenses of an improved Journal, leave a large sum applicable to the furtherance of any object to which the Association might resolve to apply it.—Editor.

3. Remarks on the forthcoming British *Pharmacopœia*. By Sir H. Cooper, M.D.
4. On the Use of Tincture of Larch in Pulmonary Hæmorrhage. By O. Daly, M.D.

The proceedings were closed by the members and visitors dining together.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The ordinary meeting of this Branch was held at the York House, Bath, on Sept. 22nd, under the presidency of J. G. Davey, M.D., of Northwoods. There were present: J. S. Bartrum, Esq. (Bath); J. Beddoe, M.D. (Bristol); E. Boult, Esq. (Bath); W. Bush, Esq. (Bath); G. C. Corbould, Esq. (Bristol); W. J. Church, Esq. (Bath); W. Davies, M.D. (Bath); G. W. Dyke, M.D. (Chippenham); F. Flower, Esq. (Chilcompton); A. S. Fowler, Esq. (Bath); E. L. Fox, M.D. (Bristol); Jas. Godfrey, Esq. (Bristol); J. M. Granville, Esq. (Bristol); C. Harper, Esq. (Batheaston); W. Henderson, M.D. (Bristol); W. B. Herapath, M.D. (Bristol); J. Hinton, Esq. (Charterhouse Hinton); R. C. B. Holland, Esq. (Bath); J. C. Jennings, Esq. (Malmesbury); G. C. Kenrick, Esq. (Melksham); Jos. Lancaster, M.D. (Bristol); S. Martyn, M.D. (Bristol); F. Mason, Esq. (Bath); E. S. Mayor, Esq. (Bristol); Jos. Metford, Esq. (Bristol); Jos. Parsons, Esq. (Beckington); T. J. C. Powell, Esq. (Bristol); A. Prichard, Esq. (Bristol); E. Skeate, Esq. (Bath); J. Soden, Esq. (Bath); J. K. Spender, Esq. (Bath); R. U. Stone, Esq. (Bath); Jas. Taylor, Esq. (Bristol); Jas. Tunstall, M.D. (Bath); W. White, Esq. (Frome); W. Willett, Esq. (Bristol); J. G. Wilson, Esq. (Bristol); G. Vicary, Esq. (Warminster). There were present as visitors, Messrs. Fox, Freeman, and Mayor.

NEW MEMBER.

Clement Smith Barter, Esq., of Bath, was proposed, balloted for, and unanimously elected a member of this Branch.

CASES AND COMMUNICATIONS.

The following papers were read:—

1. Case of Lumbricus. By A. Prichard, Esq.
2. Case of Angina Pectoris. By F. Mason, Esq.
3. Case of Disease of the Femur: with Remarks. By E. Boult, Esq.

[These papers, with the discussions on them, have been received for publication in the Journal.]

4. *Diphtheria.* Dr. Davies brought forward the subject of diphtheria, suggesting that it should be fully discussed at a future meeting. He mentioned the case of a death arising from the false membrane becoming suddenly detached during sleep, and falling on the glottis.

Dr. Herapath observed, that diphtheria is not always of an asthenic character.

Dr. Davey confirmed this observation, and stated that many cases were not asthenic for the first twelve or twenty hours. Acute febrile symptoms are of short duration; and care must be taken not to use measures of too active a character, or collapse may suddenly supervene.

Mr. Jennings had seen two hundred cases of diphtheria, and found emetics in the early stages most important, followed by calomel and chlorine gas and quinine. In most cases, emetics might be given up to the third day. In two cases, tartar emetic would not act, but sulphate of zinc had the desired effect. He frequently found that the mucous membrane was deprived of sensibility, and tracheotomy was worse than useless.

Mr. Soden stated that the first case in his practice occurred last December; since then, he had not met with it until July and August. Although cases had been very rare in towns, it has prevailed most extensively in some country districts, especially in the vale of Wiltshire from Swindon to Box. How far this has been accidental, cannot yet be seen; but the most intelligent informants from this district were unanimous that there could be no mistake in the nature of the complaint.

Drs. Lancaster, Dyke, and Tunstall, made further observations, when it was finally proposed by Dr. Davies, and agreed to by the meeting, that a circular should be sent to the practitioners of the surrounding district, asking them to furnish certain particulars as to the character and treatment of diphtheria as observed by them; and that the matter should be brought forward by Dr. Davies, and discussed, at the next meeting of the Branch, at Bristol, in November.

MEDICAL REGISTRATION.

The subject of medical registration was introduced by the President, who stated that, although some months since the Council had very coolly received the proposal of forming a Registration Society, yet, having seen how well the Act worked in the hands of the societies in London and elsewhere, the time had arrived when the subject might be reopened with advantage.

Dr. Herapath and Mr. Godfrey gave an account of the working of a small society in Bristol, and urged upon the meeting the necessity of taking steps to uphold the dignity of the profession in this district.

Dr. Lancaster did not think the subject could be brought forward without notice; which was overruled by the President, in accordance with Rule 8.

Mr. Bush and several other members considered that the Association should confine itself solely to matters of a scientific character, and not mix itself up with legal proceedings; and that, if any Registration Society be formed, it should be one distinct from the Association.

It was ultimately proposed by Dr. Herapath, seconded by Dr. Tunstall, and carried by a majority—

"That it is desirable that a general meeting of the profession of this district should be called, to take into consideration the question of the propriety of forming a local Medical Registration Society, for looking after the general welfare of the profession."

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

MARRIAGES.

Ayerst, the Rev. W., of Calcutta, to Ellen S. H., third daughter of G. H. Drawbridge, M.B., of Rochester, on Sept. 28th.

Fuller, Captain Abraham Richard, of the Bengal Artillery, to Catherine Agnes, youngest daughter of the late Richard Armstrong, M.D., Inspector of Hospitals, Royal Navy, on October 4th.

Hackney, John, Esq., Surgeon, of Pentonville Road, to Elizabeth, relict of the late Captain Blackman, of Boreham, Sussex, on October 4th.

*Silvester, Thomas H., M.D., of Clapham, to Annie, daughter of the late Henry Dobbs, Esq, of Norwood Green, at Clifton, on September 27th.

West, R. Eliot, Esq., Surgeon, of Tavistock, to Kate Scobell, only surviving daughter of Josiah Glencross, Esq., of Devonport, on September 27th.

DEATHS.

Monckton. On September 29th, at Brenchley, Kent, aged 3¼, Stephen Holland, son of S. Monckton, M.D.

Windus, F. J., Esq., Civil Surgeon, at Chicacole, Madras, aged 31, on August 10th.

APPOINTMENTS.

*Ashdown, George, Esq., appointed Surgeon to the General Infirmary, Northampton, in the room of *Henry Terry, Esq., resigned.

Brabazon, A. B., Esq., appointed Surgeon; and

*Mann, R. M., Esq., appointed Assistant-Surgeon to the Sixth Lancashire Volunteer Rifles.

PASS LISTS.

Apothecaries' Hall. Licentiates admitted on *Thursday, September 29th*, 1859:—

Arminson, John, Preston	Jackson, John, Leicester
Gaye, Arthur C., Minehead	Parker, Robert, Churton
Greenwood, Newton, Truro	Riste, William, Bere Regis
Horsley, Henry, Croydon	Shepherd, J. B., Skidhill, Kent

The following gentlemen, on the same day, passed their first examination:—

Bowling, Thos., Birmingham	Lee, L. J., Devonshire Square
Hume, H., Newcastle-on-Tyne	Wise, Wm. C., Plumstead
Kitching, Thomas, Bow	Wither, F. O. B., Basingstoke

HEALTH OF LONDON—OCTOBER 1st, 1859.

[From the Registrar-General's Report.]

		Births.	Deaths.
During week	Boys .. 812 / Girls .. 766	1578	.. 1014
Average of corresponding weeks 1849-58..		1621	.. 1141·5

The following were among the causes of death :—diarrhœa, 40; cholera (in infants), 2; scarlatina, 80; diphtheria, 17; small-pox, 19 (15 children and 4 adults); measles, 17; ague, 4; remittent fever, 2; rheumatism, 8. Of bricklayers, 1 died last week; carpenters, 2; carpenters' wives, 1; carpenters' children, 17; painters, 6; painters' wife, 1; painters' children, 7; plasterer, 1.

Barometer:

Highest (Mon.) 29.92; lowest (Wed.) 29.54; mean 29.724 in.

Thermometer:

In sun—highest (Thurs.) 85°; lowest (Fri.) 61·5°.

In shade—highest (Sun.) 70.0°; lowest (Thurs.) 49.1°.

Mean—58.7°; difference from mean of 43 yrs.+4.4°.

Range—during week, 20.9°; mean daily, 12.8°.

Mean humidity of air (*saturation*=100), 86.

Mean direction of wind, S.W.—Rain in inches, 1.69.

The London Medical Registration Association. A meeting of the Committee was held at the offices of the Association, No. 5, Charing Cross, on Wednesday evening last, Dr. Kirby in the Chair. A large amount of correspondence was read. Amongst the resolutions agreed to was one that the question of the right of dentists to assume the title of "surgeon"-dentists should be immediately brought to an issue, and the steps to be taken were determined on. Votes having been taken, it was unanimously carried that several other prosecutions should be commenced; and, as will be seen by an advertisement in our columns, the annual general meeting of the Association was fixed to take place at the Freemasons' Tavern, on Thursday, the 3rd of November ensuing.

The Milanese Practitioners in the Late War. The *Piedmontese Gazette* publishes a letter from Dr. Cuvellier, chief physician to the French military hospitals of Milan, addressed by him to the Milanese practitioners, who, in a body, had volunteered their services in the hospitals. In this letter, Dr. Cuvellier confirms what was stated at the time of the unexampled zeal displayed by all the members of the faculty. After Magenta, 2400 wounded were brought in the first day, and their number rose to 10,000 on the following. Night and day did physicians and surgeons labour without intermission, in giving their aid to all these patients, whatever their nation. Dr. Cuvellier confirms the fact of upwards of three hundred elegant equipages arriving at the railway station to convey the wounded to the hospitals as they arrived on the night of June 27th, after the battle of Solferino. The streets were lined with national guards on the occasion, and the conveying of the wounded took place by torchlight amid the profoundest silence. "The honour of this fairy-like organisation," the doctor adds, "belongs to the Potesta, Count Belgiojoso, to the Sanitary Commission, and to all the members of the municipality."

University College. On Monday afternoon the distribution of prizes in the faculty of medicine took place at this college, under the presidency of Sir Charles H. Goldsmid, Bart. The report for the past year, read by the Dean, stated that during that period there had been 198 medical students, of whom 53 were new students. In November last, four members of the college had obtained the degree of M.D. in the University of London, all of whom had been placed in the first division. At the examination of M.B., gold medals had been awarded to Mr. Bazire and Mr. E. W. Thomas. At the examination of undergraduates for M.B., in August, 1858, Mr. A. Woodford had been placed first; and at the same examination in August 1859, Mr. C. Bastion, Mr. S. J. Gee, and Mr. W. J. Smith, had received gold medals, and, in addition, Mr. Gee had received the £30 exhibition. The University College Longridge prize, and the Atkinson Morley surgical scholarship, had both been awarded to Mr. Kempster. Out of forty candidates at the examination for the medical service of Majesty's forces in India, in January, Mr. W. E. Allen had had the first place, Dr. Fawcus the sixth, and Mr. E. Selons the ninth. The college had lost the services of Dr. Carpenter, as Professor of Medical Jurisprudence, which office had been filled by Dr. Harley. In the museum there had been improvements in the arrangements for the collection of anatomical and pathological specimens, and in zoology and comparative anatomy. An annual exhibition, to be called the "Filliter Exhibition," as a prize for proficiency in pathological anatomy, had been founded by the father of the late Dr. Filliter, a former distinguished pupil of the medical school. Dr. Johnston had enriched the museum of natural history, with specimens from Java. The report also bore testimony to the zealous and enlightened spirit which prevailed among the students. The prizes were then distributed.

Funeral of Dr. Alison. The remains of this distinguished and much lamented professor, received the honour of a public funeral, at Edinburgh, on Wednesday week. Sir Archibald Alison, brother of the deceased, was the chief mourner, and in addition to a large company of private mourners, the funeral was attended by the magistrates and council in their official robes, the professors of the university, the members of the different medical corporations, the Royal Society, etc. After service in St. John's episcopal chapel, conducted by the Very Rev. Dean Ramsay, and other clergymen, the body was interred in the burying ground attached to the chapel, in presence of a large assemblage of spectators.

Dr. Smethurst. This prisoner still remains in Horsemonger Lane Gaol, under a respited sentence of death, and not the least intimation appears to have been given as to what will be the final decision of the advisers of the Crown in reference to his ultimate fate. In answer to inquiries that have been made of the gaol officials, it has been stated that no communication whatever has been received from the Home Office respecting the prisoner, except the order for his respite, and this is all they know upon the subject; but every day an order is expected from the Secretary of State, directing what punishment shall be inflicted in lieu of the capital sentence. During the last few days a paragraph, copied from an evening journal, has been going the round of the papers, to the effect that inquiries were being instituted with regard to other crimes supposed to have been committed by the prisoner. But from all the information that can be acquired from the best sources, it appears that this statement is entirely without foundation, and that no such inquiries are going on; the only question under consideration being what ought to be done with the prisoner under the very peculiar circumstances of the case.

Hospital Accommodation for the Militia. The annexed circular has been directed to commanding officers of militia regiments and barrack masters, by the Earl of Ripon, the Under Secretary of State for War:—

War Office, September 19th, 1859.

"Circular, No. 361, containing regulations for hiring property for the use of the War Department generally being inapplicable for the provision of hospital accommodation for militia regiments at the annual training periods, Mr. Secretary Herbert has been pleased to approve of the following regulations of hiring for the object named, which are to be strictly followed in all future cases. When a regiment is about to be assembled for training, the officer commanding will report to the Secretary of State for War, as early as convenient, the necessity for providing hospital accommodation, stating whether there is any infirmary or public building available for the purpose. If not, he will state the lowest rate at which a suitable house or rooms, approved by the surgeon of the regiment, can be obtained for the training period. The report is to be sent, in the latter case, through the barrack master of the district, who, in forwarding it, will state, from his experience and knowledge, whether he considers the rent demanded to be reasonable, but he is not to proceed to the station to make inquiries without directions from this office. On the hire being approved, it will be communicated to the officer commanding, and to the barrack master, and the latter will supply such hospital furniture and bedding as the officer commanding may deem necessary, reporting the expense of carriage for sanction. The bedding, etc., is to be duly removed at the expiration of the training period. When it is proposed to accommodate the sick of a regiment in a hospital attached to barracks, barrack masters will, in Great Britain, forward the application of the officer commanding, to the Inspector General of Fortifications; but in Ireland this application should be sent to the deputy quartermaster general in Dublin, agreeably to the circular memorandum of the 2nd August, 1859."

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Mr. J. A. Locking; Dr. King; Mr. W. Copney; Mr. F. G. Harcourt; Dr. James Russell; Dr. Collingwood; Dr. Jno. Cockle; Dr. W. O. Markham; Mr. Dix; Dr. W. B. Mushet; Mr. T. Holmes; Mr. H. R. Hamilton; Mr. C. Oakley; Mr. J. Thorley; Mr. J. V. Solomon; Mr. R. M. Mann; Mr. G. Ashdown; Dr. H. Sandwith; Mr. Napper; Chirurgicus; Dr. Ladd; and Mr. Stone.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. A Practical Account of General Paralysis; its Mental and Physical Symptoms, Statistics, Causes, Seat, and Treatment. By Thomas J. Austin, M.R.C.S. Eng. London: Churchill. 1859.
2. On the Diseases and Injuries of the Joints. Clinical and Pathological Observations. By Thomas Bryant, F.R.C.S. London: Churchill. 1859.
3. Phthisis and the Stethoscope: or the Physical Signs of Consumption. By R. Payne Cotton, M.D. 2nd Edition. London: Churchill. 1859.
4. Statistics of Small Pox and Vaccination in the United Kingdom: and the Necessity for a better System of Vaccination in Ireland. By William Moore, A.B., M.B. Dublin: Fannin and Co. 1859.
5. The Ulster Revival and its Physiological Agencies. By the Rev. James McCosh, LL.D. Belfast: C. Aitchison. 1859.

ADVERTISEMENTS.

Fourth Edition, just published, price 2s. 6d., by post for 32 stamps.

A Guide to the Treatment of Dis-EASES OF THE SKIN; for the Use of the Student and General Practitioner. By THOMAS HUNT, Surgeon to the Western Dispensary for Diseases of the Skin. This edition contains two new chapters; one on the Vegetable Parasites of the Human Skin, the other on Metastasis in its practical bearings.

London: T. Richards, 37, Great Queen Street.

Just published, the Eighth Edition, price 12s. 6d.

Druitt's Surgeons' Vade Mecum: a Manual of Modern Surgery. The Eighth Edition, much enlarged, improved, and illustrated by 328 highly finished wood engravings.

London: Henry Renshaw, 356, Strand; and John Churchill, New Burlington Street.

In two thick vols. 8vo, cloth, price £3.

Chelius' System of Surgery. Trans-lated, with considerable additional Notes and Observations, by JOHN F. SOUTH, Surgeon to St. Thomas's Hospital.

"The most complete systematic treatise now extant."—*Edin. Med. Journ.*

London: Henry Renshaw, 356, Strand.

In fcap. 8vo., price 6s. 6d.

The Complete Handbook of Obstetric SURGERY; or, Short Rules of Practice in every Emergency, from the Simplest to the most Formidable Operations connected with the Science of Obstetricy. With 90 Wood Engravings. By CHARLES CLAY, M.D., etc.

London: Henry Renshaw, 356, Strand.

In post 8vo, price 8s. 6d.

On the Constitutional Treatment OF FEMALE DISEASES. By EDWARD RIGBY, M.D., Senior Physician to the General Lying-in Hospital, and Examiner in Midwifery at the University of London.

London: Henry Renshaw, 356 Strand.

NEW EDITION OF DR. WEST'S WORK ON CHILDREN'S DISEASES.

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"This little work will be found extremely useful to students who have received but an imperfect classical education."—*The Lancet.*

Hughes and Butler, Medical Booksellers and Publishers, 15, St. Martin's-le-Grand.

Pepsine.—The Liq. Pepsiniæ, as used and recommended by Dr. Nelson, can be had from Messrs. W. & C. R. TITTERTON, 6, Snow Hill, Birmingham.

WATER BEDS.—EDMISTON & SON, 5, CHARING CROSS, (late 69, STRAND), beg to call the particular attention of the Managers of Hospitals and Dispensaries, and the Medical Profession generally, to the price and quality of their Hot or Cold Water Beds.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXLVI.] LONDON: SATURDAY, OCTOBER 15, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

GUY'S HOSPITAL.

I. CONCUSSION OF THE BRAIN.

Under the care of JOHN BIRKETT, Esq.

[*Reported by* J. D. HILL, Esq., *Dresser.*]

JOHN HARDIMAN, aged 60, was admitted into the accident ward, under the care of Mr. Birkett, on August 5th, 1859. According to the statement of the friends, this man received a blow from the fist of another man, which knocked him down, and he fell upon his occiput, remaining totally insensible for some hours; after which, he became partially conscious—in fact, insensibility and partial consciousness alternating from time to time up to his admission, which was two days subsequent to the injury. The patient, a spare man, and otherwise healthy in appearance, when admitted was labouring under some symptoms of compression, with a full and low pulse, 58, but with contracted pupils. When roused, he answered either indistinctly or in a surly manner (raising his hand to his head), and immediately relapsing into a state of stupor. The evacuations passed involuntarily, the skin was warm, and the tongue coated.

August 6th. He had eleven convulsive fits during the day, which resembled epilepsy; and it was at first imagined, from the peculiar character of these fits, that the patient might be producing them voluntarily. Each fit lasted about seven or eight seconds; during which period the pulse increased 10 or 12, and the surface of the body became hot and perspiring; particularly the muscles of inspiration were affected, so that the breathing was sonorous.

August 7th. He is improved; he speaks more distinctly when roused. The skin is warm and moist; pulse quicker, 62. He took food, beef-tea, etc.

August 8th. He is improving; and is more sensible.

August 9th. The pupils are sensible to light. He complains of pain in the head. The bowels are confined. A purgative was prescribed, and a dose of quinine mixture three times a day.

August 10th. He is not so well; he has relapsed into his former state, and has taken no food.

August 12th. He is better.

August 14th. He continues improving.

August 16th. He is not so well. The pulse is slow and labouring. He complains of pain in the right temple. The evacuations can be passed voluntarily.

August 17th. He is better; the pain is abated. He slept well, and his appetite is improved. The pulse is higher, and diminished in fulness.

August 18th. He has been assisting the nurses in arranging the beds, etc.

August 21st. He is progressing satisfactorily.

August 26th. He was ordered to be discharged when the bed was required; and was discharged on Sept. 5th, cured.

II. SUPPOSED FRACTURE THROUGH BASE OF SKULL: BLOOD FROM MEATUS, AND SEROUS FLUID.

Under the care of JOHN BIRKETT, Esq.

[*Reported by* J. D. HILL, Esq., *Dresser.*]

Henry Calcutt, aged 33, was admitted into the accident ward, under the care of Mr. Birkett, on August 8th, 1859. He was of healthy appearance, and rather below the usual standard height. His occupation was that of a builder's labourer. Two or three days previously to admission, this man was engaged in his usual employment (that of carrying timber), when he slipped down (the ground being slippery from a recent shower of rain), with a large block of wood, which fell across his left temple and cheek, rendering him partially insensible for a few seconds. Immediately he recovered his senses, there appeared to him a profuse flow of blood from the opposite ear (viz., the right), and since his admission, at intervals, a bloody discharge had appeared, although not considerable in quantity. Upon examining the bed-linen, distinct traces of a watery fluid were found, which he stated to be discharged after the bleeding had ceased, and even sometimes independent of it. This fluid was small in quantity, and transparent in appearance.

Upon admission, the left side presented considerable deformity. On careful examination, no fracture could be detected. There was great swelling and slight ecchymosis. This however subsided after a few days.

The following symptoms were observed: 1. Paralysis of the left muscles of the face, and more especially the left orbicularis palpebræ; 2. Impaired sensibility over the whole face, and the sense of taste affected, as well as diminished sensibility of the teeth, etc.; 3. Partial paralysis of the tongue, which, when protruded, pointed to the right side; 4. Deafness (complete at first) of left ear; 5. Affection of the sight; sometimes dimness of vision, and other times objects appeared double or inverted; 6. Complete paralysis of the abductor muscle of the left eyeball (the external rectus.)

All these symptoms gradually disappeared, excepting the last, which remained up to his discharge. There was at first considerable pain referred to the temple and occiput, which lasted for many days after admission.

The treatment consisted in quietude, moderate spare diet, and julep of bichloride of mercury three times a day, attending to the secretory and excretory functions.

He was discharged on September 8th, 1859.

UNIVERSITY COLLEGE HOSPITAL.

I. FRACTURE OF THE BASE OF THE SKULL.

Under the care of W. JENNER, M.D.

[*From Notes by* BURTON COPP, Esq., *Physician's Assistant.*]

A MAN, aged 70, of very intemperate habits, was admitted at 8½ P.M. on the night of September 5th. Nothing could be made out from the person who brought him to the Hospital, except that he left his lodgings on the Saturday night, and returned on the Sunday evening, at which time there were marks of a blow on the face. He appeared then to have been drunk, as, in fact, he almost always was.

When admitted, he lay on his back, muttering in an incoherent manner; and, when asked if he had been drinking, replied, "Yes". He moved the left arm constantly, but the right lay motionless; its muscles were rigid. The right leg was also motionless, but he had sensation on both sides. There was an abrasion on the right malar bone, and on other parts of the face; and several ribs on the right side were fractured. There was swelling, from effused blood, on the occiput; but no scalp-wound. No fracture of the skull could be detected. There was no discharge from either ear. The veins of the neck were full, and the carotids beating with considerable force. The pulse was 108. There was a puff in expiration. He passed fæces and urine unconsciously. The right arm was decidedly colder than the left. He was bled to twenty ounces, and then the inequality in temperature was seen to be reversed, the right arm becoming warmer. He continued in much the same state, muttering indistinctly to himself when awake, but sleeping much, and very irritable when disturbed.

On the following day, he seemed rather weaker. The features acted unequally, the right less than the left. He was little sensible to pain, but reflex movements were very distinct in both legs.

Sept. 7th. The respiration was irregular, about 42; pulse 132. He could not be roused to exhibit any signs of con-

sciousness. The pupils were unequal (the left smaller than the right), but both acted. There was slight hiccough. The difference in the innervation of the two arms was marked. The bowels were kept open by enemata, and he could be roused occasionally to take a little beef-tea.

Sept. 9th. He remains in much the same condition. He exhibits no signs of consciousness, except irritation when the eyes are opened, or when he is pinched. The cheeks are much sunk in. He has occasional hiccough. The difference between the arms continues. He applies his left hand frequently to his head. The respiration is almost entirely diaphragmatic. He seems to feel some pain when the right arm is extended. The buttocks have commenced to slough.

He died on the following afternoon.

On *post mortem* examination next day, the skull-cap was found to be dense. Blood escaped from beneath the left half of the occipital bone when the skull was sawn, and there was also some blood in the right occipital fossa. There was a large clot of blood over the left hemisphere of the brain, and a considerable amount of blood at the base. A portion of brain at the anterior part of the right hemisphere was broken up. There were numerous patches of extravasation both beneath the arachnoid and in the substance of the brain. The medullary matter in the latter situation was of a yellow colour, with crimson spots. The brain-tissue was soft where it had been injured; but there was no trace of inflammation in the neighbourhood. There was a fracture of the right half of the occipital bone; and, exactly over this spot, extravasation had taken place into the cerebellum.

Remarks. This case may recall to the recollection of some of our readers one which we reported some time since (vol. 1858, pp. 407, 821), and which became the subject afterwards of legal examination, in which the same difficulty was experienced in deciding whether the cerebral symptoms proceeded from disease or injury. In that case, as in this, there were evident traces of bruises on the face; but these may just as well be the consequence of an apoplectic seizure, or of trifling accidents from drunkenness, as evidence of violence done to the skull; and there were similar symptoms of imperfect loss of the functions of the brain, due in both cases to the extensive effusion of blood on its surface, and increasing as the thickness of the clot increased. The presence of a fracture in the case before us revealed the true nature of the case, which otherwise might have remained obscure as the former one did, even after all the investigation which was bestowed upon it.

II. TYPHOID FEVER.

Under the care of W. Jenner, M.D.

The following case may be usefully compared with that which we published last week from St. Mary's Hospital.

William D., aged 11, was admitted under Dr. Jenner's care on September 14th. He had always been delicate, and had had an attack of scarlet fever at six years of age, which seems to have been followed by transient dropsy. The present illness had commenced on September 2nd, with chills, and a swimming in the head. On September 4th, feverish symptoms became more decided—flushed face, thirst, bad taste in the mouth, etc.; and these had persisted up to the time of his admission, complicated with some hacking cough, and for the last five days with diarrhœa and pain in the lower part of the abdomen. He had noticed latterly that his hearing was becoming impaired.

On admission, he was in a state of extreme depression, and could not turn in bed without assistance. The respirations were 42 in a minute; the pulse was 138, very weak; sordes were collecting about the lips; the skin was hot and dry. There were a few spots, but not well marked. The tongue was furred. He was very drowsy. When asked if he had any pain, he put his hand on his abdomen. It was tympanitic. There was gurgling in the right iliac fossa, but no tenderness. The left hypochondriac region was decidedly tender; the edge of the spleen could be felt. The bowels were opened freely on admission with a dose of castor oil. He was ordered to take a tablespoonful of port wine every three hours, and glycerine to the lips.

Sept. 15th. Next day, the tongue seemed rather cleaner. He was irritable when spoken to, restless, and muttering.

He went on tolerably well during the next three days. On September 18th, it is noted that the respiration had fallen to 18; and that the pulse was 120, regular and full; but, on the following morning, violent purging came on. He had six stools, and passed a quantity of blood from the bowels. He was still restless, and made attempts to leave his bed, in one of which he fell down, and injured his face rather severely. The general condition was not materially altered; the deafness was better; the skin cooler; the pulse and respiration as before. A starch and opium enema was ordered, and arrested the purging. After this he seemed a good deal better, and recovered power to a certain extent; but, at 3 A.M. on the following morning, the purging recommenced, and he had several motions, consisting for the greater part of pure blood, between this and six o'clock. A starch and opium injection was then given, and again arrested the purging. He had, however, changed very much in the interval; the tongue was very dry and brown; the pulse 120, very weak; the skin hot and dry, with a few petechiæ on the chest. He appeared decidedly thinner, and lay on his back, with half-shut eyes. The belly was not much distended, and scarcely at all resonant. He was ordered to take the following every two hours.

℞ Plumbi acetat. gr. ij; acidi acetici diluti ℥v; tinct. opii ℥j; aquæ ʒss. M.

And two tablespoonfuls of wine every two hours. There was no purging after this. He took two doses of the above mixture, and swallowed his wine when poured into his mouth; but became gradually more and more unconscious, and about 11 P.M. was perfectly comatose. He died at 4½ A.M.

On *post mortem* examination, the body was found emaciated. There were numerous purple spots on the anterior surface of the trunk, and a few ecchymoses on the chest. The brain appeared healthy. The lungs, heart, and liver, presented no appearances calling for special mention. The spleen was hard, and rather large. The intestines were moderately distended with flatus, and the small intestine contained a good deal of bloody fluid. About a foot above the ileo-cæcal valve, on the free edge of the intestine, was a purple patch, visible on the outer surface of the gut, in the centre of which was a minute perforation. The small intestines presented several patches of inflammatory injection. There was about a teaspoonful of yellow turbid, apparently fæcal, fluid, in the peritoneal cavity. The solitary glands of the small intestine were very large. Peyer's patches were enlarged, especially at the lower part of the intestine; and there were a few small ulcers towards the lower part of the gut, one of which, as already noticed, had perforated its coats (at least, after death). In the large intestine, an ulcer only was found, a short distance from the cæcum. There was a small abscess behind the pharynx.

BIRMINGHAM GENERAL HOSPITAL.

MEDULLARY CANCER ENTIRELY DESTROYING THE ISCHIUM, AND LAYING OPEN THE ACETABULUM: SECONDARY CANCER OF THE LIVER AND LUNGS: BELLOWS-SOUND PRODUCED BY PRESSURE ON THE PULMONARY ARTERY.

Under the care of James Russell, M.D.

[*Clinical Clerk*—Ed. Ryland, Esq.]

James Purser, aged 48, a porter, was admitted on September 8th, 1859. The patient had been under the care of Dr. Keyworth, who was kind enough to furnish some particulars of his case. He had been declining since November. On February 23rd, Dr. Keyworth was called to attend him; he was suffering from pain in the side, cough, and short breath, with debility. On March 7th, the pain was so severe, as to require the application of a blister, which afforded much relief; in the middle of that month the patient was convalescent, but cough with some emaciation remained, and he had a sense of faintness in ascending a hill.

He soon relapsed; and on June 7th, was again visited by Dr. Keyworth, who found him complaining of pain in the regions of the right sciatic notch, and of the tuber ischii; he had also occasional pain and constant deep-seated tenderness in the right groin; he maintained the thigh in a semiflexed position, and the pain was increased by extension or rotation of the limb; it was worse at night, and deprived him of sleep. The cough and dyspnœa had left him. A diastolic bellows-sound was now heard over the base of the heart, and on the left side as high as the second rib. In a month he was so much benefited by counterirritation and by sedative applications, as to be able to walk, although some stiffness of the limb remained; but by the middle of August the pain had returned with increased severity, and he suffered from fainting fits and debility. On the 27th, Dr. Keyworth injected half a grain of morphia beneath the skin over the sciatic notch; the

patient had been sleepless for a fortnight up to that time, but the injection relieved the pain, and he obtained sleep. In a day or two, however, he fell into a state of low delirium, which continued up to the period of his entering the Hospital. Early in July, dulness was noticed on percussing the upper region of the left chest; and on August 28th, the right glutæal region was found somewhat full; the patient had asserted this fulness to exist at a somewhat earlier date; but the correctness of his assertion was not verified by examination.

On admission, the patient had a decidedly typhoid aspect; he was emaciated, his tongue red and glazed, and he was in a state of low delirium. He lay with his right thigh partially flexed, but preferred to lie upon his belly; there was much resistance to extension of the hip-joint, but with a little management, this movement was effected, and the two lower limbs were then found to be of equal length. The right glutæal region was decidedly fuller than the left; there was tenderness on pressure in this region as well as in the groin, and to a less degree in the intertrochanteric fossa; the muscles of both lower extremities were wasted and flabby in about an equal degree.

The left chest was dull on percussion over a space lying between the clavicle and the sixth rib, and between the axilla and a finger's breadth from the sternum. The impulse of the heart was visible over an unusually wide extent. A loud rough systolic bellows-sound, followed by the second sound of the heart, was heard over the whole upper region of the left chest, as low as the fourth rib; it could scarcely be distinguished in the fourth intercostal space, and below this space the normal sounds of the heart were alone audible. The bellows-sound was very faint under the sternum, and quite inaudible on the right side. There was absence of respiratory murmur over the dull space indicated above; elsewhere, the sound of respiration was soft and vesicular. The posterior region of the chest could not be fully examined, on account of the exhausted state of the patient, and of the pain produced by moving his body. Vesicular breathing was, however, distinguished in the *left* supraspinous fossa, and the bellows-sound was not to be heard.

Sumat omni nocte pilulæ saponis comp. gra. v.

℞ Ætheris chlorici ʒiij; ammon. sesquicarbonatis ʒss; tincturæ cinchonæ comp. ℥ss; infusi humuli ʒvij. M. Sumat ʒj 4tis horis.

Two glasses of wine and one glass of brandy were ordered.

He remained in a state of quiet delirium, slowly sinking. He dozed frequently, and only complained of pain when he was moved; it then affected his thigh and hip. The limb was maintained in a semiflexed position. On the 14th, a large fluctuating swelling was discovered in the inside of the right thigh, passing over the front of the limb to the groin. He died on the 16th.

Post Mortem Examination, fifteen hours after death. The body was much wasted. An abscess of great extent occupied the region of the right hip and the upper region of the thigh. In the latter situation, it extended among the muscles down to the femur; thence it passed along the glutæal region, separating the muscles from the ilium; and, entering the pelvis through the obturator foramen, it separated the peritoneum from the bones bounding the front of the pelvis on the right side, pushing the bladder towards the left. It was filled with thin pus. The femoral and pelvic vessels (arteries and veins) were healthy, and so was the inferior cava. A fungoid mass sprang from the periosteum around the margin of the obturator foramen, within the pelvis, and extended outwards over the posterior wall of the acetabulum, and in a thinner layer over the capsular ligament of the hip to the great trochanter. The pubes was quite uncovered by it, but the descending ramus became incorporated with it. The ischium was entirely removed, its place being taken by a fungoid mass about the size of half a small orange; the descending ramus of the pubes terminated in a jagged surface. The place of the posterior wall of the acetabulum was also occupied by fungoid tissue, an irregular aperture in which exposed the head of the femur, partially covered by the inner shell of the cartilage which had lined the cavity; the head of the femur was perfectly healthy. Looking on the anterior aspect of the pelvis, the remains of the obturator ligament appeared, beneath the horizontal ramus of the pubes, greatly thickened, and running outwards to join the capsular ligament, which was also much thickened in its inner half. Both these fibrous tissues were infiltrated with cancer-cells. The fungus was composed of dense but friable tissue, of a rose tint, having an obscurely reticulate appearance. A thick pulp exuded from its substance in spots, as though contained in small cavities; in no part were there any remains of bony tissue. This pulpy matter was chiefly composed of cells, some of irregular shape, but most of them more or less regularly spherical or ovoid; some were of a large size, from 1-314th to 1-500th of an inch; the generality varied between 1-830th and 1-1250th of an inch in diameter. The nuclei were 1-2500th of an inch in diameter, but they were generally concealed by granular matter. There was very little free granular matter, and no fat. The upper part of the femur was healthy. A small nodule of medullary cancer existed in the very extremity of the left lobe of the liver; the remainder of that organ and the spleen and kidneys were quite free from cancer. The heart and its valves, and the aorta, were healthy. The pulmonary artery contained a thin loose riband of pure fibrine, which extended into each primary branch. The upper lobe of the left lung adhered to the ribs, but hardly reached the edge of the sternum. It was fully distended, perfectly solid, and very resisting. The bronchial tubes were open as far as the small ramifications, and were filled with glairy mucus. The central portion of this lobe was of a reddish colour, and completely broken up; a large quantity of thick fluid, like raspberry cream, flowed away when it was divided, leaving a shreddy fungoid tissue. The remainder of the lobe was black, dense, and hard. The central fungoid matter consisted of the remains of pulmonary tissue, and of a large number of cells like those described above, but with larger nuclei. There was, besides, much free granular matter, and "granule cells". The surrounding portion presented pulmonary tissue in process of degeneration, plentifully infiltrated with black pigment-grains, arranged in groups or streaks, and exuded copiously in every part a thin fluid crowded with globular nucleated cells, smaller than those in the central portion. At the edge of the lower lobe (which was otherwise healthy) were a few groups of small white pulpy grains; a process from this lobe ran up to the posterior part of the apex of the lung, and explained the vesicular breathing which was heard in the supraspinous fossa. The right lung was healthy, with the exception of two firm nodules in its apex, having precisely the same structure with the upper lobe of the left lung, and, like it, infiltrated with cells 1-1000th of an inch in diameter. The pulmonary tissue around was much drawn in and puckered. A large flattened mass of indurated bronchial glands was attached to the left lung at its root, involving the different vessels, and attached especially to the superior lobe. The left pulmonary artery was closely attached to this mass at its bifurcation, and the bellows-sound was probably produced at this spot, and was conducted throughout the hardened upper lobe. The glands contained a soft fungoid matter, large masses of which escaped from the left bronchus, having found admission either through an ulcerated opening which existed in the wall of that tube, and communicated directly with the diseased glands, or through a primary subdivision which opened directly upon the fungus in the lung. The branch of the pulmonary vein from the left upper lobe was nearly occluded by a firm plug of colourless fibrine, closely adherent to the wall of the vessel.

Remarks. Although the symptoms of pulmonary disease took the lead in the history of this case, it is probable that the cancerous disease took its origin in the pelvic bones, and appeared as a secondary affection in the lungs. The lungs are among the organs the most frequently affected with secondary cancer; the appearance of secondary cancer in the lungs first, and next in the liver, is the usual course in external cancers. Moreover, the history of cancer, especially of the medullary kind, is very uncertain in respect to the presence or absence of pain; and the declining state of health which had existed in this patient for some months previous to the first report, indicates the presence of disease at that time. The pain, when it manifested itself, probably resulted from the cancerous formation having made sufficient progress to involve the obturator and sciatic nerves; the former was seen in the dissection; the latter was sacrificed in the endeavour to remove the diseased parts with as little disfigurement as possible. The appearance of the abscess in the inside of the thigh probably indicated the period when the obturator ligament gave way. The cancer appears to have commenced in the fibrous tissues, and to have extended from them to the bones. The termination of life was doubtless hastened by the formation of matter, which probably commenced within the pelvis, and escaped afterwards by completing the destruction of the obturator ligament, thereby occasioning the sudden appearance of the abscess in the thigh.

Original Communications.

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF CARDIAC DISEASES.

By W. O. Markham, M.D., F.R.C.P., Physician to St. Mary's Hospital, London.

V.—General Symptoms of Pericarditis.

The general symptoms attending acute pericarditis vary considerably. They are, as might be supposed, for the most part, merged in the symptoms of the particular inflammatory, or other disease, with which the pericarditis happens to be associated. The pericarditis of rheumatic fever, indeed, often supervenes in the progress of the fever without in any degree adding to or altering the general symptoms of it. Sometimes, but not always, local pain, and a feeling of oppression about the region of the heart, point to that organ as the part upon which the inflammation has fallen. Every stethoscopist is aware that as a general rule it is by the physical signs—the friction sounds—that we gain the earliest intimation of the existence of the pericarditis; a fact which shows how important it is ever carefully to watch for these signs during the progress of all those diseases in which, as experience teaches us, pericarditis may possibly arise.

Moreover, in severe cases of pericarditis, inflammation of other parts and organs frequently coexist—endocarditis, pleuritis, and pneumonia, for example—and necessarily modify and complicate the character of the symptoms. Hence we may conclude that there are no general symptoms which can be considered as special indicators of the existence of pericarditis. In advanced periods of the disease, however, where the inflammation has been severe, and its products are considerable, general, as well as local, indications of serious impediments to the respiratory and circulating organs arise.

The symptoms here given are such as are usually met with in a typical case of rheumatic pericarditis.

The *pulse* at the wrist varies much in its characters, for the most part corresponding to the nature of the heart's impulse. At first hard, frequent and strong, it becomes weak, fluttering, and irregular in the latter stage of the disease, when the pericardial effusion is large.

Sometimes it remains of a natural strength, even when the impulse of the heart is hardly perceptible; or it may be very weak when the heart's impulse is violent, in which case we may expect the coexistence of hypertrophy of the left side of the heart, with valvular disease. A weak, fluttering, irregular and intermittent pulse is ever an anxious sign, for it indicates an advanced condition of the disease, and an enfeebled state of the vital powers.

In advanced stages of the disease, the pulse is subject to sudden changes; the least movement or mental excitement raising its frequency in a remarkable degree. When neither pleurisy nor pneumonia coexist, the pulse may be more frequent than natural, in proportion to the number of the respiratory movements.

The Respiration. Several causes tend, directly and indirectly, to quicken the respiratory movements, and impede the respiration in pericarditis; and these causes act conjointly or separately. The due expansion of the thorax is prevented by the pain to which its movements give rise; and the free return of the blood from the lungs is impeded by the pericardial effusion, which restrains and weakens the action of the heart, and compresses the auricles, as already explained. The motion of the diaphragm, the pleuritic surface of which is often involved in the inflammation, is also frequently affected, in consequence of the pain which it occasions. Pleurisy and pneumonia, moreover, are almost constantly associates of acute pericarditis in its advanced stage; and when present, they also necessarily interfere with, and increase the disturbance of, and embarrass the respiration; and more or less so according to their degree and extent. And again, where the pericardial effusion is considerable, it mechanically presses upon the lungs, particularly upon the left lung.

In consequence of these disturbances of the respiration, we find that the respiratory movement of the upper part of the chest is sometimes increased, and that of the epigastrium arrested. The expansion of the ribs over the heart and left side of the chest is also partially arrested, particularly when the costal pleura participates in the inflammation. The difficulty of breathing is, under such circumstances, apt to be much increased by the slightest motion, or mental agitation. Sometimes, even when the exudation is small, the patient breathes much quicker than natural.

Hence the obstruction of the respiration which results from the pericarditis depends upon many different circumstances:—upon the amount of pericarditic and pleuritic effusions; upon the degree of pain; upon the condition of the muscular structure of the heart; upon the inflammation and paralysis of the diaphragm; upon the presence or absence of pneumonia and pleurisy; and upon the extent and degree of these different affections.

Difficult respiration is an important symptom when it comes on suddenly. The fluttering, faltering heart, and the respiratory anguish, as Dr. Latham remarks, almost always occur late in the course of the disease.

Pain, when of an acute kind, is generally severest at the onset of the inflammation; but of all the symptoms of pericarditis, it is the most inconstant, and therefore the least trustworthy.

It is not improbable that in some cases, when the rheumatic pains are very severe, and the præcordial pain slight, it may not be noted by the patient though actually present. The pain is felt chiefly about the præcordia and at the scrobiculus cordis, and is increased on deeply breathing, and by pressure—particularly by pressure at the epigastrium; it is increased also by motion. Sometimes it reaches to the shoulder and down the left arm.

The pain attending pericarditis is of a twofold nature. There is the distress, the anguish, and the stifling feeling—the modified angina—which result from the oppression of the heart—the congestion—and there is the sharp, acute, and cutting pain, which, probably, in the greater number of cases depends upon the accompanying pleurisy.

It seems probable, indeed, that mere inflammation of the pericardium will not, of itself alone, occasion pain. The pain may be well accounted for by the pleurisy which is so frequent an attendant upon pericarditis.

The tongue is at first moist, and coated with white epithelium; in the later stages of the disease it often becomes dry and red. The thirst is great, and there is much general fever. The distress of the patient is often extreme when the symptoms are severe. In such case he is sometimes very restless, and if rheumatic pains hinder him not, frequently varies his position in bed; but with the progress of the disease movement is restricted, and then he lies for the most part on his back. Often he requires his head and shoulders to be raised, feeling that he breathes more freely when he is high in bed. If one lung is much compressed by the pericarditic or pleuritic effusion, he tends to lie rather towards that side where the effusion is. Whatever position he assumes is painful and irksome to him, and yet some impending dread forbids him to change it. In the worst stages of the disease cold sweats come over him, lividity of face, rapid respiration, feelings of suffocation, and then, at length, coma closes the struggle for life.

Cerebral Symptoms. In pericarditis when symptoms arise indicative of disturbance of the nervous centres, they are always of very serious import. The pathology of these affections has yet to be written, for their nature is not explained by any local changes hitherto discovered to which they can be ascribed. When they appear, they are generally the precursors of a fatal termination of the disease; in young persons they present themselves under the form of choreal symptoms. Sudden movements of the body, twitchings of the limbs, throwing about of the head, great restlessness, delirium, distortion of the features, startings in the sleep, tetanic spasms, are the usual manifestations of these disturbances of the nervous centres. "Wild delirium, epileptic or tetanic convulsions, chorea, coma, fatuity, are the greatest and the rarest of these symptoms; and mutterings, reveries, transitions from torpor to excitement, subsultus, are the least and most frequent, but they are all akin one to another. The least may mount up to the greatest, and the greatest run down to the least." (Latham.)

In pericarditis associated with Bright's disease of the kidney, the head symptoms may, in some cases, be attributed to the uræmic condition of the blood;* but their cause, as said before, in rheumatic pericarditis is obscure.

* It has been thought that in Bright's disease of the kidney the head symptoms do not depend upon the urea in the blood, but upon the anæmic

The old doctrine of metastasis gives no explanation of the cerebral symptoms.

It is possible, as has been suggested, that the poisonous agent in the blood may act directly upon the nervous centres; or that the excitement may arise in a secondary or reflex manner, as a consequence of the local disease. But it seems more in accordance with modern pathology, to consider that these nervous derangements result from profound alterations in the condition of the blood, which have been produced either by the disease, or by the treatment adopted for its cure. I have elsewhere observed that since venesection and mercury have ceased to be considered as necessary remedies in this disease, the nervous symptoms alluded to seem to be less frequently met with by practitioners.

The furious delirium which sometimes arises in pericarditis may be regarded in some cases as the consequence of exhaustion of the nervous power. It is in the advanced stages of the disease, indeed, that these nervous symptoms supervene.

The following case, which lately came under my observation, is a good illustration of this condition of disease in its typical form.

A. B., a painter, aged 37, had for several weeks suffered from great dyspnœa, in connection with pericardial disease. Three days before his death, he became delirious, and for the last two days of his life was furiously maniacal. His brain was found to be perfectly healthy; but a large amount of serous, subarachnoid effusion surrounded it. The pericardium contained three pints and a quarter of fluid, and stretched twelve inches across the chest.

The heart was thickly covered with freshly deposited villous fibrine. The lungs were compressed backwards towards the spine; but were healthy.

This seems to have been a case in which, if in any, paracentesis pericardii is justifiable. We may fairly conclude that here the mechanical pressure of the fluid upon the heart, and upon the lungs, was the chief immediate promoting cause of death. The delirium may be ascribed to these facts, and to exhaustion, the patient having taken very little food during his lengthened suffering.

Difficulty of swallowing is occasionally observed when the pericarditic effusion is considerable; the difficulty being increased when the patient lies recumbent. It depends, in all probability, upon the pressure of the fluid in the pericardium, exerted on the œsophagus, whereby the passage of the food into the stomach is mechanically impeded. The same pressure has been thought, also, in rare cases, to have acted upon the trachea, and so to have interfered with the respiration; this I have never observed.

The condition of the skin depends, in great part, upon the nature of the pericarditis, whether rheumatic or not. When the disease is of rheumatic origin, the state of the skin, as well as many of the general symptoms, are those peculiar to acute rheumatism.

In some rare cases of rheumatic pericarditis, the inflammation of the pericardium has been known to precede the affection of the joints. Sometimes it comes on when the arthritic affections have already ceased to exist; but much more frequently the pericardial inflammation supervenes during their continuance.

It has not yet been clearly ascertained whether the severity of the articular bears any relation to that of the pericardial inflammation. "Sometimes we find the one affection is violent and the other absent or slight; and then again both the rheumatism and the pericarditis are violent, and their symptoms increase and decrease in force together. The fact is, that pericarditis may be looked for whether the acute rheumatism be severe or mild,—whether its seat be fixed or shifting, and at the beginning, as well as during the progress of the disease." (Latham.)

Such seems the experience of physicians in London; but it does not correspond with that of Dr. Stokes, in Dublin, who says: "The liability to all forms of carditis in rheumatism is in proportion to the severity and obstinacy of the fever." The question is one which is manifestly very difficult of solution. In accordance, however, with what I have already said in speaking of the causes of pericarditis, it is certain that the mildest form of rheumatic fever in the young is more likely to be attended with cardiac affections than the severest form of the fever in persons advanced in life.

condition of the blood. In a rapidly fatal case of this disease, which I lately witnessed, characterised by extreme anæmia and highly albuminous urine, the patient was perfectly sensible to the last, and never had any cerebral disturbance.

It is unnecessary for me to indicate especially the signs and symptoms of *non-rheumatic pericarditis*. The physical signs, when they are recognised (and I have already observed that they are frequently altogether overlooked during life by reason of the obscurity of the disease), will be found to resemble those here detailed. The general symptoms which accompany the pericarditis will be those of the particular disorder, in conjunction with which the pericarditis exists.

Pericardial adhesions. Adhesions of the pericardium do not offer any positive signs by which we can with certainty recognise their existence during life; but when we have observed the progress of the pericardial inflammation from its commencement, and have witnessed the gradual departure of the friction-sound, and of the other symptoms of pericarditis, in any particular case where the disease has been extensive, we may anticipate, with tolerable certainty, that adhesions have taken place.

It would appear that complete union of the pericardial surfaces is, for a certain time at least, compatible with the integrity of the heart's action, and that the subjects of such a condition of the membrane have existed, even for years, without manifesting any symptoms of cardiac disease, and have died at last of other affections; but cases of this description are very rare, and we find, as a rule, that whenever old pericardial adhesions exist, some other abnormal condition of the heart is likewise present.

The abnormal conditions of the heart most frequently met with in association with pericardial adhesions, are—its dilatation, hypertrophy, and atrophy. Each of these conditions has been supposed to result immediately, as a consequence of the adhesions; the hypertrophy, from the stimulus to muscular growth, caused through the impediment to the heart's action; and the dilatation and atrophy, from weakness and deterioration of its muscular structure, which have been indirectly produced by the pericardial inflammation.* It is very probable that these different conditions may all result from the pericarditis, as explained under the head of its pathology; but even though they were positively proved to be the immediate consequences of pericarditis, it must be remembered that they are not peculiar to it alone, and are therefore, as far as diagnosis is concerned, not distinctive signs of pericardial adhesions.

As regards the *diagnosis* of pericardial adhesions, we may remark, that no reliance can be placed upon the abrupt, jogging, tumbling, double motion of the heart, described as a sign by Dr. Hope; for this motion is the result simply of irregularity of the heart's rhythm, and may be associated with many other of its diseases.

Nor is it necessary to do more than merely refer to the fact that depression and pulsation at the epigastrium, during the heart's systole, have been suggested as signs of pericardial adhesions. An irregular, small, unequal pulse, præcordial anxiety, dyspnœa, tendency to fainting, dropsical swellings, and many other like symptoms, though present when pericardial adhesions exist, are symptoms of many other conditions of the heart, and therefore not distinctive of this one. Certainly, wherever such symptoms remain after an attack of pericarditis, or arise consequent to it, and no endocardial murmur is present at the same time, we may very fairly consider them as caused by pericardial adhesions.

Skoda has pointed out signs which he considers indicative of pericardial adhesions; and these I will shortly mention. It must be premised, however, that where these signs exist, union is supposed to have taken place, not only between the pericardial surfaces, but also between the external parts of the pericardium, the neighbouring pleural surfaces, and the walls of the thorax.

His diagnosis is based upon the signs which show that the heart's apex is drawn *upwards and to the right* during the systole, being prevented from moving downwards and to the left.

The heart's apex gives no systolic beat; it is either not to be felt, or seems to cause a shock during the diastole.

During the systole, depressions are visible in the intercostal space corresponding to the apex, and frequently in one or more spaces above it.

Systolic retraction of the left intercostal spaces, does not of itself enable us to diagnose adherent pericardium; it must also be shown, that, simultaneously with the retraction, the heart's apex is nowhere urged against the thoracic walls.

The systolic retraction of the lower half of the sternum, is a

* The hypertrophy and dilatation are no doubt, in the majority of these cases, the consequences of the valvular diseases, resulting from the endocarditis, which so frequently accompanies pericarditis.

certain sign of adhesion of the heart and pericardium, and of their attachment to the vertebral column.

The limits of dull percussion remain the same during inspiration and expiration, because the lungs, during inspiration, are prevented by the adhesions from dilating over the pericardium.*

The nature of the sounds of the heart gives us no aid in the diagnosis.

Dr. Law, in the *Dublin Quarterly Review*, vol. 22, p. 81, gives as a sign of adherent pericardium: "the persistence of the same extent of dulness to percussion in the præcordial region, no matter what position the individual may assume."

The only one of these signs which I have been able to verify, is the permanence of dull percussion over a given part, during inspiration as well as expiration; but this fact necessarily indicates also exo-pericardial adhesions.

[*To be continued.*]

A BRIEF REVIEW OF THE PATHOLOGY OF ANGINA PECTORIS: WITH CASES.

By William Boyd Mushet, M.B.Lond.

It must be but seldom that a number of cases of angina pectoris are presented to one practitioner. Opportunities of autopsy, in fatal instances, must yet more rarely occur—the irregular paroxysmal character of the disorder conducing to its infrequent appearance in hospitals and other public medical institutions, and, when encountered in private practice, the prejudices of relatives and friends for the most part opposing a barrier to inspections after death.

I therefore venture to publish the following cases, and previously to cite various eminent authorities as to the nature of the disease, the difference of opinion and statements amongst which, to my mind, leads to the irrefragable conviction, that we either know very little about its pathology, or that it is an *accidental phenomenon, independent of and superadded to* the special organic affections with which it has been observed to be associated. Dr. Heberden's description is generally regarded to be correct, as he was the first to draw attention to the disease, and his account is most usually followed, although it may be remarked that Dr. Parry and others differ from this physician as to the nature and symptoms of the malady in question.

According to Heberden (*Commentaries*, art. *Pectoris Dolor*) "There is a disorder of the breast marked with strong and peculiar symptoms . . . . not extremely rare. The seat of it, and sense of strangling and anxiety with which it is attended, may make it not improperly be called *angina pectoris*. Persons are seized whilst they are walking, more especially if it be up hill, and soon after eating, with a painful and most disagreeable sensation in the breast, which seems as if it would extinguish life . . . . but the moment they stand still all this uneasiness vanishes. . . . . Males are most liable to the disease, especially such as have passed their fiftieth year . . . . Varieties may be met with. Some are seized standing still or sitting, or upon first waking out of sleep, and the pain sometimes reaches to the right arm, as well as to the left, and even down to the hands." Heberden saw nearly one hundred cases, one of which was in a boy of twelve. He believed it to belong to the class of spasmodic, not of inflammatory complaints. He adds, "in one case a very skilful anatomist could discover no fault in the heart, valves, or arteries, or neighbouring veins, in opening the body of one who died suddenly of the disease, except some small rudiments of ossification in the aorta."

Dr. Parry, of Bath (*Edinburgh Medical and Physical Dictionary*), differed from Heberden, and called the affection "syncope anginosa." He maintained, in the true disease, that there is neither dyspnœa nor palpitation of the heart, and that angina pectoris is a mere case of *syncope* or fainting, differing from common syncope only *in being preceded by an unusual degree of anxiety or pain in the region of the heart*, and in being *readily excited* during apparent health, by any general exertion of the muscles, more especially that of walking. He ascribed it to *ossification of the coronary arteries*.

Dr. John Wall, of Worcester, in a letter to Dr. Heberden in 1772, reminded the latter that he (Dr. Heberden) acknowledged he never saw any one opened who had died of this disease. Dr. Wall then proceeds to detail the appearances presented on examination of the body of a person who had died of the affection, and as his statement of the symptoms and *post mortem* inspection is remarkably exact, I deem no apology requisite for the transcription.

Dr. Wall lays great stress "on the pain under the sternum, extending on each side across the breast in the direction of the pectoral muscle, and affecting one or commonly both arms, exactly where the muscle is inserted into the os humeri." This physician met with thirteen cases, and of these ten died suddenly.

"The subject examined was sixty-six years of age, and had been six or seven years subject to the complaint. He was a short, well-made man, inclined to be fat, who, in the former part of his life, had had several very severe attacks of the rheumatism. For two or three years he only felt a very slight pain and tightness across the breast and arms, upon walking a little faster than ordinary. By slow degrees this increased, till at last he could not walk, but in a very slow pace, and with great difficulty. He could not go up stairs, nor lie down without bringing on a dyspnœa, or rather a sense of suffocation. He was free from cough till towards the latter end of his illness, and then a very troublesome one came on, attended with a hoarseness. His pulse was never irregular, but always small, and during the paroxysms it sank so much under the finger, that it could hardly be felt. He died after having struggled in the fit about two hours.

"On inspection, the surface of the pericardium was covered with fat, nearly an inch in thickness. The lungs were greatly distended with very dark blood. They were full and hard, and in the cavity of the thorax was a very considerable quantity of an aqueous fluid. Cutting into the lungs, frothy mucus, mixed with something purulent, and of a fœtid smell, issued from every part, but chiefly from the divided bronchi. . . . Upon opening the pericardium, the heart appeared of an enormous size, and was covered with a great quantity of fat. The pericardium contained not less than a pint of fluid. Upon examining the heart, no part appeared diseased, till we opened the left ventricle, and there the semilunar valves placed at the origin of the aorta were found to be perfectly ossified. They did not, as usual, lie flat upon the divided orifice of the vessel, but stood erect, and appeared to be immoveable. They were entirely osseous through their whole substance, but the ossification was formed unevenly, and as it were in spines, some parts being near a line in thickness, and others thin, like a connecting membrane, but perfectly bony. The aorta at its curvature was considerably enlarged, and for near an inch from the heart was in part ossified, there being several bony scales or laminæ on it, but not connected with one another.

"The origin of the disorder," says Dr. Wall, "is here evidently to be traced from the induration of the semilunar valves, which existed probably in a less degree for several years, and increased gradually till it came to a bony hardness and immobility. It is possible that this induration of the semilunar valves may not always be the cause of the disease, though it seems not improbable that some malformation in the heart, or vessels immediately proceeding from it, may be so. Indeed, when we consider how frequently such indurations in the valves of the heart have been found, that the disease in question does not come on till a person is advanced in years, and consequently until a rigidity in every part naturally comes on, we shall be inclined to imagine that a preternatural induration of the parts necessary to the circulation of the blood, through the heart, may be the predisponent, if not the efficient cause of the disorder."

In a fatal case of Dr. Fothergill, "the only morbid appearance was a small white spot near the apex of the heart;" and in an instance recorded by Dr. Haygarth, "the heart, lungs, and pericardium were perfectly sound."

Referring to more modern authorities, we find that Laennec arranges angina pectoris under *neuralgia of the heart*. He says "it is a spasmodic affection, which returns in paroxysms after longer or shorter intervals . . . . Angina pectoris, in a slight or middling degree, is extremely common, and exists very frequently in persons who have no organic affection of the heart or large vessels. It is certainly true that this affection frequently coincides with organic disease, but nothing proves even then, that it depends upon such diseases, inasmuch as they are of various kinds, and as the angina exists without any of them. Of subjects examined, who had laboured under this disease, *in none did I find the coronary arteries ossified*. One died suddenly during an attack of angina, and such a result need not surprise us, when so severe a nervous affection co-

* This sign was long ago pointed out by Dr. Sibson.

exists (as in this case) with extensive hypertrophy." Dr. Hope "thought the disease to be owing to structural disease of the heart or great vessels, in which some portion of them was deprived of their elasticity by osseous cartilaginous or steatomatous degeneration, and that pain was dependent on over tension of the rigid portion."

Dr. John Forbes (*Cyclopædia of Practical Medicine*) seems to consider it doubtful whether angina pectoris would prove fatal in the absence of structural disease of the heart. He observes, "there is reason to believe in the few cases of fatal angina, in which no organic lesion was found on dissection, the heart was not exactly of just proportions, or of perfectly sound structure."

Dr. Wood, of Philadelphia, regards "neuralgia of the heart and angina pectoris as identical, as though angina has been frequently found in connexion with organic disease of the heart, yet frequently also no such affection has been detected after death, so that it must be considered as essentially nervous."

Dr. Copland (*Dictionary of Medicine*) remarks "in several instances, not the slightest morbid appearances could be detected, but more frequently the heart and large vessels in its vicinity have presented marks of disease, generally varied in its nature, and opposite as to its characters." This author is inclined to impute the affection to a species of neuralgia of the cardiac and pulmonary nerves. Dr. Walshe is of opinion that angina pectoris "is a neurosis, although he is disposed to think that a true angina cannot exist without organic disease of the heart."

Dr. Joy (*Library of Medicine*) states "we are disposed to side with those who believe that angina pectoris, at least in its less inveterate modifications, may exist, altogether independent of structural changes. It is only in the more aggravated and prolonged cases that such alterations have been very conspicuous."

Dr. Latham says "angina pectoris has existed where no form of disease or disorganisation whatever has been found, either in the heart or in the blood-vessels nearest it." He thinks it io be "immediately *a spasm of the heart.*"

I shall now narrate the following two cases, one of which proved suddenly fatal, a careful *post mortem* examination being instituted; the other in an old lady yet surviving, but which I regard as an undoubted example of the disease.

Case I. E. H., aged seventy-eight, a remarkably hale, stout old man, retaining all his functions, and employed as a messenger, had suffered for some months from pain over the region of the heart, coming on paroxysmally, and occasionally passing down the left arm, though this latter symptom was by no means of constant occurrence. During the attacks, he experienced a feeling of sinking and constriction of the chest, and a difficulty of breathing, together with considerable anxiety. The dyspnœa was not habitual in the intervals, and he had but very little cough. The pain was not periodic, but came on at irregular times. Auscultation was not practised, but he was ordered sulphuric ether and ammonia, which afforded great relief. He fell dead on the stairs one evening about 8.30 P.M.

Examination of the body, eighty-four hours after death. Weather cool. The pupils were moderately dilated. The arcus was strongly marked. Rigor mortis was tolerably manifest in the lower limbs, less in the upper. There was slight œdema of the feet.

Head. The vessels of the scalp were very turgid. The calvarium was remarkably dense. The dura mater was adherent to the skull anteriorly. The arachnoid was opaque at spots: and there was some fluid between it and the pia mater. The brain-substance was a little extra-vascular. A small amount of serum was found in the ventricles. About two ounces of sanguinolent fluid were found in the base of the skull. The sinuses at the base were filled with semifluid dark blood. The arteries at the base were atheromatous, not calcified.

Chest. The heart was entirely adherent to the pericardium; the adhesion was firm, but could be broken down with the finger. On attempting to separate the membrane from the heart anteriorly, some of the substance of the organ was also removed. The heart felt flabby. It was elongated transversely, and there was a white patch near its base over the right part of the left ventricle, of about the size of a shilling, which had a slightly roughened feel. There was a corresponding patch on the opposed pericardium. About the apex were two or three gelatinous-looking cysts, which appeared to be beneath the serous membrane. A large quantity of clots, and a little, partly decolorised, escaped on section of the inferior cava (several ounces.) There were also dark clots in the pulmonary artery and aorta, but the quantity of blood was small on the left side. The heart freed from blood weighed seventeen ounces and a half. Its structure appeared to be tolerably healthy to the eye, but fat encroached on its walls, especially at the apex, and at base of the right ventricle. Portions, from these situations, exhibited fatty degeneration under the microscope. The cavity of the right ventricle was dilated, its walls a little hypertrophied. Both auricles were dilated. The left ventricle was hypertrophied. The pulmonary valves were normal, but one segment was reticulated: they supported a column of water. The flap of the tricuspid valve next the septum was natural, but the other two were thickened and beaded with fibro-cretaceous deposit. The aortic valves appeared sound, but did not perfectly support a column of water. The mitral valve was healthy; the tricuspid orifice readily admitted four fingers; the mitral admitted all the fingers and thumb; the aorta and pulmonary artery appeared to be neither constricted nor dilated; but the former vessel displayed considerable atheromatous degeneration. The coronary arteries were pervious, and loaded with atheroma, but presented no appearance of calcification. The lungs were emphysematous and congested. There were old pleural adhesions on the right side, and slightly on left, and a few ounces of serum in the left side of the chest. No tubercle was present. The bronchial tubes were intensely injected, containing but very little secretion. There was no softening of the mucous membrane. The liver was contracted, with stellate deposits on the surface. The right kidney weighed five ounces; it was congested; the capsule separated well. The left kidney was also congested; it weighed five and a half ounces; the capsule separated, with a portion of the subjacent tissue attached. The bladder was distended. The spleen was normal. The stomach was empty, congested in patches. The intestines were also congested. The pancreas was hard and granular to the feel.

Case II. Mrs. D., aged fifty-nine, unmarried, has usually had good health, and worked hard in service as cook and housekeeper. She first suffered from rheumatism at thirty-five. This was an acute attack, and disabled her for some months. She has since suffered at intervals from the disease, for which she was a short time ago under treatment. At irregular periods, for some years, generally when she has pains in her limbs, or is *flurried* or *excited*, though occasionally at other times, especially when out of health, she has experienced a sensation of spasm over the front of the chest, deep seated, and inclining to the left side, and sometimes passing down the arm. "The feeling is very singular and crampy, and as if she were drawn together, and she feels a sort of stagnation, as if the heart stopped." During the attack, which is sometimes only momentary, and sometimes lasts for several minutes, she is quite conscious, and her sight does not fail. She has but very slight cough. Dyspnœa, palpitation, or globus never appears to be present, and there is no history or evidence of hysteria, though she is troubled with flatulence. Two or three attacks may occur in a month, or a year may elapse without their recurrence. They come on indifferently in the day and at night, and mostly when she is at rest. The climacteric epoch was not attended by much disturbance, but she had two or three seizures of epistaxis. Arcus is evident in both corneæ. Her pulse is regular, not intermitting or rigid. The heart-sounds are tolerably good, but feeble. Respiration is a little harsh. Pains of rheumatic character, chiefly affecting the muscles of the arms and calves, lately induced her to seek medical aid, and during her illness, the attacks described were of frequent occurrence, sometimes daily.

Ammonia, Dover's powder, iodide of potassium, quinine, etc. were prescribed, and in a week or two she became convalescent, the anginal symptoms disappearing with regained health.

How can we harmonize the discrepancies which have obtained amongst the profession, as to the symptoms and pathology of angina pectoris, ever since the first description of the disease?

Most authors admit the necessary association of *some* cardiac affection, and that the cardiac lesion is variable to which the angina is a supplemental symptom. Others regard it to be dependent on a particular morbid agency, as calcification of the nutrient vessels, induration of the valves, spasm of the heart,* etc., but the difference of opinion amongst these latter,

* That this is not essentially true, is proved, as in many cases, the pulse remains undisturbed during the paroxysm. And we cannot imagine an attack of angina, if dependent on spasm of the heart, to continue for half an hour and not prove fatal.

and *post mortem* appearances, sufficiently indicate that such doctrines are untenable and erroneous.

It is moreover evident, that every conceivable morbid process in the heart and great vessels may exist, in absence of observed symptoms of angina, as atheromatous and fatty degeneration, calcification and occlusion of coronary arteries, valvular disease, adherent pericardium, hypertrophy, dilatation, atrophy, coarctation or dilatation of the aorta, etc. Conversely, can angina be present in absence of all the diseased states enumerated? In some cases, not any morbid appearances in the heart or great vessels are reported to have been noticed after death; but these statements must be accepted with reservation, when we take into account the imperfect state of pathological knowledge which until lately prevailed, and we have no authentic proof that in these cases the individuals died suddenly in the anginal paroxysm, an event necessary to confirm the accuracy of the diagnosis. Again, fatty heart, a fruitful source of sudden death, was a change unrecognized by our earlier pathologists.

It is incontestable that angina pectoris either *can* or *cannot* be developed without appreciable structural alteration in the heart or great vessels. If the former proposition be true, the disease must be considered as a true neuralgia; and I affirm that such an affection is incapable of proving fatal *per se*.* If the latter be trne, when death results during a paroxysm, it is more reasonable to presume that it is a consequence of the organic disease than of the superadded anginal (neuralgic?) symptom, which is clearly not necessary to explain the fatal issue, as sudden death is of frequent occurrence in cases of heart disease, in which angina has never been observed. Were it present, death might be attributed to what is, I believe, merely an accidentally associated neurosis.

It may be advanced, that the aggravated symptoms and anxiety experienced by patients, are incompatible with the view of the angina being an unimportant element in the affection, but it is well known how timorous and depressed individuals become when suffering from functional palpitation or pain referred to the cardiac region; consequently, when similar symptoms arise in persons labouring under organic disease of the heart or great vessels, we can readily estimate the influence exerted on an obstructed circulation through the emotional system.

It is agreed that angina pectoris seldom announces itself before forty or fifty years of age, about which period disease of the heart commences to be fatal to any extent. When occurring in children and early manhood, I conceive the affection to be simply neuralgia (equivalent to angina pectoris *minus* heart affection), and such a notion is corroborated by a cure being, for the most part, effected in this class of cases.

On the whole, therefore, I regard angina pectoris as a neuralgic affection,+ always connected with some heart disease (in which respect it differs from simple neuralgia), being an accidental complication of the latter, and only occasionally present, as when the sufferer is dyspeptic, out of health, or subjected to any influences which are prone to induce neuralgia in other parts of the system. Some, as Dr. Chapman, are of opinion that angina pectoris is a gouty or rheumatic affection; and it must be admitted that recorded cases tend to reveal its connexion with these diatheses; and it is almost unnecessary to advert to the relationship of gout and rheumatism to neuralgia and diseased heart.

I think this group of complaints may be well illustrated by the subjoined simple diagram.

Rheumatism (Gout)
Neuralgia . . . . . Disease of Heart
Angina Pectoris.

Assuming the neuralgic origin of the disorder, it is interesting to consider the nerves implicated. That the heart is not the seat of suffering appears to be almost proved, as this organ is normally insensible, and even when seriously impaired by grave structural changes, and the varying situation of the pain (behind the sternum, on the left side, down the left arm, on the right of the thorax, at the insertion of the deltoid, at the bend of the elbow, etc.), appears inconsistent with such a presumption. A few, as Desportes, locate it in the pneumogastric nerve, but in opposition to this, the last mentioned objections hold good. I am disposed to conclude, that the intercostal are the nerves involved, the differences presented by the symptoms in different cases being explicable by consideration of the particular nerve affected, in conjunction with the special coexistent organic affection, and reference to its anatomical connections and distribution.

Upper Baker Street, October 1859.

* Is there any physician of the present day bold enough to assert from theory, or who can attest from experience, that angina pectoris has ever proved fatal in persons with a healthy heart?

+ The acknowledged efficacy of antiperiodic remedies strongly supports this conclusion.

Transactions of Branches.

READING BRANCH.

TRANSACTIONS OF THE READING PATHOLOGICAL SOCIETY.

By Frederick G. Harcourt, Esq.

[*Concluded from page* 813.]

VIII.—Surgical Cases.

Injury to the Abdomen. On September 22nd, Mr. Young read the history of a case of injury to the abdomen from a butcher's hook, occurring in a boy aged 15, who, while making his escape from another boy with whom he had quarrelled, ran against a hook which was suspended from the outside of the door. The point entered the abdomen between the anterior superior and inferior spinous processes of the ilium, and came out midway between the crista ilii and the lower rib on the right side, traversing the wall of the abdomen about four inches, and puncturing the ascending colon. The right side of the abdomen was very tender and swollen from Poupart's ligament half-way up, giving a distinct emphysematous feel when pressed on. Considerable collapse ensued. As soon as reaction set in, six leeches were applied, followed by spirit lotion, and calomel and opium every four hours. His progress was satisfactory, and he recovered in six days.

Mr. Young considered this a well marked instance of the value of calomel and opium, rest, and the avoidance of stimulants. The emphysema must be considered a proof of the opening of the intestines.

Case of Opisthotonos: Recovery. On October 23rd, 1858, Mr. May related the case of a gentleman who, from injury to the knee, had been affected with prismus opisthotonos, and almost tetanus. The bowels had not acted for three or four days, when, at the desire of the family, an aperient (castor oil) was given, which produced violent spasms, amounting almost to tetanus. The treatment consisted in giving small doses of morphia during the day, which were increased at night. Perfect rest was enjoined. The bowels were not relieved for three weeks, when, a little irritation coming on, an enema of warm water and a little aid by scooping was had recourse to, to remove the accumulation. Small quantities of beef-tea and wine were the only food given; and he recovered. The chief point in the case was, the bowels being kept quiet for such a time, contrary to the doctrine of the schools.

Ulcerated Cartilages of the Knee-Joint. On December 15th, Mr. G. May presented a specimen of ulceration of the cartilages of the knee-joint, which corresponded with one he presented two meetings before, and which had been preserved in the French patent antiseptic powder, but at length became too much decomposed to be brought into the room.

Strangulated Obturator Hernia. On Monday, December 13th, Mr. Dryland was called to see T. F., who was suffering from nausea, vomiting, and great depression. He stated that, on the previous Wednesday, "he had been to Newbury selling eggs, and had then felt a sort of strain in his inside"; that he felt very sick and faint, and vomited. He came home, and felt worse; and found that, whenever he swallowed anything, he was immediately sick. He felt very ill all night, and in the morning sent to a chemist's, stating that he was sick, and could get nothing to go through him. The chemist sent him some mixture, which appeared to contain salts, to be taken every two hours until it operated. The mixture only operated as an instant emetic; but he continued to take it, as well as sundry doses of castor oil, which he also brought up, and sent for some more, with a statement to the chemist of the state in which he then was. Another mixture was sent, with directions that, unless it operated soon, a medical man had better be called in. During the whole of this time, he said, he kept nothing on his stomach, except very small quantities of simple liquids, such as water or milk. On the Monday morning, Mr. Dryland found him in bed, in a very weak state; the vomiting had now ceased, but he suffered from continued hiccough, and complained of pain in the abdomen, but could not refer the pain to any par-

ticular spot. Mr. Dryland immediately examined him for hernia, and found a small inguinal hernia on the right side; this was, however, not strangulated; for it received an impulse when the patient coughed, and could readily be returned into the abdomen. He examined the left side, but could detect no other hernia. The abdomen was very tense, tender on pressure, and very resonant. The patient said he had noticed the rupture on the right side for years, but it had never caused him much inconvenience. He had never taken a shilling's worth of doctor's stuff in his life before this illness. Mr. Dryland could get no other history of him, either from himself, his family, or his neighbours, but that he had always enjoyed robust health. He now examined the rectum, but could find no obstruction there; and, as he could obtain no reliable evidence of fæcal vomiting, he came to the conclusion that the obstruction was probably in the sigmoid flexure, or some other part of the large intestines. He sent for an injection apparatus, and injected three pints of gruel, with four ounces of castor oil; but nothing returned except the liquid injected. A few hours afterwards, a large quantity of gruel and some turpentine were injected, with the same result. Mr. Dryland then put him on a quarter of a grain of opium every two hours, and left him for the night. On December 14th, in the morning he was vomiting, but only the small quantity of liquids he had taken during the night. The hiccough continued, and his pulse had sunk considerably. He had had no sleep, and his abdomen was more tense and more tender. Mr. Fernie and Mr. Dryland both examined him again carefully for hernia, but could distinguish none except the one already mentioned, which was still readily reducible. They then passed an O'Beirn's tube, fourteen inches in length, up the rectum, without any trouble; and injected a large quantity of warm water, which quickly returned, without any alteration in its condition. Mr. Dryland then told the patient that he feared little good could be done; and he expressed himself as quite sure that nothing could save his life. In the night, he drank large quantities of cold water, which returned, followed by stercoraceous vomit; and on the next morning he died.

Post Mortem Examination, eighteen hours after death. The body was much attenuated. The abdomen was much distended, and tympanitic. There was not much fluid in the cavity of the abdomen; and no inflammation of the bowels, except at one spot in the left iliac region. The hernia on the right side was perfectly free; but, on the left side, there was a very small knuckle of intestine which had passed through, or rather into, the obturator foramen, and was strangulated there. As soon as this was discovered from the inside, the external parts were examined, but no appearance of hernia could be discovered, neither did the left side differ from the right at this part, either to sight or touch. The hernia was then cut down on, going to the inside of the femoral vessels; and the sac, which was large in proportion to the small portion of gut strangulated, was found immediately beneath the rectineus muscle. The situation of the obturator artery was not noticed.

After the *post mortem* examination, on putting leading questions to his son, Mr. Dryland found that the deceased had suffered occasionally for some two or three years from pain in the left groin; and he therefore supposed that the hernia had been in existence for some time, and that a piece of intestine had become strangulated just a week before death, by his lifting or carrying a heavy basket of eggs, as stated.

Remarks. Mr. Dryland observed, that the only questions which arose in reference to this case are, whether it would have been possible for any one to detect this hernia during life; and if so, whether any operation could have been performed for its relief. He was of opinion that it would have been quite impossible for any one to have detected it; and, even supposing it could have been distinguished, he thought that any operation performed for its relief would have proved very tedious, troublesome, and bloody. Moreover, the patient would not have had a chance of surviving, from the long period which had elapsed between the time of strangulation and that of his consulting a surgeon, and from the very low state in which he was when he was first seen; and Mr. Dryland also thought that the bowel was strangulated superiorly by bone. The authors who have written on this subject say that this form of hernia can scarcely ever be distinguished during life, on account of the sac lying behind the muscles; and Mr. Teale of Leeds and Mr. Erichsen both question the propriety of operating, even if it should be recognised. Mr. Dryland had seen Mr. Bransby Cooper operate successfully for an obturator hernia which had found its way between the muscles, and which he diagnosed as femoral; and he thought the patient recovered. Another case, successfully treated by operation, has been recorded by Mr. Obré. Another thing might be learned from this case; viz., the mode of practice pursued by prescribing chemists in cases of strangulated hernia—castor oil and salts every two hours until it operates.

Acute Laryngitis: Laryngotomy: Recovery. Mr. Bulley related the following case. Ann B., aged 21, stout but scrofulous looking, a housemaid, was admitted into the Royal Berkshire Hospital, on October 22nd, 1858, in a state of threatening suffocation. She breathed with great difficulty, each inspiratory effort being accompanied by a loud harsh sound, the muscles of the neck and chest at the same time acting strongly and almost spasmodically. The expiratory actions appeared to be performed with comparative facility. Her countenance was expressive of the most intense anxiety and distress. Every attempt to cough or speak appeared to increase her sufferings. Her throat was greatly swollen externally: and on the left side of the neck, in the upper triangular space, there was an indurated glandular enlargement, about two inches in length, which extended downwards toward the immediate neighbourhood of the larynx. This swelling was exquisitely tender to the touch; but there was no perceptible redness of its surface, or any sensation of fluctuation within it. The larynx itself could not be felt through the generally swelled and thickened tissues of the neck; but pressure over its usual situation produced intense pain, and disposition to spasm of the glottis. Internally, the tonsils appeared enlarged and somewhat œdematous; but there was no appearance of any inflammatory redness of these parts. The epiglottis could not be brought into view, but it appeared capable of closing over the glottis in swallowing, so as completely to prevent the entrance of fluids into the larynx. Her tongue was covered with a dirty yellow-coloured fur. The pulse was very quick, and the general circulation was evidently becoming more and more feeble. She was perfectly sensible, and said that the swelling on the left side of her neck had been coming on for about a fortnight; it had been somewhat painful at times, but had not been so troublesome as to prevent her going about her usual occupations. She had only complained of a slight difficulty in swallowing, and a little soreness and dryness in her breathing on the morning of the day before her admission, which gradually increased during the day; but she still felt well enough in the evening to eat a tolerably hearty supper; after which she passed a restless, uncomfortable night, until the morning, when the suffocating sensations becoming almost insupportable, her mistress sent her to the hospital, for the purpose of undergoing an operation. After the administration of an emetic, the production of a blister in the parts of the throat not likely to be concerned in an operation, by means of an iron spoon, dipped in boiling water, and the subsequent application of a strong solution of nitrate of silver to the fauces, it was deemed expedient to perform laryngotomy without delay. Some little difficulty was encountered in the operation, owing to the unusually deep position of the larynx. Several arteries, and one or two of the turgid veins of the part, bled profusely, the hæmorrhage being temporalily arrested by pressure until the crico-thyroid membrane was opened, just prior to which the patient's pulse began to fail, and she had all the appearance of sinking, before the operation could be completed, from apparent spasm of the glottis. The depth at which the larynx lay at the part where it was incised, appeared to be about an inch; moving rapidly up and down during the convulsive efforts at respiration, it was found impossible to fix it by the ordinary sharp hook, and the incision was therefore accomplished, with some little difficulty, without its assistance. A large quantity of very thick mucus was immediately expelled with great force through the opening, which, having in part subsided, the tube was introduced, and was retained without inducing any considerable irritation. Shortly after this she began to breathe with ease through the tube, and in a little time afterwards she had the appearance of being quite comfortable. She vomited a little blood after the operation. She subsequently went on well, and remained in the hospital about six weeks; when, as she had apparently quite recovered from the effects of the operation and the disease for which it had been required, she was discharged, with only some little difficulty in articulation, apparently of a nervous character, from which, however, she has since been gradually recovering. From the time of the operation a temperate and humid atmosphere was maintained in the room day and night, by means of the steam from pans of boiling water, and the evaporation of wet sheets hung before the fire, to a temperature of 64°. Wine and nourishing diet were administered throughout.

Mr. Bulley thought that the obstructive inflammation, and the consequent mechanical hindrance to respiration, commenced in the chronically enlarged gland mentioned as existing in the anterior part of the neck, which from some cause or other had been brought into a state of active inflammation, which had afterwards spread to the larynx. He believed such cases to be extremely rare, as experience shows; for, whereas we are constantly in the habit of observing cases of inflammatory enlargement of the cervical glands, we scarcely ever find the inflammation extend to the respiratory passages. It would be an important advantage in the treatment of these cases, to be able to distinguish, by some certain signs, the difference between simple inflammation of the larynx, in which the mucous membrane was simply congested or inflamed, and that particular kind of serous effusion underneath that membrane which has obtained the name of laryngismus œdematosa; because, if we were able to do so, we might, with some degree of hope, make use of those general means of treatment which are found to be effectual in inflammation of other parts of the body, and thus supersede the necessity of an operation. But, seeing then the difficulty of distinguishing between these two states of the larynx, it would appear to be our duty, unless the symptoms of the simple employment of the mucous membrane were sufficiently well marked to remove all doubt of the nature of the affection, to lose no time in operating early. There was one circumstance which tended to show that if there was actual œdema of the laryngeal mucous membrane at the time of the operation, it had not actually affected the epiglottis, because the rima glottidis was, during the act of deglutition, capable of complete closure.

Case of Laryngotomy. Mr. Moxhay said Miss M. W., a very strumous and delicate child, aged 7, was seized with sore-throat and rash—scarlet fever, in fact. Six weeks ago the throat affection was very severe, and was followed by swelling on both sides of the neck; which, notwithstanding the trial of emetics under the advice of Dr. Cowan, went, on the right side, to the formation of a large abscess; on the left, to free slough of the cellular tissue, outlets for which were made by the lancet. The wound on the side of the slough caused rather free hæmorrhage; great pallor and depression followed, from which she rallied. Soon afterwards there was pain in one ear, and free purulent, or rather muco-purulent discharge from both. Occasional hoarseness (especially after any excitement or crying) ensued; and this, in three or four days, resulted in decided croupy breathing, increasing quickly in intensity.

On September 17th, Mr. Moxhay found the patient much distressed in breathing, pale, livid, and exhausted; every effort was required to supply the system with air; but it was evident it could not stand much longer against the inadequate supply. The noise on inspiration gave the idea of a vibrating cord, and not of a narrowed canal. Mr. Moxhay therefore proposed opening the windpipe as the only chance of saving the child's life; and with the concurrence of Dr. Cowan and his kind assistance, he opened the larynx at the crico-thyroid membrane, and with great ease introduced the tube. The child seemed thereon to be brought from death to life, and breathed as freely as at any period of her existence. At first, Hilton's trocar and cannula were used, but as in a previous case Mr. Moxhay found it most ineffectual, nothing in his opinion can excel what he immediately had recourse to, a small sharp hook and scalpel. The tube was removed on the second day, and being cleaned, was taken out, and reintroduced at irregular intervals—sometimes being left out at certain hours; the breathing however was never easy when the tube was in. Her appetite was good; perspiration was excessive, and emaciation not less so. She coughed a little, and slept for many hours at a time. After a time, the perspiration decreased, and the pulse was moderate, except on excitement. A solution of liquor plumbi in distilled water was dropped into the ear with great benefit.

On October 1st, a smaller tube was introduced, fitted at the upper outlet with a valve, and having an opening on the convexity of its bend to allow air to reach the glottis. With this she was able to speak audibly; but, on closing the aperture, it was found there was not a sufficient ingress of air through the natural passage to support life, and air continued to enter with a croupy noise.

October 20th. She still continued thin, but could walk unsupported, and went out when the weather was fine, the tube being carefully protected with some porous woollen material. Abscesses subsequently formed in the neighbourhood of the old ones; one of which was opened under the fascia of the neck below the ear. The subsequent treatment consisted in the changing of the tube twice daily, which was accomplished by her friends, and in the employment of the solution of nitrate of silver (ten grains to the ounce), frequently to the glottis. She also took tincture of iron with iodine, and also quinine with grey powder, which was discontinued in consequence of loss of appetite. In Mr. Moxhay's opinion this was a case which shewed that the principle of *nil desperandum* should ever be carried out in surgery.

Instrument for Tracheotomy. Mr. May on the same evening exhibited and presented to the Hospital a modified instrument for opening the trachea or crico-thyroid membrane, the advantages of which were, that it could be introduced as a wedge, and when in the tube, could be opened by means of a screw; and that a larger space for the admission of air was gained than was given in Liston's instrument.

Oxalate of Lime Calculus. On April 13th, Mr. Fernie, on behalf of Mr. Moxhay, exhibited a calculus of the oxalate of lime removed from a boy seven years of age, by Allarton's operation, on the 11th of April. It weighed one hundred grains, and measured two inches and a half in circumference. At the next meeting of the Society, in May, Mr. Moxhay stated that the patient left the hospital quite well fifteen days after the operation, the wound having healed five or six days previously.

Concluding Remarks.

I have now brought the history of our transactions during the past year to a conclusion; and, imperfect as it has been, it would have been far more so but for the valuable assistance I have derived from the lucid minutes of our honorary secretaries, Dr. Woodhouse and Mr. Walford, to whom I must return my sincere thanks for their kind and efficient aid.

It is true that during the past year the pathological specimens presented, and the medical papers recited, have been few in comparison with those of other years; but, gentlemen, if they have been fewer in number, they have certainly not decreased in interest. I cannot however refrain from expressing my earnest hope, that for the future the members may not only encrease in numbers, but that likewise the pathological specimens presented, and the papers contributed, may be increased. The welfare of a society like this depends upon the hearty co-operation of all its members. It is most desirable, therefore, that if all cannot contribute pathological specimens, at least we cannot fail each of us in the course of the year to have an opportunity of contributing a paper or some case which may be interesting to the society. We, who reside in rural districts, have not, for many reasons, the opportunities for obtaining pathological specimens which our more fortunate brethren residing in towns have, and more especially those connected with the Royal Berkshire Hospital, or any other public institution. I earnestly hope, therefore, that we may bear in mind that this society is established, not only for the production of pathological specimens which are undoubtedly valuable, but also for the bringing to notice obscure and interesting cases which do not fail from time to time to fall to the lot of each of us.

By so doing, we shall not only be making our monthly meetings more attractive, and our annual retrospects more interesting, but we shall at the same time be providing ourselves with valuable aids to guide us in the faithful, anxious, and responsible discharge of our high, our holy, our ennobling calling. Nay more, gentlemen, we shall be bequeathing to those who shall come after us,—to those who shall succeed us in our efforts to benefit mankind,—landmarks to guide them onwards! They will indeed be then, as

> "Footprints on the sands of time.
> Footprints that perhaps another
> Sailing o'er life's solemn main,
> A forlorn and shipwrecked brother
> Seeing, shall take heart again."

Disinfectants in Paris. Ever since Messrs. Corme and Demeaux proposed sulphate of lime and coal tar as a disinfectant, purifying agents have been the order of the day. The merit of the discovery was of course at first disputed; and everyone who thought he could contrive some disinfecting compound sent papers and samples to the Academy of Medicine or of Sciences. The last applicant is M. Boinet, well known by his works on Iodine, who, in a paper read on September 20th, before the Academy of Medicine of Paris, contends that the foulest sores can be rendered perfectly sweet by applications of tincture of iodine. There will be no harm in trying this agent, which, no doubt, has already rendered very great service.

Introductory Lectures.

ST. BARTHOLOMEW'S HOSPITAL.

Mr. Holden delivered the introductory address. He commenced by saying that he felt honoured in having the privilege to deliver an inaugural address in the oldest and the best attended medical school in the kingdom. In all friendliness, he wished the new students welcome to St. Bartholomew's. He wished them welcome to what was to be their home for some time to come—for a home it would be to them if they came there in the same spirit that the hospital received them, with a zeal and earnestness, and a determination to turn their time to the best account. If there was amongst them one who could not lay his hand on his heart and say that that was the spirit in which he came amongst them, he would say to him, "Depart at once; stay not with us." From such a man the hospital could expect no credit. His stay would be unprofitable to himself; and not only that, he would also be the nucleus of incalculable mischief to his fellow-students. They were now entering upon a profession the grandest it was possible to conceive. What other profession in the world had such a large range of study? What other profession had been so active in dispensing benefits and blessings upon mankind? Well might they say with the poet—

"Qua regio in terris nostri non plena laboris?"

Entering upon their career, he would, at the expense of dullness, venture to offer to them a few practical observations in the shape of advice. Above all things, he would advise them to consult the book of Nature, to see how things worked, to try and discover the motives of her action; for it was by taking that course that they would best be able to aid her when she required assistance. They should make practical anatomy the pillar and the backbone of their medical and surgical studies. They should not depend upon manuals for the acquisition of that knowledge; but seek for it in the dissecting-room, and afterwards apply to their books if they wished to collate their own ideas with those of writers upon the subject. He would advise them, too, to take notes of all they heard from the lecturer or from the demonstrator. They should write them out in the evening, and review them every week; for it was by such self-training that they would make their knowledge a reality, and not the ghost or shadow of medical science. The practice of writing out would not only imprint the subjects of study upon their minds, but it would also give them an easy and graceful style of writing; for it was in writing as in general behaviour and address, elegance was acquired by observation, and imprinted by habit.. Mr. Holden said he wished to put the students on their guard against a difficulty which he and all others who joined the profession had experienced. However eager they might be, in commencing their profession, to make themselves master of its details, they would, after four or five weeks of labour, find facts so accumulate upon them, and the paths of science they had to tread seemingly so intricate, that they might become despondent, and have recourse to what was called a turn of London life. He cautioned them against that, for he knew that at their time of life, with little experience of the world, and strong passions, how easy it was for them to be led into dissipation, from the baneful effects of which it would be impossible for them to recover. If they took that course, they would lose the whole of their first year; and, as they had only three years for study, they would find that, even with the greatest industry, they would not be able to prepare themselves for their examination. Their professional occupation would bring them into intercourse with all classes of society. It was, therefore, necessary that they should take care that patients who were great and noble might find them elegant and accomplished gentlemen, and that the poor should find in them kind and sympathising friends. Everybody would be applying to them. The doctor was consulted in every case. The late Duke of Wellington, when he was appointed Chancellor of the University of Oxford, had, according to custom, to deliver a Latin speech, and, for once in his lifetime, the great duke found himself at fault, and applied to his physician; and it was creditable to the profession that his physician was competent to the task. In the same way they would be consulted on matters independent of their profession; and, as professional success very frequently depended upon attention to matters that might at first sight appear trivial, it would be for their advantage if they acquired a demeanour gentle and courteous to all. The late Sir Walter Scott had observed that the country doctor was the worst paid and the worst cared for animal in existence, with the exception of his horse. Still, with all that, they were the aristocracy of science; and there was not one of those whom he addressed who might not aspire to fill the presidential chair of the Royal Society, now so worthily occupied by Sir Benjamin Brodie. As they passed through the grand hall of the hospital, they would see the portraits of those who had shed light and lustre upon the institution, and upon the medical profession. It should be their ambition to imitate them. It was said of the Romans of old, "Quùm majorum imaginibus intuerentur ad gloriam accensi fuerunt." In the same way, the sight of the great worthies of the profession would, he hoped, stimulate them to rival their renown. They might also take lessons of encouragement from their predecessors of more recent date—from those who, a few years ago, occupied the benches before him, who went out in the course of the late war, and, dying in the Crimea, showed their devotion to their profession and to suffering humanity. He hoped, however, that their career would be one of peace; that they would keep the light of science burning, like the Persian fire upon the hill tops; and that, imitating the Grecian youths in the games of old, they would pass on the burning torch from one to another, until the illumination was complete.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

Dr. Collingwood delivered the inaugural address. His first observations were addressed to commencing students. The thoughtful student came to his task stimulated by example, and armed with hope. He sees men filling various high and responsible stations in life—men who are regarded by their contemporaries with esteem, and even with veneration—men who have enriched science with the developments of their intellect, and who have advanced their art by the philosophic application of their long experience—he sees these men, on the one hand, illuminating the brilliant intellectual circle in which they move; and, on the other, imparting their stores of knowledge to eager disciples. And he knows that these were once, like himself, listeners, and that by diligence and integrity he may aspire one day to occupy a position inferior to none of them. Some of the difficulties and temptations to which the medical student is exposed, were next dwelt upon. They were to be met by manly resistance, not by pusillanimous retreat. Nothing is worth acquiring which does not cost something in the acquisition; and the greater the difficulty, the greater the value of the victory achieved over it. They would not arrest his career, but only act as a healthy stimulus to his powers—only arm him with determination to go forward; and only serve, therefore, to ensure his final achievement, and to enhance the value of success. Of anatomy, he said that it was the key-stone of the Æsculapian arch—the Alpha and Omega of medical and surgical science—and without which all was empiricism and guess-work. It was to the development of this science, and of its handmaid, physiology, that we must look for the levers which must work the progressive advance of scientific medicine. The study of ultimate structure presented a no less inexhaustible field of research than that afforded by other natural sciences; but it was to the microscope that we were indebted for the generalisations arrived at. The imperfect instrument in the hands of Leuwenhoek and Swammerdam afforded revelations which astonished the scientific world two centuries ago; and the careful labour expended in recent times upon the construction of achromatic lenses, had placed the histological knowledge of our own day upon a firm basis. It was only, however, within the last ten years that the perfection of definition and illumination had been attained which rendered the microscope the most powerful auxiliary in anatomical analysis; and it was scarcely twenty years since the science of embryology began its existence. No *laudator temporis acti* could venture in our day to compare it with the past, with any hope of success; for the greatest nations of antiquity must hide their diminished heads before the progress of the present century. Assyrian tyranny might have fostered early science; Egyptian priestcraft might have been instrumental in developing the mechanical arts: Greek heroism might have extended the regions of philosophical speculation; and the fine arts might have found their grand climacteric in the luxury of Rome. But it was ordained for our own country, in the nineteenth century, to create more "wonders of the world" than the ancients spread over a hun-

dred Olympiads, and to win, in half a century, more trophies of science and art—in geology, in organic chemistry, in photography, in steam locomotion, in naval architecture, and in the electric telegraph—than all the nations of antiquity produced in the four thousand years which preceded the birth of Christ. The lecturer then proceeded to pass in review the changes which the aspect of practical medicine had recently undergone, in consequence of the discoveries which had been made, chiefly with the aid of the microscope, of the modes in which the ultimate structures of the organised body perform their various functions. The study of embryology had afforded facts which demonstrated the proverb that "Truth is stranger than fiction", and some remarkable points in the metamorphoses of intestinal worms were referred to. Various important changes which the tissues undergo were dwelt upon; and the most recent views of inflammation alluded to, as elucidated by the experiments of Bernard. Finally, the nervous system was briefly alluded to; the difficulties which attend research in that department, and the trophies of discovery which numerous observers had accumulated, establishing relations between various parts, and offering physiological explanations of complicated and recondite vital phenomena. In conclusion, the lecturer said that education was an engine which, when properly wielded, was capable of achieving all that money could do, and more. Social position was, in this age, regulated rather by education than by wealth. There was nothing to which education might not aspire; and there was no education to which a youth might not aspire in the present day. No class of men, now, could claim to be *the* educated class *par excellence*, for all classes were fairly in the race. Let not the medical profession, as represented by its young and commencing members, be behindhand; let them keep up the *prestige* so long held by it; and, while they are not found wanting in the technical knowledge which is necessary for professional success, let them also seek to improve that general and earlier education which every gentleman is desirous of possessing.

British Medical Journal.

SATURDAY, OCTOBER 15TH, 1859.

THE WORKING OF THE MEDICAL ACT AS REGARDS ILLEGAL PRACTITIONERS.

Contrary to the opinion of those who expected the Medical Act to be a dead letter—a mere thing without life—sundry proceedings which have taken place lately in various parts of the country show that the profession are determined to put into force the powers which it gives them for their own defence, and for that of the public, from the inroads of illegal practitioners. From time to time there have come under notice cases in which prosecutions have been instituted, generally with success, though sometimes otherwise, by the Registration Associations that have been formed. If the profession go on in the energy they are now displaying—and still more if they increase the extent of their operations, for which there is room,—the time must come when no one will dare to set himself up as a medical practitioner without a legal qualification. This may not come at once; but events are pointing in that direction; and to those who have been disappointed in their expectations of seeing a clean sweep made at once of all poachers on the preserves of medicine, we will only say—Wait patiently, and give your active aid to those who are doing the work which you desire to see done.

But, in the trials which have taken place under the Medical Act, a remarkable phenomenon has been the variety in the interpretation put on the Act, in the proceedings of the defendants by the magistrates before whom the cases have been tried. Generally, the Act has been interpreted in a common-sense way, and the defendants have been subjected to fines, while in most instances they have been required to remove the external signs which denoted to the public their pretensions to practise medicine and surgery. Sometimes, however, a desire has been manifest on the part of magistrates to side with the defendants: and, at one time, from an unfortunate legal omission with regard to the keeping of the Register, and at others, probably from a feeling of the same kind as that which has induced several of our learned judges, when a person practising illegally has been charged with manslaughter by malpractice, to instruct the jury that he was not blameable because he had done his best.

Two cases have within the last week come before our notice, to which we would direct attention, as in some respects they stand in contrast.

The first case which we shall notice offers a phase which we do not remember to have seen before—the prosecution of a *registered* practitioner for the use of a title other than that for which he was registered. It was a case tried lately in the County Magistrates' Court at Liverpool, in which Mr. John Sharpers Hallows, of West Derby, was charged by Mr. W. H. Fitz Patrick. of Knotty Ash, with practising as a surgeon without being duly registered. It appeared that Mr. Hallows appears in the *Register* merely as a licentiate of the Apothecaries' Company, while on his door he had a plate on which he was designated surgeon. It was admitted by Mr. Fitz Patrick that the defendant had a right to dispense medicine, or to practise medicine as an apothecary: but he denied that he had any right to practise as a surgeon, or to act as such. The defence set up was of that kind which is often used by men who have no ground of argument. Mr. Snowball, the defendant's legal adviser, is reported to have said that—

"Mr. Fitz Patrick might be a good surgeon and a good medical man, but he evidently was not a very good lawyer. He did not appear to know what a surgeon was. It appeared on his own evidence that several years ago, before the new Act came into operation, Mr. Hallows had 'surgeon' placed over his shop. That he had a right then to act as surgeon could not be doubted; and not only so, but he had a right to recover his fees for so acting. That business he had carried on for thirty-seven years; and the medical men who had instituted the prosecution ought to feel degraded and ashamed to come before a court of justice to endeavour to take the bread away from an old man who had been so long in practice. It was a most disgusting prosecution to be brought, even if right in point of law. It showed a malignity and meanness which would not, after all, injure Mr. Hallows; and Mr. Fitz Patrick might go back to West Derby hooted and hissed at by all his neigbours. The law before the Act was that any one could act as a surgeon; and Hallows had as much right to do so as Mr. Fitz Patrick himself."

The Chairman of the bench of magistrates, however, said that, according to the Act of Parliament, the defendant was to be registered if he practised as a surgeon. His name did not appear on the Register; and therefore a breach of law had been committed. The defendant, if he were a surgeon, could become registered if he thought fit. Under the circumstances, the magistrates decided on inflicting a small penalty (twenty shillings).

Here, then, we have a prosecution successfully instituted against a registered person, for practising beyond the limits of

his registration qualification. The other case to which we refer, was one in which a prosecution was instituted against a non-registered person; but, notwithstanding the defendant's admission of the charge, it broke down on an objection grounded on the explanatory remarks printed at the beginning of the *Register*.

At the Kesteven magistrates' meeting, in Lincolnshire, on October 7, Mr. Richard Elkanah Hoyle, of Heighington, was charged with having, from the 2nd July to the 17th of September, wilfully and falsely practised as a surgeon, and with having used the name of a surgeon, without being duly qualified. The charge was preferred by Mr. Chambers, at the instance of the Lincoln and Lincolnshire Medical Registration Association. Mr. R. Toynbee appeared for Mr. Hoyle, and took an objection to the copy of the Register put in as evidence. The Act of Parliament required the Register to be "correct," and "alphabetical." The one put in was confessedly, from the registrar's preface, "incorrect," and, if the two supplements were added to it, it could not be "alphabetical." Mr. Jardine, it was said, had decided that the objection taken was a valid one, and although his decision had been appealed against, no judgment had yet been given. The Bench thought they could not receive the copy of the Register as evidence, and dismissed the case. It was at first suggested that a case should be submitted to the Court of Queen's Bench on the point; but on the magistrates urging on Mr. Chambers and Mr. Lowe, the secretary to the Lincoln and Lincolnshire Medical Registration Society, who was present, the hardship of proceeding harshly, an understanding was arrived at that the matter should be allowed to drop, if Mr. Hoyle would give an assurance that he would not practise again till legally qualified. Mr. Toynbee stated that his client intended to obtain, as soon as possible, the necessary qualification.

We leave these two cases before our readers for their consideration. It is to be trusted that, when the next edition of the *Register* appears, there will be no room whatever for any quibbles as to its correctness. In the mean time, we would urge on the profession to work on steadily in the formation of Registration Associations, and in the suppression of the acts of unqualified persons.

THE WEEK.

We desire to direct the attention of our associates to an admirable and highly instructive address, which was delivered by Sir Charles Hastings, at the recent annual meeting in Liverpool, of the Association of Medical Officers of Asylums. In the course of it, he offers some excellent remarks on the present state of the lunacy laws, and points out that, at present, "The law actually stands in the way of the only treatment of the insane, by not permitting an unfortunate sufferer, who feels that his disease is coming on him, voluntarily to place himself in charge of those who, he knows, can snatch him from the misery which threatens him. It is illegal for any man to place himself under treatment." He very soundly urges that this is a great impediment to the successful treatment of the insane.

One of the great events of the week has been the holding of the third annual congress of the National Association for the Promotion of Social Science, which was opened in St. George's Hall, Bradford, on Monday evening, under the presidency of the Earl of Shaftesbury. On Tuesday morning, Lord Brougham, President of the Council, delivered his annual address, in which he gave the following review of the proceedings of the Association since the last meeting in reference to public health.

"At the last meeting, the Association appointed a committee to consider the important subject of the means of preventing adulteration of food; and the council made an elaborate report, referring Mr. Scholefield's Bill to the committee, which approved the Bill, suggesting some material amendments. It was, however, unfortunately dropt in the Commons; but the committee's report will be of great service to Mr. Scholefield in preparing the measure for reintroduction. The same department took into its consideration the unsatisfactory footing upon which the responsibility of Government, as well as that of the local authorities, for the sanitary state of the country, had been left by the Public Health Act of 1857, and especially by the want of system, which inevitably resulted from the Act being only temporary. The council entirely agreed in this view, and presented an elaborate petition to both houses, through Lord Shaftesbury and Lord John Russell, setting forth in detail the evils complained of, and strongly urging the making the Act permanent, with some few alterations. This application to Parliament was attended with success, and the Act of 1857 is now perpetual. Great progress has been made in the investigation which was instituted as to the effects of the quarantine laws, and their proposed abrogation. A sub-committee of the department was charged with this subject, and queries in great detail were circulated among our governors and consuls, the answers to which furnish important information, as will be found in the report about to be presented. In prosecuting this inquiry, we have been greatly indebted to the Foreign and Colonial Secretaries both of the present and the former government, as well as to the valuable papers read at our last meeting. But the most remarkable papers in this department at that meeting were unquestionably those of Florence Nightingale, in which she communicated in a most striking manner the results of her experience upon the construction and economy of hospitals. The council, deeply impressed with the importance of these papers, had them printed in a separate form, and sent copies to all the hospitals in the United Kingdom, and to many medical officers. There is every reason to believe that the best effects have followed from this proceeding, and that this great benefactor to her suffering fellow-creatures will not much longer have to lament, with a feeling of shame, our free country being left behind those under despotic governments in this material branch of sanitary policy."

The Medical Societies of the metropolis are commencing their proceedings for the winter session. The Obstetrical Society, which is, we are glad to learn, in a prosperous state, held its first meeting on the 5th instant. Several interesting communications were made, the principal one being a paper on "The Hydatidiform or Vesicular Mole: its Nature and Mode of Origin;" by Dr. Graily Hewitt. The opening meeting of the Medical Society commenced on Monday last, with a valuable paper on "Internal Urethrotomy:" by Mr. Henry Thompson, an abstract of which appears in this number of the Journal. The first meeting of the Harveian Society will be held in the Stafford Rooms, Titchborn Street, Edgware Road, on Thursday, October 20th, at 8 P.M., when the Introductory Address will be delivered by the President, Dr. Hart Vinen. The Royal Medical and Chirurgical Society will, we believe, commence its meetings next month.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Oct. 20th, 6 P.M.

*** *Associates will observe that the day of meeting has been postponed one week—viz., from the 13th to the 20th Oct.*

Midland Branch. The quarterly meeting of this Branch is postponed.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS, IN CONNEXION WITH THE SOUTH-EASTERN BRANCH.

The first of the series of meetings for the present session was held at the Crown Inn, Rochester, on Friday, September 30th, at 5.15 P.M; W. Sankey, Esq. (Dover), President of the Branch, in the Chair. There were also present: John Armstrong, M.D. (Gravesend); John M. Burton, Esq. (Blackheath); W. Burton, Esq. (Brompton); D. Culhane, Esq. (Dartford); James Dulvey, Esq. (Brompton); F. J. Brown, M.D. (Chatham); W. B. Everest, Esq. (Rainham); Frederick Fry, Esq. (Maidstone); H. M. Gould, Esq. (Wateringbury); William Hoar, Esq. (Maidstone); William Keddell, Esq. (Aylesford); Adam Martin, M.D. (Rochester); E. Moore, Esq. (Dartford); J. Patrick, Esq. (New Brompton); and F. Plomley, M.D. (Maidstone); with the following gentlemen as visitors: J. Langston, Esq. (Strood); and H. Weeks, Esq. (Brompton).

The President congratulated the members present on the success which had attended these meetings, and stated that he had been trying to establish a similar series in the district of the county in which he resided; but he had not yet succeeded.

GENERAL BUSINESS.

Secretary. The minutes of the last meeting were then read by Mr. Dulvey, who reminded the members that his term of office as Honorary Secretary had then expired; and that, in accordance with Rule VII, they must elect a gentleman to fill the office for the succeeding year; whereupon, on the motion of Dr. Martin of Rochester, and seconded by W. B. Everest, Esq., of Rainham, the hearty thanks of the meeting were unanimously given to Mr. Dulvey, and he was requested to continue his services.

Subscription. The annual subscription of half-a-crown towards the moiety of the expenses not paid by the Council of the Branch, was paid by each member present to the Treasurer, Dr. Martin.

Member. Mr. Fry stated that he had been requested by J. Cordy Burrows, Esq., Mayor of Brighton, and late President of the Branch, to propose him as a member connected with these meetings, although not resident in the district—a proposition which was received and carried with acclamation.

COMMUNICATIONS.

The following papers were read:—

1. Three Cases of Encephaloid Disease. By W. Hoar, Esq.

2. Some Points connected with Midwifery. By John Armstrong, M.D.

These papers elicited a discussion, after which the thanks of the meeting were unanimously accorded to their authors, and they were requested to allow them to be published in the Journal of the Association.

Hearty thanks were also given to the President of the Branch, for his kindness in having come from so great a distance to preside on this occasion; after which the members and their friends adjourned to dinner.

It was arranged that the other meetings for the season shall be held—at Maidstone, on the last Friday in October; and at Gravesend and Dartford, on the last Fridays in March and April, 1860; and that, after each meeting, a dinner shall be provided for those who may be able to remain thereto.

SOUTH MIDLAND BRANCH.

A general meeting of the above Branch was held at the Swan Hotel, Leighton Buzzard, on Thursday, October 6th, at 2 P.M.; J. H. Webster, M.D., President, in the Chair. There were also present: T. H. Barker, M.D. (Bedford); R. Ceely, Esq. (Aylesbury); W. Collingwood, Esq. (Ampthill); E. Daniell, Esq. (Newport Pagnell); J. Denne, Esq. (Winslow); B. Dulley, Esq. (Wellingborough); F. Farr, Esq. (Dunstable); D. J. T. Francis, M.D. (Northampton); G. Hammond, Esq. (Irthlingborough); C. J. Hicks, Esq. (Dunstable); E. Lawford, M.D. (Leighton Buzzard); B. Marsack, Esq. (Olney); F. H. Marshall, Esq. (Moulton); W. Percival, Esq. (Northampton); W. S. Slinn, Esq. (Ampthill); R. S. Stedman, Esq. (Sharnbrook); R. Stevens, Esq. (Markyate Street); H. Terry, sen., Esq. (Northampton); H. Terry, jun., Esq. (Northampton); H. Veasey, Esq. (Woburn); J. F. Williams, Esq. (Cranfield); E. Woakes, jun., Esq. (Luton); and the following visitors: T. N. Gray, Esq. (Amersham); A. Henry, M.D. (London).

The minutes of the last meeting were read and confirmed.

NEW MEMBERS.

The following gentlemen were elected members of the Association and Branch: Thomas Chapman, jun., Esq. (Ampthill); William Collingwood, Esq. (Ampthill); William C. Daniell, Esq. (Stoney Stratford); J. W. Dryland, Esq. (Kettering); Frederick Farr, Esq. (Dunstable); Charles Hicks, Esq. (Dunstable); Hammett Hailey, Esq. (Newport Pagnell); W. A. Hubert, Esq. (Markyate Street); Richard Stevens, Esq. (Markyate Street); Edward Woakes, jun., Esq. (Luton).

COMMUNICATIONS.

The following papers were read:—

1. Case of Poisoning by Lobelia. By T. H. Barker, M.D.

2. Case of Œdema of the Glottis, following the Accidental Drinking of Sulphuric Acid, in which Tracheotomy was performed. By E. Lawford, M.D. Dr. Lawford also exhibited a tracheal director of his own invention, for the purpose of steadying the trachea, and directing the knife during the operation of tracheotomy.

3. Case of Necrosis of the Tibia: with a Preparation. By H. Terry, jun., Esq.

4. Case in which a Biliary Calculus was ejected from the Stomach: with a Specimen. By J. F. Williams, Esq.

5. Case of Intestinal Irritation, simulating Cerebral Disease: with a Specimen. By J. F. Williams, Esq.

6. Mr. Daniell then exhibited some interesting Specimens of Renal Calculi.

7. Mr. Ceely introduced the subject of the Preservation of Vaccine Lymph in a Fluid State, by several methods, the most perfect of which appeared to be the use of small capillary tubes, which were partially filled with recent lymph, and then immediately hermetically sealed, by the heat of a common candle. Mr. Ceely illustrated the method he usually employed, and stated that the lymph thus preserved would retain its virtue for an indefinite time.

MEDICAL REGISTRATION.

It was proposed and seconded—

"That the Registration Association of Northamptonshire and Bedfordshire should be amalgamated with the South Midland Branch of the British Medical Association."

After some conversation on the subject of medical registration, in which the advantages of joining the London Medical Registration Association were forcibly pointed out, the resolution was carried unanimously.

VOTES OF THANKS

Were proposed and carried—

1. To the readers of the cases and papers, with the request that they allow them to appear in the Journal.

2. To the President, for his kindness in presiding over the meeting.

THE DINNER.

The members present afterwards dined together, being joined by the Rev. J. Stevenson (Vicar of Leighton); J. Proctor, Esq. (Chairman of the Leighton Board of Guardians); and Dr. Henry. The usual loyal toasts were given, and were followed by the "Bishop and Clergy", responded to by the Rev. J. Stevenson; "Success to the British Medical Association and the Journal", responded to by Dr. Henry; "the President"; "the Secretaries"; "Mr. Robert Ceely"; etc.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, October 10th, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

COMMUNICATIONS.

Oxygen as a Therapeutic Agent. Dr. E. Smith asked if any Fellows of the Society had had any experience of the inhalation of a larger quantity of oxygen than is contained in the atmospheric air? A good many years ago, Sir Humphry Davy stated that the quantity of carbonic acid exhaled, and therefore of chemical changes in the body, was not increased by the inhalation of an excess of oxygen. If this were true, it did not agree with the statement recently made that the changes were increased, especially in cases of debility.

Dr. Mackenzie had had some experience in the matter. A Dr. O'Loughlin of Ireland had told him that his son, who was phthisical, had inhaled oxygen with relief. Dr. Mackenzie had several times used it, but only once with what could be called benefit in the case of a gentleman who had diseased heart and liver, and dropsy. The only marked effect was an increased renal secretion. About twenty or thirty years ago, a series of cases was published, in which oxygen was said to have been used very successfully in scrofulous cases. His (Dr. Mackenzie's) experience in it was limited; but his impression was so far in its favour. It was reasonable to hope that the administration of an additional quantity of oxygen might do good in cases where there was a deficiency in the performance of the chemical processes of the body.

The President had some time ago seen a publican with suppurative glands in the groin. He was very anæmic. Mr. Hilton observed in his room an apparatus, of which he asked the meaning; and was informed by the patient that he was in the habit of taking an occasional dose of oxygen with benefit.

Tracheotomy: importance of Position. The President mentioned the case of a child six months old, which was said to have had given it by its mother a square piece of apple. Symptoms of suffocation appeared; and the child was taken to a medical man, who said the apple had passed into the trachea. On its being taken to Guy's Hospital, there were signs of obstruction in the right bronchus. Mr. Hilton found a square mass at the back of the mouth, which he imagined to be the apple, but which he could not move; and, the symptoms being urgent, he opened the trachea. There was much bleeding. Mr. Hilton turned over the child to prevent the blood from passing back into the trachea. On passing his finger into the wound, he found a piece of core of apple. He had no doubt that, in feeling the child's mouth, he had mistaken the posterior part of the cricoid cartilage for the piece of apple which was said to have been taken. He was satisfied that, by turning the child over, much difficulty was avoided. About ten days ago, the child was brought to him well, with only a slight difficulty of breathing.

Mr. Walton concurred in the importance of turning the patient in tracheotomy into the prone position.

ON THE VALUE OF INTERNAL INCISION IN THE TREATMENT OF OBSTINATE STRICTURES OF THE URETHRA. BY HENRY THOMPSON, F.R.C.S., M.B.

Mr. Thompson commenced by observing that it was not his object to advocate any particular method of treating stricture as the exclusive one, or even as of very general application. In no complaint was there more necessity for exercising a sound discrimination as to which of the various methods sanctioned by experience should be adopted in each individual case.

He introduced the subject of internal division of stricture as a mode of treatment which, when properly applied, is one of extreme utility in some of those exceptional cases which had been found not amenable to dilatation. He was prepared to substantiate this statement by the records of a considerable experience. He thought that the many hazardous modes of performing the operation which had been practised at various times and places, but especially on the continent, had by their bad results naturally raised some prejudice against internal incision altogether. But it would be his endeavour to discriminate between these modes, and to point out one which had been proved safe and satisfactory in a very high degree.

There are two classes of cases to which the author conceived internal incisions are applicable. 1. Those in which the stricture is so unyielding, that no dilatation, simple or continuous, materially enlarges the passage, or ameliorates the symptoms; such examples usually occurring in patients who have been subject to the complaint for twenty years or more, and who have undergone repeated and long continued courses of treatment. 2. There is a class of cases for some of which, severe and obstinate stricture having occurred in comparatively early life, internal division appeared to be the most appropriate treatment. For these, the object of the operation is not only to remedy present difficulties (as in the preceding class), but also to anticipate future ones; since it is almost absolutely certain that serious if not fatal injury will result long before the term of life is spent, when, during the early part of it a severe stricture is established, and merely palliative treatment is applied. He believed it was a question which we are bound seriously to consider, whether it may not be more desirable to cure the patient if possible before extensive urethral disease has been set up, or organic complaints in the bladder or kidneys have been established, than to postpone the attempt until such changes either threaten or have taken place, and the effect of palliative measures has been well nigh exhausted. This is a view of the subject which in the author's opinion has not been sufficiently considered.

The manner of performing internal division of the stricture was next described. During the last few years Mr. Thompson had studied the modes generally adopted, both at home and abroad, especially the latter, and had made it his business personally to examine and estimate them; the consequence of which was that he had employed the method about to be considered, and with a success which gave him a high opinion of its utility.

For the successful practice of the operation, the three following conditions must be complied with. 1. The cutting instrument must be passed through the stricture, and the incision be made from behind forwards, that is, towards the orifice of the urethra, not from before backwards. 2. The limits of the stricture being first accurately defined, the whole of the contracted part should be divided. 3. The borders of the incision should be maintained apart by catheterism subsequently performed, and healing of the incision by first intention be thus prevented.

After dwelling on each of these points at some little length, Mr. Thompson invited particular attention to an important point in connexion with the kind of stricture to which incisions are applicable. He was anxious to combat a very generally received opinion that the narrowness of a stricture is the measure of its severity, an opinion which is wholly erroneous and productive of grave error in practice. The truth is, that a very narrow stricture, for example, one admitting only an instrument of the size of No. 1, sometimes produces comparatively slight symptoms, and is easily amenable to dilatation, while there are exceptional cases in which a stricture is by no means narrow, admitting, say Nos. 4 or 5, but which is quite non-dilatable, and is accompanied by most severe symptoms. Narrowness, *per se*, is not therefore the gauge of severity. The most important characters of organic stricture, whatever may be its calibre, are non-dilatability and contractility; the former denoting a condition in which the tissue constituting the stricture is so unyielding, that dilatation, however carefully used, does but slightly enlarge its calibre or improve the symptoms; the latter denoting a quality through the agency of which, whatever temporary effect may be produced by dilatation, the original degree of narrowing reappears almost immediately after ceasing to employ the instrument. The erroneous belief referred to is exemplified in the remark so frequently met with, that if a No. 4 or 5 could be passed, any incision must be unnecessary. The fact however is, that not merely the calibre, but many other conditions of the stricture, and also of the system at large, must be considered before it is possible to come to a conclusion respecting the kind of treatment which should be adopted. These points were discussed at length by the author. There was one important fact in relation to non-dilatability, viz., that this particular quality of the stricture appears generally to be developed in proportion to its proximity to the external meatus; so that those cases for which incision is most indicated, are precisely those in which the incision is rarely accompanied by any risk whatever.

The instrument which Mr. Thompson considers to supply the best method of fulfilling all the indications required by the majority of cases, is the urethrotome employed by Civiale for fifteen years past, and now slightly modified from the original pattern. The mode of employing it was minutely detailed, and

the after treatment described. For cases in which the stricture is too narrow to be treated by this instrument, Mr. Thompson employs a simple urethrotome of his own design. The accidents which might happen after internal incisions, were then discussed and considered from the facts presented in the careful observation of forty-two cases treated by the special form of urethrotomy described. These accidents were proved to be slight, and in no single instance had led to a fatal or even threatened a dangerous result. The important fact, said the author, is this: that in most cases it is in our power by internal urethrotomy to replace a confirmed non-dilatable stricture by a condition of the urethra, in which the occasional use of an instrument maintains the normal calibre. In this manner we may confer on the patient a benefit of no ordinary value, not only in relation to the removal of present symptoms (which may be accomplished equally by other methods), but in the prevention of those more serious evils which will certainly arise in the course of advancing age. It is this which has long been an important desideratum in practice. Unhappily it has been the fashion to regard too much the present results, and too little the future difficulties in our treatment. Most triumphant is dilatation in regard to the present in the great majority of cases, but in a certain proportion of them it does but postpone the evil day. He claimed for internal urethrotomy, when properly applied to appropriate cases, the position of an admirable adjunct or supplement to dilatation. It was on no account to be regarded as a treatment antagonistic to or competitive with dilatation, but as often rendering wholly amenable to that process a stricture which had been completely rebellious to it before.

Mr. Thompson presented as illustration the details of eight cases, each one of which had been treated by him either in the public wards of University College Hospital, or in connexion with some medical man whose name was given as corroborative of the statements made. The results were of the most satisfactory nature.

The President asked how soon after the operation Mr. Thompson recommended to use dilatation? And how soon had tendency to return appeared?

Mr. Coulson had practised internal urethrotomy somewhat extensively. The fundamental rule was, that the operation must be commenced and ended with dilatation. The question might arise, Why not persevere in dilatation? There were cases, however, where the contractility and non-dilatability were so obstinate, that urethrotomy was necessary. He scarcely ever performed it except anterior to the scrotum, in cases where, some years ago, he tried to perform Syme's operation. In strictures, also, close to the orifice of the urethra, mere dilatation would do little or no good. A *bistouri cachée* was the most useful here. In annular strictures, also, incision alone would produce a condition where dilatation might be usefully employed. Mr. Coulson had often occasion to repeat the operation two, three, or four times. The operation was simple, and required little confinement. He was not aware of any serious accidents arising from internal division of the urethra, either in his own practice or in that of others. He did not think the incision should be confined to the lower part of the canal: it might be required to divide it laterally.

Mr. Walton thought the operation was owed to Mr. Stafford. He had seen it many times practised in St. Bartholomew's Hospital; but not always with success, probably because dilatation was not employed. The instrument was a stilette, pushed forward at the end of a catheter. Generally agreeing with the author of the paper, he scarcely agreed with him in operating by anticipation. We had no right to do this unless under urgent circumstances. He believed that, from want of care, evil results had often arisen from Syme's operation,—such as abscesses, return of the stricture, etc. These were frequently to be attributed to insufficient division of the stricture.

Mr. Cornish did not see that the operation recommended by Mr. Thompson was less dangerous than that of Mr. Stafford.

Mr. Coulson said that it was not always certain, in passing a cutting instrument from before backwards in the urethra, that the right direction was entered on.

Dr. Routh said that if there was any subject brought before the Society oftener than another, it was stricture. In Liston's time, all strictures were to be cured by dilatation. Subsequently, he had seen cases in which portions of strictures were cut out. Then there was Mr. Wade's treatment by potassa fusa; and still more lately, there was Mr. Wakley's instrument. He would like to have some statistical documents on the merits of the different methods of treatment.

Mr. Birkett was a little surprised that Mr. Thompson regarded urethrotomy as an operation not usually performed. He thought it was frequently performed in the London hospitals. He had frequently performed internal incision at Guy's Hospital. A complicated instrument was not necessary. He was speaking of strictures anterior to or only just beyond the scrotum. He had divided these with an ordinary director and knife, in many cases where it was very difficult to pass a catheter. Mr. Thompson would have done great service by directing attention to cases arising from injury to the urethra. There was, he thought, no doubt that many cases of stricture were set up by a false passage made in passing an instrument in a case of ordinary spasmodic stricture. He thought the term stricture used in too general a sense, and would like to know more particularly in what cases the operation was specially indicated.

Mr. Thompson had purposely omitted all mention of strictures close to the orifice, because he thought that they were sufficiently before the profession; and that the mode of operation was a matter of taste. He had not found it necessary to repeat the operation. Mr. Stafford was not the inventor of urethrotomy: Sir Charles Bell had cut from behind forwards. As to operation by anticipation for a disease not existing, it was objectionable; but if a stricture exists in early life, we should use means to arrest the symptoms which will arise inevitably. No grooved director or bistoury will cut stricture at the bulb. He had carefully avoided all reference to causation; all he had attended to was the actual state of the stricture, no matter from what cause it had arisen. He would be glad to see the question of statistics settled: but he thought the treatment of stricture lay beyond the province of statistics. He did not lay claim to any invention in the treatment of strictures, but had endeavoured to use all methods according to his judgment, in the cases in which they were indicated.

Editor's Letter Box.

DO BAD SMELLS CAUSE DISEASE?

Letter from Albert Napper, Esq.

Sir,—This is a question more easily asked than answered, but as it is now become a question involving the credit of our profession, it behoves us to return a speedy and decisive reply. The subject has latterly much occupied the attention of the medical profession, as well as of the public, and as is usually the case with all popular subjects of a scientific character, has been taken up with a certain amount of prejudice, resulting in the notion that many diseases do arise from bad smells.

Without going the length of asserting that this never does occur, my observation has confirmed me in the opinion I expressed in a communication inserted in the Journal of the 15th November, 1856, in reply to some remarks of the Registrar-General on the subject, in which I stated my conviction that zymotic diseases are not the result of merely offensive exhalations, so much as of those arising from the products of fermentation and putrefaction, whether with or without smell. I have since had reason to modify this last opinion, and concur with that of Dr. Watson (which I had not seen, before reading it in your leader),—"that neither animal nor vegetable decomposition is sufficient to generate fever of any kind,"—I am, however, far from admitting that fevers are not affected, and most materially affected, although not *generated* by them. I have long urged on my poorer neighbours the doctrine that the "bad smells" arising from the cesspool under their windows, which have been endured so long with impunity, were only waiting for the seeds of fever to be sown in the system of some member of the family, to convert that which otherwise might pass off as a mild form of fever, into the most fatal kind of typhus. It appears to me that fever, of whatever type, must, by some, at present, unknown agency, be in the first place implanted in the system, where it will flourish or decline in proportion to the capabilities of the tissues in which it is engendered to support it, and that these exhalations bear the same relation to the various types of fever, as guano and phosphate of lime do to wheat and turnips. I have also remarked, that typhus and remittent fevers appear to be nourished by the emanations of the cesspool, and by those gasses proceeding from the fermentation of stagnant water exposed to atmospheric influences. Intermittent fevers and ague depend on the exhalation of water (let it be ever so pure) contained *in* the soil, but not exposed to the

air. Synochus, synocha, and the milder forms of fever being of the same character as typhus, are probably under the same but modified influences.

The thanks of the public are due to Dr. McWilliam for the attention he has bestowed on the subject, but I fear the consolatory feeling of security his statement will engender, may have the effect of turning the tide of public opinion to a do-nothing policy, if not judiciously directed by those best qualified to arrive at correct data, and for the medical profession to maintain this position, it will be necessary to lay aside those extreme theoretical views in which the leaders in some of the branches of medical science have of late years indulged, much to the prejudice of the whole body. Although as yet the disease adapted to be nourished by the filthy effluvia of the Thames has not appeared, the time may not be distant when its destructive powers may be too surely established. I would therefore urge on my fellow practitioners, even though like myself, occupying the humble position of a "village doctor," the necessity of bringing their practical knowledge to bear on this, as yet obscure, but most important subject.

I am, etc., Albert Napper.

Cranley, near Guildford, Sept. 29th, 1859.

THE ASSOCIATION AND THE JOURNAL.

Letter from Alexander Henry, M.D.

Sir,—In a speech on the Journal at the recent meeting of the East York and North Lincoln Branch at Beverley, Mr. Dix has alluded to some remarks which I made at the meeting of the Association in Liverpool. His comments show that he has greatly misunderstood my meaning. I am therefore desirous of giving such an explanation as may enable him to form a correct idea of what I desired to impress on the Associates. But first, I may be allowed to offer some observations on a general error which pervades the whole of Mr. Dix's speech.

Mr. Dix assumes, that the cost of the Journal exceeds the revenue of the Association. He speaks of it as being "maintained . . . at a cost considerably beyond the whole amount of our income." Again, he says: "The whole of the subscriptions are absorbed in the cost of the Journal"; and asks—"What is this Journal, that we should expend so much thereon: which swallows up all our subscriptions, the whole of which are inadequate to its maintenance; and for the sake of which we have been for years past, and still remain, considerably in debt?"

There is no qualification here. The speaker would have it inferred, that all the subscriptions are regularly paid up, and as regularly swallowed up by the Journal, the demands of which are even then not satisfied. This is one point on which Mr. Dix is clearly wrong. Taking the present number of members at 2,300, there should be an annual income of £2,415 from their subscriptions. After making a careful scrutiny of the expenses, and deducting therefrom the returns in the shape of advertisements, etc., I find that, so far from the Journal swallowing up the entire amount of subscriptions, its cost to the Association is somewhat under £1,800. I will give what I believe to be a fair estimate of the real cost of the Journal in its present form, for one year. If this is compared with the financial statement given in the Report of Council read at the Liverpool meeting, it will be seen that I have estimated some of the expenses at even a higher figure than appears in that document. Here is my estimate:

Printing, Paper, and Stamps, for 2,500 copies	£1,725	0	0
Folding, directing, and issuing ditto	50	0	0
Salaries of Editor, etc.	350	0	0
Hospital Reports	100	0	0
Wood Engraving	10	0	0
Sundry Expenses	50	0	0
	£2,285	0	0
Deduct returns from Advertisements and Sales, after paying agents, etc.	500	0	0
Actual cost	£1785	0	0

Thus it is evident that the Journal is supplied to each of 2,300 members (with a residue of 200 for sale and presentation), at a cost of 15*s.* 6*d.* a year,—less than half of the cost to subscribers of a stamped edition of the *Lancet* or *Medical Times and Gazette*. Surely it is a new reading in arithmetic, to deduct 15*s.* 6*d.* from a guinea, and find that the remainder is less than *nil*.

The real impediment lies in the non-payment of subscriptions when due. This is a too common evil in the working of large societies. Out of 2,300 members, there will always be a few who cannot pay their subscriptions at the proper time, and probably more who cannot be depended on for punctuality of payment. The burden is thus thrown upon the able and ready. One thing is very certain; that, lower the subscription as you will, there would always be defaulters.

If the subscriptions were regularly paid up, I am quite sure that the Association would at once be thoroughly free from debt. Even as matters now stand, not only has the revenue of the Association been in late years sufficient for the Journal and other expenses, but the debt which weighed so heavily on it some time ago has been gradually diminishing, and seems in a fair way of extinction: the only extraneous aid having been the sum of £492, raised by a call of ten shillings made in 1856.

From the figures I have already given, it will be seen that, taking the revenue from subscriptions (£2,415), and deducting therefrom the *actual* cost of the Journal (£1,785), there should remain a balance of £630, on which, at present, the charges (Secretary's salary, etc.) do not exceed £200. What I endeavoured to point out at Liverpool was that, by an increase of revenue from the subscriptions of members, there would not only be a possibility of enlarging and improving the Journal, but that, after paying all the ordinary expenses, a balance, increasing in proportion to the increase of members, would remain, which could be usefully applied to purposes of scientific investigation and other matters legitimately falling within the province of the Association. I will give the data on which I founded my assertion; premising, that the estimate for printing, paper, and stamps, was obtained from the printer of the Journal; that the additional expense for an increased number lies chiefly in the paper and stamps—the cost of compositors' work (a considerable item) being no more for thousands than for hundreds; and that I have purposely rated some of the incidental expenses higher than they are at present.

Suppose, then, that the Association consisted of 2,800 members,* the result would be, if a Journal of twenty-four pages were printed weekly—

Income:	£	*s.*	*d.*	£	*s.*	*d.*
Subscriptions	2940	0	0			
Advertisements and Sales	600	0	0			
				3540	0	0
Expenditure:						
Printing, Paper, and Stamps for 3000 copies	1975	0	0			
Folding, directing, and issuing	75	0	0			
Salaries of Editor, etc.	350	0	0			
Hospital Reports	100	0	0			
Wood Engraving	20	0	0			
Sundry Expenses	50	0	0			
				2570	0	0
Balance				£940	0	0

Again, supposing we had 3,800 members, and had each alternate week a Journal of thirty-two pages, the result would be—

Income:	£	*s.*	*d.*	£	*s.*	*d.*
Subscriptions	3990	0	0			
Advertisements, etc	600	0	0			
				4590	0	0
Expenditure:						
Printing, Paper, and Stamps for 4000 copies of 24 pages during 26 weeks	1196	0	0			
Do. do. for 4000 copies of 32 pages for 26 weeks	1417	0	0			
Folding, directing, etc.	100	0	0			
Salaries of Editor, etc.	350	0	0			
Hospital Reports	100	0	0			
Wood Engraving	20	0	0			
Sundry Expenses	75	0	0			
				3258	0	0
Balance				£1332	0	0

In each case, the balance must of course be diminished by

* I make the calculation for 2,800 and 3,800 members, in order to leave aggregate number of 3,000 and 4,000, including 200 for sales and gratuitous distribution.

the amount of the salary of the General Secretary and of the ordinary expenses of the Association—say £200 or £250 altogether.

From these calculations, the following facts are evident:

1. That the relative cost of the Journal decreases steadily in proportion as the number of members of the Association increases.

2. That, in proportion to the increase of members, there will remain an increasing balance: part of which might be applied to rendering the Journal more efficient as the organ of the Association, while a large proportion could be disposed of in the form of grants for the investigation of matters connected with medical science, or for any other purpose which the Association might decide.

Mr. Dix must now see, that it was very far from my intention to say that the whole of the revenue from an increase of members should be applied solely to the purposes of the Journal.

It may be objected, that I have made no allowance for defaulters. I have not forgotten them; but surely, if I have shewn that the surplus revenue of the Association increases in a greater ratio than the number of members, the question of defaulters can interfere with my argument only on the supposition that they would increase in a more rapid proportion than the members—a supposition which no one can entertain.

I will now leave these financial matters, into the consideration of which I should not have entered at such length, if Mr. Dix had not led the way.

As to the question raised by Mr. Dix, of the value placed on the Journal by the members of the Association, I hope it will be amply discussed. I know that many of them regard the Journal as the mainstay of the Association—as a medium which has so far the advantage of stated gatherings (however pleasant and useful these may be) that it enables them to hold weekly communication with each other.

The personal insinuation of Mr. Dix, as to my motives in offering my remarks at the Liverpool meeting, I will simply leave to the judgment of those members of the Association to whom I am known.

I am, etc., Alexander Henry.

51a, Paulton Square, Chelsea, October 12th, 1859.

THE ASSOCIATION AND THE JOURNAL.

Letter from Henry Munroe, M.D.

Sir,—Having, at the East York and North Lincoln Branch meeting, heard the paper read by Mr. Dix, and disputed the arguments advanced by him, I beg to offer a few remarks in the Journal, in addition to those I made at the meeting.

Mr. Dix assumes that the Journal is maintained at a cost considerably beyond the whole amount of the income; that it is a sore let and hindrance to the extension of members, and to the spread and power of the Association. But Mr. Dix gives no data, no statistics in proof of such an assertion; and fully persuaded am I that, if the members then present could have been in possession of your valuable leading article in the last number of the Journal, giving the true facts of the Association's history, the resolution proposed would never have been passed. The feeling of the meeting was that, if the expense of the Journal was detrimental, or, as stated, ruinous, to the interests of the Association, the sooner it was given up, or its publication modified, the better; but then the members present were of opinion that Mr. Dix had stated a true case—that the expenditure of the Journal was greater than the income of the Association. Had they been aware of the fact that the annual income of the Association had for some years exceeded the expenditure, the resolution, partially only seconded by Sir H. Cooper, would have been one of compliment rather than condemnation; and had Mr. Dix been aware of the fact, it would have saved him the labour of preparing a paper the spirit and style of which were spoken of at the meeting as being too sarcastic and uncourteous.

The caustic remarks on the analysis of the contents of the Journal might be applied to any other journal of a like character; and the unwise insinuation that the admirable lectures of Dr. Beale were read by no one, showed the author's unacquaintance with the fact that his medical colleagues, members of the Microscopical Society, have made the microscopic analysis of urine their study for years. This want of proper information on the part of the author relative to the points in question has been the occasion of this incomplete paper—incomplete as to facts and data, therefore valueless as an authority. Nevertheless, I feel glad that Mr. Dix has published his paper, as it will be the means of rendering essential service to the Association, in eliciting views and opinions as to the utility of the Journal; and moreover it will have a tendency, in the discussion of the subject, to strengthen the confidence of its true friends, and somewhat allay the irritable feelings of others, whose principal recommendation is, that they are happy only when they are grumbling. Any critique on the paper itself is rendered unnecessary by the sharp-shooting foot-notes written by yourself.

Mr. Dix's pet scheme of a diminution of the subscription, with a view to a large increase of members, would, I think, be a doubtful and hazardous experiment, and one especially fatal to the existence of the Journal, which I consider the backbone of the Association. I think no one could doubt that, with all the energy and persevering industry of the promoters of the Medical Bill, their endeavours to obtain it would have been fruitless, had they not had the Journal in which to disseminate their opinions and meet with encouragement from their professional brethren. Where would be the advantage to pay a paltry subscription to take one's place at a Branch meeting, to hear papers read, when non-associates have the same privilege from invitation? If you lower the subscription to a small sum, you make the membership too cheap, and hence valueless; for I deem that anything cheap may, like physic, be nasty also.

Some years ago, I thought, with others, that there was no positive advantage arising from being a member of the Association, and that the Journal, in its then condition, was not worth the price; but now I find that the leading members of the Association, having the welfare of the profession at heart, have bestirred themselves, and earned golden opinions for having obtained a Medical Act, and given to their members a Journal that may stand honourable comparison with any other periodical.

As there are about 15,000 medical practitioners in the kingdom, is it not rather humbling that the numbers of the Association do not exceed 2,310? Why should there not be 10,000 members? Why should we not have the means of publishing a journal that could have no rival? The argument that the *Lancet* and *Medical Times and Gazette* are so well supported that there needs no other periodical, is puerile. The *Lancet* had once a circumscribed circulation, had other periodicals to compete with, and its editor suffered much for the great cause of reform; but was this a reason why that periodical should have been discontinued? By the assistance of the profession becoming members of the Association, I cannot but believe that the British Medical Journal must take the first place in our medical periodical literature; and that, instead of lessening the frequency of its publication, if properly supported, it would have to be published twice a week.

I consider that we are somewhat indebted to Mr. Dix for his paper; and, trusting that the discussion as to the propriety of continuing the Journal may end in beneficial results to the Association,

I am, etc.,

Henry Munroe, M.D., F.L.S.,

Lecturer on Medical Jurisprudence and Histology at the Hull and East Riding School of Medicine.

Hull, October 11th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

*Bell, R. P., Esq., Goole, on October 4th.

*Stretton, Samuel, Esq., Kidderminster, on October 5th.

Wyatt, George R., Esq., Oxford, on October 5th.

Of daughters, the wives of—

Dobie, William M., M.D., Chester, on October 6th.

Taylor, J., Esq., Surgeon, Bayswater, lately.

MARRIAGES.

Bennett, R., M.D., of Buxton, to Maria, youngest daughter of Wm. Kipping, Esq., of Hadlow, Kent, on October 5th.

Caw, James, jun., Esq., St. Thomas's, to Frances, youngest daughter of the late William Ruan, M.D., of St. Croix, on September 14th.

Crawford, Thomas, M.D., Surgeon 18th Regiment, to Clara Frances, daughter of the late R. Morrison, Esq., of Dublin, on October 6th.

Higgins, Henry, Esq., Surgeon, of Peel, Isle of Man, to Louisa, fifth daughter of the late Ll. McWhannell, Esq., of Glendaff, Isle of Man, on October 11th.

Holmes, Arthur P., M.D., Bengal Army, to Isabel, eldest daughter of J. D. Marshal, M.D., of Holywood, near Belfast, on October 4th.

Long, Wm., Esq., Caldicott, Monmouthshire, to Frances, second daughter of *Edward Long, Esq., Surgeon, of Barham, Canterbury, on September 29th.

Lyon, the Rev. James, M.D., eldest son of Gilbert Lyon, M.D., of Clifton, to Fanny, eldest daughter of Wm. Fripp, Esq., of Dawlish, on October 6th.

Maunder, Charles F., Esq., Surgeon, of New Broad Street, to Catherine, youngest daughter of Wm. Beaumont, Esq., of Birmingham, on October 5th.

Mouat, James, Esq., C.B. and V.C., Knight of the Legion of Honour, Deputy Inspector-General of Army Hospitals, to Adela Rose Ellen, youngest daughter of the late Rev. Nicolas Tindal, on October 6th.

Ralstan, Wm. H., Esq., of Keele, Staffordshire, to Isabella J., second daughter of the late Jonathan Bowman, M.D., of Liverpool, on October 6th.

Stoker, Wm., Esq., Surgeon R.N., to Margaret, youngest daughter of John Trotter, M.D., at Durham, on Oct. 4th.

Ward, Thomas, Esq., Surgeon, of Southgate, Middlesex, to Agnes, eldest daughter of John Webster, Esq., late of Southgate, on October 5th.

DEATHS.

Dean, J. H., Esq., at 32, Lucas Street, E., on September 29.

Dix. On October 5th, at Long Buckby, Northamptonshire, aged 2 years, John Albert, youngest son of *F. W. Dix, Esq.

Ede. On October 9th, Mary Lydia, youngest daughter of J. R. Ede, Esq., Surgeon, of Barnsbury Park.

Jackson. On August 6th, at Jaulrah, Matilda Sarah, eldest daughter of J. M. Jackson, Esq., 2nd Madras Light Infantry.

Neill. On October 1st, at Liverpool, Elizabeth, wife of *Hugh Neill, Esq.

Simmons, G., Esq., Surgeon, at 71, Judd Street, W.C., aged 50, on October 9th.

Webber, R. T., Esq., Surgeon, at Bromley, Middlesex, aged 53, on September 26th.

PASS LISTS.

Royal College of Surgeons Licentiates in Midwifery admitted at a meeting of the Board, on October 12th:—

Bossy, Alfred Horsley, Stoke Newington: diploma of membership dated August 1st, 1859

Bridger, J., Cottenham, Cambridgeshire: March 11, 1859

Elliott, C. H., Swan River, Australia: March 12, 1858

Hughes, T. J., Woolwich: March 21, 1859

Parkes, Thomas, Woolwich: July 19, 1859

Swindell, John J., Whetstone, Middlesex: Aug. 1, 1859

Utterson, E. V., Balham Hill: May 16, 1859

HEALTH OF LONDON—OCTOBER 8TH, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... {Boys .. 917 / Girls .. 840}	1753 ..	996
Average of corresponding weeks 1849-58..	1407 ..	1002

Among the causes of death were—diarrhœa, 34; scarlatina, 95; diphtheria, 11; small-pox, 28 (22 children and 6 adults).

Barometer:

Highest (Sun.) 30.062; lowest (Fri.) 29.691; mean 29.836 in.

Thermometer:

In sun—highest (Tues.) 96·2°; lowest (Sat.) 71·4°.

In shade—highest (Tues.) 81°; lowest (Wed.) 52·5°.

Mean—62.1°; difference from mean of 43 yrs. + 9.4°.

Range—during week, 28.5°; mean daily, 16°.

Mean humidity of air (*saturation*=100), 84.

Mean direction of wind, S.E.—Rain in inches, 0.30.

In the thirteen weeks that ended October 1st, the mortality in London was high; it was at the annual rate of 23 out of a thousand persons living. The total number of deaths was 16,010, of which 9056 occurred to persons in the first twenty years of life. In the corresponding quarters of four years, 1855-58, the deaths ranged from 13,042 to 14,345. The mean temperature of the quarter was high, 62·9°, though not so high as that of 1857; and in part of July the heat was excessive, on two days having reached 93° in the shade (the mean more than 12° above the average), and 115° in the sun. The consequence was an unusual amount of diarrhœa, which, however, gradually fell during the last two months, being checked by the fall of temperature, and also by the rain, seven inches of which, or about the average quantity, were measured during the quarter. The number of deaths from diarrhœa registered in the whole period was 2743, whilst only about half that number occurred in the same season of last year; and in the warm summer of 1857, the number was 2343. The disease committed its ravages almost entirely amongst young children. It was fatal in 768 cases in the East Districts, considerably more than in those on the south side of the river, which contains a larger population. Scarlatina was also very fatal, though in a less degree than it was in the summer of last year; and, like diarrhœa, it appears to have prevailed much in the Eastern Division. In all parts, scarlatina carried off 778 persons, diphtheria 190, small-pox 287. The largest contribution of deaths from small-pox (91) is also made by the eastern portion of the metropolis, although the hospital appropriated to this disease is not situated within its bounds. Six persons died in the quarter from want of food, 172 infants from want of breast-milk and inanition, 18 persons from purpura and scurvy, 59 from intemperance and delirium tremens, 20 by murder or manslaughter, 54 by suicide.

Poisoning by Mushrooms. Last week, an elderly man in the marshes, near Midhurst, who had been previously in robust health, was suddenly seized with violent vomiting, etc., which caused his wife to send off for their medical attendant, who, on arriving, and having made the requisite inquiry, without hesitation pronounced the symptoms to arise from having, thirty hours before, eaten a quantity of large, or what are commonly called "horse mushrooms". After a short stay, the medical man left his patient comparatively tranquil; a few hours after, however, he was again sent for; but, before he reached the house, the poor man had breathed his last, and this in less than sixty hours from the time of eating the mushrooms. The appearance of the corpse was singularly remarkable, as indicative of the cause of death, inasmuch as, besides considerable frothy exudation from the mouth, which smelt strongly of fungine, advanced decomposition had taken place within twenty-four hours. The body was of a dark purple hue, and so frightfully swollen that not a single feature of the countenance was discernible.

TO CORRESPONDENTS.

The Association and the Journal. Mr. Dix has sent us, in reply to our leading article of last week, a letter which would occupy about two pages of the Journal. He will not, we presume, accuse us of want of courtesy if we defer the publication of his letter in consequence of the preoccupation of our space. Can he not, before another number appears, condense his ideas into a smaller compass?

Communications have been received from:—Dr. Cockle; Mr. P. Adams; Dr. W. F. Wade; Mr. T. Holmes; L.A.C. (Ireland); Dr. G. Vernon Blunt; Dr. David M'Laren; Dr. Wm. Moore; Mr. Henry Thompson; Dr. W. O. Markham; Mr. Joseph Hinton; Mr. R. P. Bell; Dr. Mackinder; Mr. Parkin; Mr. H. Terry, Jun.; Dr. P. H. Williams; Mr. J. Dulvey; Dr. Lawford; Dr. A. Robertson; Mr. John Dix; Dr. Munroe; Mr. T. M. Stone; Dr. Hewitt; Assistant Surgeon Indian Army; Mr. F. W. Dix; and Mr. W. J. Moore.

ADVERTISEMENTS.

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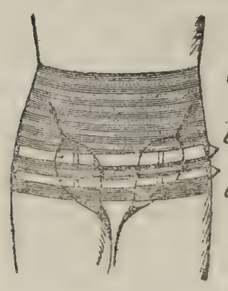
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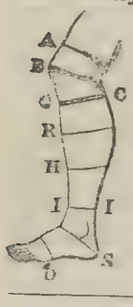
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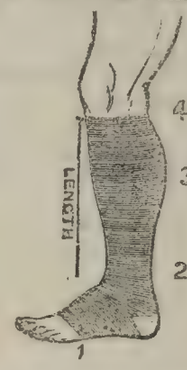
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXLVII.] LONDON: SATURDAY, OCTOBER 22, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

CASES AND STATISTICS OF STRANGULATED HERNIÆ: WITH REMARKS.

By GEORGE F. COOPER, Esq., Surgical Registrar.

CASE I. M. W., aged 40, was admitted on April 25th, under Mr. Pollock. This patient stated that she ruptured herself for the first time three or four years ago, whilst attempting to raise a heavy weight. She never wore a truss till last December, when she came into this Hospital for symptoms of strangulated hernia; but then, by means of the taxis and a hot bath, the gut was returned, and she was sent out with a truss applied. Three days before admission, whilst in bed, and the truss being off, she had a fit of coughing, and the gut again came down. Since that time till her admission here, the bowels had not acted; she had had slight vomiting, apparently not stercoraceous; and very little pain.

On admission, there was a small hard tumour in the region of the right femoral ring, of about the size of a large walnut, which was red and inflamed, and very slightly painful, as was the abdomen generally. Her tongue was furred, but moist; pulse 90, and weak; and skin cool. Herniotomy was performed directly after admission; and then, on cutting down through the various coverings, which were found rather adherent to one another, a small branch of the epigastric artery was divided, requiring a ligature. The sac was opened, and found to contain a little fluid, of a dark serous nature, and a small knuckle of intestine, the surface of which, to the extent of a square inch, was perfectly white, and surrounded by a dark margin; so a suture was passed through the healthy portion of the gut (one on each side), and attached to a corresponding part of the external wound, and the mortified portion merely snipped with a pair of scissors. No fæces escaped. The stricture, which was found to be very tight, was then divided, and the woman was put to bed. She was ordered one grain of opium every four hours. She slept very little during the night; and, on the following morning, there was great tenderness over the abdomen, and she had some stercoraceous vomiting. Her pulse was 100, and soft; tongue moist, but rather furred; skin cool; and the wound looked quiet. The next day (27th), the vomiting continued, but was more frequent; and the abdomen was acutely painful. No fæces had passed either through the wound or *per rectum*. The pulse was 90, and fluttering. She was given milk diet, and was ordered a simple injection. This was retained for a while, but eventually passed by the wound.

April 28th. She spent a better night. This morning she had another injection, after which some fæces passed through the wound. The vomiting continued, but the tenderness of the abdomen was much less. The wound was quiet, and slightly discharging; pulse 120, and weak.

April 29th. The vomiting had stopped, and the tenderness was gradually going from the abdomen. Fæces now passed freely through the wound. On the following day, she was ordered six ounces of brandy, and was given some fish.

From this time she gradually but slowly rallied; nothing more worthy of note occurred; and she was discharged on June 21st. Her fæces always passed freely through the wound, which latter had very considerably contracted. About a week after the operation, she passed her motions for a few times by the natural passages; this shortly ceased to be the case, and, for about six weeks before she left the Hospital, nothing was passed by the rectum but a very small amount of fæces and mucus, and that only rarely.

CASE II. M. B., aged 40, was admitted on May 25th, under Mr. Pollock, for strangulated femoral hernia. She had had a hernia for the last three years, and had always worn a truss. Four days and a half ago, the gut again came down during a fit of coughing; and since then, till her admission, her bowels had not acted, and there had been almost incessant vomiting.

On admission, besides the stercoraceous vomiting, there was considerable peritonitis. An operation was immediately performed. The sac was opened, and found to contain a little serum, and a knuckle of intestine, not much congested. She rapidly recovered, without any bad symptoms; and on June 11th, seventeen days after the operation, she left the Hospital.

CASE III. C. R., aged 34, was admitted on August 11th, under Mr. Cutler, for strangulated oblique inguinal hernia. He had had a hernia for the last sixteen or seventeen years, and had always worn a truss; this morning it broke, and, four hours before admission, the gut again descended; and, finding he could not return it as heretofore, he applied here for relief. He was given a hot bath, and taxis was applied, but without avail; and, two hours afterwards, herniotomy took place. The sac was opened, and found to contain a quantity of serum, and a knuckle of intestine the size of two walnuts, exceedingly congested, almost perfectly black. The stricture was very tight. The wound healed by the first intention; and, on the 24th, he left the Hospital.

REMARKS. I put these three cases together, to show how extremely fallacious it is to trust to symptoms, or even time, in operating on strangulated herniæ, as to the propriety of opening the sac or not; for let us briefly analyse these cases, and then it will appear, I think, that if we had made a diagnosis as to the state of the gut in each, we should have been greatly deceived. In the first, the woman had no very urgent symptoms, no great stercoraceous vomiting, peritonitis, or collapse, which would have been expected if mortification of the bowel had come on; and yet the strangulated portion, for the space of a square inch, was perfectly dead. In the second, the patient had had almost incessant vomiting for four days and a half (the length of time the hernia had been down), and, on admission, peritonitis; and yet the gut was not much congested; showing that, howsoever little obstruction there be to the passage of the contents in the alimentary canal, all the symptoms of strangulation show themselves almost as much as if the part had been severely constricted. In the third, when herniotomy took place, the gut had only been strangulated for six hours, and yet it was almost perfectly black. This only shows how little delay there should be in all cases of strangulated herniæ, and how little one can trust to time; for though, in some cases, the stricture is only sufficient to cause at first congestion, which will ultimately (and this may be many days) go on to gangrene of the gut, unless relieved, yet, in others, active inflammation is set up directly, and gangrene rapidly supervenes. It is quite certain that the great secret of success in herniotomy is to take it in time, and that then it is far from being so dangerous an operation as is usually considered. Unfortunately, the greater number of cases that come into our Hospital have been of so long duration, and the taxis has been frequently so rudely applied in attempts at reduction, that the aid an operation affords is too often destroyed by the patient not being able to rally from the extreme collapse he is in; or, if the gut be not gangrenous from delay, it is often severely congested and bruised. Does not common sense tell all of us with what extreme delicacy the taxis should always be used?

And now, as we do unfortunately meet with these cases of long duration, what have we to contend against, in order to re-

lieve the patient, besides the effects of the simple operation? The answer is:—1. Great collapse, from incessant vomiting, and injury to a portion of the bowel; for there is nothing in surgery that causes greater prostration of the vital powers than any injury to the intestinal canal. 2. Prostration from want of nutrition. 3. Effects of remedies, as from violent use of the taxis and administration of purgatives. 4. Peritonitis, as spreading from the portion of bowel or omentum that is strangulated. 5. Ulceration of the bowel, and gangrene.

Out of 12 cases that have been operated upon in our Hospital during this present year, the periods of strangulation before the time of admission were respectively, 4 days, 2 days, 24 hours, 3 days, 4½ days, 27 hours, 5 hours, 3 days, 14 hours, 5 days, 6 hours, and 7 days; making an average of 2 days and 15 hours for each case.

What is far more conclusive is, that during the last seven years, the period of strangulation that had existed in those who died was as follows:—

In 1852: 4 deaths: periods of strangulation respectively, 2 days; 3 days; 2 days; 2 days.
In 1853: 4 deaths: periods of strangulation, 3 days; (?); 10 days; 36 hours.
In 1854: 9 deaths: periods of strangulation, 2 days; 3 days; 8 days; 7 hours; 16 hours; 1 day; 1 day; 2 days; 36 hours.
In 1855: 9 deaths: periods of strangulation, 12 hours; 5 days; 36 hours; 8 days; 5 days; 2 days; symptoms 9 days (operation exploratory); 30 hours; 4 days.
In 1856: 5 deaths: periods of strangulation, 36 hours; 3 days; (?); 3 days; 4 days.
In 1857: 3 deaths: periods of strangulation, 2 days; 2 days; 2 hours.
In 1859: 2 deaths: periods of strangulation, 7 days; 4 days.

This makes an average of 3 days and 2 hours for each case, which is certainly very enormous.

The following table contains the statistics of the cases admitted into St. George's Hospital during the last seven years, showing the success or failure, whichever it may be, in opening the sac, in comparison with that of other hospitals where the sac may have been left unopened.

Date.	No. of cases.	Nature of hernia.	Sac opened.	Sac not opened.	Deaths.
1852	18	Inguinal 7	7	0	2(a)
		Femoral 11	9	2	2(b)
1853	15	Inguinal 2	2	0	0
		Femoral 13	12	1	4(c)
1854	23	Inguinal 7	7	0	3(d)
		Femoral 16	16	0	6(e)
1855	17	Inguinal 4	4	0	2(f)
		Femoral 12	12	0	6(g)
		Umbilical 1	1	0	1(h)
1856	14	Inguinal 3	3	0	0
		Femoral 10	10	0	5(i)
		Umbilical 1	1	0	0
1857*	11	Inguinal 2	2	0	1(j)
		Femoral 9	9	0	2(k)
1858*	6	Inguinal 2	1	1	0
		Femoral 4	4	0	0
1859	12	Inguinal 3	3	0	0
		Femoral 8	8	0	2(l)
		Umbilical 1	1	0	0
	116	Inguinal 30	29	1	8
		Femoral 83	80	3	27
		Umbilical 3	3	0	1

(a) In 1, from bronchitis previously existing, in an infant; in 1, from pleurisy previously existing.
(b) In both the gut was ulcerated and gave way during the operation. Peritonitis in both.
(c) In 1 case, peritonitis previously existed. In 2 cases, the gut was ulcerated, and gave way; in one case during, in the other a few hours after, the operation. In the 4th case, an exploratory operation was performed; the hernial sac was found empty. This was followed, however, by ulceration of a portion of bowel lying near the hernial sac, and the formation of a fæcal fistula through the incision. The patient died of exhaustion from large bed-sores.
(d) In 2, from peritonitis; in 1, from exhaustion consequent on sloughing around an artificial anus, the result of ulceration of the gut.
(e) In 1, from cholera; in 2, from peritonitis; in 2, from perforation of the intestine; and 1 was in a moribund state on admission, from neglected strangulation.
(f) In 1, from exhaustion; and in 1 from peritonitis.
(g) In 2, from perforation of the bowel by ulceration before the operation; in 1, from the same complication after the operation; in 1, from gangrene of the bowel, which was laid open at the operation; and in 2, from peritonitis.
(h) An exploratory operation; death from peritonitis existing previously to the operation.
(i) In 1, from internal strangulation, the man having quite recovered from the operation; in 2, from peritonitis; in 1, from pleural effusion; in 1, an exploratory operation was performed, and no strangulation was detected—the cause of death remained obscure.
(j) From rupture of intestine and hernial sac by violent use of taxis before admission.
(k) In 1, from peritonitis; in 1, from bronchitis.
(l) In 1, from secondary hæmorrhage into the abdominal cavity; 1 was moribund on admission and died of pure collapse.

Of the deaths, 6 were from other diseases; viz., 2 from bronchitis, 1 from exhaustion by bed-sores, 1 from cholera, 1 from internal strangulation, and 1 from pleural effusion; while 30 were from the effects of the disease.

The following four cases, which have occurred this year at St. George's Hospital, well illustrate some of the complications and difficulties that are met with in strangulated herniæ.

Case iv. A. T. was admitted under Mr. Prescott Hewett on January 6th, for strangulated femoral hernia. She had had a hernia on the left side for the last six months, but it could be always easily reduced. She never wore a truss. Four days before admission, she found she could not return it. Sickness soon came on, and continued until she entered the Hospital.

On admission, she was in a state of great collapse, having constant stercoraceous vomiting, acute tenderness over the abdomen, and hernial tumour. An operation was immediately performed. The sac was opened, and found to contain a small knuckle of gut, which was much congested; and a small piece of omentum, which was removed. The stricture was very deep and tight. Directly after the operation, the bowels acted very copiously. She was given twenty minims of tincture of opium.

Jan. 7th. She was a little sick this morning. The tenderness of the abdomen was rather less, though still severe; there was considerable tympanitis. Her tongue was moist; skin cool; and pulse 100, and jerking. The wound looked healthy, and had partially healed. She was given calomel and opium every six hours.

Jan. 8th. She was delirious this morning. Her pulse was 120, and very weak; the tongue was dry; and she was in a very low state. There was more tenderness over the abdomen. The edges of the wound were of a dark colour. The calomel and opium were repeated every three hours, and she was also given brandy and port wine; but towards evening she sank.

Autopsy. The peritoneal cavity contained much blood, reaching as high as the small omentum, and coating the various viscera; but the largest quantity was in the pelvis. The gut and omentum that had been strangulated were lying at a distance from the femoral ring, five feet from the ileo-cæcal valve, and were evidently recovering themselves. No vessel could be found wounded, except a very small one, which was given off from a branch of the epigastric artery.

Case v. A. F., aged 52, was admitted on July 10th, under Mr. Prescott Hewett, for strangulated femoral hernia. She had had a hernia on the left side for the last ten years, for which she had always worn a truss. When it came down, she could never return it herself, always requiring the aid of a medical man; and the reduction gave her much pain. Five years ago, she was in Guy's Hospital for symptoms of strangulation; but the gut was then returned by means of a hot bath and taxis. It had not been down since last November until three hours ago, and directly afterwards sickness came on. Hot baths and taxis were tried, but in vain; so, five hours after the strangulation took place, an operation was performed. The sac was opened, and found to contain nothing but a small knuckle of intestine, not much congested. Directly the stricture was divided (which was the inner portion of Poupart's

* From October 1857 to June 1858, no record of the cases was kept.

ligament), and the gut was returned, a jet of blood took place, which was of such a size that it came evidently from some considerable vessel. Mr. Hewett managed to ligature one end of the artery by simply drawing down the sac of the hernia, by which means it was exposed; but the other end he could not get hold of at all until he had cut through and everted Gimbernat's ligament; and then, just beneath this, he saw the vessel bleeding, which was accordingly secured.

The woman did very well; and on August 17th, thirty-eight days after the operation, she left the Hospital.

Case vi. E. Y., aged 51, was admitted on August 17th, under Mr. Tatum, for severe constipation and stercoraceous vomiting, she having suffered from the former for the last six days, and the latter for about twenty-four hours. Until the day of her admission, she had applied to no one; but on that day she called on a medical man, who gave her an enema; but the whole of it was directly returned. She stated that she had had a hernia for four or five years past, but had never worn a truss.

On admission, besides the constipation and vomiting, she was in a state of great collapse; had some tenderness over her abdomen, and complained of a tender swelling in the right groin, which was examined, and declared to be an inflamed gland. Nothing could be felt below this: but on account of the extreme urgency of the symptoms, an operation was proposed. She was then quite cold, her pulse could scarcely be felt; in fact she was moribund. Beneath the inflamed gland a small aqueous cyst was found, and still deeper, a small strangulated piece of intestine. The sac was opened and found to contain about half-an-ounce of milky fluid; a knuckle of intestine, the size of a filbert, not very dark in colour, and which became even lighter before returned, and a small piece of omentum, which was adherent to the sac, and was accordingly left there. The woman did not rally at all, and in about half an hour she died. An autopsy showed some peritonitis. There was also a band of lymph encircling three parts of the gut, which was recovering itself, showing the original stricture.

Case vii. H. M., aged 39, was admitted on July 30th, under Mr. Prescott Hewett, for strangulated umbilical hernia. She stated that seven or eight years ago, whilst pulling a box from beneath a bed, she ruptured herself in the umbilical region. Since which time she has always worn a bandage to support the hernia, but it never returned into the cavity of the abdomen. It never gave her any inconvenience till one month ago, when she felt some pain in the tumour, and since then it had gradually increased in size: it had also been getting painful, and was harder to the touch. On admission, she said she was four months advanced in pregnancy; she had had two children since she had been ruptured, but they had never affected the hernia in any way. Her bowels had not acted for five days, and since then she had been frequently sick. An operation was performed directly. On dividing the stricture, which consisted of a large piece of omentum encircling a small knuckle of the transverse colon, a vessel, the size of a crow-quill, was divided. The divided ends were so situated, that there was some considerable difficulty in securing them, for one was attached to the omentum, whilst the other was lying on the surface of the gut, thereby it being very difficult to take up the latter, without injury to the bowel. A little sloughing of the integuments followed the operation, and slight peritonitis; but she soon recovered from these, and on August 30th, left the Hospital.

Remarks. These four cases speak plainly enough for themselves, and therefore do not require much comment.

The first case I believe to be rare, namely, fatal secondary hæmorrhage after herniotomy; for out of the one hundred and sixteen cases I have mentioned above, this is the only one of the kind; but yet the fact of the hæmorrhage coming from a small vessel, and not the epigastric artery itself, does not seem the exception; for Mr. Lawrence, in his treatise on *Ruptures*, says, "The occurrence of hæmorrhage, even to a considerable amount after the operation, is by no means a certain proof that the epigastric artery has been wounded; and thus large bleeding may occur, when examination after death does not detect a wound of any considerable vessel."

The second and fourth cases are interesting on account of the difficulty there was in securing the divided ends of the vessels; and the third, on account of the great difficulty there was in diagnosis.

UNIVERSITY COLLEGE HOSPITAL.

I. WOUND OF THE EYE.

Under the care of J. Erichsen, Esq.

John S., aged 25, a costermonger, was admitted at one o'clock in the morning of September 8th, under the care of Mr. Erichsen, on account of a stab in the orbit from a clasp-knife. He was in a state of stupid intoxication at the time, and was quite unconscious during examination. The knife had penetrated the lower eyelid at its outer angle, and passed for one inch and a half between the eyeball and the wall of the orbit, wounding the conjunctiva, and bruising the eyeball. The pupils were observed to contract and dilate equally under the stimulus of light; but that of the injured eye was partly closed by a clot of blood. A purge was given, and the wound strapped.

At 10 A.M., the eyelid was found much swollen, and the whole of the conjunctiva of a dark purple red, from extravasation. But little pain was experienced, and that not referred to the eyebrow. The patient could see as distinctly with the injured eye, when the lids were held open, as with the sound one. The clot above mentioned had fallen down, and lay in front of the iris. The bowels had acted freely. He was ordered to bathe the eye frequently, and to have rather sparing diet.

Sept. 9th. The iris was of a somewhat dirty tinge; the pupil was dilated; and there was considerable pain over the brow. The chemosis was less, and the extravasated blood was being rapidly absorbed. The wound in the eyelid was healing by first intention. The clot of blood in the anterior chamber had disappeared, and the cornea was quite clear. Vision was somewhat misty. He was ordered to take a grain and a half of calomel, and two of Dover's powder, three times a day; with low diet, and frequent bathing of the eye with tepid water.

Sept. 10th. The pain remained about the same. The pupil was much dilated, and its margins were ragged with effused lymph. He was ordered to take the pill every four hours.

Sept. 11th. The breath had acquired the mercurial fœtor, though the gums were not tender. Some of the lymph had disappeared. He was ordered to continue the same regimen, and take the pills three times a day.

Sept. 12th. The gums were tender. The lymph was disappearing. The iris was resuming its natural colour. The pain was gone.

Sept. 13th. He complained of soreness of the gums and salivary glands. The conjunctiva being somewhat congested, he was ordered a lotion of sulphate of zinc and opium wine in water. He was ordered to take the pill once a day.

Sept. 15th. The lymph had entirely disappeared, except a small mass at the lower border of the pupil, of a pinkish colour. He was ordered extra diet.

Sept. 19th. The eye was restored to its natural condition, except that the pupil was dilated. A small abscess had been opened in the eyelid.

Sept. 22nd. He was discharged cured; the wound being healed, and the eye perfectly natural, except some dilatation of the pupil.

Remarks. We quote the above case merely as a well marked instance of a traumatic affection of the iris, produced by violence done, not to the membrane itself, but to the outer tissues of the globe and orbit; and of the great power of mercury in cutting short such an affection. In fact, as a great medical author somewhere observes, to watch a case of traumatic iritis treated by mercury is a sufficient cure for any one afflicted with the prevailing scepticism of the day as to the powers of that drug in arresting inflammation. Such cases may suggest to us a question whether the antiphlogistic plan is not in danger of falling too entirely into neglect in the after treatment of operations on the eye; but we must not pursue this topic at present.

II. SYME'S OPERATION.

Under the care of John Marshall, Esq.

We had an opportunity, a few days since, of witnessing the employment by Mr. Marshall of the modification of Syme's staff for the division of the stricture, invented by him, and described in the Journal for 1858, p. 358, to which we refer for a detailed description of the instrument. Its essential feature is, that it combines both catheter and staff; so that no necessity arises for withdrawing it and passing anything again through the wounded urethra into the bladder, which it is often found very difficult to do. It seemed to answer extremely well; and the operation was effected very rapidly, and

with little bleeding. Very severe symptoms, however, followed it. Some bleeding occurred—not, however, to any alarming extent, and easily controlled by plugging the wound. It was accompanied, however, by a succession of most severe fainting fits, so severe that the patient seemed likely to sink. At length, however, he recovered; and the pulse rapidly assumed its normal rate. No symptoms of hæmorrhage remained; and it seemed certain that the symptoms had been due entirely to the inhalation of chloroform. This is not the first time we have had occasion to note this action of chloroform, especially in operations on the urinary passages. In some of the instances, the very gravest fears have been entertained for the safety of the patient; but no instance has hitherto come to our knowledge where death has occurred.

Original Communications.

CLINICAL ILLUSTRATIONS OF THE DIAGNOSIS AND TREATMENT OF ULCER OF THE STOMACH.

By Willoughby F. Wade, B.A., M.B., Physician to the General Dispensary, and Professor of the Practice of Medicine in the Queen's College, Birmingham.

The statement that ulcer of the stomach "occurs very frequently, that it may be generally detected in the living subject, ... that it is usually curable," will be to many a startling one, and yet I do but quote it from the work of a living and recent author (Dr. Brinton), who has undoubtedly been at great pains to render himself qualified to offer an opinion on this subject, and whose judgment, I, for one, do not feel disposed to question. Space would not permit us to go through all the points of interest in the history of this complaint; and I shall therefore restrict myself to those which have the most practical bearing, viz., the possibility and method of its diagnosis, and the possibility and method of its cure.

It has been found,—contrary to a very prevalent notion, that ulcers of the stomach never reveal themselves except by perforation and its consequences,—that in certain cases symptoms of a peculiar or special character, and grouping, have been observed during life. These symptoms, though referrible to the stomach, differ very materially from those of ordinary dyspepsia. Careful examination of the bodies of these patients after death has shown that a peculiar condition of the stomach, viz., ulceration, was present. Surely, then, it cannot be rash to diagnose the existence of this condition during life, if we meet with those symptoms which morbid anatomy has shown to accompany it, and which this morbid condition satisfactorily explains. The application of our knowledge of diseases to their detection during life is made in a threefold mode.

We inquire with regard to any specified disease,

1. What evidence is sufficient to induce a suspicion of its existence?

2. What evidence is required to prove its existence?

3. What evidence will justify us in deciding that it is not present?

Our diagnosis may be expressed by the affirmation or abnegation of the propositions into which these questions are convertible.

The degree of certainty with which we may answer these questions, and the difficulty of doing so, varies materially in different cases. Sometimes one, sometimes another or two, or all three, or none of them may, be decidedly answered. With respect to the present disorder, we might put the difficulties thus:—"If ulcer of the stomach exists, are we likely, or ought we to discover it? Are we likely to suspect it where it does not exist?

The first of these questions may, I think, be answered in the affirmative; the second in the negative, but with certain qualifications which will appear presently.

The symptoms which enable us to discover the existence of this lesion are: pain after food, and the length of time after eating at which this comes on. This varies in different cases from a few minutes to an hour or two, but it is pretty constant in any given case; the pain is severe, and burning or lancinating, felt in the epigastrium and in the corresponding region of the back, sometimes radiating into the shoulders or down the legs; it is relieved often by one position, aggravated by the opposite one, thus giving us a clue not only to the existence of an ulcer, but to its site. It usually is not much alleviated till vomiting occurs, and from this the relief is speedy, sometimes instantaneous. The ejecta consist of food, more or less digested, with or without a quantity of thin watery or viscid mucus, and at times blood; the appetite is often unimpaired, the tongue natural or pallid, and thirst often absent; tenderness of the epigastrium is seldom wanting, though its extent is generally limited, so that it may escape notice. Tenderness is not unfrequent at that part of the back, in which pain, when dorsal, exists. There is often an absence of heartburn, pyrosis, sour eructations, flatulence. The regularity of the bowels depends chiefly upon the amount and kind of food taken into and retained by the stomach. This remark applies also to the degree of emaciation present, which is also dependant in a great measure upon the extent of the ulceration. Another very marked peculiarity of this disorder, is the worn and suffering countenance presented by patients who have suffered from it for any length of time, quite different from the nervous or fidgetty look of simple chronic dyspepsia. If the stomach have become adherent to any other viscus or to the parietes, or if, as may happen, there be much inflammatory infiltration of the gastric tissues, we shall possibly discover by manipulation some tumour or percussion dulness or hardness in the abdomen. When we further reflect that these symptoms continue for months or even years unchanged, both in themselves and in their relation to each other, we have certainly a group of phenomena altogether peculiar, and, as I think, characteristic. Of these symptoms it is customary to describe the hæmatemesis as the most convincing sign of a breach of continuity in the mucous membrane; but when we remember upon how many causes it may depend, it can only be considered valuable as *one of a group*, without the other members, of which it loses much of its significance; and it is upon the *presence of all or the majority of these symptoms* in a given case, rather than upon the prominence or severity of any one of them, that I should be disposed to diagnose the existence of a gastric ulcer. At all events I am sure that we shall benefit our patient by looking upon and treating such a case as one of ulcer of the stomach. As the treatment is a somewhat irksome one, it is beneficial to tell the patient what we think of the nature of his disease, the name of which will probably alarm, and thus tend to ensure obedience to our directions.

The treatment which is more beneficial than all others is the adoption of a purely milk diet; but as a large quantity of milk would produce as much exercise and irritation of the stomach as almost any other ailment, and since the irritability of this organ varies much in individual cases, we cannot specify any fixed quantity. The patient should be directed to take as much at each time as he can do without bringing on the pain. This quantity—at first perhaps not more than a teaspoonful—may be repeated as often as compatible with the ease of the stomach; this is a simple rule by which to decide the amount of nutriment; at first, patients cry out that they shall be starved, and so forth, but they soon find that they gain strength as well as comfort, and indeed it may be well to point out to them that they will gain more strength from the complete digestion of a teacupful of milk, than from eating a mutton chop which the stomach will reject again in perhaps half an hour. It is sometimes difficult to induce patients to try this absolute diet, but once tried, the glorious ease which it produces soon commends it to them.

Patients will have some medicine; otherwise I believe that the plan here recommended is of itself not unfrequently adequate to cure. We cannot well advise a person, whom we limit to a teaspoonful of milk at a time, to take an ounce of mixture thrice a day; I therefore use pills, small in size. The irritability of the stomach in these cases suggests the use of nitrate of silver and opium, of each of which I give about a third of a grain three times a day, with one-eighth of a grain of extract of belladonna, and, if the bowels require it, a little castor oil or henbane and colocynth. This, with a very careful return to ordinary diet, and, during convalescence, some citrate of iron, will, for the most part readily, cure the cases which I have now described, the symptoms of which indicate, as I believe, the existence of ulceration in the stomach. At all events, as I have already said, they are a special group of symptoms, requiring a treatment different from ordinary dyspepsia; such a treatment as, having found successful, I venture to recommend to the attention of my medical brethren.

I will now briefly narrate a few illustrations of this practice, which are more convincing than dogmatic assertions.

Case 1. M. A. Richards, aged 48, married, a bolt-maker, applied to me at the Dispensary on December 10th, 1857. She had suffered for eight months from gastric pain, which always came on half an hour after food. It was worst at the

epigastrium, which was tender, as was the corresponding part of the back, where also there was severe pain. She could lie better on the right than on the left side; lying on the back relieved the pain. Her countenance was very anxious, and face pale. The tongue was normal, but pale. She was much emaciated, and had been living very badly. She had never vomited till three nights before admission, when she felt a little sick, and threw up three-fourths of a pint of black blood. The bowels were moved immediately afterwards; the stool was pitchy. The symptoms were *always* aggravated by solid food. She had in consequence voluntarily limited herself to tea and toast for the last three days. The treatment was as above described. She improved rapidly for five days, when there was such a severe attack of pain and prostration that I feared perforation had occurred. Under the liberal use of opium, this was removed; and after one or two slight relapses, from indiscretion, she got perfectly well in about two months. I gave her some carbonate of iron during convalescence.

Case II. George Chaplin, aged 33, married, a brewer, applied to me on May 20th, 1857. He had suffered from gastric symptoms for two months. His countenance was indicative of much anxiety. He had lost flesh, had a slight hacking cough, but no expectoration. The pain came on half an hour after food, and was aggravated by lying down, especially if on the left side. He had not tried the prone posture. The pain became worse and worse for about an hour, when he vomited, and was relieved. Six weeks after, the ejecta were stained with blood; and he had on several occasions vomited black masses, something like tea-leaves (probably mucus and blood, blackened). There were pain and tenderness in the centre of the back, also at the epigastrium, more especially an inch and a half to the right of the me lian line, just below the ribs. The treatment was as before. He had several relapses, from irregularities in diet, never without; and was cured in about six weeks.

Case III. Phœbe Prince, aged 26, single, a servant, had had three attacks of gastric embarrassment; the first four years, the second two years ago. The third had lasted now (April 5, 1857) ten weeks. She vomited half a pint of blood seven weeks ago, also a much less quantity during the second attack. She had now pain a quarter of an hour after eating; it lasted for two hours. She seldom vomited. Too long abstinence would at times induce pain. She had not noticed the effect of position. Epigastric and dorsal tenderness was well marked; there was much flatus; the appetite was good; she had no thirst; the bowels were costive. She took three bottles of a mixture containing tincture of hyoscyamus, dilute sulphuric acid, and compound infusion of calumba, at the commencement of this attack, but without any relief; whilst taking it, the hæmorrhage occurred. She then tried homœopathy, but got worse instead of better. I recommended her to adopt the plan I have already described.

April 8th. She took two teacupfuls of milk at a time, and had pain after doing so, but not so severe or protracted as formerly. She was ordered to diminish the milk to such a quantity as would not produce pain; this quantity, whatever it might be, to be repeated as frequently as may be without causing uneasiness.

April 11th. She had acted upon the foregoing instructions, and had suffered no pain to speak of since.

April 18th. She had had no pain. She was ordered to continue the milk, but to omit the pills, unless pain returned.

April 25th. She had had much work, and consequently felt not so well; and therefore recurred to the pills. She was tired of the diet. The pills were repeated. She was ordered to continue the milk, and take also a little arrowroot, sago, and tea.

May 2nd. She was better; but had some pain, if she neglected the pills.

I saw no more of her till January 11th, 1858. She called on me in the evening, having just vomited a teacupful of blood. I learned that she resumed her former diet about two weeks after I last saw her, and had remained well till three weeks before the present visit. She was soon relieved on the second occasion; and I have not seen her since.

Case IV. Elizabeth Peters, aged 18, a servant, applied to me at the Dispensary on March 19th, 1857. She was a transparent-skinned girl, light complexion, pretty well developed, but had never menstruated. She had suffered from gastric symptoms for the last six months, never before; but she had always been delicate. The pain came on an hour after eating; it was always aggravated by lying on the right side, a little eased by pressure, but much relieved by vomiting only. About three weeks ago, she threw up a little blood, and, three days afterwards, half a chamberpotful; since then she had retained nothing on her stomach. She had much acid pyrosis. The bowels were regular. She had lost flesh; the face was anxious. There was no epigastric or dorsal tenderness. The treatment was as already described.

March 26th. She had much less pain; she had only vomited twice; she had not had pills all the time.

April 2nd. She had vomited twice since last note, from taking mackerel; the stomach was otherwise well. She has slight bronchitis. The pills were repeated occasionally; and half an ounce of expectorant mixture was ordered to be taken three times a day.

April 9th. She had had no sick bout since. The cough was better. The medicine was repeated.

April 16th. She was better.

April 30th. She improved slowly; was feeble. The cough was well. She had scarcely any pain at the stomach. The pills were repeated twice a day; and she was ordered to take five grains of citrate of iron, in half an ounce of water, three times a day.

May 7th. The medicine gave her pain, and was omitted.

May 21st. She was much better.

June 4th. She was gaining flesh, and had a good colour.

June 11th. She took meat and was well in all respects.

June 18th. She was discharged.

June 17th, 1858. She remained well till two months ago, when the symptoms recurred, but not severely. She was cured in a few weeks.

Case V. Ellen Worral, aged 23, single, came under my care on February 12th, 1857. She was pallid, but not much emaciated. She had had a child three years and a half ago, which she suckled nine months. For the last two years she had menstruated every three weeks. She had been well till nine months ago; since then she had suffered from epigastric pain immediately after eating, much aggravated by the supine position, and worse in lying on the right than on the left side, and easiest when she was quite upright, but never really relieved except by vomiting, which occurred in thirty minutes after taking food. The ejecta were occasionally tinged with blood; they were always very sour. She had slight epigastric, but no dorsal tenderness. The bowels were regular; the urine copious and natural. The treatment was the same. She was discharged cured on March 26th.

Case VI. Ellen Gordon, aged 18, single, a servant, came to the Dispensary on October 30th, 1856. She was a feeble-looking undeveloped girl; she had been ill two years, and thought her illness came on from being exposed in the snow. The symptoms were gastric, and had maintained pretty much the same character from the commencement; with, however, distinct remissions, lasting about a week, during which she always regained strength. The symptoms had been, pain after eating, in from thirty-five to forty minutes, getting worse till vomiting occurred, which soon relieved her; pain, aggravated by dorsal or right decubitus, more especially the former, relieved by left decubitus; ejection, besides the food, of much watery mucus, generally pale and tasteless, but at times bilious, never very sour; pain and tenderness at the epigastrium, the former, when severe, radiating to the back, where, however, there was no tenderness. She vomited about an ounce of blood a month ago. She had cough at times. Menstruation was regular, as were also the bowels. Her appetite was variable, but often good. She was ordered to take nitrate of silver pills three times a day, and to have milk diet.

Nov. 3rd. She had had no pain after eating since, but a little one day from wind. She had frontal headache. The medicine was continued.

Nov. 10th. She was much better, and was ordered not to take the pills unless the pain returned.

Nov. 20th. She took the pills once a day, and was getting fat and strong. She kept to milk.

Dec. 1st. She considered herself well, and was going to take a situation, and leave off medicine.

These few cases are sufficient to illustrate the principles of diagnosis, and the method of cure to be followed. It would be easy to multiply them, were there any advantage in doing so. No age, no sex, no condition of life, is a security against the occurrence of this eminently distressing and often fatal affection. It is easily recognised, and readily curable, but *not* by the remedies which are successful in dyspepsia; yet for dyspepsia it is, I believe, constantly mistaken, to the disadvantage of the sufferer and the discredit of the practitioner.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY
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Lecture IV.

URINE IN DISEASE. *Arrangement of the Subject. Diathesis.* EXCESS OR DEFICIENCY OF WATER AND THE ORGANIC CONSTITUENTS PRESENT IN HEALTH. *Excess of Water: Diabetes Insipidus: Deficiency of Water: Increased Acidity of Urine: Principles of Treatment: Nitric Acid in the Urine: Ammonia: on Detecting Urea in the Blood or Serum: on Detecting Ammonia in the Breath: Urea; Excess of Urea; Deficiency of Urea: Colouring Matter: Excess of Uric Acid and Urates: Principles of Treatment: Extractive Matters: General Remarks on the Increase of the Organic Constituents, with Analyses: Analyses of Urine in Chorea: Analyses of Urine in Skin-Disease.* EXCESS OR DEFICIENCY OF THE INORGANIC CONSTITUENTS PRESENT IN HEALTH. *Chloride of Sodium; its Diminution in Acute Inflammations: Sulphates; Increase in Cases of Chorea, Rheumatic Fever, etc.: Influence of Remedies: Alkaline Phosphates; Increased Secretion of Alkaline Phosphates in Inflammation of the Brain; Analyses; Earthy Phosphates; Increase in the Urine of Cases of Mollities Ossium; Analyses.*

Excess or Deficiency of Water and the Organic Constituents.

[*Continued from page* 811.]

Uric Acid and Urates are present in certain proportion in healthy urine, but in disease a large increase is very frequently observed. The substances occur as urinary deposits, either from existing in too large a proportion to be dissolved in the urine when cold, or, as is probably the case in the majority of instances, from the development of an acid in the urine, which causes them to be precipitated from their solutions. We shall consider the microscopical characters of these bodies under the head of urinary deposits. In many acute febrile diseases, the proportion of uric acid is increased, and the period of resolution of inflammation is marked by diminished frequency of the pulse and respiration, by a fall in the temperature, by free perspiration, and by a very abundant deposit of urates. In health, from 5 to 8 grains of uric acid are excreted in twenty-four hours; but, in some acute diseases, the proportion may amount to twenty grains. In a case of fever, Dr. Parkes found that 17·28 grains of uric acid were excreted in twenty-four hours. Urate of soda is very readily caused to deposit crystals of uric acid. If the amorphous deposit be merely dissolved by warming the urine, the urate often becomes decomposed; and, as the solution cools, crystals of uric acid are deposited. In some cases, the quantity of uric acid held in solution is so great that, upon the addition of a drop of nitric acid to the urine, an abundant amorphous precipitate, exactly resembling albumen, is formed. Such a precipitate has many times been mistaken for albumen (see *Albuminous Urine*), and, even if examined under the microscope immediately after it is formed, its nature cannot be made out; but if it be allowed to stand for some time, the amorphous particles gradually increase in size, and assume the well known crystalline forms of uric acid. The instances in which I have met with urine exhibiting these characters have almost all been cases of liver-disease. Although the reaction is acid, no precipitate takes place upon the application of heat, which at once distinguishes urine of this character from albuminous urine.

The presence of an abnormal quantity of uric acid in the urine shows that more of this substance or its salts is formed in the blood than in health. It would appear that, in consequence of certain conditions, a large proportion of the uric acid resulting from the disintegration of albuminous substances is not further oxidised and converted into urea, but combines with ammonia, soda, or lime, forming urates of these bases.

In gout, the presence of uric acid has been detected in the blood by Dr. Garrod. *During* the attack there is less in the urine than in health; but *after* it is over, a large quantity of uric acid and urates are often carried off from the system in the urine.

In cases characterised by a tendency to the formation of much uric acid, the principal objects to be attained by treatment are, to favour the further oxidation of the uric acid formed, and to promote its solution and elimination from the blood as rapidly as possible. Good air and moderate exercise, with attention to the action of the skin, will fulfil the first object; and the solution and elimination of the urates will be encouraged by giving alkalies in solution in a considerable quantity of water.

The satisfactory change which in chronic gouty and rheumatic cases frequently ensues from following some of the much vaunted "systems", or going through a course of bathing in Germany or elsewhere, obviously arises from the increased action of the skin, and the improvement of the health generally, effected by the exercise, good air, simple diet, and temperance, wisely enforced in the establishments. If patients could be induced to retire to a pleasant part of the country, where they could take moderate exercise and be free from mental anxiety, meet with agreeable society, live regularly, take small doses of alkalies, and soak themselves for an hour or two a day in warm water in which some carbonate of soda had been dissolved, they would receive as great benefit as by travelling hundreds of miles away, and at much less trouble and expense. I am convinced that there are many patients who would prefer to carry out such a simple plan, rather than submit themselves to all the useless routine and absurd formalities involved in many of the professed universal systems, such as homœopathy, hydropathy, etc., which cannot but be extremely offensive to their common sense, while they are claimed as converts and supporters of doctrines which they do not really believe in. There are many who, for the sake of the advantage they derive from the regular system of living, air, exercise, etc., express no disbelief in doctrines and propositions which they probably feel to be absurd, and which a little reflection must prove to be false.

In all such cases, the nature of the derangement of the physiological processes should be carefully considered before any plan of treatment is adopted. We must ascertain in what points the condition differs from a healthy state, and then consider how the deranged actions may be restored. In such cases, it is obviously quite useless to attempt to relieve the patient by giving drugs, without enforcing attention to all the circumstances which are likely to improve the health. Neither will it be wise to attempt to treat the case as if the presence of the uric acid deposit were the most important symptom, for the reasons I referred to when considering the subject of diathesis. The physiological changes taking place in the organism generally must be attended to, and the patient must be instructed to employ those means which are likely to restore healthy action.

Hippuric Acid, as before mentioned, never forms a deposit.* In diabetic urine, it is often found in large quantity, and seems to take the place of uric acid. It is also found in large quantity in the acid urine of fever patients (Lehmann). This fact is of great interest, when considered in connexion with the sugar-forming function of the liver, and the absence of hippuric acid in the organism in certain cases of liver-disease. Kühne has shown that no hippuric acid can be detected in the urine in cases of jaundice; and benzoic acid, which in health is converted into hippuric acid, escapes unchanged into the urine. There can, therefore, be little doubt that this substance is formed in the liver, whether by the action of glycin or glycocholic acid on benzoic acid, or some other substances, has not been determined.

To Lehmann's statement, that hippuric acid takes the place of uric acid in diabetic urine, there are many exceptions. I have found a considerable proportion of uric acid in the urine of many diabetic patients, and in several there was an abundant deposit of uric acid crystals.

Extractive Matters. The extractive matters present in healthy urine have been previously described; and I have mentioned that Dr. G. O. Rees has discovered in the urine, in certain cases, an extractive matter which has drained away from the blood, and which is distinguished by producing an abundant precipitate with tincture of galls. Now, although

* Dr. William Budd in certain specimens of urine in cases of gout has observed a flocculent precipitate, which was found to consist of benzoic acid, doubtless resulting from the decomposition of hippuric acid.

in many cases albumen exists in the same specimens of urine, this blood-extractive sometimes escapes without albumen; and thus the exhaustion and emaciation, in some obscure cases in which there is no hæmorrhage or escape of albumen, are accounted for. The method of testing urine supposed to contain this extractive matter has been described (page 428). The conclusions at which Dr. Rees has arrived are as follows:—

1. That whenever albumen was present in quantity in the urine, it was always accompanied by the extractives of the blood in large proportion.

2. That the cases in which the extractives of the blood were in the urine in large proportion, were generally those marked by debility.

3. That cases of anasarca with disease of the heart, and *unconnected with albuminuria*, also showed the extractives of the blood to be excreted by the urine in quantity.

4. That cases of chlorotic anæmia and hysteria give copious precipitates.

5. That when, in albuminuria, the albumen became deficient in the urine, which we know often happens in advanced cases, the blood-extractives also decrease in quantity.

6. That, in cases of anæmia, the proportion of blood-extractives observed in the urine diminished as the cure was proceeding, under the use of ferruginous tonics. (Lettsomian Lectures, *Medical Gazette*, 1851.)

In many cases where the urine contains an abnormal quantity of water, the proportion of blood-extractives is unusually great. In cases of kidney-disease, the relative proportion of extractive matter to the urea is very much greater than in healthy urine. It would seem that extractives merely filtered from the blood in certain cases, and that these substances might escape into the urine when the structure of the kidney was impaired; but that, for the separation of the urea, a healthy condition of the secreting structure is necessary.

The extractive matters are not capable of being converted, by further oxidation, into urea, carbonic acid, or ammonia; and must, therefore, be regarded as excrementitious substances. Scherer (*Würzburg Verhandl.*, B. iii, Heft 2, p. 180) found that the urea, salts, etc., in the urine of a madman who took no food, were very much diminished; while the extractive matters, although less than in healthy urine, were not diminished in nearly the same proportion as the other urinary constituents.

We know nothing of the circumstances under which the extractive matters may be formed in greater quantity than in health, nor the effects which would result from their accumulation in the blood.

General Remarks on the Increase of the Organic Constituents of Urine. The circumstances under which these constituents are excreted in increased quantity have been already considered, and I propose now to call your attention to a few analyses of the urine in cases of disease in which this character is observed. In almost all forms of fever, in internal inflammations, in acute rheumatism, in many skin-diseases, and in all conditions in which there is increased action of the muscular system, the solids are considerably above the healthy standard; but the constituents do not suffer augmentation in an equal degree. In the conditions just referred to, the increase principally affects the organic matters. Sometimes all the ordinary constituents of the urine are excreted in increased proportion. Dr. L. Lehmann (*Archiv des Vereins für gem. Arb. zur Förderung der wissensch. Heilkunde. Erster Band, Seite* 521) has shown that immersion in the sitzbath, at a temperature of 48° to 60° Fahr., for a quarter of an hour, causes an increase in the quantity of urine, not only of the water, but also of the solid matter. The uric acid, the urea, and the fixed salts, were considerably increased. These results were obtained by estimating the constituents in urine passed during six hours on certain mornings when a bath was taken, and upon others when the observer did not bathe.

The mean of eight analyses of the urine passed during six hours, is as follows:—

	Mornings on which the bath was taken.	Mornings on which the bath was not taken.
Water	443·454 grams.	258·456 grms.
Solids	19·403 „	14·459 „
Urea	10·396 „	7·080 „
Uric acid	0·130 „	0·108 „
Fixed Salts	6·982 „	4.821 „
Volatile Salts and Extractive	1·89 „	2·45 „
Chloride of Sodium	5·814 „	4·319 „

In the following analyses of urine in cases of skin disease, the solid matter is increased; and it will be noticed that the proportion of fixed salts to the organic matters is greater than in health. In No. 4, the quantity of the extractive matter exceeds that of the urea.

In the second series of analyses of the urine in chorea, the principal points to be noticed are the large amount of solid matter, the increase being caused principally by the organic matters. In Analysis 11, the proportion of sulphates is seen to be increased. This increase of sulphuric acid is always observed in cases where the urea is increased.

Urine from cases of Skin Disease.

3. Urine from a case of eczema, with crusts over the whole body: specific gravity, 1025.

4. From the same patient on the following day.

5. From a case of eczema, in a boy, aged 18: specific gravity, 1033; acid, pale colour. Contains much uric acid.

6. From a case of ichthyosis, in a girl, aged 15: acid; specific gravity, 1032.

Analysis.

	3		4		5		6	
Water	948·7		926·1		935·4		929·70	
Solid matter	51·3	100·00	73·9	100·00	64·6	100·00	70·30	100·00
Organic matter	27·9	54·6	51·70	69·97	47·91	74·17	48·35	68·77
Saline matter	23·4	45·40	21·20	30·03	16·69	25·83	21·95	31·20
Urea			24·03	32·51			48·35	68·77
Extractives			27·21	36·82				
Uric acid			·46	·62				
Alkaline salts	23·4	45·4	21·23	28·72	16·69	25·83	21·95	31·2
Earthy salts			·97	1·31				
Chloride of sodium					3·99	6·17	1·74	2·47
Sulphates					9·45	14·62		
Phosphoric acid					2·64	4·08		

Urine from cases of Chorea.

7. From a girl, aged 10, recovering—after having been ill for several weeks. The urine contained a great number of Cayenne pepper crystals of uric acid.

8. From a girl, aged 12: specific gravity, 1033; no albumen; much deposit of urates.

9. From a girl, aged 14: specific gravity, 1035; acid; turbid from the presence of urates. Uric acid deposited in the urine=·46 per 1000 parts.

10. From a girl: specific gravity, 1030; acid; pale in colour.

11. From a boy, about 10 years of age.

12. From a boy, aged 14: acid; specific gravity, 1034·2.

Analysis.

	7		8		9		10		11		12	
Water	918·75		917·90		930·4		936·8		922·60		915·44	
Solid matter	81·25	100·00	82·10	100·00	69·6	100·00	63·2	100·00	77·40	100·00	84·56	100·00
Organic matter	66·53	82·05	68·50	83·45	51·95	74·65	48·75	77·14	50·79	78·55	65·68	77·68
Saline matter	14·62	17·95	13·60	16·55	17·65	25·35	14·45	22·86	16·61	21·45	18·88	22·32
Urea	30·09	37·03	41·10	50·06	25·33	36·39	29·78	47·12	34·29	44·30		
Extractive matter	35·27	43·40			26·16	37·58	18·52	29·30	26·21	33·85	64·69	76·50
Uric acid	1·27	1·5	27·4	33·37	·96	1·30	·45	·71	·29	·38	·76	·89
Urate of soda											·43	·50
Alkaline salts	13·53	16·65	12·83	15·62	17·16	24·94	13·69	21·66	16·07	20·76		
Earthy salts	1·09	1·3	·77	·93	29	·41	·76	1·20	·54	·69	18·88	22·32
Chloride of sodium									3·35	4·32	2·78	3·29
Sulphuric acid									3·54	4·57	5·81*	6·87*
Phosphoric acid									1·17	1·51		

[*To be continued.*] * Sulphate of soda.

Transactions of Branches.

EAST YORK AND NORTH LINCOLN BRANCH.

ADDRESS ON ANTIQUARIAN PATHOLOGY.

By THOMAS SANDWITH, M.D., Beverley.

[*Read September 22nd*, 1859.]

GENTLEMEN,—In my last address, I endeavoured to prove that our pretended *new* remedies, *new* methods of treatment, and *new* diseases, were familiar to our forefathers; in the present, I trust I shall be equally successful in shewing that there is little or no *novelty* in our vaunted pathological principles.

Our worthy chief, Sir Charles Hastings, by a series of microscopical experiments on the inflamed foot of a frog, has shewn that, in inflammation, the action of the extreme vessels is slower than natural, and the vessels themselves are obstructed. His words are: "The blood in all the smaller vessels becomes very red, circulates very slowly, and in some vessels stagnates." (Hastings *On Inflammation*, p. 90.) What, I would ask, is this but a revival of the theory of Boerhaave, that "obstruction is the sole and immediate cause of inflammation" (*Aph.* 100)? If the extreme vessels, which are destined to receive the thinner parts of the blood, become surcharged with red blood, obstruction is inevitable; there is a true "*error loci*"; and it is easy to conceive that the heart and arteries will be roused to increased action to overcome the resistance. Hence arises the constitutional disturbance called *fever*, and all the local symptoms of inflammation, as "*rubor et tumor cum calore et dolore*". The locality of inflammation depends on predisposition, which, to use the words of Carmichael Smith, consists "in a proneness to *dilatation* in the vessels liable to such diseases" (*Medical Commentaries*, vol. ii, p. 174), and is either natural or acquired; the former depending on peculiarity of organisation; the latter on changes produced in an organ by climate, habits of life, etc. On this account it is that the weak are more liable to inflammation than the strong. The experiments of Sir Charles afford independent evidence of the truth of the theory of Boerhaave; and the only wonder is, that a doctrine so rational should ever have been laid aside, to make way for the Cullenian dogma of *spasm* of the extreme vessels.

We see, then, that one of the effects of *local* inflammation is fever; and it is equally certain that *fever* is capable of producing *local* inflammation, as is manifested in catarrhal and rheumatic fevers, peripneumonies, etc. This latter doctrine is in harmony with the causes and treatment of these diseases, which are general as well as local; and its importance will be made apparent hereafter, when we shew the connexion of idiopathic fevers with inflammation. The common opinion is, that all the local *phlegmasiæ* are primary affections; but this is seldom the case, most of them arising from causes which affect the whole frame, as heat and cold, or their alternations. In a practical point of view, also, the doctrine is important, inasmuch as it teaches us not to rely on local remedies when the heart and arteries are in a state of high excitement, but on those which affect the whole system.

The degree of *inflammation* may be accurately measured by the state of the tongue; for, as Baglivi observes, "other symptoms may deceive us, but this seldom or never". (*Prax. Med.*, c. 13.) When it is moderate, the tongue is dry and white; brown, when more severe; and when very intense, black. This is very important, inasmuch as many practitioners regard even a brown tongue as a sign, not of inflammation, but of debility, and an indication for the use of stimulants. I have bled fever patients, the disease being coupled with cerebral inflammation, when the tongue was either brown or black, and dry as a stick; the teeth loaded; the jaw fallen, and trembling like an aspen-leaf; and had the gratification, in every case, of seeing the fever changed from a malignant to a simple type, and the cases do well. In these cases, the blood was sizy and cupped, and contained very little serum. Such a practice is, however, inapplicable in the advanced stages of fever; for, as Dr. William Fordyce remarks, "In the hospitals of France, I have seen a fourth or fifth bleeding ordered in the last stage of fever with delirium, and a black tongue, and teeth covered with a black tenacious slough; in a word, with the pathognomonic symptoms of putrefaction and debility. A speedy dissolution was the consequence, as might naturally be expected." (*Enquiry*, p. 170.) Of the efficacy of a large bleeding in a recent case of fever, when the eyes were set in the head, the face as black as an Indian, the tongue black and hard, and the jaw fallen, an example is to be found in *The Ancient Physician's Legacy*, p. 104. An hour after the loss of fifty ounces of blood, the patient got up, and the next day was out, and as well as he ever was in his life.

Bichat obtained immense credit, and deservedly so, for his *Traité des Membranes*, in which he shewed that inflammations are modified by the texture of the several tissues, and thus laid the groundwork of Pinel's celebrated classification of diseases; but the same doctrine was taught before by our countryman, Carmichael Smith, who says, "Experience has long since shewn us that every part of an animal body, the cuticle and hair perhaps excepted, is liable to inflammation; and by attending strictly to the phenomena, it is equally evident that, according to the nature of the parts affected, the disease puts on different appearances, is of various terminations, becomes more or less acute or chronic, and requires a different, and at times an opposite treatment." (*Med. Com.*, 1785, vol. ii, p. 184.) "The following, then, in my opinion," he continues, "may be justly considered as distinct species of inflammation, each of them having a specific character, strongly marked, which in every instance seems entirely to depend upon the peculiar structure of the part inflamed:

1. The inflammation of the skin (erysipelas).
2. The inflammation of the cellular membrane (phlegmon).
3. The inflammation of the diaphonous membranes.
4. The inflammation of the mucous membranes.
5. The inflammation of the muscular fibres."

The same acute observer has also pointed out the distinc-

tion between simple *increased* action and inflammation—an important doctrine, inasmuch as it separates from the *phlegmasiæ* a host of diseases which by some of the moderns are regarded as diseases of debility, and by others as downright inflammations. His words are: "Who has not seen a bloodshot eye, without much pain or inflammation in the beginning, soon accompanied by both, when the distension was not speedily relieved by emptying or relaxing the vessels of the part? And if we plainly perceive inflammation to follow from the distension of the vessels in the *tunica albuginea* of the eye, we may fairly conclude that the same thing happens in other similar membranes." (*Med. Com.*, vol. ii, p. 174.) It is worthy of remark, that the diseases of the robust and strong seldom go beyond the point of increased action, unless the vascular system is goaded by stimulants. To simple *increased* action belong the *fluxes*, the *hæmorrhages*, the *dropsies*, and the *nervous irritations*, in none of which diseases is there *fever*, which, as we have seen, is the constant character of the *phlegmasiæ*. When, however, any of these are converted into inflammations, as must and does often happen, then fever ensues, and the type of the disease is changed altogether. In this manner, catarrh becomes *bronchitis*, diarrhœa *dysentery*, etc. Fernelius, as we shall see presently, shows that *hæmorrhages* are unattended with fever, and so are the *dropsies;* and, in regard to the *neuroses*, Galen calls *mania* the "delirium sine febre". In the *hydrophobia*, Mr. Hunter noted that "the pulse in the beginning was not quick, nor was the skin hot, and there was none of the muscular debility so remarkable in fever" (*Trans. of Soc.*, vol. i, p. 308); which observation is confirmed by the experiments of Currie, who says, "Of five cases of hydrophobia which fell under his notice, in none was there any increase of animal heat." (*Med. Reports*, vol. i, p. 178.) *Tetanus*, in like manner, says Beddoes, exists "without any alteration of the mental faculties, or increased heat" (Beddoes *On Fever*, p. 38); in which remark he is borne out by the thermometrical experiments of Currie (*Med. Reports*, p. 136). And is it not the absence of fever which enables us to distinguish *spasmodic* diseases from inflammations?

The frequent dependence of hæmorrhages on an obstruction of the liver, brought forward as a discovery by Dr. Curry, was well known to Fernelius, who, in his account of *Imbecility of the Liver*, says: "Sæpius etiam, quùm hæc imbecillitas increvit, sanguis sponte profluit e venis, idque per nares, vel per uterum, vel per hæmorrhoidas, vel per sputa. Sed et interdum sanguinem animadverti ab extremis venis quæ in cutem desinunt, multis e locis effundi qui nullo ardore livescebant." (Fernelius, p. 512.) A slight acquaintance with physiology would, one would think, have rendered this piece of pathology as familiar as household words; for if the blood conveyed by the vena porta cannot find its way into the vena cava, the capillaries of the several membranes must be overcharged, and exhalations, serous effusions, or hæmorrhages, inevitable. We all know that dropsies are a common effect of organic diseases of the liver; and in organic diseases of the heart, where the obstruction is higher up, the mucous membrane of the stomach is often so engorged as to put on the appearance of poisoning by arsenic. Dr. Ramadge published an account of two cases of this description in the *Lancet*, some years ago. There are, indeed, many other causes of hæmorrhage, as general plethora in the strong, and a want of tone in the capillaries of the feeble; and in nervous subjects, an irregular distribution of the blood. Some subjects are so organised as to bleed to death from a cut finger or the extraction of a tooth.

The connexion of *idiopathic* fevers with inflammation, so ably advocated by Clutterbuck, Plonquet, and Beddoes, was no secret to Boerhaave, Huxham, and Mead; and, as Beddoes observes, "the affirmation of Riverius (*Prax. Med.*, xvii, 2) that 'febres acutas et malignas rarissimè sine visceris alicujus inflammatione incidere,' has been confirmed in every single epidemic, when search has been made, and often without search." (Beddoes *On Fever*, p. 8.) Huxham, speaking of malignant fevers, says: "In the onset, notwithstanding the apparent weakness and prostration, bleeding to some extent is commonly required, nay, necessary, in the strong and plethoric. *A quick pulse, sharp beat, great difficulty of breathing, and violent pain in the head and back, evidently demand it.*" (Huxham *On Fevers*, p. 105.) And what are these, I would ask, but the symptoms of inflammation? Boerhaave, too, says, "in such cases, bleeding is absolutely necessary" (*Ap.* 743). The error of Clutterbuck and Plouquet was the attempt to *localise* fever, and make it to depend on inflammation of the brain; whereas the disease is a general one, and the locality of the inflammation depends on the predisposition created by the seasons, or the character of the epidemic; being sometimes in the brain or chord, sometimes in the air-passages, and more frequently, according to M. Louis, in the intestines, when the patients often die from ulceration of Peyer's glands.

The *congestive* form of fever, so graphically described by Armstrong, in which the cold stage is followed by imperfect reaction, and the veins of the larger viscera remain more or less engorged, was known to the ancients. In an epidemic malignant fever, Hippocrates noticed "a remarkable coldness of the extremities, especially about the time of the paroxysm, into which parts the heat returned by slow degrees, and not in a kindly manner." (*Lib. de Epidem.*, sect. 2.) And our own countryman, Huxham, gives a similar account (Huxham, p. 93). Boerhaave describes this state of things, and calls it the *anguish* of fevers (*Aph.* 631). But the following extract from the writings of the immortal Harvey will, I trust, prove an antidote to the scepticism of many of the moderns, who deny the very existence of such a state as venous congestion. "In the beginning of a *tertian fever*, the morbific cause going to the heart, makes them breathless, sighing, and lazy, because the vital beginning is oppressed, and the blood is driven against the lungs, and thickened, and finds no passage (I speak this, having had experience from the dissection of them that have died in the beginning of the accession); then the pulsations are always frequent, little, and sometimes disorderly." (Harvey, p. 86.) Armstrong appears to have been mistaken when he represented this condition of the circulation as a new form of fever, it being only the first stage of malignant fever, the typhus gravior of Cullen, and is sooner or later too often followed by delirium, and tremulous tongue, subsultus tendinum, relaxation of the sphincters, and all the signs of approaching dissolution.

In *epidemic scarlatina*, the effects of venous congestion are often terrific. One of my own children, a little girl six years old, when the fever was in the house, one morning drooped like a flower; at night she was feverish, but cheerful; the following morning, she became as black as a cholera patient, gasping for breath, and, before anything could be done, life was extinct. I could relate several similar cases; and yet Dr. J. Copland tells us that congestion, as a lesion in fevers, "is only of subordinate importance". (*Dict.*, vol. i, p. 914.)

In many epidemic or endemic fevers, the excitement of the brain and the other viscera advances only to the point of increased action, as is obviously the case in *intermittent*, and sometimes in *remittent* fevers; which may account for the ill success of bleeding in the latter. In his description of the epidemic bilious fever of Lausanne (1755), Tissolt exposes the ill effects of bleeding, and the good effects of emetics. "Two physicians had the care of the hospital, and they attended a fortnight each by turns; when one of them, the younger man, treated bilious and putrid malignant fevers by bleeding, purging, and cooling medicines. Many patients presently lost the distemper and their lives together. The other, an older man, prescribing a vomit at their first appearance, cured almost all speedily, safely, and with ease to his patients." (Tissolt on *Bilious Fevers*, etc., p. 170.) When, however, in *remittent* fevers, the blood becomes sizy, and obstructions and inflammations ensue; when, in short, the signs laid down by Huxham appear, then blood-letting is required. That this is of frequent occurrence, especially in hot climates, is proved by the yellow fever which prevailed in Philadelphia, of which Dr. Rush has given us so graphic a description; and also by the decisive experiment of Dover, buccaneer and physician, who, when a hundred and eighty of his men were attacked with fever, off the coast of Guyaquil, "ordered the surgeon to bleed them in both arms, and to go round to them all, with command to leave them bleeding till all were blooded, and then come and tie them up in their turns. Thus they lay bleeding and fainting so long, that he could not conceive they could lose less than one hundred ounces each man." (*Ancient Physician's Legacy*, p. 67.) According to Dewees, a modern writer, the American physicians, in severe cases of remittent fever, never suffer a paroxysm to pass without bleeding; and with such marked success, that it has grown into a proverb, "To lose a paroxysm without bleeding is to lose your patient". (Dewees's *Practice of Physic*, p. 115.)

For our knowledge of the changes in the type of fevers, dependent on changes in the constitution of the atmosphere, we are indebted to Sydenham. The moderns, however, have carried the doctrine to a ridiculous excess; so much so, that we have been gravely told that bloodletting is now no longer required in the treatment of fevers and inflammations; that in short the present race of men can no longer bear such heroic

treatment. A more dangerous and pernicious heresy was never broached, and I am glad of having this opportunity of recording my protest against it. It is well observed by a master in the profession, "that those who attempt to push concocted matter through the vessels, when there are *obstructions*, occasion a gangrene"; and I quite concur in the opinion of William Fordyce, that "it would be well for the cities of London and Westminster, if their mode of treatment were more comformable to that of the ancients in inflammatory diseases; so many people would not die, shocked in their blood; at least so many would not be afflicted with inflammations of the pleura, lungs, and liver, ending in consumption, or abscesses; nor of the brain and bowels issuing in phrenzy and gangrene." (*New Inquiry, etc.*, p. 176.) That the use of the lancet may have been abused, is no valid reason for its disuse. Acute diseases may indeed be got rid of by less bloodshed now than formerly, but this is mainly owing to our better acquaintance with the efficacy of calomel, antimony, and opium, thanks to Elliotson, Laennec, and Armstrong. The recommendation of the last of these worthies, to give after a large bleeding a full dose of opium, is not generally known. (*Apothecaries Trans.*, p. 309.) The effects, however, in equalising the circulation, and reducing the frequency of the pulse, are very remarkable, so much so, as in many instances to render a repetition of the operation unnecessary.

You need not be told that the effects of inflammation, whether acute or chronic, in the production of adhesions, abscesses, ulcers, and gangrene, were known to our foreelders, who were equally well acquainted with the results of morbid actions of a specific kind. From their recommendations of burnt sponge, it is certain they were well acquainted with that enemy to female beauty, the *bronchocele;* and it was not the moderns who gave the name of *cancer* to certain malignant tumours from their supposed resemblance to a crab. Of the effects of *scorbutus*, they knew more than ourselves, to whom a case of scurvy is a medical rarity. *Lepra* and *elephantiasis* were familiar to the Arabians, and that *syphilis* is not a new disease is plain from the following extract from Plutarch's *Life of Otho*. Among whose other claims to popular regard, was his justice in relation of Tigellinus, who was not only punished by his daily apprehension of punishment for his misdeeds, but with several diseases too, that he had contracted by conversing with lewd women; and though these were generally looked upon as punishment enough, yet the people thought life itself too great a benefit for him to enjoy, who had been the occasion of so many men's deaths. Many of you will remember how highly gratified we were with Laennec's history of *tubercles*, which, at that time, agreeably to the Cullenian philosophy, were regarded as "capable of pain and inflammation, and of consequent suppuration;" (Cullen, sect. 849); and phthisis *pulmonalis* was treated with large and successive bleedings like inflammation of the lungs. It was, however, to the researches of Dr. Stark, we owed the apparently new information. In 1780, in a paper published in the *Medical Communications* (*Med. Com.* sec. i, p. 359), he described the appearance of these remarkable bodies, their want of blood-vessels, their softening in the centre, and conversion into vomicæ; and also the manner in which they communicate with the air passages, the situation of the larger tubercles towards the back part of the upper lobes of the lungs, the condition of the contiguous parts, and the adhesions of their cavities to the parietes of the chest. He it was, moreover, who noticed the fact, so valuable in a practical point of view, that the lungs on the left side of the thorax were more commonly affected with tubercles, than those of the right, together with the distinctive characters of pus and mucus; every thing in short described by Laennec.

The constitutional nature of this and other local effects of *scrofula*, are they not written in Wiseman's *Surgery*, where their causes and hereditary tendency are sufficiently explained? "Whenever," says this eminent surgeon, "the outward glands do appear swelled, you may safely conclude that the mesenterics do so too, they being usually the first part that is attacked by this malady." (Wiseman's *Surgery*, p. 257.) There is a piece of pathology for you, based as he assures us on *post mortem* examinations. If you only carry this away with you, you will not have spent your time in vain. To the dismal catalogue of *strumous* diseases, with which you are all unhappily too familiar, Barbett added the *steatoma*, the *atheroma*, and *melicosis*. There is one morbid growth however, which it is only justice to the moderns to mention, but whether it is scrofulous or cancerous, is still unknown; and that is the *fungus hæmatodes*, the discovery of which is due to the elder Hey, the patriarch of provincial surgery. (Hey's *Obs. on Surgery*, p. 233.) He it was who first called the attention of the faculty to this remarkable morbid production, and pointed out the characters which distinguish it from other malignant tumours. It attacks the eye, the mammary gland, the testicle, the limbs, and bones; and of its constitutional origin there can be no doubt whatever. In every case that has fallen under my notice, wherever amputation was performed, the disease speedily reappeared in some other part of the frame, and the patient died miserably:—but to conclude—

It is no reflection on the moderns that the ancients were so eminent. So much indeed has been done by our forefathers, that little has been left for us to do. In their writings they have bequeathed to us a rich inheritance, which it is our duty as well as our interest to make our own, by nightly reading and daily meditation. At the same time modern medical literature is not to be neglected. If we find little or no new information, it is at least conveyed to us in a pleasing manner, and in a language we all of us can understand. Multifarious reading is epitomized, and the memory is not burthened with obsolete remedies, while methods of treatment are simplified and accommodated to our present more precise and extended knowledge of physiology, chemistry, botany, and the other collateral sciences.

The following remarks of Dr. George Fordyce are so judicious, and so apposite, that with this quotation I will conclude my address. "There are two errors, or, as Lord Bacon calls them, idols of the mind, which are equally pernicious to science, especially to such a science as medicine, which has not, and perhaps never can be, established upon absolute and certain experience. The one is an unbounded belief in the precepts laid down by those who have gone before us in medicine, some practitioners supposing that the observations of our ancestors have been founded on unquestionable experience. The other is a total doubt and disbelief of every thing that has been advanced by those before us. Hence proceeds, with regard to the powers of medicine in disease, a wish in every young practitioner to depend upon his own experience alone. Both these errors are to be avoided; for if a man is to trust entirely to what has been laid down by authors who have gone before him, it becomes necessary that he should be a perfect judge of the merits of the works of those authors. On the other hand, it is impossible for the experience of any one man, however well he may be acquainted with every science, to make any great progress in medicine." (*Med. Trans.*, Oct. 2, p. 321.)

BATH AND BRISTOL BRANCH.

CASE OF LUMBRICUS.

By Augustin Prichard, Esq., Clifton.

[*Read September 22nd*, 1859.]

The following unique case of the successful treatment of lumbricus occurred in the practice of Mr. Foxwell, a surgeon of Bristol, who presented the result as a preparation to the museum of the Bristol Royal Infirmary, and kindly agreed to my request to be allowed to bring the matter before our society. I introduce it on account of its novelty only; for, like most other isolated or unique cases, no very important practical hint is deducible from its history.

One night, an industrious tailor came to his home at his brother's house, bringing with him some cloth, and the proper complement of metallic buttons, to be converted into a pair of trousers. Having left the room for a few minutes, upon his return and the resumption of his work, he missed a considerable number of his buttons; and, after a lengthened but fruitless search, he gave them up in despair, for nine buttons were gone.

On the morning following this occurrence, a little child, his niece, aged fourteen months, had an evacuation from the bowels: and the parents, noticing some peculiar appearance in what had passed, made a closer examination of it, and to their surprise found that the peculiarity consisted in seven of the uncle's buttons. Their surprise, however, did not stop at this point. One hour afterwards, she had another evacuation, which was more extraordinary than the last; for the two remaining buttons came to light, threaded together by an adventurous ascaris lumbricoides, which had wormed himself through the central holes, and had strangulated himself in the process, as a reward for his curiosity.

This brief but curious history is rendered complete, and the whole case most satisfactory by the additional information

which Mr. Foxwell obtained; namely, that before these events the child had been in perfect health, and had never been known to have worms, or to suffer from symptoms of worms; that during the action of the remedy she felt no pain or uneasiness, and from the time when the worm was passed, to the present time, she has never passed any more, nor shown by any sign that any more existed.

Periscope.

ANATOMY AND PHYSIOLOGY.

ANTIQUITY OF THE HUMAN RACE.

At the recent meeting of the British Association for the Advancement of Science, held in Aberdeen, Sir Charles Lyell stated the results of some observations he had made in France on the antiquity of the human race. He said no subject had lately excited more curiosity and general interest, among geologists and the public, than the question of the antiquity of the human race; whether or no we had sufficient evidence to prove the former co-existence of man with certain extinct mammalia, in caves, or in the superficial deposits, commonly called drift or *diluvium*. For the last quarter of a century, the occasional occurrence, in various parts of Europe, of the bones of man, or the works of his hands, in cave-breccias and stalactites, associated with the remains of the extinct hyena, bear, elephant, or rhinoceros, have given rise to a suspicion that the date of man must be carried further back than we had heretofore imagined. On the other hand, extreme reluctance was naturally felt on the part of scientific reasoners to admit the validity of such evidence, seeing that so many caves have been inhabited by a succession of tenants, and have been selected by man as a place, not only of domicile, but of sepulture; while some caves have also served as the channels through which the waters of flooded rivers have flowed. The facts, however, recently brought to light during the systematic investigation, as reported on by Falconer, of the Brixham Cave, must, he thought, have prepared for the admission that scepticism in regard to the cave-evidence in favour of the antiquity of man had previously been pushed to an extreme. To escape from a legitimate deduction from the facts already accumulated, we were obliged to resort to hypotheses requiring great changes in the whole physical geography of the regions where the caves are situated. But, in the course of the last fifteen years, another class of proofs had been advanced in France, in confirmation of man's antiquity, into two of which Sir C. Lyell had personally examined in the course of the present summer. First, so long ago as the year 1844, M. Aymard published an account of the discovery in the volcanic district of Central France, of portions of two human skeletons (the skulls, teeth, and bones), embedded in a volcanic breccia, found in the mountain of Denise, in the environs of Le Puy en Velay, a breccia anterior in date to one, at least, of the latest eruptions of that volcanic mountain. On the opposite side of the same hill, the remains of a large number of mammalia, most of them of extinct species, have been detected in tufacious strata, probably of the same age. The authenticity of the human fossils was from the first disputed by several geologists, but admitted by the majority of those who visited Le Puy, and saw with their own eyes the original specimen now in the museum of that town. The result of a joint examination, by Sir C. Lyell and Mr. Scrope, a result which, he believed, essentially coincides with that arrived at by M. Hébert and M. Lartet, who had also this year gone into this inquiry on the spot, might thus be stated. They were by no means prepared to maintain that the specimen in the museum at Le Puy (which, unfortunately, was never seen *in situ* by any scientific observer), was a fabrication. They inclined to believe that the human fossils in this and some other specimens from the same hill, were really imbedded by natural causes in their present *matrix*. But the rock in which they were entombed consisted of two parts; a compact, and for the most part thinly laminated stone, into which none of the human bones penetrate; while the other, containing the bones, is a lighter and much more porous stone, without lamination, to which they could find nothing similar in the mountain of Denise. M. Hébert therefore suggested to them that this more porous stone, which resembled in colour and mineral composition, though not in structure, parts of the genuine old breccia of Denise, might be made of the older rock, broken up and afterwards redeposited, or, as the French say "*remanié*," and therefore of much newer date. This hypothesis deserved consideration, but Sir C. Lyell would simply say that in his opinion the human fossils afforded no demonstration of man having witnessed the last volcanic eruptions of central France. The skulls, according to the judgment of the most competent osteologists who had yet seen them, did not seem to depart in a marked manner from the modern European, or Caucasian type; and the human bones were in a fresher state than those of the *elephas meridionalis*, and other quadrupeds, found in any breccia of Denise which could be referred to the period even of the latest volcanic eruptions. But while he had failed to obtain satisfactory evidence in favour of the remote origin assigned to the human fossils of Le Puy, he was fully prepared to corroborate the conclusions recently laid before the Royal Society by Mr. Prestwich, in regard to the age of the flint implements associated in undisturbed gravel, in the north of France, with the bones of elephants, at Abbeville and Amiens. These were first noticed at Abbeville, and their true geological position assigned to them by M. Boucher de Perthes, in 1849, in his *Antiquités Celtiques*, while those of Amiens were afterwards described in 1855, by the late Dr. Rigollot. Two of the worked flints of Amiens were discovered in the gravel pits of St. Acheul—one at the depth of ten, and the other of seventeen feet below the surface, at the time of my visit; and M. Georges Pouchet, of Rouen, author of a work on the *Races of Man*, who had since visited the spot, had extracted with his own hands one of these implements, as Messrs. Prestwich and Flower had done before him. The stratified gravel resting immediately on the chalk in which these rudely-fashioned instruments are buried, belongs to the post pliocene period, all the fresh water and land shells which accompany them being of existing species. The great number of the fossil instruments, which had been likened to hatchets, spearheads, and wedges, was truly wonderful. More than a thousand of them had already been met with in the last ten years, in the valley of the Somme, in an area fifteen miles in length. Sir C. Lyell inferred that a tribe of savages, to whom the use of iron was unknown, made a long sojourn in this region; and he was reminded of a large Indian mound which he saw in St. Simond's Island, in Georgia, ten acres in area, and having an average height of five feet, chiefly composed of cast away oyster shells, throughout which arrow-heads, stone axes, and Indian pottery were dispersed. If the neighbouring river, the Alatamaha, or the sea, which was at hand, should invade, sweep away, and stratify the contents of this mound, it might produce a very analogous accumulation of human implements, unmixed, perhaps, with human bones. Although the accompanying shells were of living species, he believed the antiquity of the Abbeville and Amiens flint instruments to be great indeed if compared to the times of history or tradition. He considered the gravel to be of fluviatile origin; but he could detect nothing in the structure of its several parts indicating cataclysmal action, nothing that might not be due to such river-floods as had been witnessed in Scotland during the last half century. It must have required a long period for the wearing down of the chalk which supplied the broken flints for the formation of so much gravel at various heights—sometimes one hundred feet above the present level of the Somme—for the deposition of fine sediment, including entire shells, both terrestrial and aquatic, and also for the denudation which the entire mass of stratified drift had undergone; portions having been swept away, so that what remained of it often terminated abruptly in old river cliffs, besides being covered by a newer unstratified drift. To explain these changes, he should infer considerable oscillations in the level of the land in that part of France—slow movements of upheaval and subsidence, deranging, but not wholly displacing, the course of the ancient rivers. Lastly, the disappearance of the elephant, rhinoceros, and other genera of quadrupeds, now foreign, in Europe, implied, in like manner, a vast lapse of ages, separating the era in which the fossil implements were framed, and that of the invasion of Gaul by the Romans.

Association of the Fellows and Licentiates of the King and Queen's College of Physicians in Ireland. The following officers have been elected for the session 1859-60:—*President:* The President of the College of Physicians. *Vice-Presidents:* Robert Law, M.D.; Charles O'Reilly, M.D. *Council:* Alfred H. McClintock, M.D.; Henry Kennedy, M.D.; Lombe Atthill, M.B.; Fleetwood Churchill, M.D.; Thomas Fitzpatrick, M.D. *Treasurer:* George A. Kennedy, M.D. *Secretary:* W. Moore, M.B. The meetings of the Association are held in the College Hall (Sir Patrick Dun's Hospital), on the evening of the first Wednesday in each month during the session, at 8 o'clock, p.m. Members wishing to read papers are requested to communicate previously with the Secretary.

British Medical Journal.

SATURDAY, OCTOBER 22ND, 1859.

COMPLIMENTS FROM A COTEMPORARY.

We have to return thanks to our cotemporary, the *Medical Times and Gazette*, for its annual compliment to the Journal. Occasion or no occasion, it never lets slip the opportunity of showing to the world that we are a very great stumbling-block in the way of its own aggrandisement. If the associates would but follow the example of the American Medical Association, to publish an annual volume of *Transactions* only, they would benefit immensely; and the *Medical Times and Gazette* perhaps would pick up an odd thousand or so new subscribers, which latter fact he very judiciously neglects to mention. Whether we are to have a volume of *Transactions*, or to go on as we do now, is a question purely for the associates; and, as they will it, so it will be. We cannot help thinking, however, that there was full necessity for our cotemporary's apology for "interfering with the internal economy of the British Medical Association." But he must be excused, as he has the good of the profession solely at heart. Upwards of two thousand medical men should not throw themselves away as they do. "As a medico-political power, it," (the Association) "is destitute of influence." We have done nothing for Medical Reform, nothing for Poor-law Reform, nothing for Public Health, etc.

Have we been dreaming, or is it a fact that the Medical Reform Act, after the toil of years, was carried mainly by the petitions poured into the House of Commons, and the pressure put upon members by our different Branches? We suppose we have been dreaming also in supposing that Sir Charles Hastings, the treasurer of this Association, was appointed by the Crown as one of its nominees to the Council, mainly on the ground that he represented the Association, which was in constant communication with the Government before the final success of the measure. If these things are nothing but dreams, it is assuredly no dream that our cotemporary gave a consistent and niggling opposition to the Medical Bill in every stage of its progress. With reference to the Bill, on the 3rd of July, 1858, the editor remarked:—

"A process of squeezing has been going on, and point after point has been yielded, until the Bill as it now stands is a mere Bill for the abolition of local jurisdictions and the establishment of an alphabetical register of medical practitioners. *It pleases nobody, and is less likely to pass than ever. Our old resource—the Royal Commission—is still the only practical solution of the difficulty.*"

The next week he had reluctantly to record the passing of the Act!

When would Medical Reform have been accomplished had our cotemporary's "old resource" been accepted? In all probability, by the end of the year 1860, the Royal Commission having previously sat upon it and crushed it to death, a ponderous blue book would have been ready to be placed monumentally on its grave, by its sheer weight keeping it from rising again for discussion for the next quarter of a century; whilst for headstone a copy of the *Medical Times and Gazette* would affectingly inform us who did it foully to death. We thought this had been a sore subject with our cotemporary; but, of course, we can have no objection to its resuscitation, if he has not.

It is true there are many matters in our profession which still require reforming, but he must give us a little time. What has he done, we may ask, in furthering any public question touching the profession?

Our cotemporary so often makes incursions over our borders, and we have so long acted on the defensive, that perhaps we shall be forgiven for carrying the war into his own territories.

The *Medical Times and Gazette* prides itself upon its scientific character, and deplores what it calls our "discreditable trading competition" with it. It forgets to inform its readers, however, that it has one little object in view other than, and perhaps a little antagonistic to, its love of spreading scientific information among the profession. Its proprietor is also a publisher—the largest medical publisher: at the same time, his journal, with other duties, reviews new books. Is this combination a healthy one for the profession? Is it not something like a man auditing his own accounts? Is it possible that the books of an opposition publisher can get as well served as his own? However impartial a man may be, it is not possible that he can hold the balance true when his own interests are weighed against those of others. Is it not, therefore, clear that there must be a bias in our cotemporary's reviews? What rival publisher, putting forth a volume which came in an antagonistic form to any of the standards of the proprietor of the *Medical Times and Gazette*, could hope for even-handed justice being done him? The very sources of criticism are poisoned by self-interest. The student who appeals to our cotemporary's pages for information with respect to a new book, can receive but one answer, "*Apply within.*" Surely this illegitimate union of pelf and science cannot be for the good of the profession? Our cotemporary, forgetful of the old adage that "those who live in glass houses should not throw stones," has given us a new title. A dozen different capital titles may be invented for our cotemporary on the spur of the moment, far more appropriate than the one he now rejoices in; but, after all, name-calling is but a poor class of wit, and we are very willing to leave the practice of it to our cotemporary.

THE WEEK.

Mr. Yardley gave a decision at the Thames Police Court last week, which must interest all sanitarians, relative to the alleged nuisance arising from Mr. Croll's Alum Works on Bow Common. The question of what we shall do with manufactories which send forth emanations distasteful to our olfactory nerves, is constantly arising; and, as it involves the jeopardising of enormous masses of capital, it is of the utmost importance that it should be well considered. As we mentioned the other day, Dr. Guy has proved incontrovertibly that many occupations, hitherto supposed to be detrimental to health, really are not so; and that to confound bad smells and disgusting occupations with deleterious odours is a very sad error. All our noses are capable of appreciating a stink, and consequently a

loud outcry is made respecting it; but how few make any objection to the fœtid air of a close room or crowded theatre! Let us get rid of the stink, by all means, if it lies in our power; but nothing is gained by making it responsible for evils not due to it. Mr. Croll, it appears, is employed in manufacturing alum from gas liquor, transmuting a waste product into a highly valuable one; and, in the course of the manufacture, a certain portion of sulphuretted hydrogen is given off, but not in sufficient quantities to injure health, according to the opinion of Drs. Taylor, Odling, and Murdoch; and Mr. Yardley accordingly dismissed the case. The *Times*, in commenting upon this decision, is rather surprised to find that one argument made use of by the defendant was, that other manufactories in his neighbourhood smelt quite as bad as his; this journal arguing that many blacks do not make a white, and that one nuisance should not be allowed to bolster up another. But we must confess we do not see the cogency of these arguments. If it is granted that some manufactures cannot be carried on without giving forth disagreeable odours, surely it is better that these should be grouped together as much as possible in one neighbourhood. The Goddess of Bad Smells has long been worshipped on Bow Common; and better far that she planted her shrine there, than to find her distributing her worship near the villas of more pleasant suburbs.

Diphtheria has appeared in our Australian colonies. From a paper published in the *Australian Medical Journal* for July, by Mr. J. A. Moore, of New Norfolk, Tasmania, it appears that the disease had been epidemic in that district from the beginning of January in the present year. At the time of writing, the author had had two hundred and seventy-five cases under his care; and had, moreover, prescribed for at least fifty whom he had not seen. The symptoms were the same as have characterised the complaint as it has appeared in this country: the presence of a leathery membrane, of remarkable toughness, is particularly noted. The rate of mortality is not very apparent; but, as far as we can make out, it was not great, as Mr. Moore speaks of having treated, at one time, one hundred and fifty cases in succession, and at another time fifty, without a death; while he makes distinct reference to only nine fatal cases. In some of the instances, an attack of scarlatina followed the diphtheria, and *vice versâ*. The treatment consisted in the administration of emetics, and gargles of sulphuric acid and alum, in infusion of roses: a gargle, Beaufoy's solution of chlorinated soda, was also used with great benefit. Brandy and ammonia were given. With regard to the locality and climate, Mr. Moore states that New Norfolk is situated in a slightly elevated position, twenty-one miles from Hobart Town, on the banks of the Derwent. There are numerous roads, generally *culs-de-sac*, running into the tiers on each side of the river. The cultivation follows the course of the streams, and the district is highly timbered. The weather has been ungenial, cold, and damp, with an abundance of rain, reminding one of an English summer without the sun's rays. The temperature has been consequently below the average. The locality is mostly healthy, but any epidemic rages with severity.

An able article by Dr. H. R. Storer, of Boston, on criminal abortion, is being published in the *North American Medico-Chirurgical Review*. In the number for September 1859, the author treats of the obstacles to conviction; and points out the insufficiency and inconsistency of the laws on the subject, as they exist in America. It is to be most observed, that in that country, each State has, to a certain extent, its own laws; and hence there is a great discrepancy in the practice followed, and in the interpretation placed on various matters. In evidence of this, we will give an extract from Dr. Storer's paper:—

"In some of the States, the offence is considered a trifling one, except as affecting the person or life of the mother; this is the case in New Hampshire, Vermont, and Massachusetts. In Ohio, Michigan, Minnesota, Wisconsin, and Oregon, the proved death of either child or mother is required to make abortion a high misdemeanour, felony, or manslaughter; while in Virginia and Arkansas, it is necessary to constitute an indictable offence, in the one State that the death of the child should be proved, and in the other that this or its premature discharge has actually taken place. An attempt at the crime would here seem beyond indictment, unless fœtal life were destroyed; though if this could be proved, the attempt might perhaps be reached, even though the fœtus were retained *in utero*, and a true abortion, its discharge, had not taken place. In Maine, the fœtus must have died before birth; if, born living, it yet die in consequence of the abortion, the crime would seem not indictable, save at common law. In other States, allowing the fact of pregnancy to be proved, and in Indiana alone this is not necessary, attempts at abortion are as indictable as the act consummated, save in Texas, where the means used must be shown to be such as 'were calculated to produce the result.' In but few instances is the crime, intrinsically considered, accounted a heinous one, and recognised in its true character—an attempt to destroy the life of the child. In Texas, the consent of the mother half palliates the crime; while in very many codes abortion is omitted from the list of offences against the person, and accounted only a breach of public decency and morality. In Ohio, as we have seen, it is called a high misdemeanour; in New York, Michigan, Oregon, Arkansas, and Mississippi, it is styled manslaughter in the first degree. The punishment inflicted by the latter of these States, however, is ridiculously trivial, and in all of them proof of quickening is required. In New York, it has been determined that, under an indictment for procuring the abortion of a quick child, which by the revised statutes is a felony, the prisoner may be convicted, though it turn out that the child was not quick, and the offence therefore a mere misdemeanour; as in the remaining States it is, indeed, either in name or by penalty considered, —a simple, trivial, and venial offence."

Other inconsistencies are pointed out by Dr. Storer; who shows plainly that the legislation in America on the subject of criminal abortion is in a most imperfect state.

From an analysis of the list (just published) of Fellows, Members, and Licentiates in Midwifery, of the Royal College of Surgeons of England, it appears there are at the present time 1,226 Fellows, of which number 233 have undergone the severe examinations, and 993 are honorary and elective Fellows. Of Members there appear to be about 13,000, making a total of 14,226; of this number, 709 are Licentiates in Midwifery. It would be an interesting addition to the list to give the names of those gentlemen who have undergone the preliminary examinations for the Fellowship, in classics, mathematics, and French; especially as no certificate is given to the candidates of the fact.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

SOUTH-EASTERN BRANCH:

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

A District Meeting will be held at the Star Hotel, Maidstone, on Friday, October 28th, at 2.30 P.M. Dinner (at 5 P.M. punctually) will be prepared for those who may be able to remain.

Gentlemen intending to dine, are requested to give an intimation thereof to Mr. Dulvey, of Brompton, Chatham, or to Mr. Fry, of Maidstone, on or before Wednesday, October 26th.

Trains will leave Maidstone for London and all stations on the North Kent Line at 7.25 and 8.30.

James Dulvey, *Honorary Secretary.*

Brompton, Chatham, October 1859.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, October 5th, 1859.

Edward Rigby, M.D., President, in the Chair.

COMMUNICATIONS.

Induction of Premature Labour in a Case of Distorted Pelvis. By J. H. Trouncer, M.D. The patient had had eight children. The first three labours normal, children alive; in the fourth, turning and death of the child; in the fifth, the forceps was used, and the child born dead. The author attended her in her sixth labour; the result was as in the former case. In the seventh pregnancy premature labour was brought on at the eighth month, by means of an alternate injection of hot and cold water into the vagina, by the use of a powerful syringe: the result was successful. In the next pregnancy (the eighth) similar means were adopted; but this time a long flexible tube was passed into the cervix uteri, and water was thus injected. In four days labour set in; the shoulder presented; the child was turned; but the cord was twisted round the neck, and the child's life was in consequence sacrificed.

Fœtus in which the Anterior Abdominal Wall was Deficient. By G. Hewitt, M.D. The elbow presented, and during the progress of the labour the protrusion of the intestines through the aperture in the parietes of the abdomen, covered only by peritoneum, was felt by the fingers, and produced an impression that the placenta was in contact with them.

Ovarian Gestation. By J. H. Davis, M.D. The patient, aged 25, never previously pregnant, began to suffer in March from severe abdominal pain, and above the right pubes was found a well-defined enlargement, very tender to the touch. On the 14th of May, Dr. Davis first saw her, and found a large tumour extending to the umbilicus, and occupying chiefly the left iliac region, fluctuating, and resembling an ovarian tumour. Mammary symptoms of pregnancy, somewhat undecided and of doubtful import, were present; cervix uteri high up, inclined forwards; os not having the cushion fulness of early pregnancy; body of uterus a little enlarged; length of cavity, three inches and a half. Behind the cervix was a soft tumour, evidently continuous with that felt above. The diagnosis on this examination was that the tumour was of extra uterine character, and that within the cysts were fœtal contents. A cannula and trocar were introduced into the tumour behind the cervix, and a quantity of fluid was evacuated; but the patient refused to allow of further projected operative measures, and died on the 9th of July. The left ovary was found developed into a cyst, situated between the uterus and rectum; the interior was sloughy and putrescent; it contained a decayed fœtus and remains of placenta, all of a dark colour.

Polypus of the Uterus. By J. H. Davis, M.D. It was of about the size of an orange. He had removed it by means of the ligature and bistoury. The mass protruded from the vagina, and gave rise to considerable losses of blood and discharges.

THE HYDATIDIFORM, OR VESICULAR MOLE; ITS NATURE AND MODE OF ORIGIN. BY GRAILY HEWITT, M.D., M.R.C.P.

In this paper it was attempted to reduce the series of facts already on record in reference to the nature and mode of origin of the hydatidiform, or vesicular mole, into something like a system, and to offer a solution of certain questions not yet satisfactorily or clearly answered.

The author described a case in which a hydatidiform mole was expelled from the uterus seven months after the birth of a first child, and during lactation. The patient did not suspect her pregnant condition, but for about six weeks the milk had increased in quantity, and fulness of the lower part of the abdomen, and constipation, had been noticed. The ovum, expelled entire, was apparently about two months old, and offered a most perfect specimen of commencing hydatidiform degeneration. On cutting vertically through the whole mass, the following appearances were met with: the amniotic cavity was empty; no embryo was discoverable: the chorion and amnion membranes were adherent; about half of the chorion villi (the whole of those corresponding with the decidua serotina) presented the hydatidiform change; the remainder were covered by the decidua reflexa, shrivelled and small. The chorion villi proceeded from the chorion membrane in their passage towards the decidua serotina becoming enlarged at intervals into rounded bladder-like bodies, from one-sixteenth to one-sixth of an inch in diameter. Microscopic examination showed these vesicular bodies to possess the structure of normal chorion villi; but the cells on the surface were wider apart, and the villi distended by a serous fluid. The appearances did not differ materially from those described by Cruveilhier, Mettenheimer, Gierse, Wedl, and others.

What is the nature and cause of the change in the chorion villi, which results in the production of these hydatidiform bodies? Mettenheimer and Paget declare them to be cysts, while Gierse considers that the change consists in hypertrophy of the natural structures of the chorion villi, with secondary œdema. The "cyst" view the author considered positively disproved by observation of the specimen, and the drawings of the same produced, and by comparison of the altered villi with normal villi, at about the same period of development. In the normal villi and in the altered ones there are precisely the same structures; it is not, then, necessary to have recourse to a cyst theory to account for the appearances. The cells on the surface of the villi are seen alike in the two cases. The vesicular enlargements evidently do not originate in them, and Gierse's opinion as to the essential anatomical character of the change is far nearer the truth. In the hydatidiform mole we have, not a new formation, but simply an alteration and degeneration of previously existing structures.

What are the circumstances which determine this pathological alteration? Universally, the transformation has been supposed to be the starting-point; that the disease of the chorion was the cause; the death of the embryo the effect. Dr. Hewitt contended that the death of the embryo occurs first, the chorionic transformation subsequently. Death of the embryo involves arrest of chorionic development, but not necessarily cessation of vitality in the chorion villi. These may continue to grow, and this growth will form the hydatidiform mole. The middle or end of the third month is probably the limit within which the change can originate. Of the embryo, in most cases of hydatidiform change, no trace is detected; when found, it is always very small. The author considered that in the case of the patient above described, and in cases like it, it was very probable that the death of the embryo was due to long-sustained but slow contraction of the uterus, produced by the irritation of lactation. Dr. Barnes had found that in a number of cases of abortion of non-special character, into the particulars of which he had inquired, abortion occurred in 17 per cent. of cases of conception, during lactation, and in only 10 per cent. of other cases.

As to the possibility of a portion of retained placenta taking on the hydatidiform change, the following opinion was offered: The placenta of a mature fœtus cannot be so changed; but appearances, giving rise to an erroneous conclusion on this point, might arise: first, in cases of double conception, one of the ova perishing at an early period, and the degenerated chorion villi remaining in the uterus after the normal birth; and, se-

condly, in the perhaps possible case of a portion of the chorion villi having changed, from accidental separation from the embryo, the remainder growing normally.

The author was inclined to admit the possibility of the expulsion of true hydatid from the uterus. The true hydatids arise, doubtless, in the uterine wall, and subsequently burst into the cavity of the uterus. The fact that in true hydatids we find cysts enclosed one within the other, and in the other case round or oval bodies attached one to another, like beads, would be alone sufficient to prevent the possibility of a mistake in the diagnosis.

Dr. Barnes had observed a general tendency, in these cases, to complication with fatty degeneration. The usual absence of the embryo was accounted for by its undergoing oily transformation and dissolution, which usually proceeded to the entire disappearance of the fœtus. In one case he had witnessed this process in progress; the lower half of the embryo had melted away whilst the upper half remained. He was of opinion that it required further observations to establish the proposition that death of the fœtus must necessarily precede the hydatigenous change. Fatty degeneration certainly, in some cases, preceded the death of the fœtus; it might be that hydatigenous degeneration might also commence during the life of the embryo.

Dr. Druitt was ready to concur with the author in the position that the (so-called) cystic disease of the chorion was an exaggeration and deformity of natural structure. At the same time he doubted if the proof were complete that death of the fœtus was the only and essential cause. He expressed his belief that a kind of apoplectic engorgement of the decidual vessels was the condition which usually preceded abortion, and that the various changes of structure observed in the membranes of the ovum, such as fatty degeneration and fibrinous deposits in portions of the placenta, were generally secondary; yet in some such changes, he believed, were primary. It was an anatomical error to speak of the disappearance of any of the villi of the chorion, whether of the placental or non-placental portion of that membrane. On the contrary, the villi of the whole chorion continue to grow up to the end of pregnancy, and are readily found in every mature ovum. They are particularly large around the placental portion, and in this part in the membranes at full term he had occasionally found them excessively ampullated, as if in an incipient state of cystic degeneration.

MEDICAL SOCIETY OF LONDON.

Monday, October 17th, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

COMMUNICATIONS.

Inhalation of Oxygen. Dr. Mackenzie exhibited an apparatus for the inhalation of oxygen. It consisted of a graduated cylinder capable of holding four gallons of air. Below was a strong reservoir containing oxygen, with a machinery for introducing this gas to the air in the upper chamber in any quantity that might be desired. The working of the apparatus was explained by Mr. Barth, the patentee, who was present at the meeting.

Dr. Edward Smith was engaged in making a series of researches into the influence of inhaled gases on the chemical action in the body. He had determined the effect of percentage quantities of oxygen, and had found that an increased quantity of this gas when inhaled caused increased chemical changes up to a certain limit. He saw no reason for a special apparatus; oxygen might be administered by being mixed with air in definite proportions, and inhaled in the ordinary manner. He inquired also as to the method of procuring the gas, and as to the vast pressure which must be exerted on the iron bottles in which it was stated that a large quantity of oxygen was compressed. He believed the principle of the inhalation of oxygen capable of useful adaptation by further research.

Mr. Barth said that the oxygen was obtained from chlorate of potash and peroxide of manganese, which were selected with great care as to purity. The pressure of the oxygen compressed into the iron bottles was from 300 to 400 lbs. to the square inch; but these vessels had been previously subjected to a hydraulic pressure of 1000 lbs. to the inch.

PATHOLOGY AND TREATMENT OF GALL-STONES.
BY J. L. W. THUDICHUM, M.D.

[This paper will be published in the Journal.]

Editor's Letter Box.

THE JOURNAL.

Letter from Henry Terry, Esq.

Sir,—I very much regret the occurrence of anything tending to occasion discord in the British Medical Association. Since the strong conflict of opinion which prevailed some time ago on the question of changing the Society's name, and subsequently to the judicious decision of the majority on that point, all has gone on pleasantly and prosperously; and the great increase of our number has indicated a corresponding increase in the general appreciation of the importance and influence of the Association.

The Journal has now become the subject of contention, and strong opinions about it have been expressed; on the one hand dwelling largely upon the cost, and on the other undervaluing its worth. As one of the original members of the Association, I beg leave to express my opinion on the subject.

That the Journal might be, and would be, a better one, if more of the members would take the trouble of contributing to it, I by no means deny; but that, even in its present state, it is a very interesting and respectable publication, I do not hesitate to assert. How many hundreds of our associates are there, who take a deep interest in the Association, but who yet, from various causes, never have it in their power to attend the annual meeting, nor even the meetings of their Branch! and how can such members have their interest in the Society kept up, but by the Journal? I have no hesitation in stating it as my belief that, without our weekly Journal, the number of members would soon be reduced one-half. Admitting what has been said, that we have not in the British Medical Journal so much valuable medical and scientific matter as may be found in the *Medical Times and Gazette* and the *Lancet*, I contend that we do not expect it; a very large portion of our publication being employed in a detail of the proceedings of our Association and its many Branches. The Journal's report of the Branch meetings is generally interesting, and often highly edifying.

As to the comparative worth of a weekly Journal and an annual volume of *Transactions*, I believe the opinion of a very large majority of members would be in favour of the former. For my own part, I certainly consider the former as our great bond of union and strength, and the latter as quite unnecessary, and almost useless. Who, feeling disposed to send a paper, would not rather do so at once, than delay it possibly twelve months for an annual volume? To have every week the means of familiar and friendly communication with more than two thousand professional associates is no small boon, but a very great power. I consider the British Medical Association a most valuable institution; and I believe that at no period has so great and good a society ever existed before. The good it has already done is fresh in the memory of us all; but to foresee the still greater good which, with a large increase of members, it might do, is not in the power of any one. I look for my weekly Journal with interest and much pleasure; and I think that our best thanks are due to you, sir, for the able and honourable manner in which it is conducted.

I am, etc. H. Terry, F.R.C.S.,
Surgeon Extraordinary to the Northampton General Infirmary.

Northampton, October 15th, 1859.

THE JOURNAL.

Letter from T. H. Barker, M.D.

Sir,—I write a few lines to express my great surprise on reading Mr. Dix's remarks on the Journal. Rest assured, sir, that very few, in this part of the country at least, agree with that gentleman. We have a prosperous Branch, which started three years ago (ten new members were elected the other day); and I have no hesitation in saying that it is mainly owing to the fact of our having a good Journal. Had we simply a small fortnightly Journal, as we had some years ago, the Association would again become stagnant. Shall we have *Transactions* or a weekly Journal? There can be no doubt of the superiority, in every respect, of the latter. As a bond of union, it is infinitely better than a solitary volume of *Transactions;* and as a vehicle for the transmission of our ad-

dresses, papers, etc., every way equal, if not greatly superior. There can be no doubt that the Journal is capable of improvement; and when the funds of the Association allow of more paid literary assistance, it will be improved. We must ever bear in mind, however, that for one guinea we are receiving a weekly Journal which does not pretend, and cannot pretend, to rival another journal for which we must pay £1:13. In addition to the Journal, for one guinea we receive all the advantages of membership; and we must put these down at some money value; for, whether we have *Transactions* or a weekly Journal, the machinery of a large Association cannot be carried on without funds.

Our Association is gradually increasing its numbers; and if the advantages of membership were more generally known, I believe it would soon number six thousand members. In order to offer the best inducement, we must vigorously support our Journal, as showing the weekly transactions of the Association, together with such other medical matters as the editor can provide for us. We must do all in our power, too, to increase the value of the Journal by good practical communications; and, as our numbers increase, the field will be wider, and the fruitfulness more abundant. I believe that, if our Journal were discontinued, nine-tenths of the members in this part of the country would leave the Association at once.

I am, etc., T. Herbert Barker.

Bedford, October 17th, 1859.

THE ASSOCIATION AND THE JOURNAL.

Letter from Edward Daniell, Esq.

Sir,—I very much regret that the remarks made by Mr. Dix at the meeting of the East York and North Lincoln Branch of the British Medical Association, in reference to the Journal, did not appear in that periodical until two days after the meeting of the South Midland Branch held at Leighton. I regret this, because it would have been better to be able to record the opinions of our associates who were there assembled on a subject which I regard of vital interest to the well-being of the Association itself. If the editor had not so ably, in his foot-notes, controverted the assertions of Mr. Dix; and if, moreover, Dr. Henry had not, in his letter of the 15th instant, proved by figures the incorrectness of Mr. Dix's statements,—I should have considered it right, from my own knowledge of facts, to have taken up the question. As it is, I shall only refer to the dangerous doctrine advanced in Mr. Dix's paper—that the Association can exist at all without the Journal.

I happen to be rather an old member of the Association, and know a good deal of its early struggles and early difficulties; and also have been the instrument of introducing a great many members. Now, I have no hesitation in asserting that I should not have been successful in introducing any one member, if I had not been able to assure him that he would receive weekly a Journal—a work not to be considered as an equivalent for more elaborate periodicals, but still one giving much practical information, records of cases, and general Association intelligence. And I am not aware of one of my friends having expressed the slightest dissatisfaction with it.

Mr. Dix must pardon me if I complain generally of the spirit of his speech. I am sure, if he reflects fairly, he must see there is something exceedingly caustic in his remarks, and something insulting, not only to the editor, but to the members themselves. What right has Mr. Dix to *fear* the members "*don't duly study the* Journal"? How does he know that few preserve it? By what clairvoyancy does he see the bookshelves of his brother-associates? Had he looked into my library, he would have found the Journal bound from 1844, side by side with the *Lancet*, the *Medical Times*, and the *Circular*. And I can assure Mr. Dix I find the Journal occasionally a very valuable work of reference, more particularly in its records of cases furnished by annual meetings of the Association and the various Branches.

The passage referring to Dr. Henry is a sad step in the wrong direction. He says Dr. Henry is "a modest and disinterested man". I quite agree with him. But why the note of admiration after the sentence? Simply because the whole passage is ironical. Dr. Henry is known to be a man of great learning and very deep research. He is not a man of show; but he is a man of power, when in his proper element, with his brain and his pen at work. Yet, forsooth, he may be assumed, from Mr. Dix's paper, to be fattening out of his share of the editor's salary of £350 (!) a year. I do not know what this share may be, but I assume it is not the lion's share. Now, a butler often gets £100 a year, food and wine *ad libitum;* an excise-officer, £100 a year; a clerk in a bank, or at a merchant's office, from £100 to £500 a year; yet a learned physician is to be subjected to the sneers of a brother practitioner for receiving an annual moiety out of the £350 a year—paid, I have no doubt, to meet the claims of two editors. Oh! that men whose avocations were active knew the wearisome life of literature when pursued alone! Methinks there would be more of the milk of human feeling flowing; sarcasm would be then at a discount; and sneers and irony would be weapons very carefully wielded.

Mr. Dix asks the question, "Does this Journal exist for the Association, or the Association for the Journal?" They cannot exist apart. Remove the Journal, and you will have to write "Ichabod" over the portals of the Association. *It is indeed the "sap and root";* it helps in no small degree to invigorate the parent stem; and, as far as my knowledge goes of the Branches, they would immediately wither without it. The British Medical Association is rapidly growing into importance; it is planted on firm ground, is extending its protecting influence over the length and the breadth of the land; and I see no danger to it, if it escapes the sharp knife of the pruner, who, in his desire perhaps to do well, does ill, and thus jeopardises the vitality of the tree.

I have occupied more space than I designed; but, as I have thus publicly acknowledged that, in my recruiting for members, I did offer them a bounty, and that bounty no other than the Journal, I stand convicted, under Mr. Dix's doctrine, as a "deluder", and my unfortunate friends as "deluded". No matter; we are contented, and bear the burden of our condition without repining.

Thus, Mr. Editor, I have said my say. I shall not trouble myself with controversy; I am too old for that. I have studied to say nothing offensive. I will conclude with subscribing myself a sincere friend to the Association, and a great lover of the Journal; wishing, as every associate does, that it may go on "prospering and to prosper"; that, in the end, it may be valued equally by Mr. Dix and by every member of the British Medical Association.

I am, etc.,

Edward Daniell,

Late President of the South Midland Branch of the British Medical Association.

Newport Pagnell, October 17th, 1859.

THE JOURNAL.

Sir,—In the number of the Journal for October 8th, Dr. Munroe's name appears as a visitor at the East York and North Lincoln Branch general meeting. May I ask if Dr. Munroe has since that meeting become a member of the British Medical Association? For, if not, it appears to be very strange indeed that you should publish a long letter from a gentleman in no way connected with the Association, in defence of the Journal, whilst the publication of Mr. Dix's letter, in reply to your leader and remarks upon his paper, is deferred on the plea of want of space. I cannot think that such a course will meet with the approbation of the members of the Association, or in any way strengthen your cause. I, as a member of many years standing, beg to enter my protest against such a course. The cause of the Journal must be weak indeed, if it is necessary to seek for support without the body of the subscribers; and I would beg to suggest that the letters of associates, upon matters connected with the internal economy of the Association, should have precedence; otherwise we may fairly ask, What benefit does membership confer, if the letter of a gentleman who is not a member is preferred before an associate's; and that, too, on a question which concerns no one except ourselves? Requesting the publication of this letter,

I am, etc., M.D.

October 18th, 1859.

P.S. I beg to inclose my card.

[Dr. Munroe is not at present a member of the Association: but his letter was valuable as showing the opinions of a man who intends to join the Association because it has a weekly Journal. Mr. Dix's letter was more than three times as long as that of Dr. Munroe, and was therefore omitted last week for want of space, and for no other reason. We insert, for the sake of fairness, the letter of M.D., which has reached us too late for us to communicate our wishes to him by post; but, for the future, we must request all correspondents on either side of the question to affix their names to their communications. We have already declined to insert letters in favour of the Journal, on account of their being anonymous. Editor.]

THE ASSOCIATION AND THE JOURNAL.

Letter from John Dix, Esq.

Sir,—When I sent my paper to press, I entertained a hope that I should not be called on for a few weeks to occupy your space with further remarks of mine. My desire was to be a silent listener to the opinions of others on the subject I have broached; but both in your leading article, and in your foot-note comments on my communication, you impugn the accuracy of my statements, and misrepresent my views. This latter error has doubtless arisen from misapprehension on your part, arising probably from obscurity of expression on mine. This renders it incumbent on me, in justice to myself and my cause, to place before the Association a few explanatory observations.

As to the "*presumed* financial difficulty," as it is termed in your leader—are we or are we not *seriously* in debt? I trust both for the sake of the Association, and for your own credit, that your statement is a correct one. My grounds for entertaining an opposite opinion were the report of the council, and their appeal to us for further donations for the liquidation of our debt. You state that "the financial difficulty is not only not increasing, but is *rapidly proceeding to the vanishing point;* out of the £2000 that hung over our heads five years ago, but little more than £300 now remains." Now, such a statement as this, to be worth anything, must mean that there has been a *gradual and progressive* diminution of the debt, at the rate of about £300 a year, and that we are in a position still to maintain a corresponding process of liquidation.

Compare with this the statement of the Council, "In the year 1856, there was a debt which amounted to near £2000. *By a call of ten shillings then made*, (which you appear to have forgotten), and by the fact of the income having since that time exceeded our expenditure, that debt has been very considerably diminished—*but this diminution is going on slowly*, and inconvenience results," etc., etc.—the upshot of all this being an appeal for donations. I do not pretend to any special knowledge of our finances; all I have to say is, that I took on trust the statement of the committee, and in reply to their request for increased funds—*I suggest, as an amendment*, a diminution of the expenditure. You are at issue then in this matter, not with me, but with the Council of the Association, with whom I leave you to settle the question.

Yet I must for a moment, in fairness to yourself, and for the guidance of our jury, take up your challenge of a reference to the published balance sheet for this year, and the year preceding, which, according to my poor judgment, does not present a very flattering view of our money matters.

	1857.	1858.	Difference.
Income	£2,680	2,435	255
Payments	2,504	2,429	75

The balance, in favour of the year 1857, is £180. There is, in 1858, a diminution of receipts to the amount of £255—the reduction of expenditure being only £75—showing a balance of £180 adverse to the last year, as compared with the preceding one. True, the expenditure for the last year, *so far as the balance sheet informs us*, was less than the income by £7; by which noble sum the debt of the treasurer has been reduced, viz., from £300 to £293. But, sir, I here observe another very important item. It comes to my notice for the first time, and I have to thank you for putting it in my way. In 1857, besides the debt of £300 to the treasurer, other trifling sums appear under the head of liabilities, viz., to Richards, printer, two items, one of £408, and another of £116 = £524, which, added to the treasurer's demands, shows a total of liabilities exceeding £800. This year, for some reason or other, no statement of liabilities, besides that of the treasurer, is put before us; but I find that this same printer has been paid only £25 more than in the previous years, viz., £1685 for the year 1858, and £1660 for the year 1857; and seeing that the income for the last year has been £255 less than that of the preceding year, I cannot imagine that his balance against us has been much reduced, and, until the contrary is made to appear, I shall continue in the fear that the real debt of the Association on January 1, 1859, was not simply the sum of £293 due to the treasurer, but that there were also unpaid accounts (perhaps considerable) due to the printer, on account of the Journal. It may be that this £524 due at the commencement of 1858 has been much diminished, or altogether paid off. I hope it has (though I cannot for the life of me divine whence the money can have come), and if so, my doubts are easily solved. If not, the balance sheet published at the last annual meeting is altogether false and inaccurate, and our financial position is *apparently flourishing*, only through a flagrant *suppressio veri*. I ask, sir, what is the truth of the matter? Reticence will not avail, and would be neither honest nor politic. We want the truth, the whole truth, and nothing but the truth, that we may determine accurately "the actual condition of the Association;" and I hope honestly and sincerely that you may be able to prove your reiterated assertion that the debt of the Association is but little more than £300; which, being done, we shall have but little need to resume the discussion as to the best mode of meeting existing difficulties.

But, as you very properly put it, independent of "the matter of funds,"—"the question still remains, Is there any necessity for a weekly journal?" Sir, I for one, am particularly desirous that this point should be fairly discussed *apart from financial considerations*. On it you remark: "We presume that some organ of the Association must be contemplated even by those who think a change would be beneficial in the frequency of its issue, always excepting "root and branch members, like Mr. Dix." Whether I am "a root and branch member," I cannot tell, because I don't know the meaning of the expression—I hope it is nothing very dreadful—but this I know, that this sentence occurs in my published paper. "I would also remind you that I am but arguing against the Journal in its present expensive shape. *A periodical of some sort we no doubt need";* so that, judged by this test, I am not a "root and branch member." At all events, I am not an exception to those who "contemplate some organ of the Association," and to speak of me as such is misrepresentation No. 1.

Next you endeavour to show that our members have increased *pari passu* with the enlargement and improvement (which by the way are not necessarily the same thing) of the Journal, with no great success so far as I can see. Thus, our numbers increased from 1,250 in the year 1841 to 1856 in the year 1846; being an addition of 600 *in five years*, and this when "the Journal was on a very small scale, not bigger than *Chambers' Journal*." In 1853, "the Journal was brought to London, and greatly enlarged," the numbers of the Association then being 1883. Since which time, being *a period of six years*, we have added to our score *only* 427. The figures are your own, and I wish you joy of this argument.

And here occurs another of the misrepresentations of which I have to complain. You say of this increase, on which it seems you much pride yourself, that it is "(as Mr. Dix would have it) a lamentable result." No such expression occurs in my paper, nor anything tantamount thereto, or indicative of any such idea. On the contrary, I rejoice at every fresh accession of strength, and am in truth labouring for the change I propose, chiefly because I believe most firmly that it might tend to an enormous increase of our numbers. So to extend our Association, that it shall embrace every respectable member of the profession, is what I aim at. This is my "pet scheme," and not as you absurdly make me to say "to reduce the Journal," which is misrepresentation the 3rd. Yet, sir, I thank you for the phrase, and I say it is a "lamentable result," that in this, the twenty-eighth year of our Association, we number but 2,310 members out of the thousands of the profession.

Lastly (so far as your leading article is concerned), I have to remark on the following sentence. "We are really at a loss to know what reason can be given for a change in the present form and issue of the Journal." I was weak enough to imagine that I had given not *a reason*, but several reasons, for such a proceeding; but reasons are like jokes, no matter how good they are, some there will surely be who can't see or comprehend them. I have in my paper laid down certain premises, stated certain facts, argued therefrom, and drawn certain deductions, which, I hope and believe, are neither unwarrantable nor unreasonable. These I deem reasons. They were so considered at the Beverley meeting—reasons good enough to commend the unanimous assent of the members to the resolution which grew out of them. Here is a brief *résumé* of the chief points of my address. 1. I state that I have mooted the question in consequence of the application from the Council for additional funds to pay off our debt. 2. I point out that the cause of the debt is the Journal, which is *almost* the sole charge upon our funds. 3. I raise the question, is a *costly weekly* Journal essential to our existence or progress? and I ask for reasons or precedent, and I state my opinion to the contrary, viz., that it is no advantage, but "a let and hindrance to our spread and power." 4. In support of this view I quote your own opinion, that the guinea subscription deters many from joining the Association,

which subscription goes to defray the cost of the Journal. Hence, I say, "the yearly Journal and the guinea are convertible terms," and the Journal is the real obstacle to the increase of our numbers. On this point, especially, I appeal to the personal knowledge of members present, and pledge myself to enlist at least half a dozen fresh recruits if the subscription were lowered. 5. Branch meetings are next spoken of as the real strength of the Association. For the sake of these and not of the Journal we join the Association. It is asked, what is the pecuniary value of the Journal? and I argue that to those who read this Journal only, it is necessarily inadequate and defective; to others, its value depends on the amount of matter which does not, or would not, find its way into the other periodicals. 7. To aid in this estimate, I give an analysis of the contents of the Journal for August 20th, taken at random, whence it appears that a considerable portion of the Journal is made up of "old news," and other matter entirely foreign to the affairs of the Association; and that it is one of the characteristics of the Journal to be behind-hand; whilst the original matter occupies but a small space, and is not of any startling interest. 8. Next, the notion that the Journal brings in fresh subscribers is criticised, and also the idea that the Journal affords us any advantage in publishing our papers, which, if worthy of publicity, would be gladly received by other periodicals. So that, 9. Even the original and good papers of the Journal would probably be published all the same without the Journal, and for those who endeavour to read all that is written, it would be far better collected in two than scattered through three weekly periodicals. 10. Next, the speech of Dr. Henry is passed in review, who asks for a thousand or two more pounds for the Journal to be raised, by an increase of members; which leads me to ask, Does the Journal exist for the Association, or the Association for the Journal? 11. I allude to the damage we already do the independent periodicals, by attracting certain subscribers who might otherwise support one or other of them; and I suggest that, even if the Journal were raised to the acme of excellence, it would only still more compete with and injure these, which would be an evil rather than a good. 12. Having pointed out that a periodical publication of some kind is needful for the Association, and that the discontinuance or modification of the weekly Journal does not necessarily lead to a diminished subscription, I conclude by advocating such a diminution, believing that so we might add to our ranks almost all respectable members of the profession, and become a universal medical society, and, in conclusion, 13. I enumerate a few of the advantages of such a society, into which our Association might be readily developed were it not for that *great obstacle*, the Journal.

A few of these topics you have deemed worthy of notice; the majority, and those the most important, you have passed over in silence.

As to the former, I claim the right of reply, and promise to be brief. First, you object to my estimate of the importance and magnitude of our debt, to which objection I have already referred at some length, and I am content to rest my case on the statements of the Council. This much is certain, whatever the debt, either old or new, it has been caused by the Journal; our other expenses are trivial compared with this. "Mr. Dix takes a very limited view of the utility of Branch meetings." On the contrary, I believe that in them lies the real strength of the Association, they are our "root and sap." Why you should misrepresent me I know not. As to the publication of reports which are sure to appear at the same time in the other journals:—the *Daily News* and *Morning Post* are competitors with *The Times* for public favour. It is this very attempt to thrust our Journal into a similar competition with the other medical weeklies, that I most strongly object to.

"The Cornwall Medical Society shall still remain a subsection of the British Medical Association." What is a subsection? and what is their connection with the parent tree? Do all its members pay their guinea to the Association—I beg pardon—I mean to the Journal, or are they deterred from joining by the expense? This has reference to the subject of the enlistment of fresh members.

"By all means let a man read a dozen periodicals if he pleases." Sir, you know as well as I do, that for a man to keep up his knowledge to the level of the day, it is absolutely necessary—not a matter of choice—to read all periodicals. Hence, multiplicity and dilution are a nuisance.

"But suppose he requires only one, does Mr. Dix mean to say that he is to pay £1 10s. a year for that which he can procure for a guinea." Does Mr. Editor mean to say that what he gives for a guinea is at all equal to the £1 10s. journals? Is it equal, *not in absolute, but in relative value?* This is matter of opinion.

Lastly, you accuse me of misrepresenting Dr. Henry, I leave it to the decision of any one who will take the trouble to examine, compare, and decide, whether your version of his views or mine most accord with his speech, as reported. Mine, I grant, is not quite accurate; but yours is still wider the mark.

The remainder of your foot-notes are scarce worthy of notice. Eschewing all argument, ignoring all reason, you gloss over my statements, and misrepresent my views (of which I have pointed out many examples), and you prefer to raise puerile and captious objections to modes of expression, and trivial and unimportant inaccuracies, rather than to deal fairly with the merits of the case.

What, for instance, can be more out of place in a serious discussion, than your comments on your own favourite quotation, "odorous comparisons," which you say you have borrowed from Shakespeare. Like most of the Journal, Mr. Editor, this is "old news." I was perfectly aware of the fact, and also I know that your reference is inaccurate. What appropriate and lofty sarcasm in your expression of regret that I should have ever contributed to the Journal! What querulous whining over what you unjustly call my sneers at Dr. L. Beale's lecture! What a brilliant example of rapid reasoning and of jumping to a hasty conclusion is shown in the assumption that Mr. Munroe had read those lectures because he ventured an opinion on their value!

But I forbear to carry this analysis further. I notice such remarks for the first and last time, and, perhaps, even now unwisely. This discussion will not be either burked or shortened by the introduction of unnecessary and unpleasant personalities. Of course it is your duty and your interest to stand up for the Journal, and I am glad that it has so able an advocate, because it will insure "a fair fight, and no favour," which is all I ask.

Equally, of course, some of my remarks were not altogether palatable to you; this I could not avoid. But you need not empty all the vials of your wrath on my poor devoted head, as if I were your only assailant. My opinions were endorsed, my arguments seconded, and my resolution heartily supported, by such men as the two Sandwiths—*par nobile fratrum*—Sir Henry Cooper, Hill of Cave, a member of the Association *ab origine*, and many others, as anxious as yourself for the welfare of the Association; and, perhaps, as good judges as to the best mode of advancing our interests. This, I assure you, is the only object *I* have in view, and I give *you* credit for similar good motives. Let us, therefore, for the future, laying aside personality, irascibility and ill-will, discuss this subect as becomes gentlemen and honest advocates for truth, on which ever side the right may lie—failing which, we shall both fall into error. I daresay you will recognise the quotation, and admit its aptness, when I venture to remind you, I hope without offence, "That petulance is not criticism, and insolence is not invective."

I am, etc., etc., John Dix.

P.S.—In reply to your suggestion that I should "condense my ideas," I have to observe that if you had answered my inquiries about the debts of the Association, a considerable portion of my letter might have been unnecessary; in default of this, I have nothing to erase.

In reply to Dr. Henry, I beg to remark that I have neither misunderstood nor misrepresented him. If he will look to the report of his speech, he will see that for 3000 members he promised *nothing more than an improved* Journal, and not until we reach 4000 does he say anything about a surplus. He now shifts his ground altogether, and argues that with 3000 subscribers we might have a surplus, the Journal to remain in its present form; which our readers will see is quite another matter. But this is a mere personal question, not worthy of further discussion. On his general scheme, I have but to remark that it is Utopian and impracticable. How is this increase of members to be brought about? He talks a good deal about arrears, and very properly, which he says is the main cause of the debt; but arrears there always have been and will be, and we must look at things not as they might be, or even as they ought to be, but as they really are; and I have to thank him for his explicit account of the actual cost of the Journal at present, which he clearly shows is not less than £1,785 a year. Here, then, is a fact worthy of *your* attention and *his*. The subscriptions for 1858, inclusive of previous arrears paid up, amounted to £1,790 8*s.* 9*d.*; and I am accused of exaggeration and misstatement when I assert that the Journal "swallows

up all our subscriptions." I admit my error: there is a balance of *five pounds, eight shillings, and ninepence*, "to meet the expenses of the General Council, and the salary of the general secretary, and to liquidate the old debt." Lastly, I beg to observe that I have made no "insinuations as to the motives" of Dr. Henry. I merely state the fact that he, a paid contributor, desires an increase of funds, so that "contributors could be more liberally paid"—a very natural, and for aught I have to say to the contrary, a very proper wish; though I may question his taste and judgment in making such an open avowal of his feelings on that particular occasion. J. D.

[Mr. Dix entirely forgets to notice the good debts owing to the Journal for the year in question. These would be certainly not less than £500 for arrears of subscriptions. He should, therefore, add to the balance of five pounds, eight shillings, and nine pence, the further sum of £500. Editor.]

THE JOURNAL.

Letter from W. H. Ranking, M.D.

Sir,—I see the old cry of disparagement of the Journal has recently been revived by Mr. Dix, at a meeting of a local Branch of the Association. Allow me, as a former editor of our Journal, to say that it is not altogether ungratifying to me to find the accusation of inferiority still adduced. In former days, I was unwillingly forced to the conviction that the shortcomings of the publication were considered to be due to the incompetence of the editor; but I am now relieved of that uncomfortable reflection, for I am sure that no such accusation can attach to yourself, and yet the plaint is still as energetically repeated.

That the Journal is not what it ought to be, no one can deny; neither can the most sanguine associate compare it to the *Lancet*. But whose fault is that? Surely not that of the editorial management. Clever as the editor may be, he ought not to be expected to find brains and matter for publication also; and, if our 2,300 members fail to supply materials equal to those furnished to other journals, the fault is with them, not with the editor. Such was the apathy of the members on this point in my time, and such it appears to be now.

I for one should be sorry to miss the appearance of the Journal from my study table; for I believe it tends to keep up the *esprit de corps* of the Association; but, sir, whether it is to be a first-rate production, or to remain as it is, must depend not upon your talents alone, but upon the zeal of the 2,300.

I am, etc., W. H. Ranking.

Norwich, October 15th, 1859.

THE JOURNAL.

Letter from T. W. Nunn, Esq.

Sir,—It is not my wish, in addressing you, to take any part in the somewhat acrimonous discussion respecting the comparative merits of the *Lancet*, *Medical Times*, and the Journal of our Association.

My object is to raise one humble voice against the suppression of the weekly issue of the British Medical Journal. It is surely most important that there should be a weekly communication, or rather means of communication, between the members of our large and influential association. The larger the association, the more essential does this weekly intercommunication become.

I also would venture to suggest that the sole use of a Journal to the Association is not in its newspaper function. It is a powerful instrument, ready in the event of emergencies. If one buy a revolver for the protection of one's house, it is scarcely sound actuaryship to reckon its cost as dead loss, because one does not shoot a robber per week.

Moreover, competition, we are taught, is wholesome; beneficial to the community; and one cannot doubt but that the *Lancet* and *Medical Times* are maintained at their high standard by a competition in which the British Medical Journal has at least a share, small as that share may be.

I think, too, it might be urged on behalf of the Journal, that very many papers of great value, from provincial members, would neither have been written nor recorded without the instrumentality of the Journal; while the lectures of Dr. Lionel Beale, at present in course of publication, constitute a practical refutation of much that has been alleged against the editorship. I am, etc., T. W. Nunn.

8, Stratford Place, W., October 18th, 1859.

THE JOURNAL "THE BACKBONE OF THE ASSOCIATION".

Letter from Thomas Skinner, M.D.

Sir,—Excision of the coccyx is a favourite operation in some parts of Her Majesty's dominions at present; but, at Hull, a surgeon has proposed to extract the backbone out of 2,300 individuals at one fell stroke of his scalpel; with what success, remains yet to be seen. Fortunately, one of the intended victims has been bold enough to resist the heroic measure, and he has endeavoured to open the eyes of the rest to the fact that, even admitting the dexterity of the operator, the probability is that the success of his operation is coequal with the certainty of their death. He therefore wisely advises them to stick to their backbone, or let it stick to them, while they seek to strengthen it, and make it their mainstay.

Joking aside, whatever Mr. Dix may think of Dr. Beale's Lectures, it strikes me very forcibly that the chemico-microscopic analysis of urine, as regards the diagnosis and treatment of most diseases, particularly those of the abdominal and pelvic regions, is only equalled in value to the profession by the arts of auscultation and percussion; and I cannot help looking upon Mr. Dix's gratuitous statement in regard to those lectures to be as ungentlemanly as it was uncalled for. I for one beg to assure Dr. Beale that the perusal of those same lectures has afforded me much pleasure, and still greater profit; and I trust that, in spite of Mr. Dix's remarks, he will still continue to afford us the latest ideas in that branch of medicine which he has so successfully cultivated, and which he has made so peculiarly his own.

Mr. Dix *despises* our Journal. What has it not done for medical reform? What has it not done for reform among ourselves? Had it nothing to do in transforming us from a Provincial into a British Medical Association? Is it not a perfect record of all that is going on in our Branches, and at the annual meetings of those Branches and of the Association? Does it not record with accuracy all the measures connecting us with the State, Acts of Parliament, etc.? Does it not ably advocate the cause of medical education; and furnish us, for reference or otherwise, with the proceedings of the Medical Council? Are not the proceedings of our learned and medical societies duly transcribed in it? Does it not contain hospital reports, reviews, and many original papers, besides miscellaneous information, and most excellent leading articles? For further particulars, I refer to the copious index to each volume, and to the index of the hospital practice.

The truth of the matter is, the Journal is ridiculously cheap. The words of our distinguished associate, Sir John Forbes, at our last annual meeting in Liverpool, ought to be printed in letters of gold. "*The* Journal", he says, "*which was so received by every member of the Association, was as good as any other weekly journal which costs* 33*s. a year. The Association, therefore, gave* 33*s. to each member, and received* 21*s. in return.*" I do not in general approve of making "odorous comparisons," but in the present instance it is irresistible. Surely Sir John Forbes may be looked upon as a judge of the qualities of a medical periodical, in all its bearings, superior to Mr. Dix; and I feel confident that the mass of the Associates quite agree with Sir John that the Journal is far too cheap. That it is capable of improvement no one will deny; but its total annihilation is a strange mode of improvement. We should rather be stimulated to never wearying efforts until we make our Journal the leading medical journal of the nation. Let us only be united, and there is no fear of the result.

Are not there substantial reasons why we should have an independent and separate organ of our own? There is quite room enough for three weekly periodicals. If there is not, let the British Medical Journal fight until it sees its enemies at its feet, and the whole medical faculty one united brotherhood, having one common object in view—the interests of the profession and the public.

Without the Journal we may as well shut shop. Without the Journal none of us would ever have heard of Mr. Dix and his discontent. Without the Journal this and all other matters could not be mooted and ventilated as they require. And certainly, if it appeared monthly or quarterly, thought would travel so slowly that all discussion would terminate, and men would forget whether they should write warmly or coolly—whether they should speak in joke or write in earnest.

The fact is, we must have a journal, and it must be published weekly, if not twice weekly, as seen in prospective by Dr. Munroe. Another fact is, we must have the money; but at the

same time we must not suicidally reduce the subscription, or lower the character or usefulness of the Journal. Increase the number of members (I make no doubt they will increase); and there is no better way of doing so than by increasing the number of original lectures and communications. By such means we shall be able to supply the members of the profession with the greatest amount of good material for improving themselves in their daily practice, besides the other advantages belonging to membership.

Brother associates, let me remind you that this Journal is the organ of a mighty power, which was at one time lisping its tiny notes in the provinces. Conceived in the modest town of Worcester, by our distinguished President of the Council, Sir Charles Hastings, nourished by his paternal care and solicitude, it has now passed honourably through its teens, and it will soon, I hope, speak in thunder tones as the mighty engine of the rights and privileges of the profession. Let us have nothing to do with other journals. While we respect and think much more highly of them than they seem to think of us, let us retain our own identity. Believe me, the Journal is the backbone of the Association, as expressed by Dr. Munroe.

Let me conclude with what I fully believe to be prophetic words, from the pen of Dr. Munroe. "By the assistance of the profession becoming members of the Association, I cannot but believe that the British Medical Journal *must* take the first place in our medical periodical literature." I am confident that it is in our power to fulfil this prophecy if every member will only exert himself in writing for the Journal, particularly those enjoying hospital practice, as physicians or surgeons, or house-physicians or house-surgeons, and in procuring as members some of the 13,000 still to be included, and getting those in arrear to pay up.

I am, etc., Thomas Skinner.

Liverpool, October 15th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of daughters, the wives of—

Francis, C. R., M.D., Bengal Army, at Bognor, on Oct. 1st.

*Tyrrell, Walter, Esq., St. Helen's Place, E.C., on Oct. 17.

MARRIAGES.

Barnett, John M., M.D., Bombay Army, to Mary E. C., daughter of the late John Johnston, Esq., of Ashley Lodge, County Down, at Paddington, on October 14th.

Dain, Fredk. C., Esq., Surgeon, King's Cliffe, Northamptonshire, to Caroline Fanny, younger daughter of the late R. Preedy, Esq., of Hampton, Evesham, on October 13th.

Hartmann, Ernest, Esq., to Amy Anne, only child of *W. H. Fry, Esq., Surgeon, of Brighton, at Hounslow, on Oct. 17.

Kendall, Henry, M.D., 7th Hussars, to Annie Jane, second daughter of Colonel Brind, C.B., Bengal Horse Artillery, at Umballa, on August 9th.

Parke, Henry B., Esq., Norfolk Square, to Eliza M., eldest daughter of *G. R. Hilliard, L.R.C.P., of Chelmsford, on October 15th.

*Sephton, R., Esq., Culcheth, Lancashire, to Caroline, third daughter of *J. Burrows, Esq., of Liverpool, on Oct. 13th.

Swinson, Henry, Esq., second son of *G. N. Swinson, Esq., of Leamington, to Sarah, youngest daughter of the late C. Greatrex, Esq., of Walsall, on October 13th.

DEATHS.

Lloyd. On October 14th, at Brighton, Frances Charlotte, third daughter of E. A. Lloyd, Esq., Surgeon.

Newholt., William R., M.D., at Bath, aged 68, on Oct. 13.

Parker. On October 13th, at Dover, aged 7, Percy Yeates, second son of *James Parker, Esq., Surgeon, Trowbridge.

Toogood. On July 19th, in Australia, Charles, fourth son of J. Toogood, M.D., Torquay.

Vaux, James, M.D., in the wreck of the *Admella*, aged 27, on August 5th.

Wallis, Edward S., M.D., at Calcutta, aged 32, on Aug. 31st.

Ware. On October 12th, at Tilford, aged 67, Anne, wife of Martin Ware, Esq., Surgeon, of Russell Square and Tilford.

Whyte. On October 16th, at East Grinstead, Anna, wife of John Whyte, Esq.

PASS LISTS.

Royal College of Physicians of London. At the Comitia Majora, held on Wednesday, Oct. 19th,

Macloughlin, David, M.D., Bruton Street, was admitted a member of the College under the temporary bye-laws.

Royal College of Surgeons. The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on October 13th:—

Andrew, Henry, Truro: diploma of membership dated May 15th, 1839

Bennett, G., Sydney, New South Wales: March 7, 1828

Hawkins, James, Newport, Monmouthshire: June 4, 1838

Hawthorne, Arthur Neville, Eccleshall: June 17, 1840

Martin, Henry Victor, Ealing: May 12, 1834

Metcalfe, Edmund, Delamere Crescent, Westbourne Terrace: October 1st, 1841

Vallance, James Thomas, Stratford, Essex: June 3, 1842

Wildbore, Daniel Peacock, Old Street: May 3rd, 1816

Williams, William, Oldbury, Worcestershire: Oct. 7, 1825

Apothecaries' Hall. Licentiates admitted on *Thursday, October 13th*, 1859:—

Creagh, William, Ireland
Drury, John T. C., Doncaster
Elliott, C. H., York, Swan River
King, Edward P., Chepstow
Sansom, Arthur E., Corsham
Smith, John, Coseley
Wickham, William, Tetbury

The following gentlemen, on the same day, passed their first examination:—

Catt, Alfred, Brighton
Collins, John B., Yapton, Sussex
Matthews, C. S., Carey Street
Miall, Philip E., Bradford
Nowell, A. H., Richmond

HEALTH OF LONDON—OCTOBER 15th, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... {Boys .. 822 / Girls .. 805}	1627 ..	902
Average of corresponding weeks 1849-58 ..	1543 ..	1035

Among the causes of death were—diarrhœa, 29 cases; whooping-cough, 17; measles, 18; scarlatina, 87; small-pox, 37; diphtheria, 7. Of bricklayers, 1 died; bricklayers' wives, 3; bricklayers' children, 7; carpenters, 6; carpenters' wives, 3; carpenters' children, 21; painters, 5; painters' wives, 4; painters' children, 5; of plasterers, 1; plasterers' children, 8.

Barometer:

Highest (Sun.) 29.640; lowest (Sat.) 29.365; mean 29.492 in.

Thermometer:

In sun—highest (Fri.) 75°; lowest (Tues.) 60·3°.

In shade—highest (Fri.) 66°; lowest (Wed.) 45·7°.

Mean—55.3°; difference from mean of 43 yrs. + 4.4°.

Range—during week, 20.3°; mean daily, 12.3°.

Mean humidity of air (*saturation*=100), 92.

Mean direction of wind, E.—Rain in inches, 0.88.

TO CORRESPONDENTS.

Communications have been received from:—Mr. G. N. Swinson; Mr. W. Martin; Dr. Whytehead; Mr. T. W. Nunn; Mr. W. Copney; Dr. Lionel Beale; Mr. T. Holmes; Dr. Thos. Sandwith; Dr. P. H. Williams; Mr. Harrinson; Dr. Thudichum; Dr. Strap; Mr. H. Terry; Dr. T. H. Barker; Dr. W. H. Ranking; Mr. E. Daniell; Dr. Skinner; Mr. John Dix; Dr. C. H. Jones; Mr. James Reid; Dr. Birch; Dr. Inman; Mr. T. Pope; Mr. A. Prichard; Mr. J. K. Spender; Mr. Dulvey; Dr. Sloper; Dr. De Mierre; Mr. D. Crawford; Mr. T. M. Stone; and Mr. Harcourt.

BOOKS RECEIVED.

[** An Asterisk is prefixed to the names of Members of the Association.*]

1. Illustrations of How to Work with the Microscope. By *Lionel Beale, M.B., F.R.S. London: Churchill. 1859.
2. Throat Ailments: more especially the Enlarged Tonsil and Elongated Uvula, in connection with Defects of Voice, etc. By *James Yearsley. Seventh Edition. London: Churchill. 1859.

BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXLVIII.] LONDON: SATURDAY, OCTOBER 29, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

LIVERPOOL NORTHERN HOSPITAL.

LIME-JUICE IN RHEUMATIC FEVER.

By THOMAS INMAN, M.D., lately Physician to the Hospital.

SOME time ago, I stated the results of my experience of the value of lime-juice in acute rheumatism; since then I have had abundant corroborative proof of its utility. The last case under my care is so instructive, that it deserves a record.

Mary S., aged 27, was admitted into the Liverpool Northern Hospital, with a severe attack of the above disease, on the 19th of September. I ordered her half a pint of lime-juice daily. On my visit on the 23rd, I found her only a trifle better; and on the 26th, I found her worse than she was on admission. As this was the first failure I had met with, instead of altering the treatment, I went into the shop to inspect the lime-juice, of which I was told the supply was fresh, and furnished by a first-rate house (the Liverpool Apothecaries' Company). I found it colourless, slightly viscous, and, on my tasting it, it seemed to be nothing but lemonade sweetened and acidulated with tartaric or other acid. I directed the pure material to be procured, and the patient to take it as before. After leaving the Hospital, I lost sight of the patient; but I called to hear of her on the 5th of October. I did not see her, but next day I received a note from the House-surgeon, stating that "the patient got well rapidly after the lime-juice had been changed, and was discharged cured in three days afterwards."

This case proves:—1. That the lime-juice procured at first-rate houses is not always to be depended upon. 2. That lime-juice does not act simply because it is an acid. 3. That lime-juice may have been undervalued, because those employing it have not had the pure material. 4. That the treatment of acute rheumatism by this drug is not equivalent to leaving the disease alone.

GUY'S HOSPITAL.

I. A CASE OF FRACTURED RIBS, ETC.

Under the care of J. BIRKETT, Esq.

[*From Notes by* J. D. HILL, ESQ.]

DANIEL LEE, aged 19, was admitted on August 5th, on account of an accident, in which he had fallen off the shaft of a waggon, the wheel of which had passed over his chest. The weight was said to be three tons.

Upon examination, it was found that the four or five upper ribs, below the first, on the left side, were fractured, and that the sternal end of the clavicle was dislocated forwards upon the sternum. The patient was suffering from intense dyspnœa and expectoration of frothy blood, indicating injury to the lungs. That side of the chest was strapped, with strips of adhesive plaister passing from the spine to the sternum, which seemed in some measure to relieve the breathing. The symptoms, however, soon became more urgent; and, at 10 P.M., the house-surgeon ordered half a drachm of antimonial wine with five minims of laudanum, every three hours.

At 12.30 P.M., Mr. Bryant was asked to see him, and ordered that he should be bled to ten ounces. After this, there was a marked improvement in the patient's condition. His breathing became less hurried, and the pulse diminished in force as well as frequency. The mixture was ordered to be continued.

Next morning, it was noted that there was no emphysema. He was better, breathing more quietly; but the pulse was full and bounding, and the tongue brown and coated. There were thirst and heat of skin. He had slept for three hours. There was still great anxiety and oppression.

In the afternoon, he was again bled to twelve ounces, after which there was a decided improvement; the pulse became soft and compressible, the breathing tranquil, and the patient altogether relieved.

August 7th. He was improving, and slept several hours in the night. The mixture was ordered to be continued. His breathing was quiet, but still diaphragmatic.

From this time no detailed notes were required. The strapping was removed on August 9th, and the medicine was discontinued three days afterwards. He left the Hospital in the beginning of September.

As soon as his condition allowed of an examination being made, Mr. Birkett ascertained that the bodies of the second, third, fourth, and fifth ribs, had been broken at a point corresponding with an imaginary line drawn vertically downwards from the centre of the clavicle to the left nipple; a slight irregularity in each rib indicating the seat of fracture. The sternal end of the left clavicle remained displaced; but when the man left the Hospital, he could move the left shoulder as if no injury had been inflicted. The relief afforded by the abstraction of blood in this instance was most striking. Before the operation, the man seemed at the point of death, so great was the dyspnœa and distress in every attempt at respiration. Afterwards he rested calmly, and breathed with ease. Mr. Birkett attributed the successful issue of this case, after such extensive injury, entirely to the judicious employment of venesection by the direction of Mr. Bryant.

II. CASE OF HÆMATOMA, OR SECONDARY BLOOD-TUMOUR.

Under the care of J. BIRKETT, Esq.

[*From Notes by* H. TOPHAM, ESQ.]

Edwin Westlake, aged 19, was admitted on April 26th, under Mr. Birkett's care. It seemed that fifteen days before his admission, he had been kicked by a horse on the outer part of the left thigh, about its middle. He suffered a good deal of pain at first, but not after the first seven days. On the fourteenth day it swelled, and on the fifteenth became intensely painful and much swollen.

The history of the case and its appearance led to the supposition that a collection of pus existed; but from the sudden and great enlargement of the swelling, Mr. Birkett recognised the probability of its containing blood. A bistoury was passed in beneath the fascia, when a quantity of bloody fluid spirted out to a great distance. The wound was immediately closed, and healed, with the exception of the puncture in the skin. A stimulating embrocation was then applied to the part, and the coagulum became by degrees absorbed. The man was discharged on June 14th.

In commenting on this case, Mr. Birkett said that it was the first instance he had observed in which a large quantity of blood had been poured out at so long a period as fourteen days after the receipt of a local injury.

REMARKS. The pathology of such cases as this is not well determined. It seems clear that the bleeding cannot usually come from a single large vessel, either arterial or venous; for if it were the former, pulsation ought to be evident, and the sac, when emptied, ought to refill; and it is hard to conceive any condition, apart from ulceration or the forcible removal of a clot, in which a vein which had been wounded and closed for a fortnight should burst out bleeding. The hæmorrhage then seems to belong to the class of exhalations, but what the condition of the capillaries is which favours this event, is obscure. As to the treatment, the tension of the fascia, and the pain thus occasioned, necessitated a puncture, without which the irritation would probably have soon passed into suppuration, and the extension of the hæmorrhage might have produced further mischief in the limb. It was important to close the wound after evacuating the blood, in order to avoid the consequences of the admission of air to the clot.

MIDDLESEX HOSPITAL.

FRACTURE OF THE RIBS WITH EXTENSIVE EMPHYSEMA: WITH CLINICAL REMARKS.

By A. Shaw, Esq.

G. B., aged 39, a carman, was admitted on September 10th, 1859, into Middlesex Hospital, under the care of Mr. Shaw, for fracture of several of the ribs on the right side. For many years he has been subject to chronic bronchitis, and up to the present time has been a patient of a Dispensary for Diseases of the Chest. On this day, while unloading his waggon of beer-barrels at a public house, he fell into the cellar, and struck his side with great force against the edge of a barrel. He was brought to the Hospital within an hour after the accident. Three or four of his ribs, in the central and back part of the right side, were broken, their ends being loose and grating. Over the seat of the injury, for a space of about eight inches square, there was emphysema, marked by the swelling and peculiar crackling feel caused by air contained in the cellular membrane. No blood was perceived in the sputa. The dyspnœa was very great. As this was aggravated by the application of the rib-roller, it was removed; and a broad piece of adhesive strapping was drawn firmly over the injured part. The patient being unable to lie down, a bed chair with pillows was provided: he had a purge of calomel and jalap: also a linctus for the cough: and diet of gruel.

September 11th. His difficulty of breathing has increased: the act of expectoration causes great distress: what he brings up is thick mucus. Pulse 82. The emphysema can now be felt all round the chest, over the abdomen, and down the arms. He was ordered a saline mixture, with ipecacuanha wine and chloric ether: and broth for diet.

September 12th. The emphysema has extended to the neck and head, and is now in all the upper half of the body. The face is greatly puffed out, all the lines and wrinkles of the features being obliterated, and the skin tense and glossy; both eyes are quite closed, the eyelids being distended, like segments of round balls, beyond the level of the orbits. Even under the scalp, near the vertex, the crackling of the air can be felt. The scrotum and skin of the penis are very largely distended. The emphysema does not extend to the lower extremities; it terminates abruptly on both sides at the line of Poupart's ligament. The frequency of the cough and painful efforts to expectorate, greatly harass him; the matter brought up is still tenacious mucus. In the intervals of the fits of dyspnœa, the respiration, though laboured, is comparatively tranquil; not being so difficult as to lead to the idea that much air is confined in the cavity of the pleura. As he is unable to lie down, and his body frequently falls forwards, his rest is greatly disturbed; his pulse is weak, and he complains of exhaustion. Brandy, in small quantity, and ammonia, are to be administered when he is faint.

September 14th. He is much the same; the brandy is to be discontinued, as he complains of increased pain in the side.

September 15th. A new source of distress has been added in his having had an attack of diarrhœa; it subsided after a few doses of chalk and aromatic mixture. The emphysema in the face is diminished; he can partly open one eye.

September 16th. The cough is much less troublesome. By substituting numerous pillows for the bed-chair, he has rested more comfortably, and got some sleep. Fish diet was ordered.

September 18th. He goes on favourably. The swelling of his face is much less; he can now partially open both eyes.

September 23rd. His breathing is easy. Since last report, the rib-roller has been applied, and has added to his comfort. He was ordered olei balænæ ℥i, three times a day, after meals.*

September 29th. The emphysema is nearly gone. He is dressed, and has been out of bed for two hours.

October 11th. His cough has almost ceased, and he has gained flesh. He was discharged to-day.

Mr. Shaw has favoured us with the following

Clinical Observations, which were addressed to his class. The case presents an example of ribs fractured by *direct* force. That distinction is important, as, in such kind of fracture, the jagged ends of the ribs are driven inwards, and are in danger of penetrating not only the pleura costalis, but, as in our patient, the lung itself.

The signs of the lung being wounded are, bloody sputa and emphysema. In this case, there was an absence of expectoration of blood. Owing to the elasticity and immediate collapsing of the lung at the wounded part, vessels of considerable size may be opened, and yet the hæmorrhage may not be great.

In emphysema, the air escapes from the wound of the lung during the act of expiration: it is owing to the same compression by which the air contained in the lung generally is expelled through the natural passages, the bronchi and trachea, that the air contained in the portion of lung near the wound is expelled into the cavity of the pleura, through the newly formed outlet, viz., the wound. By degrees, the air which thus issues from the wound collects, in greater or less volume, within the cavity; but it does not long remain there: it is gradually expelled, and that principally by the efforts of coughing. The pressure of the compages of the chest, exerted upon the confined body of air, causes it to escape out of the pleural cavity through the interstices of the fractured ends of the ribs and the lacerated tissues around. In that manner the air gets access to the cellular membrane of the exterior of the thorax; and as the pumping goes on, the emphysema extends. The whole trunk, arms, neck, and face, in our patient, were blown out by the extravasated air. But it was observed that the lower extremities were not affected. The explanation of the latter fact I conceive to be, that, as the patient could breathe only in the sitting posture, and his body was commonly inclined forwards, there were produced at the flexure in the lower part of the abdomen, by that position, a constriction and pressure, which had the effect of preventing the air from descending into the cellular membrane of the lower extremities.

In this case, notwithstanding its absence in the legs, the emphysema was certainly more extensive than is commonly met with. Can you think of any peculiarity in the patient's condition that may account for that? In my opinion, the dyspnœa from which he suffered, in consequence of his chronic bronchitis, had an important effect. The quantity of sputa collected daily in the porringer, you observed, was considerable; it was also expectorated with much effort. We may conclude, therefore, that when he met with the accident, the bronchial tubes were obstructed more or less by tough tenacious mucus. Now, in proportion as the respired air, which fills the lungs in ordinary breathing, is expelled, during expiration or coughing, with difficulty, so much greater will be the tendency of the air contained in the portion of lung near the wound to be emitted in large quantity through that abnormal passage into the cavity of the pleura. Hence the painful and laborious expectoration, and the great and rapid extension of the emphysema, both strikingly observed in this patient, may be justly connected together as cause and effect. I would also suggest, as a reason for the absence of bloody sputa, that just as the air contained in the lung near the seat of the wound could not be expired along the bronchi and trachea, so the blood extravasated into the minute bronchial tubes at the wound could not be expelled through the same passages.

The question may be asked: was the distension of the cellular membrane over such a large extent of the body, and which, especially in the face, had such an alarming appearance, a real source of danger; or was it rather to be considered in a contrary view? That question will be best answered if you reflect on what would have been the consequence if all that air, instead of having been distributed over the exterior of the thorax, had been pent up in the closed cavity of the pleura. How would the patient's breathing have been affected? The first effort would have been a collapse of the wounded lung; it would have been flattened against the mediastinum, and the breathing through it greatly impeded, or stopped. Secondly, if air had continued to be pumped through the wound in the lung, the cavity of the pleura would have become, in the course of a short time, so much overdistended that the heart and mediastinum would have yielded to the pressure—they would have been thrust to the opposite side—they would have encroached on the space pertaining to the sound lung; accordingly, that lung, on which the act of respiration would then have entirely depended, would have been compressed, and incapable of performing its office.

I have witnessed, in a case of fractured ribs, where the emphysema was slight, the dreadful dyspnœa produced in the manner I have described; and also the extraordinary, instantaneous relief given by puncturing one of the intercostal spaces. As soon as the cavity of the pleura was perforated, the air rushed from the orifice with a force that blew out a lighted candle. Accordingly, when we bear in mind to what an excessive degree our patient suffered from difficulty of breathing, owing to the effects of his long-standing bronchitis, it may fairly be

* The oil of the black-whale of the Southern Seas. It has been long used in the Middlesex Hospital as equal in virtue to the cod-oil; than which it is cheaper, and less objected to in taste.

conjectured that if, in addition to that, his breathing had been oppressed by compression of the lungs from air accumulating in the cavity of the pleura, he could not have survived. We may, therefore, look on the escape of air into the cellular membrane, external to the chest, as having been a source of safety—like the steam let off by the engineer, from an overcharged boiler.

In the course of watching the case, we had to keep our minds directed to three distinct sources of difficult breathing: first, that which might depend on the patient's former disease of the chest, of the nature of which we had no exact information; secondly, that which might be the ordinary effect of several ribs having been broken at the same time; thirdly, that which might arise at any moment from the air that escaped at the wound becoming confined, and increasing in quantity within the cavity of the pleura, so as to compress and stop the breathing in one or both lungs.

You will have observed that we applied the rib-roller at first, and immediately afterwards removed it; but again, when the patient improved, returned to its use. It is not unfrequently found, in cases where more ribs than one have been broken without any lesion of the lung, that the chest-bandage, however applied, with or without pasteboard or the like to protect the side, cannot be borne, and we are obliged to abandon it. This is more likely to occur when there has been previous disease of the chest, old bronchitis, or emphysema, in elderly persons, who are the people most liable to have their ribs broken. But, in this case, I was afraid that, if the thorax had been bound firmly, or with tightness sufficient to do any good, two bad results would have ensued: first, it was to be apprehended that the pressure directed on the seat of the fracture by the roller would have stopped the exit of air from the cavity of the pleura, or prevented its free entrance into the cellular membrane; and secondly, supposing air had accumulated in the cavity, and caused compression of the wounded lung, the bandage would have had the effect of interrupting the play of the sound side of the thorax, and, by impeding the respiration in the only lung left to perform the office, would have added greatly to the dangers of the patient, suffering already as he did from chronic bronchitis.

Original Communications.

ON THE SUCTION-METHOD OF REARING INFANTS.

By F. J. Brown, M.D., Chatham.

My object in this paper is to point out the value of milk as the food of infants, and the importance of administering it by the suck-bottle; also, to condemn the practice of pap-feeding.

I wish to show not only that milk is the natural food of infants, but also that suction is the natural mode of taking this kind of food during the infantile period of life. In speaking of suction, I do not mean exclusively the sucking of the mother's breasts; I also include the sucking of a bottle with prepared mouthpiece. I use the word suction to show that the natural mode of feeding in infants is by sucking, in contradistinction to the eating or swallowing of spoon-food.

Pap of every kind I hold in abhorrence. I declare war against it. I tell the mothers and nurses that feeding by pap is an excellent way to kill their children; that, although the majority of infants live and thrive on spoon-food, yet that many perish; and that spoon-food is the cause of the flatulence, eructations, vomitings, and gripes, that are considered to be natural to infants. I believe that these unpleasant conditions are mostly due to the spoon-food; that they are far less frequent in children that are suckled either at the breast or by means of the bottle, *provided that the acts of suckling be not repeated at intervals shorter than three hours.*

Children thrive admirably on breast-milk, or on cow's milk diluted with one-sixth part of water, and slightly sweetened with white sugar. The amount of sugar should be very small; and the milk should be given lukewarm, with the child lying in the semi-recumbent posture, in its nurse's arms. The child may take its fill (from four to eight ounces) each suckling period: thus it will take from one to two quarts, or even more, of milk and water daily. The child may be taught to do without sucking for four or five hours in the night.

The child should not have anything given it in the way of food until the teeth begin to appear. Nature sends the teeth to indicate that mastication is about to replace suction. About this period, it is right to give a small quantity of pap; namely, white home-made bread (free from alum), scalded or boiled slightly, and sweetened by a small quantity of white sugar. If such bread cannot be obtained, give tops and bottoms, or rusks, prepared for use in the usual manner. Gradually increase the feeding, and give beef-tea and gravy, and, finally, portions of any wholesome food that may be upon the table.

When the teeth appear late, the feeding must also be adopted late.

Milk must be the food of toothless infants. Still, after nine months have passed from the birth of the child, although there may be no teeth, a small amount of food may be given; but I should advise that it be beef-tea, rather than bread, in these cases. The cordials and baby-mixtures, so commonly used for infants, would almost disappear from our homes, if children were not sought to be reared as young birds. Birds throw food down the throats of their gaping progeny, and nurses imitate them by shovelling pap into the mouths of their little ones until the food lies in the mouth unswallowed, the child scarcely caring to swallow it. Mark the difference in the results: the young bird thrives in direct proportion to the amount of solid food swallowed, whilst the infant thrives in an indirect ratio.

A few words now respecting the sleeping of infants. Infants ought not to sleep in the same bed with their parents: they should sleep in a cot by the side of the bed—one of equal height with the bed. This would save the child from the danger of suffocation, and would render the mother's bed more comfortable for herself. It is believed that many infants perish, not by being overlaid, but by being asphyxiated by carbonic acid; the child sinking down in the bed under the clothes, and so being exposed to the carbonic acid.

The few remarks that I have made contain nothing that is not already known and taught by all medical gentlemen acquainted with sanitary science; but the public are utterly shocked at the heretical nature of the doctrine, and cry out upon its promoters as if they had a design upon infantile life. I have seen so many fine children reared by the suction of milk, and so many children damaged by spoon-food, that I cannot forbear raising my voice a second time* in favour of the one method, and adversely to the other. I believe that thousands of illegitimate children, that are put out to nurse, and that now perish, might be reared by the milk-suction method. Certainly many of these poor innocents are diseased, and die of syphilis; but for this affection in infants there is a remedy that acts most satisfactorily; it is the unguentum hydrargyri fortius of the *Pharmacopœia*, applied over the abdomen. No medicine is required internally. I have seen many children cured in this way of syphilis, and also of strumous glandular disease of the abdomen.

If it were not unsound policy to interfere with the operations of trade—to disorder the balance between supply and demand—I should recommend that adults in the enjoyment of good health should forego the use of milk, so that babes might obtain an abundant supply of their natural food. There are so many weakly mothers, and so many unmarried women that bear children, that a large supply of cow's milk is needed. I expect that all the cows' milk consumed in this country in tea and coffee would be required for infants, if the milk-suction method of rearing children were exclusively adopted. For my part, I should be glad to see the use of milk confined to infants, to the aged, and to the sick of all ages.

To sum up:—

1. The natural food of infants is milk.
2. The natural mode of feeding, in infants, is by suction.
3. Milk must be the food of toothless infants.
4. The teeth are Nature's indices of the masticatory process.

AN ANALYSIS OF TWO THOUSAND CONSECUTIVE CASES IN MIDWIFERY OCCURRING IN PRIVATE PRACTICE.

By G. Rigden, Esq., Surgeon to the Canterbury Dispensary.

[*Read before the East Kent and Canterbury Medical Society.*]

I have been induced to communicate the following analysis of cases in midwifery to the Society, not only as giving the result of an individual practitioner's experience during a period of many years, but as affording in some degree a contrast between the statistics of private practice and those derived from obstetric institutions, where the average of bad cases, from the

* See my paper on the First Food of Infancy, in the "Journal of Public Health and Sanitary Review" for April 1856.

less favourable condition of the circumstances, is higher than in private practice. I have purposely taken consecutive cases as making a fairer analysis of ordinary midwifery practice, and have excluded all cases that I have attended on account of, or in conjunction with, other practitioners. An analysis of rather more than half of these cases I published in the *Medical Times and Gazette* for 1854.

The 2000 labours resulted in the birth of 2,025 children. One mother gave birth to twins at four consecutive confinements; in each of the other cases of plural birth, twins were born but once to each mother.

Four of the mothers died from the complications or consequences of labour; viz., one from convulsions and coma two hours after delivery, and three from puerperal fever at the expiration of five days, six days, and fourteen days respectively, after the termination of the labour.

Of the children, forty-six males, and fifty females, total ninety-six, were still-born.

Four labours were complicated with *retained placenta:* three from inertia, and one from irregular contraction of the uterus. In the latter, the placenta was removed one hour after the birth of the child. In the former three cases the mother recovered favourably; in the case of irregular contraction, puerperal fever presented itself on the third day, and terminated fatally on the fifth.

Five cases were complicated after labour, with *retention of urine*, for which the catheter had to be employed at least twice daily in two cases for seven days, in the other three, for periods varying from seven to fourteen days. They all terminated in recovery. Three of the above cases occurred to the same female. In three cases, the retention occurred after a first and difficult labour, in the other two cases it was after the second and third, and comparatively easy labours.

Five mothers were attacked with *puerperal convulsions.* In the *first* case, a primipara, unmarried, aged about 18, was attacked within an hour after delivery. Threatening symptoms, for which venesection and cold applications to the head had been had recourse to, had shown themselves during labour. There was but one paroxysm: and the recovery was perfect. The patient has since married, and borne several children, but has had no recurrence of the disease. The *second* case was that of a primipara, married, aged about 34, in whom convulsions occurred during a protracted and difficult labour; they first appeared when the head was in the cavity of the pelvis, and continued, with slight intermissions for seven hours, until the birth was completed. Labour proceeded favourably, but slowly, without instrumental assistance. Venesection and cold to the head were freely used from the commencement of the paroxysms. The child was saved, and the mother had no return of the disease after delivery. She has since had several confinements, without any recurrence of convulsions. In the *third* case, a primipara, unmarried, aged 18, had been subject to epileptic fits since childhood, and was almost idiotic. The labour was not protracted nor difficult. Convulsions occurred during labour, for which venesection and cold to the head were resorted to. The convulsions terminated in coma, in which state a still-born and premature child was expelled by the natural efforts. The mother died comatose, two hours after delivery. The *fourth* case was that of a primipara, aged about 20, married. Convulsions commenced soon after the birth of a living child (labour not very difficult), and continued with slight intermissions for several hours. She was treated with cold applications to the head, and frequently repeated doses of calomel; she recovered. Her next confinement was free from this complication; but in her third labour, when residing at a distance from Canterbury, they again recurred, I believe at a premature birth, and terminated fatally to the mother. The *fifth* case was that of a woman, aged about 30, married, and the mother of two or three living children. She had had several miscarriages of still-born children at the seventh and eighth months. Two distinct attacks of convulsions occurred during labour, for which she was bled freely, and cold was applied to the head. The child, still-born and premature, was expelled by the natural efforts; after which, although large and frequently repeated doses of calomel were given, as many as sixteen attacks of convulsions came on within the next twelve hours, but ultimately ceased. With the exception of a severe salivation, the patient afterwards did well.

Of the labours, *twenty-six* were cases of *breech presentation*, all delivered by the natural efforts: of these eighteen children were saved.

Four were cases of *feet or foot presentations*, all delivered by the natural efforts. One child was saved.

Fourteen were cases of *face presentations;* nine children were saved. In *two* cases the delivery was completed with the aid of the forceps, and the children were saved. In *one* (and in this also the hand presented), the child was delivered by turning, and was still-born. In *eleven* cases the delivery was effected by the natural efforts, and seven children were saved.

Twelve of the cases were *shoulder* or *arm presentations*, all delivered by turning. Two were premature, and the children were still-born. Two were the second of twins; the children were born alive. Three of the other mothers were delivered of living children; and in five cases the children were still-born.

Six were *placental* presentations; all were delivered by turning. The children were still-born, and all premature. In two cases the placenta was removed before the child.

Nine were *cranial* presentations, in which delivery was effected with the *forceps*, in consequence of deficient space. Six children were saved, and three were still-born.

In one cranial presentation, in which space and the natural efforts were deficient, delivery was effected with the vectis. The child was still-born.

In one cranial presentation, delivery was effected by embryotomy, in consequence of failure of the natural efforts and want of space. It was the opinion of Dr. Scudamore and Mr. Crawford, as well as myself, that the child was dead before the operation. The mother has since given birth to several living children by the natural efforts, and without more than ordinary difficulty.

Five patients, subsequently to their labours, were affected with *puerperal fever.* The *first*, aged about 40, married, the mother of several children, was attacked, apparently from exposure to cold, on the tenth day after an easy labour, and died in four days. In the *second*, aged 20, married, a primipara, the disease showed itself on the third day, after a protracted and difficult labour, and terminated in recovery. The *third* patient, aged 39, married, and a primipara, was delivered by forceps. The placenta was retained by irregular contraction of the uterus. The disease shewed itself on the third day, and terminated fatally on the fifth day. The *fourth*, aged about 35, married, and the mother of several children, subject at the time to much domestic affliction, after an easy labour, was attacked on the fourth day, and the disease terminated fatally in two days. The *fifth*, aged about 35, married, and the mother of three children, living in a very unhealthy neighbourhood, was attacked on the sixth day; but, after a lingering convalescence, recovered.

One patient was attacked with *puerperal mania.* She was about 30 years of age, married, and the mother of two children. She had never shewn symptoms of mental derangement until this her third confinement. Her labour was natural and not difficult. There was no apparent cause, except a slight excess of lochial discharge. She was observed on the third day to have a dislike to her child, as well as to exhibit other morbid mental symptoms. The disease continued for six months, and terminated in complete recovery. She afterwards remained free from pregnancy for thirteen years, and at her next labour had no return of the disease.

One mother had an open cancer of the left breast at the time of her labour, and the other breast had previously been removed for the same disease. She recovered well from the effects of her labour, but died of the cancer about three months afterwards.

The following complications were observed among the living children:—

Breech presentations	18
Face presentations	9
Foot presentation	1
Shoulder or arm presentations	5
Forceps cases	6
Spina bifida: one living 4 and the other 6 weeks	2
Imperforate anus: operation on fourth day; death on eighth day	1
One finger and no thumb on each hand, and two toes on each foot. The mother had previously given birth to a child afflicted in the same manner	1
One leg only below the knee-joint	1
One nasal aperture only, and other considerable deformities about the face: died on second day	1

Of the still-born children,* there were—

Breech presentations	8

* With the exception of those in which instrumental aid was had recourse to, a very large proportion of the still-born children were dead before labour commenced. The notes made at the time, however, do not sufficiently record the exact numbers.

Face presentations	5
Foot or feet presentations	3
Shoulder or arm presentations	7
Protracted labour from rigidity: three delivered by the forceps, and one by the vectis	4
Placental presentations: all premature, and probably dead	6
Embryotomy: death during labour	1
Prolapsed funis: one certainly died before labour	2
Complicated birth: dropsy of the amnion; dead previously to commencement of labour	2
Hydrocephalus: one with spina bifida	8
Acephaloid	2
Premature: before the seventh month	19
Do. between the seventh and eighth months	20
Do. over the eighth month	2
Causes of death not recorded	7

Almost all the premature children were dead before the commencement of labour.

Of the twenty-five twin cases, there were—

Both males	cases	6
Both females	„	12
A male and a female	„	7

In four of the latter, the female was first born.

STATISTICS OF ONE THOUSAND CASES IN OBSTETRICS.

By I. Harrinson, Esq., F.R.C.S., Fellow of the Obstetrical Society.

[*Read before the Reading Pathological Society, August 17th*, 1859.]

In bringing before you the statistics of one thousand cases in obstetrics, my aim is not to confirm or controvert the opinions of others, nor to establish tenets opposed to reputed authorities. I shall reason from the materials, which my own tables supply, and not on arbitrary assumptions or conventional reticences, accept the methods or embrace the conclusions of established writers; nor shall I blindly adopt the formulæ founded on numerical data. My endeavour will be simply to collate and to examine my own cases, adducing occasionally the testimony of my friends; and from them to draw lessons, which may be neither destitute of interest nor barren of utility.

My own engagements only are tabulated; for it is evident that, were I to include cases seen in the practice of others, such introductions would spoil any product as to the mean and relative frequency of any particular class.

I have chosen a thousand cases on account of the numerical facilities which such a number affords.

Perfect accuracy of detail I have endeavoured to obtain; but when it is remembered that information has to be elicited from other and in some cases unwilling witnesses, we must be content with approximations to absolute truth. For example, ascertaining a lady's age is not always an easy matter; again, the duration of labour cannot often be exactly ascertained: when the question is asked, How long it is since labour began? the reply may be, some hours; a few days; or, in some extensive imaginations, "the last three or four weeks".

The poverty of correct obstetric statistics has been deplored by a late writer in the *Psychological Journal*, in an article on Puerperal Insanity. He says: "The medical attendant, in the majority cases, has no interest in keeping the statistics of his practice with any accuracy." If each member, however, of this Society has kept (and I trust he has) a record of his cases, then shall we be enabled to exhibit a combined experience, nearly equal to the entire recorded results of the Dublin Lying-in Hospital, amounting now to rather more than 60,000 cases. Let me express a hope that some heavy instalments from the treasury of this Society, rich in this material, may be speedily forthcoming.

Age. The following were the numbers of labours occurring at certain periods of five years.

Between 15 and 19 years	11	Between 35 and 39 years	192
Between 20 and 24 years	176	Between 40 and 44 years	80
Between 25 and 29 years	263	Between 45 and 49 years	9
Between 30 and 34 years	269		

The greatest proportion (above one-fourth) occurs between 30 and 34 years. The age of the oldest mother was 46; of the oldest father, 68; of the youngest mother, 16; of the youngest father, 16.

Months in the Year. The labours occurred in the following proportions in the several months.

January	93	April	67	July	82	October	89
February	68	May	97	August	76	November	91
March	85	June	78	September	82	December	92

November, December, and January, had more than any other three consecutive months. The smallest number occurred in April, and the largest in May.

Comparing the results of birth with those of conception, we have—

Months of birth.	Months of conception.		Months of birth.	Months of conception.	
January	April	93	July	October	82
February	May	68	August	November	76
March	June	85	September	December	82
April	July	67	October	January	89
May	August	97	November	February	91
June	September	78	December	March	92

Days of the Week. It was the opinion of the late Mr. Hooper of this town, that many more children were born in the early than in the later part of the week. The following table confirms this supposition. No doubt it is correct among certain classes, for reasons too obvious to be further insisted on.

Sunday	148	Thursday	155
Monday	158	Friday	105
Tuesday	150	Saturday	136
Wednesday	148		

Hours in the Day and Night. Classifying the labours according to the hours in which they occurred, we have the following result.

Hours.	No. of labours.	Hours.	No. of labours.
12 P.M. to 6 A.M.	270	12 A.M. to 6 P.M.	214
6 A.M. to 12 A.M.	268	6 P.M. to 12 P.M.	248

It is pretty well known that most labours occur in the night; but I was not prepared to find that the next greater number was from 6 to 12 in the morning.

State of the Moon. The following is an arrangement of the labours according to the state of the moon.

			Labours.
New Moon.	Day of change	43	236
	Remaining period	193	
First Quarter.	Day of first quarter	37	252
	Remaining period	215	
Full Moon.	Day of full moon	35	253
	Remaining period	218	
Last Quarter.	Day of last quarter	20	259
	Remaining period	239	

Has the moon anything to do with labours? "It is a prevalent opinion," says Dr. Lardner, "that births occur more frequently in the decline of the moon than in her increase. This opinion has been tested by comparing the number of births with the periods of the lunar phases; but the attention directed to statistics, as well in this country as abroad, will soon lead to the decision of this question."

The circumstance that gave rise in my mind to such an inquiry was, that our esteemed associate Mr. Workman, when in an extensive country practice, discovered that he was not only deprived of his rest, but also of the light of the luminary in question. The table confirms Mr. Workman's experience. I do not mean to decide whether, in my cases, the moon was a mistress or an agent, nor whether the conclusion is legitimate or the coincidences fortuitous. I do not mean to go in with the Greenlanders, "who imagine that the moon visits their wives now and then; that staring long at the full moon will make a maid pregnant." (Dr. Laycock.)

Perhaps there is sufficient in the subject to merit further inquiry; present results it would be equally unwise to build upon, and unjust to doubt.

Theory of Periods: Duration of Pregnancy. With regard to the former of these subjects, it may be well to say here, that I hold with the catamenial method of calculation. Notwithstanding this, however, I have adhered to the old method of counting and expression; viz., by calendar months, as being at present more convenient. A diligent look out has not afforded me one case where I could unmistakably reckon the

duration of pregnancy. The approximations have been towards 280 days.

I have no statistics bearing on Dr. Clay's opinion, that "the younger the parent, the shorter is the term of gestation."

The Number of Pregnancies is shewn in the subjoined table.

Pregnancy.	Labours.	Pregnancy.	Labours.
First . .	272	Eighth . .	44
Second . .	186	Ninth . .	27
Third . .	140	Tenth . .	20
Fourth . .	102	Eleventh . .	10
Fifth . .	82	Twelfth . .	5
Sixth . .	56	Thirteenth .	5
Seventh . .	48	Fourteenth .	3

The numbers from the first to the fourteenth diminish in a gradual ratio.

The Mean Duration of Labours in hours is shewn in the following table.

Number of Pregnancy.	Whole number.	Males.	Females.
1	11·62	11·10	12·14
2	6·08	6·32	5·88
3	5·88	6·22	5·53
4	4·90	5·02	4·78
5	6·03	6·93	4·94
6	5·15	5·66	4·46
7	6·02	7·54	4·78
8	5·91	6·06	5·64
9	5·46	3·78	6·80
10	6·40	10·75	4·02
11	6·23	5·40	7·06
12	11·40	16·	8·33
13	4·06	5·	3·82
14	4·33	5·	3·
Average ..	7·36	7·55	7·17

The first thing the table shews is what was known to most of us to our cost; viz., that first labours are the longest—as long again as subsequent ones. Twelfth labours are apparently an exception; but this probably in the small number of five cases is quite accidental.

I did not expect to find that in first labours the girls were a little longer about than the boys.

Sex of Children. The 1000 labours produced 1010 children, ten being cases of twins; 504 males and 506 females.

Presentations. The presentations were as follows.

Face to Pubes . .	15	Arm	1
Face	2	Breech	26
Occiput (and Hand) .	1	Feet	9
Head	834	Foot	3
Head and Hand . .	114	Knee	1
Head and Cord . .	3	Feet and Cord . .	2
Head and Foot . .	1		
Total Head and varieties	968	Total . .	42

It will be seen in what a majority the head with its varieties presented. I regret not to have noted in my early cases the presentations of the head in the second position. It has been noticed to be more tedious than the first position, for which the reasons are not very obvious. Having ascertained that the head presented, I have been content, and have not attempted that refinement of touch which it appears some possess, in immediately telling its position, when the tip of the finger can scarcely be introduced within the os uteri. I have judged the position of the child by its mode of exit; therefore, I am quite unable to deny or confirm the opinion of Nägele, that the third position merges into the second, and the fourth into the first; and to say whether the face to pubes presentations are the rule or the exception in the third position. I think it may safely be affirmed that the head may come down, in certain cases, in any position.

I cannot agree with Dr. Ramsbotham, when he says, speaking of the third and fourth (his fifth and sixth) positions: "These irregular positions of the head are frequent causes for the necessity of instrumental interference."

Division of Labours. The classification adopted is—

1. *Natural:* including all the varieties of head presentation and also premature labours.
2. *Lingering.* This probably would be better called one of the varieties of natural labour, from which it differs only in duration. I cannot class it among the difficult labours, as in the Dublin division; because tedious labours may not be difficult, nor difficult tedious.
3. *Preternatural:* Presentations of the breech and upper and lower extremities.
4. *Complicated:* Twins; presentation of funis; hæmorrhage; convulsions; etc.
5. *Instrumental:* Forceps; perforation; and induced labour.

The tables afford—

Natural . . .	907	Preternatural . .	30
Lingering . .	15	Complicated . .	31
Instrumental . .	17		

Natural Labour. It might reasonably be supposed that in so very common an occurrence as natural labour there could be little difference of opinion either in the principles of the practice, or the practice of its peculiarities; yet how marvellous is the diversity, scarcely two practitioners agreeing in its management. I mean, not only in the management of those small matters which are—though these are by no means defined—usually considered necessary, but of others of more weighty import, which are either—if not unknown—unpractised, unheeded, or ignored. The great deficiency is in preliminary treatment. I fully agree with Dr. Tyler Smith, when he says: "Nothing will contribute more to the reduction of the dangers and mortality of obstetric practice than a careful attention to the disorders of pregnancy."

It would be foreign to my present purpose to enlarge on this subject now. On a future occasion, I hope to bring it before you in all its detail.

Lingering Labour.—Fifteen cases.

Number.	Age of mother.	No. of pregnancy.	Duration in hours.	Sex.	Presentation.
1	40	1	36	M.	Natural.
2	39	1	40	F.	Do.
3	32	9	26	F.	Do.
4	30	1	31	F.	Do.
5	25	3	26	M.	Do.
6	40	5	58	M.	Do.
7	39	8	35	M.	Do.
8	21	1	27	F.	Do.
9	41	12	29	M.	Do.
10	34	3	25	F.	Do.
11	34	1	28	F.	Do.
12	19	1	48	M.	Do.
13	21	2	30	M.	Do.
14	19	1	25	F.	Do.
15	25	1	36	F.	Do.

Arranging these lingering labours according to the number of pregnancies, we have—

With first child	8	With eighth child	1
With second child	1	With ninth child	1
With third child	2	With twelfth child	1
With fifth child	1		

According to the ages of the mothers, there were—

Age of mother.	No. of cases.
15 to 20	2
20 to 30	4
30 to 40	6
40 to 50	3

The mean age was 30½ years; the mean duration of labour, 33 hours; and of first labours, not quite 34 hours. There were seven males and eight females. The mean duration of labour with the males was 38 hours; with the females, 30 hours. The presentations were all natural.

The tables shew that more than half were first labours, late in life, having a range of duration of from 25 to 58, and a mean of 33 hours. All the children were born alive. One mother died from causes in nowise connected with prolonged labour, but from erysipelas, unfortunately conveyed by myself.

The table does not bear out Dr. Simpson's axiom, "that labour is dangerous according to its duration." I shall have to recur to this subject presently.

Preternatural Labours.—Thirty cases.

No.	Age.	No. of child.	Duration of labour.	Sex.	Part presenting.	Child dead or alive.
			Hours.			
1	37	1	5	F.	Right hand and cord.	Dead.
2	37	2	5	F.	Breech.	Alive.
3	36	4	2¼	M.	Footling.	Dead.
4	35	10	6	F.	Left knee.	Alive.
5	30	8	10	M.	Feet.	7 months; dead.
6	36	6	2¼	M.	Breech.	Dead some days.
7	25	1	13½	M.	Breech.	Died in birth.
8	33	9	5	F.	Feet.	Died in birth.
9	28	1	21	F.	Breech.	Alive.
10	31	1	7	M.	Breech.	Alive.
11	26	2	6	M.	Breech.	Alive.
12	31	4	4	F.	Breech.	7 months; dead.
13	38	1	50	M.	Breech.	Dead some days.
14	27	3	24	M.	Breech.	Alive.
15	22	1	9	F.	Breech.	Alive.
16	31	5	12	M.	Foot.	Alive.
17	24	1	6	M.	Breech.	Alive.
18	27	5	13	M.	Breech.	7 months; dead.
19	32	5	5	F.	Breech and foot.	7 months; dead.
20	30	2	2	F.	Feet.	Alive.
21	19	2	6	F.	Feet and head.	7 months; dead.
22	33	3	6	M.	Breech.	8 months; dead.
23	28	1	30	M.	Breech.	Alive.
24	22	2	6	M.	Breech.	7 months; dead.
25	28	1	32	M.	Breech.	Alive.
26	39	5	12	F.	Breech.	Alive.
27	37	3	2	F.	Breech and feet.	Alive.
28	33	5	2½	F.	Breech.	Dead; no scalp.
29	26	1	10½	F.	Breech.	Alive.
30	26	4	4	F.	Breech.	7 months; dead.

Further classifying these, we find the following results—

No. of pregnancy.	No. of cases.	No. of pregnancy.	No. of cases.
First	10	Sixth	1
Second	5	Eighth	1
Third	3	Ninth	1
Fourth	3	Tenth	1
Fifth	5		

There were 15 males, and 15 females.

The mean duration of labour was 10·3 hours: with the males, 14 hours; with the females, 6·6 hours.

Of the presentations, 22 were breech (two with feet): of these, 12 were alive and 10 dead; of the dead, two had been dead some days. Six were premature; five at seven, and one at eight months. Two died in the birth (one before I arrived).

There was one hand and cord presentation—child dead; and one knee—child alive. There were six footlings—two children alive, and four dead. Of the dead, two were premature (seven months), and two died in the birth.

The table does not include one dead breech presentation in "induced" instrumental cases.

One-third were first labours. The short mean duration of the labours, little more than ten hours, is worthy of notice. To lose a few children in these presentations by over much care for the mother, where there is such opportunity for rashness and for mischief, is pardonable. Only one case of arm-presentation in a thousand labours is a remarkably small proportion.

[*To be continued.*]

Introductory Lecture

DELIVERED AT THE

GROSVENOR PLACE SCHOOL OF MEDICINE,

OCTOBER 3RD, 1859.

By John Cockle, M.D., F.L.S., Licentiate of the Royal College of Physicians; Physician to the Royal Free Hospital; Lecturer on the Principles and Practice of Medicine at the above School; etc.

Gentlemen,—In undertaking the duty so kindly delegated to me by my colleagues, of delivering the introductory lecture of the present session, the first and main difficulty consists in the selection of a subject. I would address you in a manner befitting the time and the occasion, and so acquit myself, that your first impressions of medical life should be not only lasting, but useful and directing. I know that for a lecture like this, the latitude for the subject is so wide, and the choice so extensive, that I ought to incur no risk of vexing your ear "with a tale twice told." These very contingencies, however, become occasion of embarrassment by not sufficiently restricting the subject-matter. The permissible discursiveness in these annual orations appears to me frequently to entail obscurity by impairing that sharpness of outline which any discourse directed to the neophytes of our science should possess. As students, then, I address myself exclusively to your comprehension, caring far less for my language than my material.

To bestow upon a complex subject connectiveness and intelligibility, is all that, in the allotted time, I dare aspire to. And, even for this end, I must entreat your sustained attention; for medicine, beyond most other philosophical pursuits, is barred by difficulties. Its oracles yield no response to our surface questioning. No key of common temper will force the intricacies of the lock that guards the knowledge we desire. Constant reflection and untiring perseverance are the powers we must employ; powers, by the intermediation of which, science wrests from nature the "living truth."

With these views before me, I select for the subject of the lecture "The present and past Phases of Physic." Such an intention involves the consideration of the science of to-day, and the attempt to ascertain in what particulars it differs from that of the past. From our survey of these periods we may, perchance, obtain *data* to indicate the future phase of medicine—the phase to be presented to you when the day of your professional maturity shall have arrived.

Let us then, standing on the broad platform of our science, steadily contemplate the actual phases of medicine opening around: and ascertain their relative weight and value in the scientific balance. We shall find minds of unquestioned greatness vying with each other in the common object of extending the boundaries of our knowledge, and, though travelling by different routes, each hoping to bring medicine, more or less nearly, to its desired goal—positive science. Now, looking at these labourers in their respective positions, we find them dividing our science into five grand sections, passing by insensible degrees into each other, but all having distinct centres of inquiry.

The *first* of these divisions is working on the basis of a refined and elaborate *physiological pathology*. Its proposed object is, to solve the higher problems of organic life, and, by virtue of such solution, to deduce a general theory of disease, sufficient in extent and comprehension to embrace in the category each particular still requiring classification, and to infer, from such theory, a susceptibility of the system to given agents. In this sense, the school of physiological pathology considers its science the sole rational basis of therapeutic.

The *second division* includes those who, exercising their reason as to the *modus operandi* of morbific agents, superadd the use of such remedies as experience has affirmed to be fitting for the cure of diseases, whether general or particular. The doctrine upheld by this section may be styled *rational empiricism*.

The third division comprises those who, endeavouring to investigate the general laws of the causation of disease, irrespective of symptoms or particular treatment, aim at the removal of such causes by the strict enforcement of sanitary regulations; in other words, removing the community from the sphere of disease-producing influences. This sect is called *hygienic*.

The fourth section enumerates those who, though studying minutely the causes and symptoms of disease, trust mainly to the innate power of the organism to repair its injured mechanism. This school, the head quarters of which are in France and Germany, is attaining considerable prominence in the history of our epoch. They are known by the name of *expectants* or *naturists*.

The *last section* embraces those who distrust our actual therapeutics. It is not that they question the action of medicinal agents; for example, that jalap purges, tartar emetic vomits, or that opium narcotises; but they contend that, with our organs so delicately attuned, and, consequently, so liable to perturbing causes of such varied nature, it is impossible to erect a criterion; in other words, that we have no means of distinguishing the exact times and conditions under which such medicines can be successfully employed. Skoda, the distinguished head of the Vienna school, is the great representative of this class. To illustrate his doctrine, therefore, I cannot resist the opportunity of reading you a *résumé* from the pen of Dr. Gallavardin, a French physician, who recently visited his clinique. He observes: "That which essentially distinguishes the originality of Skoda from that of all the other clinical observers of Germany, is his scepticism. A doubter, so absolute, so fervent, has rarely, if ever, been seen in medicine; so that with the Germans, Skodism is synonymous with Pyrrhonism in physic. Every year, at his clinical lessons, he tries successively upon his twenty-eight patients, all the most vaunted medicines of the *Pharmacopœia*. And with what intention think you? Simply to convince his pupils that all these medicines are invariably inefficacious. If, by chance, a prompt and marked amelioration follows the employment of any treatment, he bestows all the honour upon the natural progress of the disease. For instance, a young and very robust man, 19 years of age, entered the Hospital on the 11th of May, for pneumonia of severe type. On the 13th and 14th, Skoda prescribed infusion of digitalis, which produced six evacuations daily. On the 15th, he bled. On the 16th, the pulse, which was 106 the preceding evening, had fallen to 66. To explain this prompt and obvious modification of the pulse, Skoda thus expressed himself: 'It may be the effect of the bleeding; such a result has occurred. It may be the effect of the digitalis; that has been also observed. But it may equally be considered as due to the natural progress of the disease; for that result has also been seen.' This is Skoda's habitual mode of argument, invariably indirect. In this manner he gradually insinuates doubt into the minds of his pupils, and eventually leads them to lose all practical faith." Such is an outline of the *sceptical* school.

The forces of modern medicine having been thus paraded before us, we may, to render the historic circle and the means of contrast more complete, look with advantage through the deep vista of the past, and see how far these various divisions were represented by the retainers of Æsculapius in the olden and mediæval times. I would lead you far away from the busy modern scientific world, to a period of two thousand five hundred years ago, where, in the smiling Cyclades, the fathers of medicine were cradled—Hippocrates greatest of them all. Anteceding even these remote times, medicine was held in unnatural thraldom by the speculative philosophers of the age. Hippocrates, dissevering this alliance, and placing medicine on an independent basis, established the first era in its history. He raised her children into a distinct profession; a priesthood having for its work the noblest ministrations and the most elevating studies. Now, Hippocrates, as the first cultivator of the pure science, can hardly be designated the ancient representative of any school; yet did he shadow forth in his profound philosophy some of the elements of the several sects we have delineated. The superstitions of his time, we may infer, prevented him from studying the anatomy of man in its healthy and diseased manifestations. Hence, in our modern acceptation of the term, he was neither anatomist, physiologist, nor pathologist. Still, in your onward career, you will find a pathology and physiology neither to be learned in the laboratory, nor excogitated in the study—a physiology and pathology based on the observation of the living man in health and disease. In this sense, he was profoundly versed in each science. Hence the physiological and pathological schools may claim and have claimed him as a master. He is remarkable for the boldness of his speculations concerning the various causes and essence of disease. Empedocles had taught that fire, air, earth, and water, were the first principles of things. Hippocrates converted these elements into the four cardinal humours—blood, phlegm, yellow and black bile; and speculatively assumed disease to result from the excess, defect, or commixture of these fluids. Thus originated the dogma of the *humoral pathology*, or, diseases of the fluids.

One school in medicine already alluded to, I mean that now termed hygienic, Hippocrates,—if we except the sanitary precepts of the inspired law-giver,—even founded. He investigated those relations which are maintained betwixt man and the outer universe. He was, in a large sense, cognizant of the external exciting causes of disease, and taught, practically, the importance of their removal. Never was sublime and exalted talent in hygienic science better shown than when, at the plague of Athens, by blocking up the openings in the mountains, through which the pestilential miasm was wafted by the winds upon the city, he stopped the further progress of disease. And, certainly, never could proffered golden crown adorn a nobler brow. With all this rationalism in his medicine, Hippocrates further blended a simply empirical system of treatment of disease; that is, adopting experience and observation as his guides. In this respect, he delineated what is, and always has been, for most part, the medical practice of daily life. To resume, he was not the eclectic of the present day, because he preceded systems; but he was the unequalled founder of what is called *rational empiricism*.

Soon after Hippocrates, a distinct sect sprung up in medicine, the representatives of which impugned the validity of the reasoning faculty in its inquiry concerning the occult causes and essence of disease. For they contended, that causes hidden and inaccessible to our senses, could not afford a basis for rational treatment. But, on the other hand, they maintained that the nature or essence of disease consisted in the aggregate of their appreciable phenomena or symptoms. They therefore adopted a system of pure *empiricism;* in other words, affirming that medicine was to be perfected by experience alone. Disregarding all physiological and pathological hypotheses, they placed their main trust on previous observation, as to the efficacy of particular remedies in particular diseases. Reasoning from analogy was only adopted when some new disease was first observed.

Suppose, for example, a disease occurred as yet undescribed by authors. Seek, argue this sect, either from your reading or your experience, what disease approximates most nearly to the one under consideration, and treat this latter by the remedy which succeeded in the former case. In the same manner, a remedy which cured a rheumatism of the leg might, arguing analogically, probably cure a rheumatism of the arm. Such was the doctrine of the sect originated by Acron of Agrigentum, and, subsequently, perfected by Serapion.

The next ancient sect which comes before us is known as the *methodic* sect, whose founder was Themison. Their doctrine requires some little elucidation. Epicurus, the Greek philosopher, refining upon Democritus, held that the universe was formed by the fortuitous concourse of atoms of various sizes. Asclepiades of Bithynia, applying this doctrine to physic, maintained that health or disease was produced by the want of relation of these atoms to the pores of the body. And now first sprang up the great rival theory—the pathology of the solids as opposed to the pathology of the fluids advocated by Hippocrates.

We meet with next, taking origin about the first century of the Christian era, the *pneumatic* sect founded by Athenæus. Its followers believed that an immaterial principle or *pneuma** pervaded the body; and that disease resulted from perturbations of this subtle essence. There are two points connected with this sect of much historical interest. First, as we shall subsequently see, this doctrine, under a new name, reappeared in medicine, and still remains under the term of vitalism; secondly, the pneumatics appear to have had a notion of the existence of some life-sustaining principle. It may be, that what we now recognise as oxygen gas was dimly foreshadowed by these ancient sectarians.

Following the thread of history, we arrive at an *eclectic* school, the great representatives of which were Archigenes, then Celsus, and later, perhaps, Galen. This school taught that which we shall subsequently enforce, viz., that a vein of truth ramifies through all these various sects; and that he will be most likely to act the best who, without bias, draws his knowledge from these fountain-heads.

From this period we find no special school in medicine until the time of the Arabian Avicenna, who, engrafting much

* The doctrine of the "Pneuma" differs but little from that of the "Nature" of Hippocrates.

clinical observation on the Galenical system, held divided sway with Galen himself for some centuries after. Approaching nearer the confines of our own time, we find in the sixteenth century, the birth-time of the great Reformation, a physiological phase developing itself. This phase has continued, undergoing, nevertheless, various modifications. It has developed itself now—in a chemical sense; now, taken an anatomical basis, and therewith a mechanical and mathematical type; again, it has shown itself linked with the idea of a separate essence or principle called life—vitalism. The phase to which I have alluded, originated in the labours of the chemical school; Paracelsus leading the way, followed by Sylvius de la Boë and our own learned Thomas Willis. From this crude state, the *chemico-physiological* school has undergone, through the labours of Mayow, Boyle, Black, Priestley, and others, various developmental changes down to the refined chemistry of the present day.

At the time that chemistry was thus lending her aid to medicine, modern anatomy sprang into existence at the bidding of Vesalius. The master-spirit breathed order and beauty into the cold, impassive form, and imparted a healthy impulse to a study which had, heretofore, been too generally regarded as unnatural and repulsive. The great Italian anatomists, Eustachius, Fabricius, Fallopius, Columbus, and Cæsalpinus, furthered this study, and laid, deeply in their science, the foundation-stones of that most important of all physiological discoveries—the circulation of the blood. This great discovery, made by a countryman of our own, whose immortal name has become a household world, imparted to medicine, in all its branches, a precision it had never before attained. Indeed, in the present day, Harvey's discovery plays the leading part in all the phenomena presented to our ordinary experience. The circulation of the blood, however, in its entire solution, owes a deep debt to the labours of Malpighi, who, in the year 1680, first demonstrated by the microscope the actual transit of the blood from the arteries into the veins by the mediation of the capillaries. Through this great original observation of Malpighi, and its corollaries, not only is the direct circuit made manifest, but various other more complicated facts connected with the circulation—namely, the circulation through the glandular system—has been the reward of the initial impulse he gave in this direction. Without him, indeed, the Harveian problem were not yet fully solved. The discovery of the circulation set also in action another department of physiological science, which may be called the Mechanical. It opened a boundless field of inquiry as to the movement of the blood and power of the impelling organs. The advocates of this study held, it may be, extreme views as to the mechanical forces of the organism; but, to this hour, the problems of the dynamics of the body remain under consideration; and, while we smile at the iatro-mathematical physiologists, as they are called, for many of their crudities, we have yet to follow them in most, if not all of their researches, before we comprehend the whole economy of being. The chiefs of this school, Borelli, Baglivi, and Boerhaave, may be said to have revived the ancient doctrines of Asclepiades and Themison.

While the physiological school was yet busy with the chemical theories of Paracelsus and his followers, as also with the mechanical views and their advocates, the old doctrine of the pneumatics underwent revival. This, under a new name, was termed *vitalism*. We may regard Van Helmont as the man who reproduced this long lost view. Accepting his hypothesis of a distinct essence or principle pervading the body, and substituting for *pneuma* or *archæus* the term vital, we have the origin of a theory which, through Stahl, Barthez, and John Hunter, still remains, sometimes perplexing us by its subtleness, at others becoming ancillary to our appreciation of abstruse phenomena; but still, like some other vague interpretation of Nature, awaiting inclusion under a more comprehensive formula, and promising to him who shall translate the meaning aright, indeed, an immortality of fame.

Almost in juxtaposition with these revivals of ideas originating in the past, there appeared, contemporaneously with Harvey, the greatest exponent of the rational empiricism of Hippocrates—Sydenham. Thoroughly, indeed, did this English Hippocrates enter into the spirit of his great master. In truth, the parallel between the two is nearly perfect. Both rescued medicine from the subtleties of the schools; both sought to lead her back once again to the path of pure observation; both were unversed in the collateral branches of their art; both bestowed unbounded attention upon those atmospherical and general phenomena which play so important a part in the etiology or causation of diseases, especially those of an epidemic type; both simplified the science of therapeutics; both adopted the doctrines of the humoral pathology; but, if I dare criticise these great Coryphæi of our art, both were as unsound in their speculative reveries as they were true to nature by their matchless power of observation.

Before we finally leave this truly eventful epoch of Harvey and Sydenham, we faintly trace in the horizon of medicine the advent of another science, which has to the present day continued with never-ceasing progression, and now stands forth in boldest relief: I mean the science of pathological anatomy. Its father was Benevenius, whose labours really belong to the fifteenth century. It received its second birth in the voluminous compilation of Bonetus, another of the Italian school. A third impulse was given by Harvey himself, as evidenced in the Introduction to his works, and in his frequent reference to those Medical Observations which never yet have seen the light, and which, I fear, we may now consider lost for ever. The note, thus for the third time struck, roused into full play the marvellous energies of Morgagni, whose researches into the *Seat and Causes of Disease* will ever remain a monument to his genius and his fame.

I have but to refer to one other phase of medicine in our onward progress; it has been before alluded to, as the hygienic or sanitary. As a developed science, hygiene is, strictly speaking, of modern origin, with its restorers and masters living among us. I shall defer any further remarks respecting it for the moment, simply observing here, that its tendencies, if not the most immediate, are among the most important, and replete with promise.

Thus, then, we have reviewed both present and past in a brief, but, as far as time permits, comprehensive retrospect. If we have read aright the page of the historic past, we learn that all modern systems take deep root there; and we are, moreover, taught the lesson that much that we deem novel in our doctrines and our practice is but the after-growth of such root—is but the reappearance of old sectarians on the stage, although in modern garb. We now return to our starting-point. The links of the chain are, thus far, complete. Amid all this confusion and seeming perplexity, you want some clue to guide you—some "fortunate word whispered by which the riddle is read". Indeed, to you the answer is all important, with respect to the relative value of these systems as influencing practice. I am not insensible to the weight of my position as your Mentor for the hour, and can only hope that my ability may keep pace with my desire to guide you right. I know that one chord, falsely struck, may vibrate painfully through life; one wrong bias to the now pliant mind may so distort the mental vision, that years of toil may not redeem the wrong. The true amount of good to be obtained from the survey, is conditioned upon our correct appreciation of these various doctrines, in their theoretical and practical bearings. I shall assume that the majority of learners here intend to follow out medicine in its entirety, as a science.

I would, therefore, suggest *in limine* that, the broader the basis of your study, the more expanded will your philosophy eventually become. Some time ago we left eclecticism, with the promise to return to its consideration. It is, perhaps, hardly to be called a system, being rather the expression of the tendency to a critical selection from other sections of their most useful parts, and to blend them into one harmonious whole. With such a definition of our term, and in such a spirit, let us see what parts of scientific knowledge the eclectic should select. It is clear that he should study anatomy; for from this source he learns the whole physical structure of the organism, and bases his knowledge as to those higher laws by which that organism "lives, moves, and has its being". He appreciates anatomy in its most refined development; he recognises it as an exact and positive science. It is, again, obvious that the eclectic will study physiology; for this science aspires to a knowledge of the functions of organic being, and to expound the laws by which such functions are governed. In pure theory, indeed, as we have seen physiology associated with pathology assumes the possibility of absolute pathological knowledge; that is to say, it assumes that, the nature of disease being known, the therapeutical indication follows as a natural corollary. In as far as this science can make good this bold pretension, it is to be diligently pursued. Let me first point out to you, briefly, what it has done with reference to the determination of the actual seat of disease, before I arraign its capacity to act as an arbiter in deducing the principle of cure. I will first mention three experimental facts, giving them all the prominence they demand.

There is a disease called diabetes, of the source of which, whether general or special, ten years ago, there was no direct knowledge. The researches of Bernard have shown, now, that this disease can be produced, temporarily, by simple experiment, namely, puncturing the medulla. There is another disease called epilepsy. Till now, we knew of no direct means by which this disease could be developed; but we have knowledge, from the experiments of Brown-Séquard, that a permanent epilepsy may be produced by a given division of the spinal cord. A few months since, we had no proof that a well known disease, endocarditis, with its specific physical signs, could be induced by experiment. Dr. Richardson has shown how lactic acid, injected into the peritoneal sac, has produced the result stated. In like manner, but not so determinately, in relation to known disease, Galen in his time proved that division of the recurrent nerve would produce aphonia; and Sir Charles Bell showed that division of different roots of the spinal cord would cause paralysis of motion or sensation. Now, these and other experimental inquiries in physiology and pathology are, in a sense, of high importance. They show what this mode of inquiry is capable of effecting; and they open to you, who will one day enter the arena of scientific debate, what is of particular interest to inquiring minds; for there are yet the diseases, tetanus, hydrophobia, chorea, and many others, still open to the same lines of research.

Having thus far laid before you the pretensions of Physiological Pathology to localise disease by experiment, I next proceed to inquire, and I hope impartially, how far, having thus ascertained, to some extent, the nature of disease, this science can and does infer the method of the cure. One of the latest examples of such an attempt was afforded by a distinguished English physiologist lately deceased—tracheotomy for epileptic seizure. But experience has not shown that the suggestion is likely to prove either generally applicable or successful. So far this school has gone. Its inquiries, however, have not yet reflected any steady light on therapeutic science. Should the latter term, taken in its very widest sense, demand some qualification of the proposition, it would be with respect to some few of the operations of surgery. But you will not, I am sure, Gentlemen, suspect me of any disposition to underestimate the excellence of that important branch of study just named, physiological pathology. The *quotum* it has contributed to the ever widening stream of knowledge is, we all admit, immense. But I urge of you not to lose sight of the true fields of the respective sciences, and to bear in mind that none can transcend its limits with logical impunity. The final aim and end of medicine is the cure of disease. The gulf between physiological pathology and therapeutics must be bridged over by clinical observation and experiment; that is to say, by what is known as "rational empiricism". Simple knowledge of the nature of disease can no more, of itself, suggest the remedy, than can a knowledge of the nature of the rocks and mountains thrown up by voleanic agency suggest the mechanical means by which these may be removed, and the barren spot restored to its primeval freshness. Let us test the truth of what I here advance, by selecting a few of the best known and homeliest illustrations.

Look to the history of the virtues of cinchona bark. The untutored Indian, chance-directed to the healing stream, into which cinchona bark had been driven by the winds, found that the stream that slaked his thirst achieved his cure. And this, to him, was all sufficient. Some reasoning Jesuit traced the pregnant sequence, and added to our therapeutic treasury cinchona bark, one of its richest, most invaluable gifts. Since that poor Indian lived, how many pages have been written, both on the nature of the fever, and the action of the bark! But, I would ask, whether all this co-called knowledge has afforded one single element of explanation of the simple formula—*bark cures intermittent fever?*

Take another illustration. A thousand years ago, the Arabian Rhazes described the pathology of small-pox so accurately, that, even now, after this lapse of ages, it scarcely requires retouching. Barely half a century ago, the protective power of vaccination was discovered. Was this a deduction from the known pathology of the disease? I will not libel your historical knowledge by pausing for a reply. A country milkmaid, living in some remote district, where small-pox frequently raged in all its fearful intensity, learned from simple observation that, if from the udder of the cow, a certain pustule were produced upon the hand, immunity was given from disease. No observation could be more simply empirical than this. The fact in all its simplicity, was related to one of our greatest observers. Jenner's intuitive sagacity saw the deep import of the tale. He followed out the experiment in all its simple grandeur, verified it on the largest scale, and bequeathed to suffering humanity, for all coming time, one of its greatest blessings.

There is a disease called bronchocele, vernacularly *goitre*, or enlargement of the thyroid gland; the cure of which was again discovered by simple observation of the purest kind, though the history is less generally known. It was found that burnt sponge cured the disease; and although more recent researches have shown that the virtue of the sponge was in proportion to the amount of iodine it contained, still the fact is in no way changed; and another practical truth is thus added by simple observation to practical medicine.

I must not dwell on more examples; these sufficiently establish the fact that the remedy here was not deduced from the nature of the disease.

I have now, I trust, more than verified the proposition that clinical experiment is still the most valuable source on which to base the healing art, especially when combined with that rational diagnosis which the sciences named, and that of pathological anatomy, supply. To avoid a cumbrous terminology, I have included the schools of pathological anatomy and physiology; but the above criticism applies with equal force to pure pathological anatomy. The proximate cause of disease may be, and has been, ascertained with the utmost precision by the labours of this distinguished school, and rational diagnosis has been further perfected, but an equal sterility exists with regard to therapeutic indications.

Once more, as eclecticism abstracts all that is useful, so from the hygienics must it select a wreath. It would be disingenuous to ignore the fact that this sect presents a front as practical as it is imposing. The prophylaxis or preventive treatment of disease has been ever held in the highest estimation as a branch of the healing art; indeed, is popularly considered even better than the cure. When we ponder over the dreadful effects of the almost total neglect of sanitary regulations in the middle ages, when governments, in their almost instinctive desire to hold fast, or extend, dominions gained, bestowed no thought upon the public health; when we further reflect that, the only spark which glimmered in these dark times, was from the imperfect hygiene contained in the health maxims of the school of Salerno;—in the name of humanity, we hail the coming light. Were I required to select one grand illustration of what its more modern followers have achieved by their persevering industry, and show how nearly they have surpassed almost any other set of observers, I would point to the history of jail-fever in England, the records of which have been recently most carefully penned by my colleague Dr. Webb. This disease, a form of typhus, once infested every prison in this country, as well as abroad. The judge in his ermine, the advocate in his robe, down even to the juryman in the box, sought in vain, by power of mystic rue, to exorcise death. No medicine brought the wished for cure. The pioneers of sanitary science, led by the intrepid Howard, traced out the cause, and showed the value of the admission of pure air. By a means so simple, yet, in results, so prolific, this moral Hercules cleansed these worse than Augean stables. Thus, by one blow, not only did he free our native isle from a hydra-headed pest, but permitted even nations to sleep on in safety.

From the expectant school, the eclectic may largely draw, provided he correctly appreciate its teachings. It has been, perhaps, the fault of the sect that they have generalised too vaguely, and carried their doctrine out of the sphere of its true utility. I do not think it can be disputed for a moment that there are diseases which terminate, when uncomplicated, by a natural process of recovery. This class includes the pyrexiæ and febrile exanthemata, or, as they are designated in modern phraseology, zymotic diseases. I select another example as a curiosity in our medical literature. But a few months ago, the greatest violence would have been done to our opinions, hallowed as they were by the experience of ages, by the supposition that sthenic pneumonia could have been put *hors de combat* unless at the point of the lancet. Look at the result which follows our less heated notions of the nature of inflammation. It is now most conclusively proved that pneumonia of moderate intensity, attacking persons of unimpaired constitution, runs a course as definite and cyclical as the exanthemata, and almost invariably terminates in recovery. Indeed, Professor Dietl, of Cracow, one of the great heads of the expectant school, asserts that pneumonia, treated by bloodletting, is more frequently fatal than when this remedy is omitted. I would also add pleurisy, and even pericarditis: for Bamberger, the most recent

and trustworthy writer on diseases of the heart, affirms that of twenty cases of pericarditis, among which seventeen resulted from acute rheumatism, not one terminated fatally. Even when this disease complicates pneumonia and pleuritis, the prognosis, according to the same authority, is also favourable.* It is mostly when pericarditis is associated with otherwise incurable disease that it accelerates the fatal termination. If diseases so important as these pursue their cycles without destroying the organism they invade, may we not fairly infer that as our knowledge of the natural history of disease advances, many others may claim the right of insertion in the list? It is self-evident that, in so far as correct observation can adduce the fact that a disease exhibits the tendency to spontaneous recovery, so is it the duty of the practitioner to permit that disease to abate by the natural process; in fine, to avoid as much as possible the reproach of the *nimia diligentia medici*. Within the limits here prescribed, the practitioner will act most rationally in trusting to the expectant plan. But now the analogy fails; for some diseases tend as naturally to death as these to resolution, so that the *vis medicatrix naturæ*, as an abstract dogma, holds no sound place in medicine. Among these may be enumerated constitutional cancer, hydrophobia, tetanus, rupture of the heart and great vessels, and other diseases your reflection may supply. In these, expectant treatment, of necessity, fails.

Here the physician must be not only the *minister*, but the *magister naturæ*; in short, he must, as far as experience can guide, avert what may at present be considered a natural tendency to dissolution.

With one exception, our examination of modern sects is finished.

The remaining sect is the sceptical, respecting which I would only add that we have seen it, in principle, a simple abnegation of the efficiency of therapeutic agents. As a system it stands out, cold, cheerless, and hopeless. I would not press it into eclecticism, since, by weakening our faith, it paralyses our action. Indeed, we thoroughly concur in the sentiment of Cabanis, that for the successful practice of medicine there must be annexed the belief in its value as a science.

Although you have, in eclectic spirit, laid each system under heavy contribution, I must still impress upon you that you must ever draw your largest and trustworthiest supplies from the rich mine of simple clinical observation—a mine in which Hippocrates and Sydenham both have toiled, nor toiled in vain; for they have left for our guidance, extracts from the book of nature, which Time, with all its mutations of opinion, can never change.

But, in enlisting you into eclectic ranks, I refer, not to that pseudo-eclecticism that, as it were, mechanically and without reserve, selects the latest theory, but that, the premises of which, challenged by your intellect, is made your own by right of mental conquest. For pure indeed must that system eventually become which ever tends, by the application of a severe logic, to eliminate the false. With this admixture, visionary were the attempt to erect true science—Sisyphus-like, we raise the stone in vain.

Be you, then, eclectics in this, the wider, better sense—ever ready to disarm prejudice at the altar of principle.

Thus far, gentlemen, our wanderings have gone; at times in many a devious track; now o'er quicksands; now through mists of error; but ever and anon discerning in the far distance, reposing on her adamantine basis, the glorious image of Truth, inviting the purified and chastened votary to lift the veil that but imperfectly shrouds the effulgence of her face.

Gentlemen, I conclude with this exhortation to you—Lift the veil.

* With reference to this result obtained by Bamberger, it may be interesting to mention that the sharp-sighted Galen had arrived at a similar conclusion. He expressly states: "Uncomplicated affections of the pericardium, and other analogous structures, destined to protect important organs, are unattended, generally, by dangerous results."

Cholera at Bruges. Towards the beginning of last month, warnings were given of the presence of cholera, which has since progressed with alarming strides. The ordinary mortality of the town is two or three daily, but for some time past it has averaged from twenty to thirty; and on the 5th inst., we learn, on official authority, that it reached the unprecedented number of forty, or at the rate of 280 a week. The population of Bruges consists of 50,000 souls; so that, having regard to the difference of numbers, this is equal to a mortality in London of 15,000 to 16,000 weekly.

Transactions of Branches.

BATH AND BRISTOL BRANCH

CASE OF ANGINA PECTORIS.

By Frederick Mason, Esq. Bath.

[*Read September 22nd*, 1859.]

From my having seen the subject of the following case of angina pectoris but once professionally during life, and that when free from pain, and apparently in health, the history is necessarily short and incomplete, and although Heberden, in his commentaries, says that he "saw nearly a hundred people under this disorder," yet angina is comparatively a rare disease, and very few cases fall under the observation of any one of us; and although various theories have been advanced, yet more extensive inquiry appears to be necessary before we shall be able to define positively its true pathology.

I have therefore thought that this case would not be altogether devoid of interest to this meeting.

Mr. G. B., a house painter and decorator, aged 53, had, until about fifteen months ago, enjoyed good health. On Thursday, the 14th July, as I was passing his house, he called me in. He told me that for some time past he had suffered from occasional attacks of pain in the chest, with great difficulty of breathing, and a sensation as if he were about to die. This generally came on if he attempted to walk up hill, more especially after taking a meal. He sometimes endeavoured to get rid of it by persisting in walking; but this always made him worse, and he was compelled to stop. He had frequently spoken to medical men when he met them in the street, but had never placed himself under treatment. He now wished to know whether it arose from indigestion. He described the pain as commencing behind the lower portion of the sternum, passing round the chest, producing a sensation of constriction, and down the nerves of Wrisberg of both arms, to the elbows. There were no physical signs of disease of the lungs or heart, with the exception of weakened impulse of the latter organ.

On Saturday evening, July 16th, a gentleman called to see him upon business. He was then suffering from a paroxysm of pain. He begged to be excused for a few moments, saying that he should soon be better. This attack never entirely left him. He went to bed, but was restless throughout the night, and complained towards morning that he did not get relief as he usually had done. About six, A.M., he was seized with another paroxysm. I was sent for, and was with him in a quarter of an hour; but he was dead.

I made a *post mortem* examination twenty-four hours after death.

During life, although stout, he did not appear to be remarkably so; but on making an incision through the skin, we were surprised at the large deposit of fat; and this was so great in the omentum, mesentery, etc., that I had great difficulty in dissecting out the stomach. This organ contained nothing but a very small quantity of fluid, the mucous membrane was congested, more especially at the pyloric end. The other contents of the abdomen were healthy. The lungs were healthy, and the pleura quite free from any adhesion. There was about one ounce of fluid in the pericardium. The heart was of natural size, but surrounded with a layer of fat, which was also interspersed throughout its structure. I did not make a microscopic examination. The valves were healthy, and there was no appearance of disease, excepting in the coronary arteries, which were both converted into rigid tubes, and the inner surfaces of both were rendered very irregular and rough by atheromatous deposit.

Discussion. Dr. Davies considered that angina always arises from malnutrition of the walls of the heart, more especially from diseased arteries.

Dr. Davey imagined that the disease consists essentially of cessation of the action of the heart. Whence does this organ derive its power to act? From the nerves arising from cardiac ganglia. It is here, then, that we must look for the cause of the disease.

Mr. Jennings had observed angina pectoris frequently connected with acute rheumatism.

Dr. Fox believed that angina seldom or never occurred without some structural lesion; but that at present the examination of the heart was not complete without the assistance of the microscope.

Mr. Spender remarked that Dr. Latham adopted the doctrine that angina depends upon spasm of the heart; arguing in favour of the doctrine from the phenomena attending colic and cramp. But Dr. Stokes points out some considerations which militate against this view, and says that it is difficult to understand how such a general or local spasm could occur as would only impede, and not destroy, the function of the organ. Dr. Stokes advocates Parry's doctrine that the symptoms of angina arise from a temporary increase of weakness in an organ already weakened; the disease being, according to him, an example of syncope, the result of some organic lesion which acts in diminishing its energy; and he holds that the symptoms arise from the retardation and accumulation of blood in the cavities of the organ.

Dr. Herapath gave the history of a case, when a gentleman, who had been liable to attacks of pain and distress in the region of the heart, fell back dead, after an ineffectual attempt to rise from bed. After the most careful examinations, no disease of the heart could be discovered. The coronary arteries were healthy; the left ventricle was closely contracted, and empty. No other cause of death than angina could be suggested.

Reviews and Notices.

On the Diseases and Injuries of the Joints: Clinical and Pathological Observations. By Thomas Bryant, F.R.C.S., Assistant-Surgeon, Surgical Registrar, and Lecturer upon Operative Surgery at Guy's Hospital. Pp. 273. London: Churchill. 1859.

This little work, Mr. Bryant informs us, is not to be regarded as a complete treatise upon the diseases and injuries of joints, but simply as the record of much personal investigation and of some experience. Notwithstanding this modest declaration, we imagine the readers of the book will derive from it at least as much instruction as is often to be found in more bulky volumes. On a subject which has been so well elaborated, it is not to be expected that any man will have much original matter to bring forward. Mr. Bryant, however, is already known to the profession as an able investigator of the pathology of the joints; and, in the present treatise, we have the results of the opportunities which have been afforded to him in the wards of Guy's Hospital put together in so complete and readable a form, that whoever makes himself master of the contents of the book will have no reason to be ashamed of his theoretical knowledge of joint-disease—nor of his practical knowledge either, so far as reading can impart it. In order to have a complete practical knowledge, he must do as Mr. Bryant has done, as well as read his book.

The work is divided into two parts. The first part contains twelve chapters on Diseases of the Joints; and in the second part are twelve chapters on Injuries of the Joints. The author devotes one chapter to the consideration of the question of Amputation or Excision in cases of diseased joint. The following extract draws attention to an important point to be considered when the choice between the two operations has to be decided on.

"When we approach the consideration of the operation of excision as applied to the joints of the lower extremity, we find that the different purposes for which they were formed render the value of the joint or limb considerably less. The value of a hand is so great that almost all risks are worth running if a chance of saving it can be entertained; it is the one great instrument of an intellectual being, and without it the benefit of that intellect must be materially diminished; it has a psychical relation to its owner which marks its own peculiar value. With the lower extremities a different condition naturally exists; they are simply pillars of support, and are purely mechanical powers of progression. Doubtless they are far above all others in their value and perfection, still they can be dispensed with without entailing such a loss to their owner as is experienced by the loss of an upper extremity. The risks that are worth running to preserve an upper extremity become then comparatively less justifiable when run to preserve a lower; exactly in the same proportion as the arm or hand is of greater value than the leg. If then by the operation of excision of the knee-joint the dangers to life are greater than in amputation, and as the advantages gained by preserving the limb are not so great as to cover this extra risk, the propriety of selecting amputation cannot be questioned. I do not doubt that there are select cases where excision of the knee-joint may be most advantageously employed, as there have been many excellent examples to prove; but I do not believe that the operation will supersede amputation and be employed as a substitute." (Pp. 141-42.)

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, OCTOBER 29th, 1859.

DRINK AND DISEASE.

The fearful practice of intemperance among our working classes has been the theme of comment by more than one social reformer. Only the other day, Lord Brougham, at Bradford, alluded to the subject, and spoke in favour of the introduction of the Maine liquor-law. Mr. Hill, the recorder of Birmingham, on Monday last, lamented the fact that an increase of wages was synonymous with an increase of intemperance in the manufacturing districts.

No doubt intoxication is the prevalent vice of the British workman at the present moment; and our social reformers do well to drag the fact prominently to light. At the same time, it strikes us that we are a little unnecessarily severe upon the lower classes on this head. The upper and middle classes should remember that they are themselves only reformed drunkards of a very recent date. Fifty or sixty years ago, the lord, and the squire, and the tradesmen, were far more debased in the habits of intemperance than the working man of the present time; and with far less excuse, for the simple reason that there was not the same temptation in their way. Here is an anecdote related as coming from Mr. Mackenzie, the author of *The Man of Feeling*, which paints in a vivid manner the deliberate drinking habits of our northern friends.

"Mackenzie had been involved in a regular drinking party, and was keeping as free from the usual excesses as he was able, when, as he marked companions around him falling victims to the power of drink, his attention was called to a small pair of hands that were working at his throat. On asking what it was, a voice replied, 'Sir, I'm the lad that's to louse the neckcloths.' To such an extent were the guests liable to become helpless, and such was the risk of apoplexy or suffocation from their inability to untie their cravats, that it was the appointed duty of one of the household in this instance to perform this office for the protection of their jugulars."

We think it would be very difficult to match this extraordinary anecdote bearing upon the systematic manner in which our fathers made beasts of themselves, with anything we know respecting the present drinking habits of even the most depraved of the population.

Such as these habits are, we are afraid the upper classes must take the full credit of having encouraged them by their own example; and we can with as little grace and justice scold the working classes on this account, as we could for following

the fashion of our garments, or for imitating any other of our foibles or customs. Nevertheless, it is a great fact that drink is the bane of our lower, as it was only half a century ago of our upper classes; and, important as the bearing of this bad habit is upon the whole community, there can be little doubt that its bearing upon medicine and medical men is still more immediate and worthy of attention. That a very large percentage of the patients who are attended gratuitously by medical men have been reduced to ill health directly by drink, the records of cases in our hospitals and dispensaries clearly show. In addition to this dismal troop, we must also reckon the innocent victims of their vice—their wives and children—the scrofulous and ricketty apparitions we meet with in crowds in the waiting-rooms of our medical charities. The demon of drink brings all these victims to our doors. Our time is to a large extent taken up in ministering to their afflictions, brought on or induced by this dreadful habit. In a pecuniary sense, then, the medical profession are the largest sufferers by the drunken habits of their countrymen; and any scheme which will tend to correct the vice must be hailed by it with satisfaction.

We question, however, very much whether our reformers have touched or will touch the evil by any of the propositions which they have yet brought forward. That a Maine Liquor-Law will ever be carried in England, we do not believe; and that the taps of our "Red Lions" and "Admiral Rodneys" will be emptied by the superior attractions of our mechanics' institutes, or by penny book-clubs, is a matter concerning which we are very sceptical. All such blows are aimed over the heads of our gross and rather sensual Anglo-Saxon labourers, at least of the present age. We do believe, however, in the gradual progress of society, and the slow influence of the example of the better classes upon those brought immediately into contact with them; and by this subtle power we do trust that in time to come the working man will emancipate himself, as the classes above him have emancipated themselves, from this degrading habit.

There is a medical as well as a moral aspect, however, to this very important question. The discussion which has been so long going on, as to whether the type of disease has changed of late years, may possibly receive some light from a consideration of the changes which have taken place in the drinking habits of the country. Those who contend that their patients cannot bear bleeding as they used to do, find their experience principally among patients in the middle walks of life. It may perhaps be asked, Do we not owe the less inflammatory nature of our diseases among these classes to the increased temperance to be found among them? We have been given to understand that those among the working classes whose business induces very immoderate drinking, are still subject to disorders of a highly inflammatory type. Brewers' draymen, publicans, potboys, are examples in this category. That their length of life is far below the average of the class to which they belong, is undoubted; and their exceptional mortality, and the manner of it, certainly lend countenance to our suggestion, that the middle classes, at least, suffer under less inflammatory diseases of late years than of old—for the one reason, perhaps, among others, that they are far more temperate.

THE WEEK.

On the 22nd instant, the Royal College of Physicians of London presented a very animated appearance, as the list of candidates proposed by the Council for election to the Fellowship was presented for acceptance to the Fellows assembled in *Comitia Majora*, and it was anticipated that there would be a very spirited discussion. As it proved, however, the old list, which was referred back at the last meeting, was again brought forward, and received, with the exception of a few names: together with a new list, which is understood to contain a liberal selection of names, and which we have no doubt will meet with the approbation of the profession.

A paragraph recently appeared in the *Court Journal*, and has this week gone the round of the daily papers, to the effect that our worthy asaociate, Sir James Clark, had retired from his office of personal physician in daily attendance on the Queen, and had been succeeded by Dr. Baly. In making the announcement, the *Court Journal* gave the following sketch of the career of Sir James Clark in his connection with royalty.

"Sir James was appointed physician in ordinary to Her Royal Highness the Duchess of Kent, on the death of Dr. Maton, some twenty-seven years ago, and has therefore had charge of the health of the Queen from her girlhood. Since Her Majesty's accession, Sir James has been in daily attendance, accompanying the court to Windsor, Osborne, and Balmoral, and regularly travelling with Her Majesty in her trips to Ireland, Belgium, France, and Prussia, and also when taking her marine excursions in the royal yacht. Although at the births of the royal children the professional assistance of Dr. Locock was called in, yet the Queen was always considered to be in the care of her own personal physician up to the moment when Dr. Locock's professional services were indispensable, and Sir James always signed the official bulletins first. In addition to his post in the household of the Queen, Sir James was also attached to that of the Prince Consort and the Duchess of Kent, and has had the sole medical direction of the health of the royal children. The loss, therefore, of so old and confidential a family medical adviser is much felt by the Royal family; but some few years ago Sir James had a severe attack of illness, and advancing age has induced him to retire from his constant daily attendance at the palace. Sir James Clark is succeeded in his important duties by Dr. Baly, who has been gradually initiated in the routine of his duties by the retiring baronet. For this purpose Dr. Baly was in attendance at Osborne this summer, and again joined the suite of Her Majesty at Balmoral, where Sir James was also on duty."

Since the appearance of the above, it has been stated in one of the daily papers that the announcement relative to Sir James Clark's retirement is incorrect.

It has transpired that Dr. J. A. Lawrie, Professor of Surgery in the University of Glasgow, has resigned his chair in consequence of bad health. Many qualified candidates are reported to have already made application for the post to the Home Secretary. Mr. Lister, son-in-law of Professor Syme, divides, it is said, the Edinburgh Whig interest with Mr. Edwards, who is supported by Professor Simpson. Dr. McLeod, a brother of the Rev. Norman McLeod of Barony Parish, and Lecturer on Military Surgery in the Andersonian University, has a strong party in his favour; and Mr. Lyon, also of the Andersonian school, has likewise zealous friends.

Association Intelligence.

BATH AND BRISTOL BRANCH.

MEDICAL REGISTRATION.

At the last Ordinary Meeting of this Society, it was resolved—"That it is desirable that a General Meeting of the profession of this district be called, to take into consideration the propriety of forming a Local Medical Registration Society, for looking after the general welfare of the profession."

In accordance with the above resolution, a meeting will be held at the Institution, Park Street, Bristol, on Thursday, November 10th, at 3 o'clock P.M.

Crosby Leonard,
R. S. Fowler, } *Hon. Secs.*

October 20th, 1859.

DIPHTHERIA.

At the last Quarterly Meeting of the Bath and Bristol Branch, it was resolved that an inquiry should be set on foot with reference to diphtheria. Dr. William Davies, of Bath, will be obliged by answers to the following queries: the replies being numbered according to the questions.

1. Number of cases, ; age, ; sex, ; and general condition of patients.—2. Condition of throat, especially as regards the presence of false membrane, etc.—3. Mode of treatment; local and general.—4. Number of deaths.—5. Cause of death in fatal cases.—6. *Post mortem* appearances.—7. General remarks.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, October 24th, 1859.

Edward Smith, M.D., LL.B., in the Chair.

By a recent regulation of the Medical Society, at every third meeting no paper is read, but the evening is devoted to the discussion of such practical observations as may be brought forward by any member.

CLINICAL OBSERVATIONS.

Fluid from a Hydrocele, containing a large amount of Cholesterine. Mr. Canton exhibited some serum which he had removed from a hydrocele, and which contained a large quantity of cholesterine. It was taken from the tunica vaginalis of a man aged 64. He was otherwise in fair health; was in active walking employment, a thin spare man, with good appetite and good pulse. He was operated on for hydrocele twice, at the interval of twelve months; and on each occasion the fluid contained cholesterine in sufficient quantity to render it turbid. Cholesterine was sometimes found in the fluid of hydrocele; but, the author believed, in much smaller quantity than in the specimen exhibited.

Mr. Bryant said that it was not at all uncommon to find in the hydroceles of old men even more cholesterine than in the specimen exhibited by Mr. Canton. He had sometimes seen the fluid rendered quite dense by it. It was possible to determine the exact constitutional condition under which it appeared. In cases in which it is present, the tunica vaginalis is generally remarkably thick.

Dr. Routh said it seemed as if any serous membrane, when diseased, was capable of yielding a fluid containing cholesterine; an instance of this was found in ovarian dropsy. He thought the cholesterine in these cases was to be regarded as a secretion or exudation from the blood.

Deodorisation of Ulcers. Mr. Weeden Cooke referred to the discussion which has recently taken place in Paris, on the effects of a mixture of sulphate of lime and coal-tar as a deodoriser. He thought more had been said regarding it than it deserved; at the same time, as cleanliness was an important indication in the treatment of ulcers, it might be well to notice the subject. He had had many foul ulcers under his care, and had used the preparation; he found it to cleanse the wound, but at the same time it was liable to produce much inflammatory action. There are two classes of foul ulcers; in one class, the fœtor arises from the pus and discharges; while in the other the foulness arises from the presence of a slough. The preparation of gypsum and coal-tar is useful in the former; but in the latter it has no effect on the slough. A lotion of chlorate of potash is a very agreeable and effective means of cleansing a foul ulcer; and for sloughs, nothing is to be compared to the "manganese with potash." A little of this sprinkled on a piece of cotton wool or lint, and applied, at once dries up the slough, which comes off in twenty-four hours; after this the chlorate of potash lotion may be applied. The smell is removed with the detachment of the slough by the manganese with potash; but returns when another slough appears.

Dr. Routh had had cases of foul ulcer under his care, especially cancer of the uterus. He had found in these cases that the smell returned after the removal of the slough. With regard to the mode of action of the coal-tar, he observed that the smell of cancerous ulcers probably only arose from a kind of fermentation, and was capable of being stopped by substances which arrested fermentation. He had found a saturated solution of tannic acid very useful in correcting the character and odour of unhealthy ulcers; the improvement produced, however, was only temporary.

Dr. James Bird had had large opportunities during service in India. The continuance of the ulcer here depended on the amount of the surrounding inflammation, and the indications were to reduce the inflammation and to prevent absorption of noxious matter from the surface of the ulcer. In India, he had employed common nitric acid, diluted according to the extent and depth of the slough. He had also used tincture of perchloride of iron; but the application is very painful. This was also found by the French army surgeons in the Crimea.

Mr. De Méric thought that two kinds of ulcers were confounded in the discussion. There was a great difference between an offensive slough lying on an ulcer, and an ulcer yielding an offensive secretion. A slough must be removed; and at the same time it may be possible to change the character of the ulcer. There may be ulcers with no slough, but a smooth surface, and which may yet be phagedænic and very offensive. In these, he considered that the preparation mentioned by Mr. Cooke might be of great value to deodorise the secretions. In applying a disinfectant, it is necessary to take great care that it has not an injurious effect; and hence it was important to know the strength of the solution of chlorate of potash to be used. There was a simple substance which had not been mentioned as a deodoriser—charcoal. *Primâ facie* charcoal must do good on the principle laid down by Dr. Routh. A simple combination of linseed-meal and charcoal was a homely but useful application.

Mr. Rice had long been in the habit of successfully using a solution of chlorinated soda in sloughing ulcers, and also as an injection.

Dr. Mackenzie had read the tracts of Bishop Berkeley; and it would from them seem as if nothing was so good for foul ulcers as tar-water. He had used it, variously diluted; and had found it useful as a remedy in foul ulcers. He had also used tar ointment with benefit. He referred to a case related in the *Medical Commentaries*, in which a cancer was said to have been successfully treated by the local and constitutional use of tar; and to a case of obstinate phagedænic ulcer mentioned by Dr. Graves, in which creasote was successfully applied. Dr. Livingstone had also described the case of a sailor affected with cancer, which resisted all remedies, but which yielded to the use of lemon-juice administered to the patient during an outbreak of scurvy.

Treatment of Tetanus by Woorara. Mr. De Méric referred to the proposal recently made in Paris, to treat tetanus by the use of the woorara poison. In a discussion on this disease, however, it was necessary to have an idea of its varieties; for there are evidently cases which recover under simple treatment, or even spontaneously. Sir B. Brodie had lately written to the Secretary of the Academy of Sciences in Paris, stating that he had many years ago made experiments with woorara, and that it had been then tried in tetanus, but without success. In Paris, there had been a case of tetanus from shattered toe by a gunshot wound. Woorara was given both internally and externally. There was much trismus and general contraction; but when the case was brought forward, the patient was nearly well. For practical purposes, however, it is not sufficient to merely speak of tetanus; it must be divided into true and false, and the former into acute and chronic. In true tetanus, all the well known symptoms occur; in the false, there is contraction of a few muscles only. Acute tetanus will carry off a patient in twenty-four or thirty-six hours; in chronic tetanus, the disease may last a fortnight or three weeks. Sir B. Brodie

believes there is a kind of chronic tetanus from which the patient recovers with little or no treatment; and the case referred to as having occurred in Paris was regarded as being chronic. Mr. De Méric had had in his practice a case of recovery from chronic tetanus. The patient had had a very severe crush of the leg by a railway accident. Amputation was performed just below the knee. Sloughing took place, but the case seemed going on well, when trismus set in. This continued some time, but was only accompanied by contraction of some of the muscles of the neck. It was debated whether the end of the bone should be removed, but it was decided not to do this. Narcotics (morphia, chloroform, etc.) were given. The patient after a time began to show symptoms of amendment, and at last recovered. In regard to the use of woorara, it must be remembered that it is said to have no effect when taken into the stomach, and yet in the French case it was partially administered in this way. If it be resolved to try this agent in tetanus, it must be observed that there is a species of woorara which does act through the stomach, and which should be first administered to an animal. It should, when applied, be at once injected into the cellular tissue: little or no good is likely to arise from merely sprinkling it on the wound, or giving it by the stomach.

A discussion followed, with regard to the supposed source of woorara and the experiments of Sir Benjamin Brodie, in which Mr. Canton, Mr. Streeter, Dr. Routh, and Dr. Bird, took part.

Editor's Letter Box.

THE JOURNAL.

Letter from Humphry Sandwith, M.D.

Sir,—A passage occurs in Mr. Dix's letter of last week, which has excited my astonishment. It is the following:—

"My opinions were endorsed, my arguments seconded, and my resolution heartily supported by such men as the two Sandwiths," etc.

This statement is certainly at variance with what occurred at the meeting in Beverley, *so far as I am concerned;* as all who were present can bear witness. So far from endorsing Mr. Dix's opinions, or seconding his arguments, I called both in question, excepting only his financial statements. I distinctly stated my conviction, that, in these days of railway speed in thought and action, the Association could not exist without a Journal to maintain a ready intercourse among its branches. I also demurred to his mode of reasoning on the merits of our periodical, more especially his argument founded on the analysis of the contents of a single journal. I moreover strongly objected to the tone and spirit of his paper, which I said was too satirical to be in harmony with so grave an inquiry, satire being a hindrance rather than a help to the discovery of truth. I regret much, that we had no short-hand writer to take down my words, of which the above is but a meagre outline. In truth, my speech, as reported in the Journal of October 8th, being cut down to two lines, conveys no idea of my actual opposition to Mr. Dix's proposal. This I much regret, because a full and correct account of it would have shown that I was not prepared to join Mr. Dix in his crusade against the Journal. My remarks were addressed to the meeting immediately after Sir Henry Cooper's speech on seconding Mr. Dix's resolution. Having thus offered a decided opposition to some of the opinions and arguments, as well as to the tone of the paper, I *at first proposed my resolution, as an amendment upon that of Mr. Dix.* I was induced, however, by his urgent request, to withdraw my direct opposition, from his wish to ventilate the subject of his paper, and to secure attention by a *virtually* unanimous vote. I therefore contented myself with afterwards bringing forward my resolution (slightly modified) as a secondary and independent one, which also was carried without any opposition, except on the part of Mr. Dix. I now regret, that through courtesy I yielded a reluctant consent to Mr. Dix's request, because on that he has founded the statement of which I complain. Nor should I have so readily retreated from my first position, had I not felt myself unprepared to grapple with the financial part of the argument. The idea of a vast debt hanging over our heads, was the cause of my proposing a fortnightly, instead of a weekly Journal, coupled with a strong persuasion that the Association, in order to do justice to itself, requires an annual volume of *Transactions* for more elaborate essays, as well as a journal for reports of meetings and various other matters demanding a more rapid circulation.

If I have erred in occupying so much space in your pages on a matter chiefly personal to myself, I submit that Mr. Dix must divide the blame with me. But it is not wholly a personal matter, because it is clear that Mr. Dix employs the names of Sir Henry Cooper, Mr. Hill, of Cave, and others, including my own, as an auxiliary proof of the irresistible power of his argument. The object of this letter is to extricate myself from the false position in which Mr. Dix's sweeping statement places me: for, after the part I took in the debate, to represent me, as he has done, as *endorsing his opinions, seconding his arguments*, and *heartily supporting his resolution*, simply because I did not formally vote against it, is a mistake not in keeping with his usual logical acuteness.

In conclusion, I must compliment yourself, Mr. Editor, on the manly course you have pursued in an affair demanding great forbearance, tact, and judgment. Your strictures upon Mr. Dix's paper were dignified, temperate, and for the most part just. You were obviously aware how much the success of any cause depends on the superiority of moral tone, no less than of intellectual power in its advocates.

I am, etc., Humphry Sandwith.

1, Albion Street, Hull, October 22nd, 1859.

P.S. As to the part my brother took in the matter, his opinion, founded on the assumption that the Journal absorbed all our income, was, that a monthly Journal might answer every purpose. At the same time he remarked, that the weekly Journal had mightily improved under its present management. I can only account for Mr. Dix's unqualified statement respecting my brother and myself, by supposing that, in the self-abstraction of his own ideas, or in the confusion of tongues, he did not hear what we said.

THE JOURNAL.

Letter from Sir Henry Cooper, M.D.

Sir,—As the seconder of Mr. Dix's proposition, which has again raised the "Journal question", I may be allowed a few remarks in explanation of my own views. I will make them brief, as I see that the discussion is already assuming portentous dimensions.

And first, I would remark, that the resolution of the meeting at Beverley was *not* to *discontinue* the Journal, but to diminish the frequency of its issue; the extent of the change being purposely left an open question. This at once disposes of the great mass of the argument which has been used, and which merely goes to prove that it is desirable the Association should have some medium of communication between its members. It also disposes of the invidious and unpleasant discussion on the merits of the Journal at the present time, since such merits or demerits are merely the accident of the time, and may be changed if found necessary. If we are to have a Journal, it rests with ourselves whether it be a good or a bad one. The question is then narrowed to these limits,—Is it desirable to have so frequent an issue of the Journal? and if it is, can we afford to have it, consistently with other and more important calls on our funds?

I have long been of opinion that the facility afforded for rapid communication of opinions, and even of facts, in matters of science, is far from being an unmixed good; at least, I am quite sure that the benefit derived is not in proportion to the facility afforded. To rapid journalism we owe the enormous accumulation of crude and unused material which lie buried in our serials for many years back, and which, for want of arrangement and generalisation, are almost valueless to science. What is wanted is more condensation and utilising of existing material, and less encouragement to hasty publicity and "vain repetitions". Conceive a *daily* medical journal! What hunting for materials! what hasty undigested communications! what personal disputes, and discussions on matters of ephemeral interest! The whole affair would be of and for the day, and not for the permanent advancement of science, or the interests of the body which published it. No man would be bold enough to advocate such a scheme, even were it a paying concern; and yet, if the argument for unlimited frequency of publication is worth anything, it ought to stand this test. The truth is, there is a limit here, as in all other matters, at which the maximum of good and the minimum of evil is attained; and it is this limit, in this case, that we have to find.

Is it a day, a week, or a month? I think the last. Our Society has been formed on the model of, and (with special adaptation to professional objects) is similar in its objects to, the British Association for the Advancement of Science. This Society has no journal; its funds are expended in grants for conducting scientific inquiries and observations, and in furthering the ends of science socially and politically. The American Medical Association—a strictly kindred society to our own—follows the same system; and both publish their results in an annual volume of *Transactions*, the value of which is undeniable. I need scarcely suggest in how many ways pecuniary assistance from the funds of our Association would assist the progress of medical science, and add to our political force and social status. This branch of the subject is capable of great development, but I forbear to enter on it now.

Practically speaking, it must be admitted that we expend our available income upon the Journal. On an average of years, the net income has not materially exceeded the cost of producing it. Is it wise to expend our strength on the vehicle, and, in so doing, debar ourselves from producing, in its best possible form, the material which it is to convey? Would it not be better policy to divide our resources; to expend part on securing valuable and reliable matter, and part in circulating it among our members? The converse of the present system should then be adopted. Instead of begging for contributions to supply a stated demand for publication, we should publish as often as materials of sufficient interest and value were collected; and the interval required for this purpose would soon be determined.

In short, I would advocate such an issue of the Journal as would diminish its cost one half; and I would expend the balance in the manner above indicated, and in the occasional issue of a volume of *Transactions*.

I think it would be well that this question, being now well considered, should be brought prominently before the Branch meetings which immediately precede the annual meeting, so that the feeling of every section of the Association should be represented there. I am, etc., Henry Cooper.

Hull, October 24th, 1859.

THE JOURNAL.

Letter from T. H. Jackson, M.D.

Sir,—With Mr. Dix, I might exclaim, "What is the use of the Journal?" with just as much propriety as the student of Guy's remarked, "He did not see the use of the liver! A man could do just as well without a liver!" Certainly, if you removed that all important viscus, it would be an insult to the unfortunate patient to inquire, like *Beppo*, "How's your liver?" and, if deprived of that organ, he would be quickly "gathered to his fathers". Just so with the British Medical Association. I consider it an insult to the Society that the propriety and existence of the Journal is even questioned. Excise or diminish the Journal, and, *felo-de-se*-like, you ring the death knell of the Association.

I hope Mr. Daniell will have no occasion to take refuge in an "inner chamber"; that his recruits, erect as a staff and elastic as a cane, in the hour of need will not prove "feather-bed soldiers". Let their motto be, "Onward!" like a snow-ball thrown from the top of the mountain, gathering as it rolls, until it becomes a mighty avalanche, bearing down all opposition.

I trust, therefore, that my fellow-associates, through good report and evil report, will resemble in pertinacity the ivy clinging to the oak, which it deserts not, either in the balmy hour or howling tempest. I am, etc.,

Thos. Hayes Jackson, F.R.C.P.Edin.

Darlington, Oct. 25th, 1859.

P.S. Two mules, one laden with salt, the other with sand, travelling onward, arrived at the banks of a river. The mule laden with salt plunged into the stream, and, swimming to the opposite side, found his burden considerably lightened. The other mule, laden with sand, hoping to obtain the same desirable result, swam through the river also; and, alas! found, to his chagrin, his burden increased to the maximum degree. Just so with the Association. While we are united and amicable, our debt or burden will diminish in the same happy ratio, as the mule's burden of salt. On the other hand, disunion and discord will increase our burden tenfold, not unlike the foolish mule's load of sand. T. H. J.

THE JOURNAL.

Letter from William Legge, Esq.

Sir,—As a young member of the Association, I have waited to learn the opinions of my seniors on this question of the Journal, before adventuring my own. From what has been already written, I cannot gather that *one* member is ready to submit to "excision of the back-bone"; not even Mr. Dix, for *he* does not say "Down with the Journal," but "Give us a cheaper one"; and certainly the most zealous defenders of the Journal betray the opinion that it is not what it might be. No one for a moment I am sure blames the editor; his thankless task is too well accomplished. How then is the "lamentable result," paucity of members, to be accounted for? To use a homely phrase, I think Dr. Ranking and Dr. Barker have "the right pig by the ear"; and unless their suggestions be responded to, it is useless for us to hope to compete with other medical weeklies, except indeed by making the Journal like them a commercial speculation. *They* can afford to pay for "good practical communications, *we* cannot; and this want of the sinews of war cripples us, and lays us open not only to the charge of retailing "old news," but even of omitting important intelligence. Thus lately, week after week, I looked in vain for the list of successful candidates at the India House examination. It never appeared; and, as my brother-in-law stood at the head, it chanced to possess unusual interest to me.

Notwithstanding the rather severe reception Mr. Dix has met with in broaching this question, his facts and opinions deserve serious consideration; and if the discussion be carried on in a friendly spirit, without bitterness or personality, good is sure to result. I for one stand by a weekly Journal; but until our little army of 2,300 bid fair to become a host of 10,000, might not a cheaper form of paper like that of *All the year round* contain the same amount of association and general intelligence, while the diminution in price, allowing a reduced subscription, would speedily recruit our ranks from those who cannot afford both their *Lancet* (which they will not sacrifice) and a guinea for our Journal? I feel convinced that a lower subscription and cheaper paper *for the present* would pay, and we should hear no more of pecuniary difficulties. When myself deliberating whether to keep the *Lancet* or join the Association, I yielded my personal preference to the conviction of the necessity of united action in our profession, and to the assurance that eventually the adhesion of units would render the Association a mighty power in the commonwealth; but I cannot say the attraction of the Journal was sufficient to allure me; for I was then regularly receiving it from a member, generally uncut. I only state this fact to show that Mr. Dix scarcely merited the rebuke Mr. Daniell administered him for presuming to fear that members "don't duly study the Journal." To me the Journal is a welcome guest, as the only means of communication with my medical brethren; for although I have been a member of the Association nearly eighteen months, we have had no branch meeting since my election.

I sincerely trust that this discussion may not induce you, sir, to deem your services undervalued by the associates, and that it may also be the means of eliciting from our brethren many valuable contributions. I am, etc., William Legge.

Wiveliscombe, Somerset, October 1859.

MEDICAL TITLES AND THEIR LEGAL MEANING.

Sir,—In your leading article of this week's Journal, you comment upon the case of Fitzpatrick *versus* Hallows; and, without offering any remark as to the justice or injustice of those proceedings, I beg to offer the following lines for the opinion of the profession. The question is, Can a Licentiate of the Society of Apothecaries call himself Surgeon? Mr. Hallows is a Licentiate, and as such can claim in a court of law for all proper charges for medicines and attendance in cases of sickness, no matter what be the complaint. An M.R.C.S. can only claim for attendance upon surgical cases. What is the meaning of the word surgeon? Clearly one who attends to surgical cases. What is the meaning of the word apothecary? If only one who compounds medicines, What does the law mean by allowing him to charge for all proper attendance, etc., upon a sick person? Further, If the law looked upon an apothecary as only a compounder of medicines, how is it that when a medical man goes into a court, he prosecutes as an apothecary, not for the compounding of medicines, but for the regular attendance and charges of a medical man?

Does M.R.C.S. call himself a medical man? If he does, I

beg to tell him that he was no right whatever to the title. A medical man, as I take it, is one who has the right of attending upon all cases of sickness, no matter of what nature, whilst M.R.C.S. is clearly defined by law as one to attend upon surgical cases, and none other, therefore cannot have anything to do with the term *medical*.

Could not the matter be set at rest in something like the following manner (if nothing but legal proceedings will settle it)? Let all surgeons be prosecuted who attend medical cases, and all apothecaries who attend surgical cases. We should soon see who has the greatest cause for complaint.

In conclusion, would it not be far better if those members of our profession who are so fond of law, would join the London or some other Registration Association, and assist in putting down really unqualified persons who live as parasites upon us, instead of going into courts of law to prosecute regularly qualified medical men—it may be from jealousy.

I am, etc., Surgeon and Apothecary.

October 18th, 1859.

THE QUALIFICATIONS OF A GENERAL PRACTITIONER.

Sir,—Being an ignoramus regarding the qualifications which it is necessary to be possessed of to be styled a "general practitioner" since the passing of the Medical Act, will you, or any of your correspondents, have the kindness to inform me whether I am right or wrong in adopting the subscribed conjecture? The possession of any one medical and any one surgical qualification entitles the holder of both of them, to be denominated a general practitioner, that is, legally qualified to practise both medicine and surgery in any part of Her Majesty's dominions. For instance, an M.R.C.S. and a L.R.C.P.Edinburgh, is quite as legal as M. or L.R.C.S. and L.A.C.; or, an M.D. and M.R.C.S. is legally qualified to practise both medicine and surgery. So that, in point of law, or public appointment, any medical diploma or degree obtained from any legally constituted bodies in England, Ireland, or Scotland, will answer the same purpose as the L.A.C., so that it may no longer be considered indispensable to be L.A.C., provided always that a medical qualification exists instead.

I am, etc., Chirurgicus.

October 1859.

[Our correspondent is correct. Editor.]

THE EMPLOYMENT OF MERCURY IN TRAUMATIC INFLAMMATION OF THE EYE.

Letter from I. Harrinson, Esq.

Sir,—In the *Lancet* for May 15th, 1858, Mr. Alfred Poland states: "It would hardly be credited, that, in the year 1858, mercury was administered for penetrating wounds of the eye, yet he was sorry to say such was the case."

In the British Medical Journal for October 22nd, 1859, the reporter of a case in University College Hospital says: "To watch a case of traumatic iritis treated by mercury, is a sufficient cure for any one afflicted with the prevailing scepticism of the day, as to the powers of that drug in arresting inflammation."

Will any one reconcile these diverse opinions, and tell us which practice is the right one?

I am, etc., I. Harrinson.

Reading, October 24th, 1859.

INDIA MEDICAL SERVICES.

Sir,—The India Medical Services appear doomed to wait in vain for any real improvement being made in their condition, in order to place them on an equality with their brethren in the English army.

In England, it has been almost universally acknowledged that the late Warrant is insufficient to remedy the evils it was intended to reform; and it has now been, I believe, returned from India by the Government there, as not really liberal enough. Still there is not a whisper of anything more being probably done for a much injured class of men. In spite of the remonstrances of the three services, in spite of the number of candidates for appointments falling short of the number required, and in spite of the return of the Warrant from India, will the Government at home remain deaf to the voice of justice?

Hoping that you will grant us your powerful aid to procure for us reform when it is so much needed; namely, in the condition of our medical funds, in our slow promotion, and in the inequality of our retiring allowances compared with those of military officers; and trusting that you will excuse me for again troubling you on the subject of our service.

I am, etc., Assistant-Surgeon Indian Army.

October 1859.

INQUIRY INTO CERTAIN CASES OF DEATH.

Letter from F. J. Brown, M.D.

Sir,—As a preventive measure that would guard against the evil effects of speculation on human life, I propose that the medical officer of health for the district should make inquisition into the cause of death of every individual dying in his district, that might be insured in a burial-club or in an assurance office. Machinery would be necessary to carry out such a measure. It should be made imperative upon the executor or person eligible to draw the money, to report the death to the medical officer within twenty-four hours. Respecting payment for the inquisition, this ought to be made out of the county rate. The nature of the inquisition should be left to the medical officer. He should visit the dead body in every instance, and see the medical attendant; and in suspicious cases he should make a *post mortem* examination and an analysis. Where there is no medical officer now, one should be appointed; thus the whole country would be mapped out into sanitary districts, and provided with a staff of medico-legal officers.

I am, etc.,

Fred. J. Brown.

Chatham, October 20th, 1859.

UNREGISTERED POOR-LAW SURGEONS.

Letter from Richard Griffin, Esq.

Sir,—If you think the following correspondence will interest your readers, it is at your service for publication. I regret to perceive that the Poor-law Board make no promise of refusing to confirm the appointments of non-registered medical men. Would not a *quo warranto* lie against them? If so, it would be far better to obtain one, than to prosecute the individuals who have been elected. I wish the London Medical Registration Association would turn their attention to the subject of illegal Poor-law medical appointments.

I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, Oct. 15, 1859.

I. *Mr. Griffin to the Poor-law Board.*

Weymouth, Sept. 27th, 1859.

My Lords and Gentlemen,—Fearing the Medical Act may have escaped your recollection, I take the liberty to draw your attention to one of its provisions, which enacts "that, after the first day of July, 1859, no person shall hold any appointment as physician, surgeon, or other medical officer, in any union workhouse or poorhouse, or parish union, unless he be registered under this Act." The reason for my now pointing out to you this section is, that during the last four months, certain gentlemen, whose names are hereunto attached, have been elected union medical officers, though they were not at the time registered, nor have they registered up to the 24th of this month. The importance of this Act to the community at large is so great, that I feel sure, if you have inadvertently confirmed these appointments, you will insist on these gentlemen immediately registering, or, in default, resigning; and that, in future, you will not confirm any medical man to his office, if, at the time of his election, he is not registered.

I have the honour to be, etc.,

Richard Griffin.

The Poor-law Board.

Names of gentlemen not registered.	Name of Union.
O. Ward . . .	Easthampstead
George Corneley . .	Headley.
Albert Carter . .	Gloucester.
H. Shirley . . .	Guildford.
Richard Smith . .	Barnstaple.

II. *The Assistant-Secretary of the Poor-law Board to Mr. Griffin.*

Poor-law Board, Whitehall, S.W., Oct. 15th, 1859.

Sir,—I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 27th ultimo, in which you draw

their attention to the provisions of the 21st and 22nd Vict., cap. 90, sec. 32, and 22nd Vict., cap. 21, sec. 2; and furnish them with the names of certain Poor-law medical officers who have recently been elected, but who, it is alleged, were not registered pursuant to the first mentioned statute up to the 24th ult. I am directed to inform you that the Board require it to be stated, in the form of *queries* containing the particulars of the appointments of medical officers, whether they are registered or not under the statute. The Board will make such inquiries into the cases mentioned in your letter as, on referring to the particulars of the appointments, may appear necessary.

I am, sir, your obedient servant,

Fras. Fletcher, *Assistant-Secretary.*

Richard Griffin, Esq.

REDUCTION OF DISLOCATION OF THE HIP.

Letter from John McIntyre, M.D.

Sir,—In your issue for Sept. 17th, in the reports from the Hull General Infirmary, are found two cases of dislocation of the hip. In one of them, the head of the bone, before returning to its normal position, "oddly enough" had a freak, and jumped into the obturator foramen. In a case I published in the Journal for August 15th, 1857 (p. 698), the like event happened, as I have thought since, from a guiding as well as liberating influence not having been used in the process of reduction.

It is not, however, with the view of drawing attention to these cases that I now write, but to show that the "new method", "Reid's method", "method by manipulation", or by whatever other names it may be called, is *not* new; that it was in use in 1772, and as successfully used as now. I am indebted for the reference to the two following cases to my talented friend Mr. R. S. Hill of Basingstoke. In a work entitled *Medical and Philosophical Commentaries, published by a Society in Edinburgh*, vol. iii, p. 424, it is thus written:—

"*Two Cases of Dislocation of the Femur, with an Account of the Method of Reduction.* By Mr. Thos. Anderson, Surgeon in Leith.

"Case i. In September 1772, Mr. Bruice, surgeon at Musselbourge, sent for me, desiring I would meet him at Lord Abercorn's coal-work, one of the colliers having dislocated his left thigh-bone. I there found Messrs. Bruice and Stewart, surgeons in Musselbourge, and Messrs. Simpson and Clarkson, surgeons in Dalkeith, who were just begun to attempt the reduction by pulleys. With these several trials were made; but the lacque round the knee slipping, it was taken off. By this means I had an opportunity of examining it. I found the left knee protruding three or four inches more than the right, and the one could not be brought within eight or ten inches of the other, the foot being turned out. When it was moved upwards and downwards, if done gently, he found little pain; but I observed, when it was nearly or altogether extended, the head of the bone became fixed. And he complained more when it was in that situation if any rotatory motion was attempted with the femur, which gave him no uneasiness when the thigh was brought up towards the abdomen. From the above appearance, it was certain the head of the bone was displaced from the acetabulum, and lodged downwards and inwards in the large foramen of the ischium and pubis. I was convinced that attempting the reduction in the common method, with the thigh extended, was improper, as the muscles were all put upon the stretch, the action of which is perhaps sufficient to overbalance any extension we can apply. But, by bringing the thigh to near a right angle with the trunk, by which the muscles would be greatly relaxed, I imagined that the reduction might more readily take place, and with much less extension. When I made this examination, he was lying on a table, on his back. I raised the thigh to about a right angle with the trunk, and, with my right hand at the ham, laid hold of the thigh, and made what extension I could. From this trial I found I could dislodge the head of the bone. At the same time that I did this, with my left hand at the head and inside of the thigh, I pressed it towards the acetabulum; while my right gave the femur a little circular turn, so as to bring the rotula inwards to its natural situation; and, upon the second attempt, it went in with a snap observable to the gentlemen standing round, but more so to the poor man, who instantly cried out he was well and free from pain. His knees could then be brought together; the legs were of the same length, and the foot in its natural situation. The knees were kept together for some time with a roller, to confine the motion of the thigh; and in three weeks he was at his work, without the least stiffness in the joint.

"Case ii. A boy, eight years old, of a strong healthy constitution, while he happened to be carried on his sister's back, lost the hold he had of her neck, and fell to the left side. She, however, held him by the legs, which were round her waist, so as to occasion considerable stress to the parts. He was carried home, and complained of the left thigh and haunch, which he said was from a fall from his sister's back. The parents being poor, and imagining it to be only bruised, were eighteen days before they called any assistance. At this time, I found him lying in bed on his back, the fore part of the femur turned quite in; the knee, lying on the right thigh, was fully four inches shorter; the leg turned out; and considerable tension and swelling on the hip. From the appearance, I suspected a fracture at the neck of the bone; but, on examining it, was soon convinced of the dislocation, and that the head of the bone was lodged upwards and backwards from the acetabulum, in the concave part of the ilium where it joins the ischium. The smallest attempt to carry the thigh outwards from the position in which it lay gave him the most exquisite pain, and he could only allow it to be gently moved upwards, if, at the same time, the knee was kept over to the right side. From the motion made to discover its situation, he complained so much, that the reduction was not attempted at that time. The hip was fomented, rubbed with camphorated oil, and a poultice applied for the night. Next forenoon I called on him with two young gentlemen. He was placed across the bed, the thigh raised so as to form an acute angle with the trunk. In this situation, the knee lay considerably over to the right side, and the leg was turned much outwards. He was kept down by an assistant, while I laid hold with both my hands above the knee, at the same time standing upon the side of the bed, and pulling upwards. I found I could move the head of the bone from the place where it was lodged; and, upon making considerable extension, with my left hand I laid hold of the middle of the leg, which I brought inwards. By this the femur made a circular turn, which directed its head towards the acetabulum, into which it went with a sensible noise. The boy immediately cried out that he was well, and could allow the thigh to be moved gently in any direction. The thighs were kept together for two weeks with a bandage, and in three weeks he could walk; but he complained of stiffness in the joint for a week or two afterwards."

Until a prior claim, therefore, can be instituted, these cases fully point to Mr. Thomas Anderson, surgeon in Leith *anno* 1772, as the discoverer of the method now found at once so safe, speedy, and effectual. I am, etc.,

J. McIntyre.

Odiham, October 3rd, 1859.

AMPUTATION OF THE PENIS.

Letter from Augustin Prichard, Esq.

Sir,—At page 354 of the *Medical Times and Gazette* for October 8th, is a letter by Mr. Teale of Leeds, on the subject of amputation of the penis, referring to some reports in a former number of that journal; and in it he alludes to the practice of stitching together the skin and mucous membrane of the urethra, to prevent the contraction of the newly made orifice; and he calls it his mode of treatment, which he has adopted for five years.

There must be some mistake about his laying claim to be the originator of this plan, for it has been taught for many years, and it is mentioned in surgical works (Pirrie, for instance) as a well known practical point. The first case in which I had an opportunity of adopting it was in 1851, and I had heard of it then as an established method of proceeding.

I cannot help thinking that the practice of reporting in the periodicals the cases occurring in the London hospitals has outgrown all useful limits; and, as a general rule, that nobody looks at more than the headings; for there is a weekly series of cases, mostly of every-day occurrence, in which well known and ordinarily received modes of treatment are carried out, with the usual results. As every case that occurs is not published, the reports are useless for statistical purposes. All the rare or exceptional cases should be published, and the records would then be valuable. I am, etc.,

Augustin Prichard.

Clifton, October 15th, 1859.

A QUESTION OF MEDICAL ETIQUETTE.

Sir,—Your opinion and that of my brother associates on the following will oblige.

A gentleman, having lost his property, is left with his wife and daughter without means of support except by the exertions of his two sons, general practitioners, who live at too great a distance to render their services during sickness.

In such a case, what would be professional etiquette? Ought medical attendance to be charged by the surgeon in the place where they reside? I am, etc.,

Mem. Brit. Med. Assoc.

October, 1859.

[We think the surgeon of the place should attend them gratuitously; especially if he is himself in competent circumstances. The matter must depend, however, much more on individual good feeling than on any formal rules.]

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Maclean, —, M.D., at Brompton, Chatham, on Oct. 25th.

Peregrine, T., M.D., at 3, Half-Moon Street, Piccadilly, on October 13th.

Of daughters, the wives of—

Barry, D. P., Esq., Staff-Surgeon, at Aldershott, on Oct. 15.

Fowler, R., M.D., 145, Bishopsgate St. Without, on Oct. 22.

Halley, Alexander, M.D., 7, Harley Street, on Oct. 23.

*Plumbe, Samuel, M.D., at Maidenhead, on October 22nd.

Procter, J. G., Esq., Surgeon, at Lydd, Kent, on Oct. 19.

Richardson, Alfred, M.D., 16, King's Place, E., on Oct. 24.

MARRIAGES.

*Fletcher, Adam, Esq., Bury, to Betsey, youngest daughter of the late Thomas Hindley, Esq., of Farnworth, on Oct. 19.

DEATHS.

Barker, Francis, M.D., late Professor of Chemistry in the University of Dublin, in Dublin, aged 86, on Oct. 8th.

Dufton, Wm., Esq., at Birmingham, aged 53, on Oct. 17.

MacDermott, Robert, A.B., M.D., Professor of Materia Medica in the Catholic University of Ireland, in Dublin, aged 27, on October 8th.

McAndrew. On October 25th, at Bayswater, aged 38, John L. McAndrew, late Captain in the 4th and 96th Regiments, eldest son of Sir John McAndrew, M.D., K.C.B.

*Paley, Robert, M.D., at Ripon, aged 79, on Oct. 16.

Sykes. On October 18th, aged 2 years, Arthur Wm., youngest son of John Sykes, Esq., Surgeon, Mile End Road.

*Wyman, W. S., Esq., at Kettering, aged 52, on Oct. 18.

PASS LISTS.

Royal College of Physicians of London. At the Comitia Majora, held on September 30th,

Waters, A. T. Houghton, Liverpool, was admitted a member of the College after examination.

Royal College of Physicians, Edinburgh. The following gentlemen have recently been admitted Licentiates of this College after examination:—

Arnison, Chas., Alston
Atkyns, Alfred, Hoxton
Barratt, Edgar, Brighton
Berwick, George, Sunderland
Boydell, J., M.D., Sackville Street
Chick. E. R., Manchester
Davies, J. H., Birmingham
Fluker, R. C., Berwick-on-Tweed
Hirst, C., Morley, near Leeds
Horner, T., Stoke Newington
Livett, H. W., M.D., Wells
Moore, W. J., Indian Army
Pitt, J. B., M.D., Norwich
Sloper, Charles E., Tredegar
Spear, Wm., Southampton
Wade, Wm. S., Stanningley, Leeds
Warcup, Wm. M., Scarning, Norfolk
Welch, C., Hackney Road
Wilkins, E. P., Newport, Isle of Wight

Apothecaries' Hall. Licentiates admitted on *Thursday, October 20th*, 1859:—

Barrett, A. E., Eton
Gordon, P., East Indies
Grabham, C., Islington
Griffith, J., Bangor
Jones, J., Brighton
Lawson, J. E. S., Egremont, Cumberland
Thornhill, D. C., Stratford

HEALTH OF LONDON—OCTOBER 22nd, 1859.

[From the Registrar-General's Report.]

	Births.	Deaths.
During week ..... {Boys .. 872 / Girls .. 918}	1790 ..	910
Average of corresponding weeks 1849-58..	1533 ..	1031

Among the causes of death were—small-pox, 29; scarlatina, 85; diphtheria, 14; diarrhœa, 31; cholera, 2; intermittent fever, 1; syphilis (in infants), 7; delirium tremens, 1; intemperance, 7. Of bricklayers, there died 1; bricklayers' children, 8; carpenters, 3; carpenters' wives, 2; carpenters' children, 14; of masons, 1; of masons' wives, 1; masons' children, 2; painters, 2; painters' wives, 2; painters' children, 9; plasterers' children, 3.

Barometer:

Highest (Tues.) 29.831; lowest (Fri.) 29.172; mean 29.490 in.

Thermometer:

In sun—highest (Sun.) 73°; lowest (Fri.) 53°.
In shade—highest (Sun.) 64°; lowest (Sat.) 28°.
Mean—48.3°; difference from mean of 43 yrs.—0.8°.
Range—during week, 36°; mean daily, 13.5°.

Mean humidity of air (*saturation*=100), 88.

Mean direction of wind, S.W.—Rain in inches, 0.53.

Royal College of Surgeons. From a return just published of the receipts and expenditure of the Royal College of Surgeons of England, in the year from Midsummer-day 1858 to 1859, it appears that the receipts amounted to £19,697:7:5, derived from the following sources, viz., Court of Examiners, £16,655:5:0. Fellowship, £1,449:0:0. *Ad eundem* Membership, £88:0:0. Certificate of Membership, £5:5:0. Midwifery Examinations, £365:8:0. Admission to Council, £21:0:0. Sale of Lists of Members, Catalogues, etc., £20:13:9; and dividends on Investments in Government Securities, £1092:15:8. The disbursements amounted to £20,994:7:0, divided under various heads, including a deposit of £850:0:0 on the purchase of the large house adjoining the College. From a summary of the whole it appears that the incidental income of the College was £18,604:11:9, and the incidental expenditure £17,305:12:2. The permanent income of the College was only £1092:15:8, whereas the expenditure amounted to £3,688:14:10.

TO CORRESPONDENTS.

Mr. P. H. Chavasse of Birmingham has forwarded some documents relating to a charge made by him against Dr. Barker of Bedford, whom he accuses of plagiarism. Several letters on the subject from both these gentlemen have already appeared in the pages of a medical contemporary, which has now declined to allow the discussion to be continued in its columns: and we cannot with propriety take up a matter which has been thus dropped by another journal. Moreover, we do not think that any good is to be gained by the publication in this Journal of what must be a voluminous personal correspondence, at the end of which the matter would remain in as unsatisfactory a state as now. Mr. Chavasse and Dr. Barker should agree to submit their dispute to the arbitration of some respectable member or members of the profession, whose decision should be made public in the medical periodicals.

An Associate. A Licentiate of the Royal College of Physicians of Edinburgh cannot legally dispense and recover in a court of justice for medicines supplied by him in medical cases.

Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

NOTICE.—Dr. Wynter will feel obliged if the Associates will address all Post Office Orders in payment of Subscriptions, to the Publisher, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C., "Bloomsbury Branch"; and he would also feel obliged by their sending all communications respecting the non-receipt of the Journal, to the same address; as both these matters are out of the province of the Editor.

Communications have been received from:—Mr. Fred. Mason; Mr. Edmund Boult; Mr. Crosby Leonard; Mr. R. S. Fowler; Dr. William Davies; Dr. A. T. H. Waters; Dr. F. J. Brown; Dr. Cockle; Mr. T. Holmes; Sir H. Cooper; Dr. H. Sandwith; Mr. I. Harrinson; Dr. G. E. Day; Mr. Fletcher; Mr. Jas. Reid; Dr. Semple; Member of the British Medical Association; An Associate; Argus; Mr. C. Snape; Dr. Hayes Jackson; Mr. William Legge; and The Secretary of the College of Dentists.

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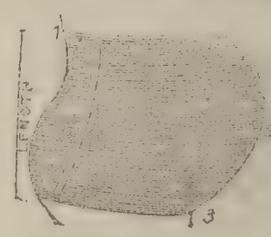
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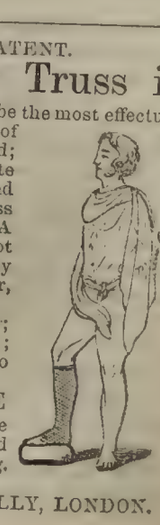
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CXLIX.] LONDON: SATURDAY, NOVEMBER 5, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

EXTENSIVE INJURIES: PRIMARY AMPUTATION OF THE THIGH: RAPID RECOVERY.

Under the care of PRESCOTT G. HEWETT, Esq.

THE following case is worthy of record, as an instance of the slight results which sometimes follow the most extensive injuries, and also of the importance of sedulous attention to bandaging when the soft parts in an amputation threaten to leave the stump of the bone exposed.

George P., aged 29, a lamplighter, was admitted on August 19th, under the care of Mr. Prescott Hewett, on account of extensive injuries from the explosion of a gas-meter, which was in the same room with him. It appeared from his account, that he had been projected through the ceiling, and had then dropped back into the room again, the pieces of the ceiling falling on him.

On admission, there was a lacerated wound of the sole of the left foot, from which blood was pouring out in considerable quantity. The tarsal bones, and the lower half of the tibia, were literally smashed to pieces; the head of the tibia was greatly comminuted; and there was a longitudinal fracture running down the centre of the bone for about two inches. The whole of the cellular tissue of the leg was much infiltrated with blood, and the ecchymosis extended up also some distance on the thigh. There was also much blood in the knee-joint. The right tibia was fractured just below its head, and there was simple fracture of both bones of the left forearm. He was much collapsed on admission, but was revived by the free administration of stimulants; and then (six hours after admission) the left thigh was removed by the circular method. The simple fractures were put up in the usual way.

Next day, he was found much better. He had passed a good night; the surface was warm; the skin moist; and he was quite cheerful. He went on without a bad symptom, except that the soft parts sloughed to some extent, probably as a consequence of the injury, and threatened a conical stump. This, however, was obviated by careful daily dressing; the soft parts being well drawn forwards, and secured by a bandage. When he left the house, on October 26th, the stump had been healed for about ten days, and was very well shaped; and the simple fractures were consolidated.

UNIVERSITY COLLEGE HOSPITAL.

UNUNITED FRACTURE OF THE HUMERUS, CURED BY IVORY PEGS, AFTER DIEFFENBACH'S METHOD.

Under the care of J. ERICHSEN, Esq.

THOMAS B., aged 20, a healthy-looking farm labourer, was admitted under Mr. Erichsen's care, on account of ununited fracture of the right humerus. He had always enjoyed good health, with the exception of palpitation of the heart. Had never had syphilis. He had been told that his heart was diseased, but on examination, this turned out to be an error. The accident happened about seven months before admission. He was caught in a threshing machine, and injured about the head and arm. He lost consciousness, and remembered nothing that occurred for a week afterwards. When he came to himself, he was told that his arm was broken in three places; and he pointed to the seat of the present solution of continuity, to the radius about two inches from the elbow-joint, and to the same bone lower down, as the seats of fracture. The latter two fractures had united; and he could pronate and supinate the hand, but could not bend the arm, which was stiffened in the extended position. After the accident, the arm was put up for five weeks in a long splint; at the end of which time it was examined, and the fracture of the humerus gave way, the lower fragment nearly sticking through the skin. It was then put up again in a starch bandage for six weeks, and then he had leather splints put on. These, however, were left off at one time for a month; and were reapplied on his medical attendant finding that the fracture was not united.

The patient looked and felt well, and his appetite was good. The fracture was situated at the middle part of the right humerus. There was free motion at the seat of fracture, which compensated for the stiffness of the elbow.

June 22nd. He was placed under chloroform; the ends of the bone were laid bare, and five holes were drilled in them with a gimlet. Ivory pegs were then driven in with a mallet. The elbow was forcibly brought into a semiflexed position, placed upon an angular splint, and a dose of laudanum was given after the operation; a rather sharp attack of erysipelas followed the operation.

July 7th. The erysipelas having nearly disappeared, one of the pegs (from the lower fragment) was discharged. The erysipelas soon after subsided.

September 1st. It is noted that there was very good union between the fragments, and no pain at the seat of fracture. The wound was nearly healed.

September 5th. The wound was healed. A pair of leather splints were now substituted for the angular splint, in order to support the new union. Passive motion of the elbow daily was now commenced.

He was seen on October 30th, and the fracture was then firmly united; the limb had considerably increased in size, from the muscles becoming better nourished. The arm could be raised freely; three pegs remained in; a screw splint is being applied to the elbow, which appears likely to become useful.

SAMARITAN HOSPITAL.

CASES OF PROLAPSUS UTERI SUCCESSFULLY TREATED.

Under the care of C. H. F. ROUTH, M.D.

CASE I. A. M., aged 52, was admitted under the care of Dr. Routh, affected with prolapsus uteri. She looks to be a full-blooded strong woman, of a dark complexion, bilious temperament, following the occupation of a laundress. She has been a widow for about two years. She has had three children born alive, and has twice miscarried. Nine years since (when her last child was still-born), the labour was difficult. The catamenia had been regular since that period. Two years ago, she had *partial* prolapsus, which came on after unusually heavy work and carrying of heavy weights; but the womb came down completely six months ago, and she has been in the habit of returning it herself since that time.

February 26th. The patient being placed under the influence of chloroform, the usual plastic operation was performed. About one-third of an inch of the external skin was included, extending backwards to about an inch and a half of the mucous membrane, leaving only about two fingers breadth of mucous membrane superiorly untouched. Three deep sutures were put in by means of a tubular needle, a modification of Simpson's, so as to admit the passage of rather thicker annealed iron wire than that usually employed. The ends of these wires being on both sides passed between a clamp of iron of

peculiar make (constituted as a hinge, to allow equable tightening of the wires by three screws), the two clamps were brought as near together as possible (the vulva being between them), and secured to the wires in that position. Four or five superficial sutures of wire were now applied, to bring the anterior edges of the wound together; and the vagina was well syringed out. A very considerable amount of hæmorrhage occurred during the operation, so as to necessitate the ligature of one or two small vessels. A catheter was now passed, and left in the bladder, attached to a long India-rubber tube. A suppository of morphia was given at night, with from half a grain to a grain of crude opium by the mouth.

Feb. 28th. The catheter, causing some irritation, was removed, and ordered to be passed three times a day.

March 1st. There is considerable discharge. She sleeps well, and does not complain of pain. The vagina was ordered to be washed out with lukewarm water. The deeper sutures were removed to-day. There was some amount of bleeding. The urine passed is very thick. The union is complete.

The irritation of the bladder lasted some days, but ultimately gave way. The superficial sutures were removed about the eighth day after the operation. She left the Hospital on April 3rd, with a good firm perinæum, wearing a T bandage as a precautionary measure; the womb being completely kept up.

Case II. M. A. D., aged 21, a servant, was admitted December 15th, 1858, under the care of Dr. Routh. She is of a fair complexion, and generally healthy. She had rheumatic fever three years ago, and was at that time very ill for about six months. There were no cardiac symptoms to be traced. She was married four years ago, and had two children born alive. The first child died at eight months old, from convulsions. The second was a six months child, and died nine days after birth, also in convulsions; it barely took the breast, and had to be fed with a spoon. This second confinement took place in the workhouse. It began at 4, and terminated at between 7 and 8 P.M. She was not aware that she had been torn; but it gave her great pain and bearing down, when she got up to walk, on the eleventh day. The womb was at this time quite out, so that she could both see and feel it; and, two or three days subsequently, it protruded as completely as it does now. She did not mention this circumstance to the medical man. It has continued down ever since—*i. e.*, about a twelvemonth—giving her great uneasiness and occasional pain, and difficulty in walking; but latterly she has suffered less in these respects. She has been in place three months from the date of her confinement. The catamenia first began at thirteen years old. She has been regular ever since, though the secretion has been scanty, and lasts four days upon her. No leucorrhœa has been present, except when she has been walking about and working.

There is a pyriform shaped tumour, of about the size of a large pear, protruding between her legs. The apex of the cone constitutes the os uteri, which is large and patent, with ulcerated portions of mucous membrane round it, and here and there with thickened patches of epithelium. The superior wall consists of the bladder, completely extraverted with the uterus and vagina. The posterior wall is made up in the same way by the protruded rectum. A catheter, to penetrate the bladder, has to be directed anteriorly, following the curve of the protruded uterus. She experiences considerable difficulty in passing urine. When the bladder is full, the protruded parts are considerably enlarged. There is scarcely any perinæum. The prolapsus can be readily returned.

Dec. 30th. The patient being placed under the influence of chloroform, the urine drawn off, and the prolapsed parts reduced, about one-third of an inch of the external skin, and the mucous membrane of the vagina, extending an inch and a half up the lower two-thirds of the vagina, were dissected off. The deep sutures, consisting of double silver threads, were put in by the ordinary bent needles; the whole secured by two perforated pieces of whalebone, one on each side; and kept in position and tightened by perforated shot, and by about six or seven superficial silver sutures. The catheter was placed in the bladder with a long India-rubber tube. There was a considerable amount of hæmorrhage during the operation. Cold water dressing was applied.

Dec. 31st. Three morphine suppositories have been used in the course of the night. She has not slept, but has been quiet. Tongue rather dry; pulse 84. No further hæmorrhage has occurred. The vagina was syringed out.

Jan. 1st, 1859. She complains of some pain, but has slept all night. An effervescent mixture was ordered, and a glass of wine.

Jan. 2nd. The deep sutures were removed. Union complete. One suppository only was ordered to be used every night. Three ounces of wine were given. This evening, an attack of rigors, followed by copious perspiration, occurred. Tongue cleaning; pulse 84.

Jan. 3rd. The wound looks healthy. There is no sloughing about the position of the deep sutures. The vagina was washed out. Three glasses of wine were ordered daily. Chlorate of potass lotion was directed to be applied externally.

From this time she continued to improve. The catheter was removed on January 4th. On January 5th, the superficial sutures were removed. A small superficial slough at the upper part of the wound made its appearance, but yielded to poultices and generous diet. The parts were completely healed by the 15th. She left the Hospital cured, Jan. 26th, 1859.

Original Communications.

STATISTICS OF ONE THOUSAND CASES IN OBSTETRICS.

By I. Harrinson, Esq., F.R.C.S., Fellow of the Obstetrical Society.

[*Read before the Reading Pathological Society, August 17th*, 1859.]

[*Continued from page* 871.]

Complicated Labour.—Thirty-one cases.

The cases are thus arranged—

Twins	10	Prolapsus of cord....	3
Hæmorrhage	11	Tumour	2
Prolapsus of bladder	2	Hydrocephalus	1
Convulsions	2		

Twins.—Ten cases.

	Age of mother.	No. of child.	Duration in hours.	Sex.	Labour.	State of child.
1	35	4	2	F.	Natural.	Alive.
2	..	..	2.30	F.	Natural.	—
3	33	3	11	F.	Breech.	—
4	..	..	11.45	M.	Breech.	—
5	42	8	3	F.	Foot & knee.	—
6	..	..	3.30	M.	Foot.	—
7	28	2	3.30	F.	Breech.	—
8	..	..	4	F.	Feet.	—
9	31	4	3	M.	Cord & feet.	Dead.
10	..	..	3.15	F.	Feet.	Alive.
11	33	7	7	F.	Natural.	—
12	..	..	7.15	M.	Breech.	—
13	25	3	4	F.	Natural.	—
14	..	..	4.15	M.	Natural.	—
15	36	2	8.15	F.	Natural.	—
16	..	..	8.45	F.	Both knees.	—
17	37	6	6	F.	Natural.	—
18	..	..	6.30	F.	Breech.	—
19	32	1	48	F.	Craniotomy.	Dead.
20	..	..	50	F.	Forceps.	—

The ages of the mothers in the twin cases were—

Under 25 years	0	35 to 40	3
25 to 30	2	40 to 45	1
30 to 35	4		

Seven out of ten were between 30 and 40 years of age. The mean age was 33 years.

According to the number of pregnancies, there were—

	Cases.		Cases.
In first labour	1	In sixth labour.....	1
In second labour	2	In seventh labour....	1
In third labour	2	In eighth labour	1
In fourth labour	2		

The mean duration of labour was ten hours; but, deducting one remarkable case, the mean duration is little more than five hours.

Of the presentations, three natural in both; one breech in each; in two, the first child presented the head, the second the breech; in one case, the first presented the head, the second

the knees; in two cases, the foot or feet were present, one with a knee and one with cord; and in one instance, the first child presented the breech, and the second the feet.

Of the twenty children, seventeen were alive and three dead. Of the dead, one was dead before I arrived; on one craniotomy was performed; and to one (dead) the forceps was applied.

There were five males and fifteen females. In five cases, both twins were females: and in five others, one was male and one female.

Hæmorrhage.—Eleven cases.

No.	Age.	No. of child.	Duration in hours.	Sex.	Period.	State of child.	Presentation.	Hæmorrhage.
1	26	4	2	F.	Full.	Alive.	Nat.	Before, and with placenta.
2	43	5	3	F.	7 mos.	Dead.	Nat.	Concealed accidental.
3	19	1	6	M.	Full.	Alive.	Nat.	With placenta.
4	37	7	16	F.	7 mos.	Dead.	Nat.	Placental presentation nearly complete.
5	36	4	2	M.	Full.	Dead.	Feet.	Before, and with placenta.
6	33	9	4	F.	7 mos.	Alive.	Nat.	Partial placental presentation.
7	35	3	12	M.	7½ mos.	Dead.	Nat.	Concealed accidental; fatal.
8	38	7	8	F.	7 mos.	Dead.	Nat.	Concealed accidental; fatal.
9	36	7	3	M.	Full.	Alive.	Nat.	Concealed accidental.
10	39	7	27	M.	Full.	Alive.	Nat.	Partial placental presentation.
11	31	2	7	F.	Full.	Dead.	Nat.	After placenta.

Arranging the cases of hæmorrhage according to the number of pregnancies, there were—

	Cases.		Cases.
With first child	1	With fifth child	1
With second child ..	1	With seventh child ..	4
With third child	1	With ninth child	1
With fourth child ..	2		

The mean age of the mother was 34 years. The mean duration of labour was eight hours. Of the children, six were females and five males. Six were delivered at the full period; four at seven months; and one at seven months and a half. Five were alive and six dead. Of the live ones, one was born at seven months, and lived four days. Of the dead ones, two were born at the full period.

The varieties of hæmorrhage were:—before and with placenta, 3; concealed accidental, 4; placental presentations, 3; and after placenta, 1.

I must limit myself to a few observations on one form of hæmorrhage; viz., the internal. The table contains a summary of the rest. It will be remembered that in 1852, I read before this Society a case of a peculiar form of uterine hæmorrhage, which was unique, as far as my practice was concerned, and which had not then occurred to any other member of the Society. It was only incidentally named—not described—by some of the authors then enumerated. The case was published in the Association Medical Journal for 1853, and excited some interest. Professor Murphy kindly directed my attention to his *Lectures*, where this form of hæmorrhage was more particularly mentioned. In *Guy's Hospital Reports* for 1856, Dr. Oldham has written a very good paper on this subject, under the appropriate title of "Concealed Accidental Uterine Hæmorrhage", and has confirmed the expression of its rarity and its danger. Some well marked cases have been since published in the various journals.

In the latter part of the year 1852, I met with a second case, also fatal. Two slighter cases have also occurred: one in 1840, and the other in 1853.

The table does not include those rather frequent cases where hæmorrhage occurs occasionally during pregnancy without any obvious cause.

Convulsions.—Two cases.

1. Aged 31; married; first child; duration of labour, seven hours; female; presentation natural; from fright; treated by bleeding; recovery.
2. Aged 31; single; first child; duration of labour, eight hours; male; presentation natural; albuminous urine; treated by bleeding; death.

In both, the children were born alive.

That there should be only two cases of convulsions, is worthy of some notice. One occurred from fright, from the napkins at the fire becoming ignited during labour, and was readily controlled. The other was a case of great œdema, with albuminous urine, seen for the first time only the day before convulsions occurred, and before any curative measures were employed. I refer to those conditions of which albuminous urine forms so significant a sign. In other cases—and the signs and symptoms are usually amply sufficient for their detection—preliminary preventive treatment was successfully employed. I entirely dissent from Dr. Copeman, who has little faith in preventive means. My friends, Mr. Workman and Mr. Walford, have permitted me to add their testimony of the value of anticipatory treatment.

Of course, it must not be taken for granted that where there is œdema, there must necessarily be found albuminous urine. Extreme œdema is often present without albuminous urine.

With the second case, above referred to as my text, I read a long paper before this Society, in which I endeavoured to show—and fancied I succeeded in so doing—that a more comprehensive view should be taken of puerperal convulsions, mania, and the various forms of puerperal fever, etc., as the same cause, or combination of causes, might and did eventuate in the production, indifferently, of one or the other disease, according to the idiosyncrasy of the patient.

Prolapsus of the Cord.—Six cases.

This class includes all the cases where prolapsus of the cord occurred, though some belong to other classes. Amid the variety of complication, it will be seen that only one child lived. The class must be considered a very dangerous one.

No.	Age.	No. of child.	Duration of labour.	Sex.	Nature of prolapsus.	Result.
			Hours.			
1	42	5	15	M.	Cord and head.	Child dead.
2	25	3	4	M.	Cord with neck.	Child alive.
3	34	10	36	M.	Cord with head and hand; face to pubes.	Child dead.
4	31	4	3	M.	Cord and feet; 1st of twins.	Child dead before I arrived.
5	29	3	7	F.	Cord and feet; induced labour.	Child lived some minutes.
6	37	1	5	F.	Cord and arm.	Child dead.

Prolapsus of the Bladder occurred in two cases, which presented nothing remarkable. The bladder was not in the way.

Tumour. There were two cases of tumour.

1. Mother, aged 28; fourth child; duration of labour, twelve hours; child, a female; labour natural; child alive. There was a tumour of the left ovary. I did not find it in subsequent labours.
2. Mother, aged 32; first child; duration of labour, three days; child, a male; breech presentation. A solid tumour filled up the hollow of the sacrum, and extended into the cavity of the pelvis. Premature labour was induced at seven months with the second child; at eight months with the third child. The tumour was much the same. After this it disappeared; and the fourth child was allowed to go to the full period.

Hydrocephalus occurred in one case. The mother was aged 30; first child; duration of labour, 51 hours; child, a male; head presentation; perforation; two or three pints of fluid removed. The mother recovered.

Retroversion of Uterus was found in one case. It occurred in a woman, aged 39, with her first; it happened when she was advanced between three and four months. She was kept on her elbows and knees and the prone position for a fortnight; during which time it recurred three or four times. After this, it did not return. She was safely delivered at eight months; the child was alive.

Instrumental Labours.—Twenty cases.

No.	Age.	No. of child.	Hours.	Sex.	Operation.	State of child.	Cause of obstruction.	Presentation.	Period of pregnancy.	Result to mother.
1	38	1	28	M.	Forceps	Alive		Head	Full	Recovery
2	23	1	15	M.	Forceps	Alive	Loaded bowel	Head	Full	Do.
3	37	1	26	F.	Forceps	Alive		Head	Full	Do.
4	42	7	27	M.	Forceps	Alive		Head	Full	Do.
5	30	1	51	M.	Perforator	Died in birth	Hydrocephalus	Head	Full	Do.
6	32	2	3	F.	Induced	Alive	Tumour	Feet & cord	7 months	Do.
7	27	1	4 days	F.	Forceps	Alive		Head	Full	Do.
8	34	3	4½	F.	Induced	Died in birth	Tumour	Breech	8 months	Do.
9	24	1	24	F.	Forceps	Alive		Head	Full	Do.
10	30	2	16	F.	Forceps	Alive		Head	Full	Do.
11	45	11	7	F.	Perforator	Died in birth	Deformity of brim	Head	Full	Do.
12	42	2	20	M.	Forceps	Alive		Head	Full	Do.
13	35	1	12	M.	Perforator	Died in birth	Deep perineum	Head	7 months	Do.
14	31	1	51	F.	Forceps	Alive		Head	Full	Do.
15	24	1	10	M.	Forceps	Dead and putrid		Head	Full	Do.
16	21	1	24	F.	Perforator	Died in birth	Deformed pelvis	Head	Full	Do.
17	40	4	12	M.	Perforator	Dead some days	Deformed pelvis	Head	Full	Do.
18	35	3	12	M.	Perforator	Died in birth	Concealed hæmorrhage	Head	7 months	Death
19	32	1	48	F.	Perforator	Dead some days		Head	Full	Recovery
20	32	1	50	F.	Forceps	Dead some days		Head	Full	Do.

Omitting two "induced", there remain eleven forceps and seven perforator cases.

Analysing this table, we have the following results:—

Forceps cases:

Age:	20 to 30		4 cases.
„	30 to 40		5 „
„	40 to 45		2 „
Pregnancy:	First		8 „
„	Second		2 „
„	Seventh		1 „
Mean age of patients			31 years.
Duration of labour:	Shortest		10 hours.
„ „	Longest		4 days.
„ „	Mean		33 hours.
Sex: Males ..	Alive 4; Dead and putrid 1		5
„ Females	Alive 5; Dead some days 1		6
Causes of operation:	Powerless labour		9 cases.
„ „	Loaded bowels		1 „
„ „	Putrid child, etc.		1 „

Perforator cases:

Age:	20 to 30		1 „
„	30 to 40		5 „
„	40 to 45		1 „
Pregnancy:	First		4 „
„	Third		1 „
„	Fourth		1 „
„	Eleventh		1 „
Mean age of patient			31 years.
Duration of labour:	Shortest		7 hours.
„ „	Longest		51 „
„ „	Mean		23 „
Sex: Males ..	Died in birth 3; Dead before birth 1		4
„ Females	Died in birth 2; Dead before birth 1		3
Causes of operation:	Hydrocephalus		1 case.
„ „	Concealed hæmorrhage		1 „
„ „	Deformity of pelvis		3 „
„ „	Deep perinæum (child dead—seven months)		1 „
„ „	Child dead—1st of twins		1 „

The case of concealed hæmorrhage in which perforation was performed, and death followed, has been named elsewhere. In one forceps case intense intestinal irritation followed, from impacted cherry-stones. The patient ultimately did well. All the rest recovered without any unfavourable symptoms. There was no case of injury to the soft parts; nor lacerated perinæum.

Induced Labour.—Two cases.

In one case labour was induced at seven months, on account of a tumour. The feet and cord presented. The child lived a short time. Labour was another time brought on at eight months in the same patient. The breech presented. The child died in the birth from want of assistance. The mother did well.

It will be remarked that the ages of both classes of cases are somewhat advanced, bearing a mean of thirty-one years in the forceps, and thirty-five years in the perforator cases; that of the eighteen cases, twelve (two-thirds) were in first pregnancies; that the mean duration of the forceps cases was thirty-three hours; of the perforator, twenty-three hours; that the children in all the forceps cases (alive at the labour) were preserved; that the forceps was used twice when the children were dead; that the perforator was used in five living and two dead children; and that the after illness was limited to a solitary case of intestinal irritation.

The influence of age must be passed over now. That two-thirds of the cases were first pregnancies, is a circumstance to be specially noted. The consideration, however, of this subject, involving as it does one of the most interesting inquiries in obstetrics—viz., the preparatory treatment of pregnancy—is much too important to be cursorily considered, and must be put off to a more convenient season.

The mean duration of the forceps cases was thirty-three hours; of the perforator, twenty-three; and of the lingering, thirty-three hours. You will not have failed to remark that there is a great range of duration; in the lingering, from twenty-five to fifty-eight hours; in the forceps cases, from ten hours to four days; in the perforator cases, from seven to fifty-one hours; the latter having the shortest time, the most limited range, and the smallest mean. There appears to have been no fixed rule followed here. In one case, perforation was performed in seven hours; and in another, I waited four days before the forceps was applied. A principle, however, was obeyed, one immutable in surgery; viz., not to interfere before it is necessary, but when necessary, without delay, to interfere. As before stated, a lingering labour of fifty-eight hours may be perfectly natural; while in another case, it may be needful to perforate in seven hours.

I hold that it is opposed to all sound experience to attempt to lay down any absolute rule, to teach that the forceps shall be applied only after a long ineffectual struggle, and the perforator only after so many hours more, when utterly exhausted, as a *dernier ressort*. I hold that a comprehensive survey of the condition of the patient will show and does show the time when to interfere. This condition is curtly comprised in two words, "done up"; words as expressive of a state as its definition is difficult.

As regards the preference of craniotomy to the forceps, my rule has been this. When I could not get at the head with these forceps (Ramsbotham's), then I use the perforator. I do not mean to say that in some favourable cases, a dexterous operator might not seize the head when far above the brim with a long forceps; but such cases, suitable or successful, are the exception, not the rule.

It is laid down in books, as a fundamental precept, that the perforator, not the forceps, should be resorted to for the delivery of dead children. The reason assigned is, that the perforator is a safer instrument than the forceps. I beg to doubt the correctness of the supposition and the propriety of the practice. In a case of twins (before named), I perforated the first child, because I could not; and I did not use the perforator to the second, because I could get at it with the forceps.

When the necessity for the use of the perforator is in my mind clearly established, I have not hesitated, holding paramount the safety of the mother, to employ it, irrespectively of the child being dead or alive.

A very laudable desire has been expressed by Dr. Tyler Smith, on the desirability of abolishing the operation of craniotomy. It would be well indeed could this be accomplished; but, bearing in mind that the difficulties usually arise in first children, where previously we have had no means of ascertaining the exact condition of things, it is more desirable than possible. After the first labour, when the difficulty has been discovered, then it would not only be culpable, but criminal, to neglect, as the chief means of averting so dire a necessity, the induction of premature labour. This was done twice in the same patient, when at the first labour a tumour was discovered. It is well for the interests of humanity that the dangerous facility with which this operation can be effected, is unknown—if it is unknown; and, if not unnamed, not fully described in ordinary channels. The manifold uses of warm water are not yet enumerated. Of its appliance and value in natural labour, I hope fully to speak at no distant period.

[*To be continued.*]

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF CARDIAC DISEASES.

By W. O. Markham, M.D., F.R.C.P., Physician to St. Mary's Hospital, London.

VI.—Treatment of Pericarditis. General Remarks; Bleeding; Mercury; Opium; General and Local Treatment; Paracentesis of the Pericardium; Pericardial Adhesions.

In considering the treatment of pericarditis, it is necessary to bear in mind a fact already referred to, namely, that pericarditis (excepting in the case where it is the consequence of traumatic injury) is not an idiopathic inflammation; that is, not idiopathic in the sense in which we use the term, as applied, for instance, to ordinary inflammation of the lungs.* Pericarditis, when not of traumatic origin, or excited by the local action of tumours, etc. in the neighbourhood of the pericardium, is manifested either secondarily, as the result of some other disease present elsewhere in the body,—of purulent absorption, for instance; or as one of the local expressions of some general disorder of the system,—of its fluids or its solids,—as in the case of rheumatic fever. Unless these distinctions, in the origin of the disease, be properly recognised by the practitioner, he will never arrive at a correct and rational method of treating pericarditis.

Excluding, then, from consideration those cases of pericarditis, which are the results of traumatic injuries, or other local affections, we find, that we have to deal with a disease which is connected with some particular diathesis, or constitutional disorder, not merely with a local inflammation. One treatment, therefore, must be directed to the constitutional disorder as well as to the pericardial affection. And since, as we have seen, pericarditis is associated with many different constitutional disorders, it is manifest that no general directions of treatment can be prescribed, which shall be adapted to every case; for each case demands a particular consideration—a consideration founded, in the first place, upon the nature of the exciting cause, or upon the relation of the pericarditis to the constitutional affection; and secondly, upon the age, constitution, and condition in life of the patient. These are the data upon which a rational treatment must be founded.

It follows necessarily from this, that the treatment which may be proper in one case, is most unfitted for another case; and, therefore, that in different cases, different plans and methods of treatment become the true and proper methods.

We have already seen, when describing the causes of pericarditis, that it was necessary to divide the disease into two general classes, *rheumatic* and *non-rheumatic;* and in accordance with what has been there advanced, I shall consider the treatment of the disease under these two separate heads.

The first sort, the *rheumatic pericarditis*, includes generally all the most acute forms of the disease. In such, the local inflammation itself becomes the chief centre towards which the treatment is especially directed; for it is this local inflammation which immediately tends to the destruction of life, and in the manner I have already described. The local character of the inflammation, therefore, and the consequences resulting from it, are the characteristics of rheumatic pericarditis,—its prominent features. The same cause which brings out the pericarditis is, perchance, the cause of the arthritic affections, and may be the cause of other local inflammations; but all such other co-existing and localised affections, are of diminished importance in comparison with the pericardial affection. Once the pericarditis has declared itself, it becomes the primary object of our treatment; the others are but secondary and subordinate objects.

On the other hand, in the *non-rheumatic* form of pericarditis, the local inflammation is rarely of other than secondary importance; its symptoms are ofttimes so little marked, so obscure, and produce, by their reaction, so little disturbance of the constitution, that the existence of the inflammation may altogether escape observation, if not carefully watched for and anticipated. Where non-rheumatic pericarditis occurs, death very generally ensues, but it is not the pericarditic inflammation, which is the chief destroyer of life in such cases. Although the local inflammation is ten times more severe in the rheumatic form of pericarditis, death is an exceptional result, whilst here in the non-rheumatic form it is the rule; and when we seek a clue to elucidate this apparent discrepancy, we find it at once in the different nature of the maladies with which the inflammations are associated. Acute rheumatism is not, *per se*, a fatal malady: but uræmia is, and so are very generally those forms of erysipelas, of tuberculosis, of scarlatina, of typhus, of pyæmia, of pneumonia, of pleurisy, in the course of which non-rheumatic pericarditis appears, and which are erroneously said to be its causes.

Speaking generally, then, and in accordance with the foregoing remarks, I may say: That the treatment of the *non-rheumatic* form of pericarditis is the treatment of that particular general affection, with which it happens to be associated; and that the treatment, therefore, has quite a secondary reference to the particular local inflammation. Such is the rule; but of course it has its exceptions: for we now and then, though very rarely, meet with cases of non-rheumatic pericarditis, in which the local inflammation takes on such a form as to become a very prominent part of the disorder.

On the other hand, in the case of *rheumatic pericarditis*, we have to treat both the general disorder and the local inflammation. The diathetic nature of the disease indicates, that the general treatment should be mainly the treatment of acute rheumatism. And the local inflammation demands the use of local remedies; its peculiar seat,—its immediate relation to the heart—indicating, besides, some special objects for our consideration in this respect. It is to the acute inflammation, therefore, as we find it especially typified in rheumatic pericarditis, that the following remarks on its treatment apply.

Bleeding, in the treatment of pericarditis, has been very highly extolled; at the present moment, however, its practice is generally abandoned in this country. That its value, as a remedial agent, has been overstated by Bouillaud and many other admirers of the practice, is now universally admitted.

"Contrast," says Dr. Bennett, "the treatment of Hope with that of Stokes, and what a difference is observable! The former energetic in lowering remedies, the latter cautious, and constantly warning us not to proceed too far. Though he

* I say advisedly, "as usually applied to inflammation of the lungs"; for I do not wish to be here understood, as considering that so-called idiopathic pneumonia is really and truly invariably such. I have already referred to the fact, that pathology is daily diminishing the number of those idiopathic local diseases, and referring them to some more general and exciting cause, present in the body. There are many reasons which justify the belief that "idiopathic pneumonia" may possibly be merely the local signs of a general disorder. We must remember, therefore, that "idiopathic" means merely, and no more than, this; viz., that, so far as we at present see, the inflammation is a local disorder, provoked by local causes, and having no relation to any particular general disorder of the system; and admitting, as we must, our very imperfect knowledge concerning the exciting causes of diseases in general, and marking, as before said, the more enlarged views which modern pathology has opened to us concerning their nature, we should at least be cautious in localising *the disease* in the existing and perhaps accidental derangements of parts.

recommends blood-letting, it can only be practised with his consent, at a time, to an extent, and under circumstances when obviously it is least likely to do harm." (*Principles of Medicine*, p. 528.)

A better pathology and a truer method of observation have forced upon the physician, during the last few years, a conviction of the injurious effects of large venesections upon the progress of internal inflammations. Inflammation is a disease of weakness. It is a condition, which, in reference to health, is an asthenic condition. Heat, redness, and increased vascularity are no more signs of a sthenic circulation, than is the hyperæsthesia of a paralysed limb a sign of increased vigour of the nerve force. There are, indeed, few physicians at the present time who resort to venesection in the cure of pericarditis with the hope of arresting the inflammation; and even they who still follow this practice of former days, in the treatment of acute internal inflammations, admit that it is only during the very early periods of the pericardial inflammation, and in patients of strong and robust constitutions, that venesection is of service. That a moderate bleeding may be practised with impunity, *under such conditions*, there is little doubt; and that it often gives *temporary* relief to the sufferings of the patient, and relieves the congestion of the heart and lungs, is certainly true; but that such a bleeding has any other beneficial effect or any direct influence over the progress of the inflammation has yet to be proved.

But if the good effects of such venesection are so doubtful, its evil consequences, when it is practised without reference to the conditions specified, are to the eye of modern medicine certain and manifest. We must recollect, that we have to do with a disease which attacks for the most part those of a somewhat feeble constitution; and that rheumatic pericarditis occurs exceptionally only in persons of robust constitution; and that there are, moreover, peculiar circumstances connected with pericarditis, which oblige us to be especially cautious in the abstraction of blood. We must keep in mind the fact, that an organ is involved in this inflammation, the constant performance of whose functions is indispensable to life; and that one of the most immediate effects of the inflammation and its products is to induce a paralysed condition of the muscular structure of the heart, and thus to endanger the integrity of its action; that in pericarditis, the reaction of depression, consequent upon the excitement, is great, and sets in early; and that it is in those cases in which the inflammation appears most violent at the onset, that we are most cautiously to watch for and to expect the greatest amount of subsequent depression. Moreover, it is certain that bleeding will not arrest the exudation; but on the contrary it appears, in certain states of the body, to hasten and increase the amount both of the solid and fluid parts of the exudation. There is another danger, also, which is possibly incurred by the bleeding. Endocarditis, as we have said, is very commonly associated with the pericarditis, and under such circumstances bleeding, by promoting the tendency in the blood to the deposition of its fibrinous particles, increases the danger of permanent injury, to which the valves are exposed, through the deposition of fibrine upon them. Dr. Todd, again, has a remark well worthy of note under this head. He says, in his lectures on *Renal Diseases*, p. 412:

"I would impress upon you this dogma; an active antiphlogistic treatment creates asthenia—asthenia gives to both rheumatic fever and gout what I may call *the shifting character*, which in both diseases is most perilous; when you find this shifting tendency, depend upon it that the asthenic condition of the patient is that which demands your earliest attention." "In this case of acute rheumatism," he says again at p. 12, "the loss of large quantities of blood from hæmaturia at an early period of the disease, has not sufficed to keep off a severe attack of pericarditis .... nor has it saved the patient from swollen and exquisitely painful joints. On the contrary, the articular, as well as the cardiac symptoms, have been much less tractable than usual."

It is to be understood, however, that in thus speaking of blood-letting, I am referring to large venesections, and of their effects upon the inflammation only. That small bleedings are often of very great service in relieving the congestions of the heart and lungs, which so often arise as consequences of and coincidently with the pericarditis, is, I think, an undoubted fact. I have elsewhere spoken of this particular mode of action of venesection; and if the conclusions* there arrived at are correct, it follows that, in the treatment of chronic and acute cardiac, as well as in certain other acute diseases, moderate venesection is of the greatest service, and, at the present moment, less frequently resorted to than is desirable.

In all cases of pericarditis, when the heart's action is much disturbed and its congestion great, I would strongly recommend the abstraction of a moderate amount of blood by venesection; the amount being regulated by the condition of the patient, and the degree of relief which it gives. Not only in pericarditis, but in all states of diseases of the heart in which congestion of the organ occurs, is such venesection—duly adapted to the individual case—of great service. I am satisfied that I have even seen life preserved by this timely abstraction of blood in cases of chronic valvular diseases of the heart, where the organ was so overwhelmed and labouring as to render death imminent.

As regards the *local abstraction of blood*, there can, in my opinion, be no doubt as to the propriety of applying a few leeches to the præcordial region, or of abstracting blood by cupping, in pericarditis, from that part, whenever there is much pain in the neighbourhood of the heart. The relief which a few leeches, thus applied, often give, is very striking; and is, I believe, explained by the fact that they draw the blood directly, or divert it, from the seat of the inflammation which causes the pain. Severe pericarditis, it must be remembered, is invariably accompanied by inflammation of the parts of the pleura which lie contiguous to the heart; and this local pleurisy is, I believe, very frequently the chief cause of the pain which is felt in the course of the pericarditis. And it certainly is not unfair to assume, when (as frequently happens in the less severe forms of pericarditis) there is an absence of pain at the præcordial region, that there is also an absence of the pleurisy.*

Caution, however, is requisite even in the local abstraction of blood at advanced periods of the disease, when the patient has previously undergone venesection, or is in an anæmic or enfeebled condition of body. Even a few leeches, under such circumstances, appear sometimes to produce alarming results. I have seen purpura hæmorrhagica and death quickly succeed the application of eight or ten leeches, in a case of acute pericarditis, where bleeding was considered inadmissible; and I have also witnessed fatal choreal symptoms closely follow the application of a few leeches in a child who was suffering from the same affection; and in both cases I was compelled, in reason, to associate the effects of the leeches with the immediate results which followed their application.+

It has been supposed that leeches, applied to the inflamed joints, may reduce the pericardial inflammation; but of this the proofs are altogether wanting. Whether there really is any connexion between the severity of the arthritic and the severity of the pericardial inflammation, is still matter of doubt. The influence which the one exercises over the other has yet to be determined. There can, however, be no objection to the application of one or two leeches to the inflamed joint when the arthritic pain is severe. I have so often seen this practice give great relief, that I cannot doubt its propriety, if judiciously made use of.

Whether leeches or cupping be most adapted for the local abstraction of blood, has been made matter of dispute; cupping is, occasionally, in pericarditis a very painful operation, but it has the advantage, when skilfully performed, of more quickly

* 1. Venesection has no *directly* beneficial influence over the course of inflammations, either external or internal.

2. But venesection is at times of great service, *indirectly*, in the course of certain internal inflammations, and in the course of certain internal chronic diseases, and of all disorders which occasion congestion and oppression of the heart.

3. The use of the venesection is in all cases alike. It acts by relieving the cardiac oppression; it neither arrests nor modifies beneficially inflammation. (*Remarks on the Uses of Bleeding in Diseases.*—BRITISH MEDICAL JOURNAL.)

* The distribution of the blood-vessels here enables us to explain the reason of the beneficial influence of the local bleeding. The internal mammary artery, which, in part, supplies the skin, etc., over the left side of the sternum, sends a branch directly to the pericardium. The intercostal arteries, also, which supply the costal pleura, are in part distributed to the skin over the præcordial region. Consequently, both from the inflamed pericardium and the inflamed pleura local bleeding acts directly by drawing blood, or diverting the current of blood, from the part. There is, consequently, a marked condition to be drawn between the effects of bleeding in inflammation and the local abstraction of blood from the inflamed part: Local abstraction of blood materially influences the inflammation, reducing the most characteristic of its phenomena. But local abstraction of blood can only modify, in this way, the inflammation of internal parts, when there is a direct vascular connection between the part inflamed and the part from whence the blood is taken.

+ In the case of the child, violent choreal symptoms so immediately followed the application of two leeches to the temples, as to leave no reasonable doubt as to the fact of their being the immediate exciting cause of the chorea. And in the other case, I well remember the remark of the gentleman who insisted on their application: "That they could do no harm, if they did no good."

obtaining the object sought than leeches, and of less worrying and fatiguing the patient; and less exposes him to the chances of being chilled by exposure to the air. Cupping, however, is manifestly objectionable in females, and few persons have the knack of performing the operation quickly and effectually; leeches, therefore, will as a rule be the means used to draw blood from the præcordial region. The distribution of the internal mammary artery would seem to indicate that the leeches should be applied rather along the left side of the sternum than about the point where the apex of the heart beats, and the left side of the left nipple.* The patient should always be carefully covered with flannel during the application of the leeches.

Mercury. The induction of the specific effects of mercury was formerly considered by the leading practitioners of our art as of primary importance in the treatment of acute pericarditis; but later and more extended experience has not corroborated the opinion.† The practice, indeed, may be said to be generally abandoned at the present moment. The careful observations made by Dr. John Taylor first demonstrated the worse than inutility of the induction of salivation in pericarditis. "The best evidence", as Dr. Bennett says, "on this subject is to be derived from an analysis of the forty cases of acute rheumatic pericarditis by that gentleman, in which mercurial ptyalism was produced, and with the following results:—1. Ptyalism was not followed by any abatement of the pericarditis in twelve cases. 2. In one case, ptyalism was followed by speedy relief. 3. In two cases, ptyalism was followed by a diminution, and then gradual cessation, of pericardial murmur. 4. In one case, pericardial murmur had been diminishing for some days before, and it ceased soon after ptyalism was produced. 5. In one case, pericarditis and pneumonia both increased in extent and intensity after ptyalism. 6. In four cases, pneumonia supervened after the establishment of, and therefore was not prevented by, ptyalism. Was it *caused* by it? 7. In three cases, endocarditis supervened after ptyalism. 8. In six cases, ptyalism was followed by pericarditis. 9. In one case, ptyalism could not be produced, and yet the pericarditis went on favourably. 10. In two cases, ptyalism was followed by extensive pleuritis. 11. In one case, ptyalism was followed by erysipelas and inflammation of the larynx. 12. In two cases, rheumatism continued long after ptyalism was produced.‡ Thus, out of the forty cases, only four can be said to have improved after the mercurial action was established, and in these there can be little doubt that the improvement was purely a matter of coincidence. Indeed, I have often observed in hospital cases, that when mercury has been said to be most successful, its physiological action has been established just about the time when, during the natural progress of the disease, the friction or blowing murmur may be expected to cease." (Bennett's *Principles of Medicine*, p. 529.)

The conclusions to which Dr. Taylor was led by these observations have been so fully confirmed by subsequent investigations, that the inefficacy of the practice of inducing salivation in the cure of acute pericarditis may now be considered as an admitted fact in therapeutics.§

[*To be continued.*]

* It might, perhaps, not be out of place here to insert a word of caution to the student in respect to the management of the physical examination of the patient. I believe there is no case, in which physical diagnosis is required, where more gentleness and tenderness should be employed in its practice than in the case of acute pericarditis. The severe sufferings of the patient and the nature of the disease forbid all needless exposure of his person, and all manipulations which are not absolutely necessary for the satisfaction of the diagnosis. I cannot doubt, that the excitement, and the pain, and the exposure, which frequent examinations necessarily entail, are often very prejudicial to the patient; and particularly in the instance of young and nervous females, who seem, among the lower classes, to be especially liable to the inflammation, and in its most acute forms.

† The following may be quoted as an example of the ordinary method of treatment adopted some years ago in acute pericarditis:—"Of one thing, I am certain, that inflammation of the pericardium in a person of tolerably good constitution, may be generally arrested in its progress by bleeding, frequent leeching, and scruple doses of calomel..... Instantly use every effort to produce the full action of mercury on the system. Apply the ointment to the axillæ, smear it over the inside of the thighs; make your patient respire the vapour of hydrargyrum cum cretâ as often in the day as he can bear the process." (Graves' *Lectures*, II, 153.)

‡ To these conclusions may be added the fact: that pericarditis has been frequently observed to supervene during salivation. Dr. Fuller, in his work on Rheumatism, notes five such cases. In each case he observed that the salivation appeared to act injuriously upon the pericarditis. The most rapidly fatal case of pericarditis which has come under my own notice, was one in which the pericarditis commenced, when the patient was suffering from severe salivation.

§ It is a fact worthy of note, as corroborative of this position, that mercurialisation in acute pericarditis has never been much resorted to on the Continent. The practice would seem to be almost untried and unknown in Germany. Neither do there appear to have been any authorities in France who have patronised it extensively, however vigorously they may have resorted to that other prime (so-called) antiphlogistic remedy, bleeding. The opinion of Gendrin (*Leçons sur les Maladies du Cœur*), that mercury is completely useless, appears to be the general opinion of his countrymen.

TWO CASES OF CONTINUED FEVER OCCURRING IN THE PUERPERAL PERIOD, SEVERALLY SIMULATING PUERPERAL CONVULSIONS AND FEVER.

By E. Garraway, Esq., Faversham.

[*Read before the East Kent and Canterbury Medical Society.*]

The suspension and arrest of internal disease on the occurrence and during the continuance of pregnancy is well known to you. Instances must have occurred to all where a woman has been snatched for a time apparently from the very jaws of death, by the occurrence of conception. A lady, a near relative, who four years ago was expectorating large quantities of pus from a cavity in the right lung, sweating, emaciating, in short said to be dying, became pregnant, all these formidable symptoms abated, and in due course a strong and healthy child was born. Again the mother relapsed, again she became pregnant, and this recurred four times, and the lady is at this moment in the enjoyment of moderately good health, still, however, with a partially obliterated lung.

I mention this singular power which pregnancy appears to exert of arresting existing internal disorder, only the more strikingly to contrast the peculiar susceptibility to disease, which arises on its completion, the puerperal state appearing to induce a proneness to the absorption of noxious or morbid *materies* from without. No sooner is the process of gestation perfected, and the child born, than the maternal system seems ready to imbibe any subtle poison which may be floating in the atmosphere, more particularly the *materies* of erysipelas, the exanthemata, and eruptive, and febrile disorders generally. Why this should be so is not easy to explain, it is probably dependent upon diminished nervous tone consequent upon the shock of labour. Did the uterine sinuses remain open, and the os and vagina uncontracted, we might imagine absorption of a poisoned atmosphere to ensue, but experience warrants no such supposition.

I have been led to these observations by one or two cases of recent occurrence, and which I think sufficiently interesting to bring before the society.

Case I. Mrs. M., aged 35, was safely delivered of her fifth child in December last. Everything went well with her till the 10th day, when I was hastily summoned, and found my patient just recovered from what appeared to have been a hysterical seizure. She expressed herself as being perfectly well, and unconscious of what had happened. In an hour or two this was repeated, but the attack which I had the opportunity of partially witnessing was evidently not hysterical, but epileptiform and convulsive. The seizures occurred again and again at intervals of a few hours, each time becoming more violent and protracted. During the intervening periods, however, the patient had nothing to complain of, save a feeling of exhaustion, no pain in the head, no great acceleration of pulse, in short, no indication of disease whatever. Still the attacks were sufficiently alarming. Depletion, counterirritation, in various forms, and mercurialisation, were had recourse to; notwithstanding matters grew worse, and scarcely three or four hours passed without convulsion, which every time became stronger and lasted longer than before, so that at length they assumed a more frightful character than anything of the kind I had ever witnessed. Every muscle, from the occipito-frontalis to the plantar muscles of the foot, was in violent action, every thing in the room was in a state of vibration, the windows rattled, and the nurses were fain to fly in terror from the house. The poor creature was about four days arriving at this state; the pulse was by this time running, the dejections passing involuntarily, the whole surface bathed in sweat, the tongue and teeth now brown and covered with sordes, and so my poor patient sank.

It was at first difficult to pronounce upon the pathology of this unwonted case, but the brown tongue and sordes, coupled with the fact that one of Mrs. M's. little girls was suffering from low fever at the time of her accouchement, furnished the key to the mystery. There is little doubt in my mind that the fever-poison was here absorbed, probably soon after delivery, and the convulsions under which the patient sank were occasioned by its maturation and nature's efforts at elimination.

The next case, though altogether dissimilar, so far as

outward symptoms were concerned, and also happily in its results, was nevertheless fraught with considerable apparent danger, and productive of no little disquiet and alarm to the medical attendant.

Case II. Mrs. W., aged 29, was confined on February 25th. On the third evening I was sent for, a rigor having occurred, and found my patient complaining of much diffused abdominal pain though without extreme tenderness, the lochia and milk suppressed, the countenance anxious, the pulse 150, very feeble and compressible. The bowels had acted twice during the day from castor oil. The poor woman's state was sufficiently alarming. I was loth to believe in puerperal fever: all my recent cases had done well, there was no erysipelas prevailing, and puerperal fever, when it has been my misfortune to meet with, I have hitherto been able to trace. Depletory measures in this case were out of the question, so I resolved, at all events for the night, to temporise, contenting myself with ordering a fomentation to the abdomen, and sending a drachm of Battley's solution in divided doses, at the same time giving with it a little calomel, merely for the sake of smoothing the way for remedies which it might possibly be necessary to bring to bear on the morrow. The next morning, to my great relief, the patient had slept well, the pain and tenderness were greatly diminished, the milk and lochial discharge were returning, and the pulse, from having been 150, was down to 100. There was some sickness, which I attributed to the opiate, the whole drachm having been taken. On the following day the abdominal tenderness was very slight, pain occasionally occurred in paroxysms, the lochia and milk were free, the pulse only 88. "Convalescent" appears in my notes the next day, and my anxiety was at an end. But my satisfaction was of short duration. On the ninth day from Mrs. W's. confinement, I was once more summoned to find her in a state of high fever, the milk and lochia gone, the abdominal pain and tenderness returned, the pulse 130. Calomel and Dover's powder were now steadily given, and Battley in the interim to ease violent exacerbations of pain. No abatement of the symptoms occurred; the next day, on the contrary, the pulse had risen to 140, the pain and tenderness, particularly over the uterus, were considerable, the lochia and milk continued suppressed. The case was certainly puzzling, but I felt justified this day in forming my diagnosis, that it was not one of puerperal fever or hysteritis, but fever fortuitously occurring during the puerperal state. I was led to this from a consideration of the *period* of the attack, nine days after delivery; from the presence to-day of a brown dry tongue, and a herpetic eruption around the lips (indicative of fever of an intermittent type); from the absence of tympanitis, dyspnœa, delirium, or that terror, tremor, or agitation so painful to witness in puerperal fever generally. It is needless to trouble you further with the minute details of the case. Calomel as a safeguard was still cautiously administered; the pain gradually left the abdomen, and became located in the chest and scapulæ, causing some difficulty of breathing; but this pain, being evidently muscular, was disregarded. The case became thoroughly developed as one of common continued fever, not, as I had expected, intermittent; and, after the conventional twenty-one days, the patient became convalescent. It was a source of satisfaction that depletory measures were not had recourse to in this case, although some might at first have considered them indicated. The subsequent debility was extreme, and it was not without difficulty that convalescence was established and a tendency to the development of phthisis averted. It was not until some time after this that I accidentally discovered that Mrs. W., up to the day of her confinement, had been washing the linen from a little girl with low fever, none other than the child of the same lady who died in convulsions. To my mind, this linen was the source of the dangerous illness with which my patient had had to contend.

If, as we are led to believe, febrile disorders generally are dependent upon certain not well-defined atmospheric conditions, or upon actual poisonous particles floating in the air we breathe, and that in certain states of the system this poison becomes absorbed, giving rise in its elimination to that train of symptoms we term "fever," the important questions suggest themselves, and open a wide field for discussion: What are those states, and how may they be neutralized? Who are those susceptible, and how may they be protected? Without taking upon myself to answer these, I would simply place for one in the latter category, "the lying-in woman," and suggest that during the prevalence of fever, more active measures to maintain her energy and tone, and her resistive power, be had recourse to, and every form of morbid material be removed as far from her as possible.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF DISEASE OF THE FEMUR: WITH REMARKS.

By Edmund Boult, Esq., F.R.C.S.

[*Read September 22nd*, 1859.]

In the early part of the summer of 1858, I was consulted in the case of a young gentleman, about 10 years of age, who was supposed to have a tendency to lateral curvature of the spine. He was a somewhat delicate looking boy, with full black eyes, and a clear complexion; but heretofore had been generally healthy. I could not detect any symptoms of spinal disease; but I ascertained that twelve months previously he had had a very severe and acute inflammatory attack in the right thigh, which resulted in the formation of pus beneath the periosteum. His sufferings were very great, and the complaint must have been of a very serious character; for he was at that time under the care of a very able surgeon, who judged it necessary to make an incision down to the bone, fully four inches in length. After the matter was discharged, the wound healed almost immediately, and within a short time the boy was up and running about as usual.

Some weeks after I first was consulted about him, our distinguished associate, Dr. Symonds, happened to have an opportunity of examining him, and he thought the right limb was decidedly *longer* than the left. As his parents were naturally anxious about him, they took him up to London, where he was seen by an eminent orthopædic surgeon, who thought he detected symptoms of incipient lateral curvature; but could not see that the limbs differed in length. Indeed, he went so far as to say that if a difference did exist, it must be the result of some latent paralytic affection of the left leg, which had interfered with its proper nutrition. This gentleman recommended a mechanical support to the spine, which, however, as it was of somewhat cumbrous construction, and the weather at this time very hot, neither Dr. Symonds nor myself thought it desirable he should commence wearing then.

Towards the month of September 1858, I was again requested to see him, as there was a very evident diffused swelling extending round the upper part of the knee-joint. There was no pain in the limb, but the temperature was decidedly higher than that of the left. It was now clear that there was chronic mischief going on in the bone, and that this swelling depended upon a collection of fluid connected with the disease. The hypertrophy of the femur was now very palpable.

With the concurrence and assistance of Dr. Symonds, I made an opening at the upper part of the old cicatrix, about an inch and a half in length, which soon gave exit to a considerable watery discharge.

I chose the upper part of the cicatrix for my opening in preference to the lower, because I foresaw a long confinement to the horizontal posture, and I knew it would be more easy to make the former the most depending part than the latter; moreover, this plan had the advantage of draining away all discharges from the neighbourhood of the knee-joint. After this there was but little to remark in the case. The patient was left at rest in the horizontal position for several months. His general health and strength were maintained by a generous diet and the exhibition of tonics (principally such as contained steel or iodine) and cod-liver oil, and occasional change of air to Clifton. On this plan he throve wonderfully well, and locally he had no pain nor discomfort. The discharge, however, continued, and occasionally little spiculæ and pieces of crenelated bone, came away with it. Thus months passed, with but little sign of the wound healing.

In the month of February, this year, his parents, still anxious about him, felt desirous of another surgical opinion in the case, and I had the advantage of a consultation with another London surgeon of great eminence. He agreed with the diagnosis and prognosis I had previously given, which were favourable; but when I pointed out to him the abnormal growth of the limb, he was evidently sceptical, and appeared to think the difference was more apparent than real, and being pressed for time he made no very minute inquiry into this abnormity. On the other hand, Dr. Symonds and myself, who had ample opportunitty of watching the case, were fully convinced that there was increasing hypertrophy of the whole femur, as regards length and circumference, both in the shaft and the epiphysis. I believe, also, that the head of the tibia was coin-

cidently enlarged so as to accommodate itself to the hypertrophied condyles resting upon it. Certainly, the right femur is now fully an inch and a half longer than the left. At last, about a couple of months ago, the discharge having gradually lessened in quantity, altogether ceased, and the wound healed. The boy was then allowed to get up, and in a very short time he was running about, nearly as well as ever, his lameness being very trifling, the differential length of the limbs being compensated for by a very much thicker sole being attached to the right shoe than to the left. His spine is perfectly straight.

It is not my intention to dwell upon the nature or character of the disease this patient suffered from, which, indeed, are sufficiently obvious; but there are two points of great practical interest I wish to allude to.

The first is, how far will nature, as the boy grows up to manhood, rectify the abnormal difference in the femurs? And the second is, how far will this inequality of length tend to produce lateral curvature of the spine?

Hypertrophy is by no means an unusual result of long continued inflammation of osseous structures, and it is not difficult to conceive how the exalted nutrition of a bone should produce such a consequence; but *thickening* is much more frequently observed in such cases than *lengthening*, and I believe the latter to be very uncommon. This, I apprehend, is the reason why the two London surgeons I have alluded to, declined to believe it had occurred in this instance. Still, this result is not unknown. Mr. Erichsen, in his excellent work on surgery, mentions having seen the tibia elongated from one and a half to two inches in length, as the result of chronic osteitis. And Mr. Stanley, in his valuable book on *Diseases of the Bones*, says, "long bones are often increased in thickness, but rarely in length. I have, however, seen instances of long bones hypertrophied in length" (*Diseases of the Bones*, p. 1), and he then adduces several cases.

Of course it cannot be expected that the hypertrophied bones will shrink, nor that nutrition will be less effectually maintained in them: but it is a matter of great practical interest to know how far we may reasonably expect a compensatory growth to occur in the corresponding limb.

As regards the second point, how far will the inequality of length tend to produce spinal curvature? authors appear to be divided in opinion. Mr. Stanley says, speaking of the inequality produced by atrophy of bone, "Among all the consequences of such defective growth in any of the bones of one of the lower limbs, is the formation of lateral curvature. (*Op. cit.*, p. 10). On the other hand, Dr. Little, who appears to have given a good deal of attention to this subject, states that "Inequality in the length of the lower extremities has been assigned as a frequent cause of distortion of the spinal column. I have several times witnessed lateral inclination combined with actual difference in the length of the lower limbs, or when the growth of one had been impaired in childhood from scrofulous abscess in the leg and foot; but I have examined no case in which, notwithstanding the shortening, other causes of lateral curvature did not exist. On the contrary, it is very remarkable according to my experience that difference in the length of the lower extremities is so rarely accompanied with deformity of the spine." (Little *On Deformities*, p. 363.)

I am doubtful which of these opinions be the more correct, and I am induced to bring this case before the meeting, in the hope that the experience of some of the gentlemen present may enable them to give some further information on the points I have alluded to.

Prize Essay. The Medical Society of Amsterdam offers a gold medal, of the value of thirty ducats, for the best essay on the Physiology and Pathology of Scoliosis. The Society wishes for investigations respecting the muscles which can produce curvature, and those which may be brought into antagonism with them and promote a cure. Those muscles the active and passive motion of which may be of service, should be carefully pointed out, and it should be stated to what extent the energy of muscular action may be excited by electricity. The essays should be sent, free, before the 1st of May, 1861, to Dr. J. W. K. Tilanus, at Amsterdam; they must not be in the author's handwriting, and may be written in Dutch, German, French, English, or Latin. The name of the author to be placed in an envelope with the motto heading the essay.

Bequest. By the will of Mr. Henry Guy, of Hamlet House, Moulsham, recently deceased, £200 are left to the Essex and Colchester Hospital, and £600 to the Asylum for Idiots at Earlswood.

Reviews and Notices.

The Pathology and Treatment of Stricture of the Urethra and Urinary Fistulæ. By Henry Thompson, F.R.C.S., etc. Being the Jacksonian Prize Essay for 1852. Second edition. London: Churchill. 1859.

The work before us is the essay to which the College of Surgeons awarded the Jacksonian Prize some years ago. It has passed through one edition; and Mr. Thompson has availed himself of the opportunity of a second to make considerable additions to, and otherwise improve the original. There is one error to which all works devoted to specialities are peculiarly liable—that of exalting the subject of which they treat into an isolated importance, forgetful of its relations to other branches of science, and of its place as but one portion of an harmonious whole. Though what has been achieved by the genius of such "giants" in the profession as Bright, Addison, and others, by their discoveries may offer a seeming contradiction to such an assertion, a glance at the crowd of "pigmies" who have, with no corresponding benefit to the world, taken each organ and region of the body under their special protection, will but prove its truth. Besides this danger, moreover, a prize essayist has a special temptation from the nature of his position to forget his subject in himself, and use his success as a mere advertisement for his personal advancement.

From both these errors Mr. Thompson has steered clear, and has produced a work which will be recognized as an authority on the subject. Since the first publication of the essay, he has not relaxed his investigations; and the present edition contains a great deal of new matter, and offers a most comprehensive view of the whole subject of stricture, its complications, and all the circumstances relating to it. The subjects treated of are arranged in the following order. First, the anatomy and physiology of the urethra are considered; then the pathology and classification of strictures, and their various methods of treatment, illustrated by cases in detail: retention of urine; and urinary abscess and fistulæ. These chapters are followed by an appendix containing tables for the clinical examination of urine, an account of the preparations relating to stricture in the museums of the London and Edinburgh Colleges and Hospitals (all of which have been examined by the author), and a most careful analysis of two hundred and twenty cases of stricture, showing their history and causes, and lastly a copious index.

Mr. Thompson first passes in detailed review the anatomy and physiology of the urethra; and on the whole he gives a correct exposition of what is at present known respecting the subject. We must, however, take exception to one or two points.

He objects to the term "membranous urethra," and would prefer the term "muscular" or "contractile." In our opinion, however, the old term is preferable; it is not likely to be misunderstood, whereas the term muscular might be, inasmuch as the whole canal is more or less surrounded with muscular fibres.

He seems also to have a leaning to the term "interfascial" urethra, believing that it is interposed between the anterior and posterior layers of the so-called deep perineal fascia. In almost all works on surgery and surgical anatomy, there has been a great deal of loose writing respecting this deep perineal fascia. Much misapprehension exists about it, and not a little false pathology in consequence. It is usually said to consist of two layers, one which is obvious to every dissector, as admitting the passage of the urethra close to its bulb, the other passing down over the apex of the prostate. The upper and lower attachments of the deep layer are most vaguely stated; it is supposed to exert great influence over the direction of the

fluids in extravasation of urine, and the lithotomist is taught to hold it in great respect. But, we would ask, What is the *posterior* layer so much spoken of? In very many dissections made to discover it, we have never been successful. Practically, and in reality, the "deep perineal fascia" or triangular ligament of the urethra, consists only of a single layer which is attached to the bones forming the pubic arch, the inferior margin being connected with the superficial fascia of the perineum. Urine extravasated in *front* of this membrane finds its way up towards the root of the penis and along the cord to the abdominal wall, and also infiltrates the scrotum generally: extravasation *behind* the fascia spreads around the neck of the bladder and downwards round the rectum. The pelvic fascia, on the other hand, is fixed to the posterior surface of the symphysis pubis, passes backwards along the level of the membranous urethra, forming the anterior ligaments of the bladder, joins with the investing membrane of the prostate, and then may be traced posteriorly round the rectum. Its inferior surface is in contact with the levator ani, and we will venture to assert that the real pelvic fascia is never endangered by the knife of the lithotomist, unless he passes by the staff, and perforates the anterior or upper wall of the urethra. Strictly speaking, no important layer is given off from the pelvic fascia which can be called the posterior layer of the deep perineal fascia. Mr. Ellis, one of the first living anatomists, ignores this posterior layer altogether, and describes the triangular ligament as consisting of but one layer.

The various sorts of stricture are next considered, and a classification from their anatomical characters proposed; into, 1, linear; 2, annular; 3, indurated annular; 4, irregular or tortuous: or, according to their pathology—into, 1, simple; 2, sensitive or irritable; 3, contractile or recurrent. With regard to the amount of contraction to which the urethra may be subject, or, in other words, its impermeability, a question of some interest in consequence of the assertions of Mr. Syme, Mr. Thompson states his opinion that "probably never do the walls of the contracted passage adhere, causing obliteration of the urethra," except from some injury to the perineum, by which the urethra may be cut across. Nevertheless he has "twice met with a stricture (in the dead-house) impermeable to a bristle or an eye-probe, even after the urethra had been slit up to the point of contraction." In one of these cases which occurred in Mr. Thompson's own practice, and in which he punctured the bladder three months before death (the only case in which he has done so for the relief of stricture and inability to pass an instrument during life), the *post mortem* examination showed a stricture through which a probe of the smallest size could not be passed, though there was no absolute occlusion or obliteration of the canal.

With the view of determining the most frequent locality of stricture, the opinions of many eminent surgeons, mostly differing from one another, are quoted, and the conclusion at which Mr. Thompson arrives is that the most frequent seat of stricture is "that part of the urethra comprised in the inch anterior to the junction of the membranous and spongy portions, *i.e.*, the posterior or bulbous part of the spongy portion." In an analysis of 320 cases, he found 215 or 67 per cent. in this situation. He also adds "that not a single case of stricture in the prostatic part is to be found in any of the public museums of London, Edinburgh, or Paris." In estimating the causes of stricture, inflammation of some sort takes the most prominent place, and a careful analysis of 220 cases gives as large a proportion as 164 to that of a gonorrhœal character, and only 28 to injury to perineum.

It is, however, to the methods of treatment that most surgeons will look with the greatest interest; and these are considered at some length by our author, who gives each its fair share of attention without any bias on his own part. The construction of a catheter must necessarily be an important element of consideration in the process of dilatation; and to this point, besides practical experience, Mr. Thompson brings an argument, partly "geometrical," so to speak, which, to our mind, is conclusive, as to the proper curve a catheter should possess. The curves of instruments usually found at the makers', describe, very nearly, arcs of circles varying from four to four-and-a-half inches in diameter; and sometimes, which is worse, the last inch of the sound is scarcely flexed at all, a form which is wholly unfitted to traverse the urethra with ease and safety. As a curve is necessary, it is worth discovering what is the most valuable one for general use.

"Were it necessary to construct a catheter on *à priori* principles, we should naturally, as it appears to me, adapt its curve to that of the least moveable portion of the urethra itself. This was shown to be equal to a portion of the circumferential line, equal to about three-tenths of a circle, three inches and three-fourths in diameter. Now, as we shall see that the instrument must, in its transit to the bladder, through a healthy urethra, describe a curve, and turn round an axis, which may be imagined to exist about the centre of the symphysis pubis, it follows that it will most easily do this, if its own curve corresponds with that described. Accordingly, this principle may be safely recommended as that on which the plan of its construction should be based."

To this reasoning Mr. Thompson adds the testimony of his "practical experience" (a term which will probably have more charms for, and be more satisfactory to, the majority of surgeons, than any demonstration, however philosophical), having tried many forms for a long period, and having been led to adopt one such as he recommends "simply from having found such a form the most successful for the majority of cases". Our limits will not allow us to follow in detail the various curative means which are so amply detailed, in their history and application, in this work; but we may content ourselves with stating some of the conclusions at which Mr. Thompson has arrived, making a few remarks on the subject of external division.

"That the process of dilatation, carefully, judiciously, and perseveringly performed, is the most safe, efficient, and generally applicable, of all means for the treatment of organic and permanent stricture. That, while dilatation is successful in curing the great majority of cases, there are unquestionably some in which either the effect is so temporary that the contraction reappears on the cessation of the treatment, however long continued, or in which the urethra is so irritable that its employment aggravates rather than removes the symptoms. Cauterisation may be regarded, perhaps, as a useful adjunct to dilatation in some few cases, especially in some of those in which a considerable degree of irritability exists. It is wholly inapplicable to the removal of old and extensive contractions. Internal urethrotomy is indicated in almost all strictures of the external meatus of the urethra, and in many cases of stricture situated about the middle of the spongy portion, for which dilatation, fairly applied, has proved unsuccessful."

Till the time of the introduction of Mr. Syme's operation, the "perinæal section" was that favoured by the authority of all surgeons, performed as it was chiefly for the relief of a much distended bladder, or for the introduction of instruments when the stricture was *impassable* by ordinary means. Mr. Syme, however, based his operation on a different axiom to that generally received; and, instead of considering that, in a stricture permeable to instruments, external division is *contraindicated*, boldly asserted that "permeability was an indispensable prerequisite to the performance of external division". This operation, then, which may be briefly described as the "division of a permeable stricture on a grooved sound, as a means of cure," has been extensively tried, both in and out of London; and a list of 219 cases in which it has been performed (with the names of the operators in each) is given, from which it appears that the results have been most favourable, the number of deaths being only slightly over 6 per cent. The cases for which it is most applicable are—1. Those in which the chief character of the stricture is its extreme irritability, and where

continued dilatation is impossible, from the distress it occasions—symptoms which cease as soon as the stricture is divided; 2. Those in which there is a strong tendency to contract, against which dilatation is powerless; and 3. It is recommended "where several old urinary fistulæ, situated at or near the middle line, complicate a stricture not readily yielding to dilatation, because they can be included in the incisions, and their healing is thus effectually promoted. On the other hand, where advanced renal disease exists, this or any other operation has but a small chance of success, and ought never to be undertaken; and it is to be regretted that sufficient care is not always taken to discover its existence before any such steps are determined on. Much controversy has been excited by, and no little acrimony devoted to, the discussion of Mr. Syme's dogma as to the non-existence of an *impermeable* stricture; after which assertion, one reads with some little astonishment that gentleman's statement "that he has been recently on three occasions foiled, after repeated attempts to pass an instrument, and obliged to open the urethra in front of the stricture, and divide the contracted part in the usual manner". The question of puncture of the bladder *per rectum* is afterwards considered in quite as impartial a manner as the topics in previous chapters; and the work may be consulted in any part of it with the certainty of affording satisfactory information.

The thoroughly fair and honest way in which Mr. Thompson has discussed every portion of his subject (many of the points being of a personal and much debated nature), and, without advancing any special claims or advocating any peculiar views of his own, has afforded all the information having any relation to it, reflects the highest credit on the author, both as a surgeon and a gentleman. We cannot conclude without endorsing the words which are placed in the title-page of his work:—

"No single species of treatment ought to be vaunted as the one exclusively appropriate method. . . . No one can be successfully applied to all the varieties of the complaint. We cannot possess too many resources: we shall be unwise to deny ourselves the right to select, with discrimination, for each case its appropriate remedy. Such, I believe, is the lesson which is learned by most of those whose study and experience of the subject has been most extended, and whose judgments are not warped by that predilection for a particular method which those who have discovered, introduced, or in some way become identified with it, are so prone to exhibit in a greater or less degree."

The Pathology of Tuberculous Bone. By C. Black, M.D. Lond. Pp. 40. Edinburgh: Sutherland and Knox. London: Simpkin, Marshall, and Co. 1859.

This little work contains the results of Dr. Black's researches on tubercle as affecting the osseous tissue. Tuberculosis of bones, he says, presents three pathological stages: 1. Active congestion or local predisposition; 2. Exudation; 3. Germination and ulceration. Of each of these, the microscopical appearances, the symptoms, and the treatment, are described. The phenomena of the second or exudative stage are thus given:—

"The process of tuberculous exudation in bone is, in every respect, similar to that which occurs in the pulmonary tissue,—namely, firstly, an exudation into the basement tissue of the vascular membrane of the cancelli, which may or may not extend into the lacunæ and canaliculi; and secondly, the occupation to a greater or less extent, of the cavities of the cancelli themselves. Hence, in a section of bone illustrative of this stage, we find that, in some cancelli, the vascular membrane, like that of the air-cells of the pulmonary tissue, has undergone a degree of thickening, and is more granular than in its healthy condition—that, in other cancelli, a portion of their cavities is occupied by deposit—whilst, in a third series, they are completely *stuffed* with this exudation. In the last mentioned condition the cancelli appear, under the microscope, as so many spaces of irregular size and shape, densely packed with exudation-matter in colour deeper than the bony fibres which constitute their walls. On adding a drop of distilled water to the preparation, a quantity of granular matter of irregular shape, and varying in size from 1-7000th to 1-15,000th of an inch in diameter, and dark, irregular, granular patches, from 1-600th to 1-1300th of an inch in their long diameter, are detached from the cancelli, which are thereby rendered more transparent than before. In colour these patches vary from a light yellow to a dirty reddish-brown, which is no doubt due to the different degree of staining which they have undergone by the hæmatine of the blood extravasated into the respective cancelli. They consist of portions of the lining membrane of the latter detached during the process of exudation, and imprisoned amidst the tuberculous matter which occupies the cavities of the cancelli.

"As they and the granular matter before-mentioned lie *in situ* in their respective cancelli, a few oil-globules of various sizes are seen to be scattered amongst them; whilst others lie on the surface of the osseous walls of these cavities. In this state the lacunæ of the latter are but dimly visible. On adding now a solution of potash to the preparation, the number of detached granules and patches increases, the cancelli becoming less and less occupied by the deposit, and the structure of the osseous walls of the latter more and more defined. There appears with this result a great increase in the number of oil-globules, which crowd different points of the field of vision, and the formation of which is contemporaneous with a marked diminution in the degree of opacity of the granular matter and irregularly sized patches before named. It is thus evident, that the latter have, by a species of degeneration, undergone a degree of fatty transformation, which, in the further stage of the disease, is carried to a still greater extent.

"The action of æther is similar to that of liquor potassæ. The number of granular patches detached by the former, is, however, not so great, nor are the patches quite so transparent, as by the latter re-agent. Acetic acid has the effect of rendering the cancelli, their contents, and the bony fibre, more transparent.

"In examining the naked walls of the cancelli after the removal of the contents of the latter, minute projections of bone constituting exostoses, are not unfrequently observed to spring from them into the cavities of the cancelli. These vary in size from a minute elevation on the surface of the cancellous wall to an exostosis which occupies nearly the whole cavity of a cancellus. In this new bone lacunæ, similar to those of the real bony tissue itself, are sometimes to be seen. In the lacunæ and canaliculi of the real bony tissue, tuberculous and osseous deposits likewise occur." (Pp. 17-18.)

The pathological symptoms, then, which attend the second stage are thus summed up: "1. Exudation into the basement structure of the lining membrane of the cancelli, and consequent thickening of the latter: 2. Exudation into the cancelli, with more or less consequent detachment of their lining membrane: 3. Obliteration, more or less, of the lacunæ and their canaliculi by tuberculous deposit: 4. The growth of exostoses from the osseous walls of the cancelli, and the occasional occupation of the lacunæ and canaliculi by osseous deposit."

The third stage, that of germination and ulceration, is described by Dr. Black as characterised by disintegration of the walls of the cancelli, consequent breaking down of the partitions, fatty degeneration of the exudation within the cancelli, and ulceration of the bone. The author explains the destruction of cartilages in cases of disease of the articular ends of bones, on the principle that their supply of nutrition is cut off by a membrane thrown out between them and the bones.

"As a preparatory step to the ulceration of the cartilage, an exudation is thrown out between it and the extremity of the bone, by the vessels of the latter; and this exudation, undergoing a certain development into cells, constitutes a seemingly false membrane, to which important functions, in the subsequent destruction of the cartilage, have been ascribed. Of itself, and by virtue of an inherent property, this false membrane has no power to cause the absorption of the cartilage; but, by interposing between it and the bone, from the vessels of which the cartilage draws its pabulum of support, the healthy nutrition of the latter is destroyed, and its subsequent ulceration is in consequence decreed. It is extremely rare to find this false membrane intervening between the whole extent of the cartilage and the adjacent bone. It much more com-

monly exists in patches, and these invariably correspond with diseased points of bone beneath. Where the cartilage is yet adherent to the bone, no such false membrane is to be found, and the condition of the bone beneath is proportionately normal. Hence, the formation of this false membrane is but the natural result of the advance of the disease to the surface of the articulating extremity of the bone; and the subsequent destruction of the cartilage is no more ascribable to the influence of any power of absorption on its part, than is the destruction of the periosteum, or of the superjacent soft tissues, to an inherent power of absorption in the exudation which occurs beneath the former, and amongst the latter, in the progress of the disease to the surface of the body. The true explanation, then, seems to be, that where, in the progress of the ulcerative stage of tuberculosis of bone, the cartilages of the adjacent joints ulcerate, they, in a great measure, do so as the result of an exudation thrown out between them and their corresponding extremities of bone by the vessels of the latter, by which their normal nutrition is destroyed, and their subsequent disintegration induced. I say, 'in a great measure;' because the ulceration of the cartilages is not entirely due to the effect of intervening exudation, but in part to tuberculous disease of the cartilages themselves." (Pp. 30-31.)

We would recommend all pathologists to examine into the results at which Dr. Black has arrived. He has here, as on previous occasions, shewn that evidence of great industry, and of conversance with pathological investigations, which must entitle his labours to the friendly consideration of scientific men.

Phthisis and the Stethoscope; or the Physical Signs of Consumption. By Richard Payne Cotton, M.D., Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. Second edition, pp. 80. London: Churchill. 1859.

Although this work is described as a second edition, it may really be considered as a new work, since it has been entirely rewritten by the author. It describes in a very brief but lucid manner the whole of the physical signs which accompany the different stages of phthisis, and it will be found a most useful compendium of practical knowledge upon this disease. No theoretical views are introduced, the aim of the author appearing to be the description of the signs of disease, such as he has witnessed when himself in the wide sphere offered to him in the Consumption Hospital at Brompton. The student, who is as yet unacquainted with the physical signs of phthisis, cannot fail to understand them when he compares Dr. Cotton's descriptions with his own observations at the bedside; and the practitioner of medicine will likewise derive most valuable information from the perusal of this practical little treatise.

British Medical Journal.

SATURDAY, NOVEMBER 5th, 1859.

THE LONDON MEDICAL REGISTRATION ASSOCIATION.

It is evident that Clause xl in the Medical Act, which enacts that no person shall claim any medical title unless he is duly registered, will not remain a dead letter. When Dr. Hawkins gave it as his opinion that the General Council could not take upon itself the duties of a prosecuting body, many persons believed that the Act would turn out after all little better than the sham one of our cotemporaries has pronounced it to be. We rejoice to find, however, that the profession have determined to work this clause themselves, and thus supplement the Council in the performance of a duty of vital consequence to the whole profession. The rapidity with which Registration Associations have sprung up all over the country, and the vigour displayed by the metropolitan body, are the most convincing signs that illegal practice deeply trenches upon our rights, and preys upon the weaknesses of the general public. The Central Association, which was planted about a year ago, has already grown into a powerful body, numbering seven hundred members, having many provincial Registration Societies affiliated with it; and we are glad to find that, at the meeting on Wednesday last, a series of rules and bye-laws for its guidance were agreed upon, some of which are very worthy of notice. For instance, Bye-law ix states

"That, in the event of any member being accused of practising other than is understood to be orthodox medicine, the Vigilance Committee shall communicate with the said member, informing him of the accusation brought against him, and requesting his attendance before them; and the Vigilance Committee shall report the result of their investigations to the Committee at their next meeting; which body, if the accusation be proved, shall have power to expel such member."

At first sight, this bye-law appears to be a little arbitrary; but those acquainted with the tactics of the homœo-quacks are well aware that those gentlemen by no means reciprocate our desire to avoid them. They hang upon our skirts, wherever we go, too glad to pick the crumbs from our scientific discussions, and even to rub shoulders with orthodoxy, which they are mean enough to repay by anonymous tirades against us in the penny papers. The Society has a perfect right to protect itself against these wolves in sheep's clothing; and the profession will agree with the Association that they have done well in shutting their doors resolutely against them. Yet we apprehend that, without some further explanation, this bye-law may act unfairly. Thus, for instance, it is not impossible that a perfectly orthodox practitioner may, through erroneous information on the part of the Vigilance Committee, be summoned before them, which summons he may not think it necessary to attend to. Under such circumstances, we should scarcely suppose that the Society would consider that he allowed sentence of expulsion to go by default. It is quite clear that, in the majority of cases, no sensible man would object to give any necessary explanations that the Vigilance Committee may demand of him; but exceptions will possibly occur, where pride may lead a member to say, "No, I will not be questioned by such an authority". He may be very foolish in acting so; but we scarcely think that, on the ground of his non-appearance, the Society would be justified in voting him by implication an unorthodox person, and expelling him accordingly. In the case of declared homœopaths, of course there can be no question that this bye-law should be carried out to its utmost consequences.

Bye-law xii is calculated to meet a difficulty that threatened to very materially impede the working of Provincial Medical Registration Associations, especially those existing in small towns. There is no difficulty in such committees to pick out delinquents, but there is very considerable difficulty in settling who shall bell the cat. It is no slight thing to appear as a prosecutor against your next door neighbour, and to incur the credit of taking the bread out of his mouth. When Mr. Fitzpatrick, the other day at Liverpool, boldly took upon himself the character of public prosecutor under the Medical Act, against a person who was practising with only one license, we all know how fiercely he was attacked and blackguarded by

the defendant's attorney. To meet this difficulty, bye-law XII states—

"That on the Honorary Secretary receiving a legal undertaking from any local Registration Association, or any local association of medical practitioners, to defray the expenses of a prosecution or prosecutions against any unqualified practitioner or practitioners of medicine or surgery, he shall have the power to direct legal proceedings to be taken in the name of the Association."

There can be no doubt that this will prove a very admirable arrangement. It will at once relieve medical men from the odium of appearing to prosecute from personal motives. Moreover, a legal prosecutor would be able to see that a magistrate did not contravene the letter of the law in his decisions, which sometimes happens. For instance, Mr. Jardine, in the case of Scott, decided that the burden of proving that a man is not legally qualified because his name is not in the register, rests with the prosecutor; whereas the Act under clause XXVII clearly throws the proof on the defendant.

It will be observed that this offer of action from the metropolitan association is made to all local registration societies, or societies of medical men, whether affiliated to them or not, provided they guarantee the expenses of the prosecution. We trust the facilities thus placed in the way of medical men in the provinces will be taken advantage of, and that a vigorous attack will be made all over the country on the army of illegal practitioners, the very numbers of whom have become ascertained by the Medical Council to be so great, as to deter them from any attempts at prosecution.

It has been decided, wisely we think, not to meddle, for the present at least, with medical men practising with a single qualification. So much has to be done in eradicating positive quacks, who have not the shadow of a right to meddle with the health of Her Majesty's lieges, that cases of insufficient qualification under the new Act can well be postponed. Moreover, the very fact that it is known they are insufficient, will slowly have the effect of inducing their possessors to qualify in a more satisfactory manner, which in many cases we know actually to have taken place.

For what it has done during the year which has elapsed since its formation, the London Medical Registration Association deserves well of the profession and of the public. We trust that it will be enabled to proceed with renewed vigour.

THE WEEK.

We desire to call the attention of our associates to an advertisement of the New Sydenham Society, which appears in the present number. It is there stated that the number of members has so greatly increased beyond what was at first expected, that four volumes out of the five which were to form the supply for the first year, are out of print: but that it is intended to issue a second edition of these. The Society has commended itself to the favour of the profession by the quantity of valuable matter it gives for the annual guinea subscription, as well as for the promptness with which its operations are conducted. We would strongly advise those members of the profession who are desirous of being possessed of the works of this institution from the beginning, to forward their names at once to the Secretary. The society has in course of preparation translations of several standard works, which, we believe, will be ready for presentation in the course of the second year of its existence, which will commence in January 1860.

The trial of George Frederick Royal for the murder of Zipporah Wright by poisoning, took place last week at the Central Criminal Court. The evidence went to shew that the deceased, who cohabited with the prisoner, was delivered of a child on April 28th, and that she was convalescent in a fortnight. Early in the morning of May 31st, she was suddenly attacked with what the prisoner described as "cramp in the stomach". She complained of a burning sensation in the throat and a violent pain in the stomach, and of sickness and diarrhœa; and also of numbness of the legs. She was attended by Dr. Webb, one of the medical officers of the Poplar Union, and died on June 4th. Dr. Webb, in his examination, stated that he believed death to have been caused by an irritant poison; and in this opinion he was supported by Dr. T. Alfred Barker, Dr. Garrod, and Dr. Letheby: the latter of whom thus described the phenomena with which he met in examining the stomach of the deceased.

"The stomach was very much softened and inflamed. There was no odour of any volatile poison, and I searched for mineral poisons, but could not find any. I then searched for organic poisons, and from a quantity of treacle-looking liquid I obtained about a drop of an oily liquid, which I found to be exceedingly acrid in taste, and upon applying it to my lip it produced great pain, and in a quarter of an hour several blisters were formed and the next day there was a scab, which remained two or three days. Upon examining the vomit, I discovered in it some of exactly the same description of oily matter I had done before, and there was also some in the contents of the stomach. The total quantity of acrid matter that was obtained was about four grains. At one time I thought this matter might have been cantharides, but from experiments I made, I am satisfied it was not. I tried every pure acrid I could obtain, and none of them produced a similar effect to this, except croton oil. I administered a small portion of the matter to a guinea-pig, and it was dead in ten minutes. I then extracted it again from the body of the guinea-pig, and administered it to some sparrows. One of them died in four minutes, another in a quarter of an hour. It appeared to occasion death by causing a spasm of the throat. I gave some treacle and water to another bird before administering it, and this bird was violently sick in a quarter of an hour, and died the next day. Although I cannot state what the nature of the ingredient was, I am satisfied that it was an acrid poison of a very deadly character. I never heard or read in all my experience of a matter of the description I have mentioned being generated spontaneously in the stomach."

On the part of the prosecution, it was attempted to be shewn that this poisonous matter—whatever it might be—had been given to the deceased by the prisoner in some coffee or milk. No witnesses were called for the defence: but Mr. Sleigh, the counsel for the prisoner, endeavoured to show by cross-examination of the medical witnesses, that the symptoms and *post mortem* appearances were more attributable to natural disease than to poison; and that extraordinary changes, possibly resulting in the formation of acrid matters, were acknowledged to sometimes take place within the body. The jury, after retiring for twenty minutes, returned a verdict of Not Guilty. The trial lasted two days.

Association Intelligence.

MEDICAL BENEVOLENT FUND.

At a meeting of the Committee, held on October 25th, in New Burlington Street—William Newnham, Esq., Vice-President, in the Chair—seven cases for relief were presented to the meeting, five of which were relieved; and four additional annuities of £20 each were granted.

BATH AND BRISTOL BRANCH.

MEDICAL REGISTRATION.

At the last Ordinary Meeting of this Society, it was resolved—"That it is desirable that a General Meeting of the profession of this district be called, to take into consideration the propriety of forming a Local Medical Registration Society, for looking after the general welfare of the profession."

In accordance with the above resolution, a meeting will be held at the Institution, Park Street, Bristol, on Thursday, November 10th, at 3 o'clock P.M.

Crosby Leonard,
R. S. Fowler, } *Hon. Secs.*

October 20th, 1859.

DIPHTHERIA.

At the last Quarterly Meeting of the Bath and Bristol Branch, it was resolved that an inquiry should be set on foot with reference to diphtheria. Dr. William Davies, of Bath, will be obliged by answers to the following queries: the replies being numbered according to the questions.

1. Number of cases, ; age, ; sex, ; and general condition of patients.—2. Condition of throat, especially as regards the presence of false membrane, etc.—3. Mode of treatment; local and general.—4. Number of deaths.—5. Cause of death in fatal cases.—6. *Post mortem* appearances.—7. General remarks.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A general meeting of the above Branch was held at the Hen and Chickens Hotel, Birmingham, on Thursday, October 20th; J. B. Melson, M.D., President, in the Chair. There were also present: E. Bartleet, Esq. (Birmingham); F. T. Bond, M.D. (Birmingham); G. V. Blunt, M.D. (Birmingham); P. Chavasse, Esq. (Birmingham); E. Cheshire, Esq. (Birmingham); W. Downes, Esq. (Handsworth); G. Fayrer, M.D. (Henley-in-Arden); Bell Fletcher, M.D. (Birmingham); T. S. Fletcher, Esq. (Bromsgrove); J. J. Hadley, Esq. (Birmingham); H. Hancox, M.D. (Wolverhampton); F. Jordan, Esq. (Birmingham); W. Kite, Esq. (Westbromwich); J. H. Lakin, M.B. (Kineton); G. Marshall, M.D. (Birmingham); O. Pemberton, Esq. (Birmingham); J. V. Solomon, Esq. (Birmingham); S. Spratley, Esq. (Birmingham); W. F. Wade, M.D. (Birmingham); C. Warden, M.D. (Birmingham); T. W. Williams, Esq. (Birmingham); C. Yarwood, Esq. (Birmingham); G. Yates, Esq. (Birmingham); and, as a visitor, — Garner, Esq.

GENERAL BUSINESS.

It was proposed by Dr. Wade, seconded by Mr. T. W. Williams, and carried unanimously—

"That Mr. Baker's notice regarding the alteration in the mode of electing the Council be carried on until the next meeting; and that the Secretaries be requested to print the same on the card."

Mr. J. V. Solomon gave notice that he should move the following at the next meeting:—

"That, in the opinion of this meeting, the call of 5*s*. per annum, in two consecutive years, from each member of the Association, would be unnecessary, if the resolutions of the Executive Committee and the laws of the Association were duly carried out."

PAPERS.

The following papers were read:—

1. Observations on the Anatomy and Surgery of Talipes Equino-Varus. By Furneaux Jordan, Esq. [This will be published in the Journal.]
2. Observations on Anæmia. By Bell Fletcher, M.D.

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS IN CONNEXION WITH THE SOUTH EASTERN BRANCH.

The second meeting of the present session was held at the Star Hotel, Maidstone, on Friday, October 28th, at 2.20 P.M. Present: W. Sankey, Esq. (Dover), President of the Branch, in the chair; C. L. Allwork, Esq. (Maidstone); John Armstrong, M.D. (Gravesend); F. Barham, Esq. (Maidstone); F. J. Brown, M.D. (Chatham); J. M. Burton, Esq. (Blackheath); John J. D. Burns, M.D. (Chatham) James Dulvey, Esq, (Brompton); Frederick Fry, Esq. (Maidstone); H. M. Gould, Esq. (Wateringbury); J. H. Gramshaw, Esq. (Gravesend); William Hoar, Esq. (Maidstone); H. W. Joy, Esq. (Maidstone); W. Keddell, Esq. (Aylesford); Adam Martin, M.D. (Rochester); F. Plomley, M.D. (Maidstone); J. C. Prance, Esq. (Maidstone); John W. Woodfall, M.D. (Maidstone).

The minutes of the last meeting were read and confirmed.

THE JOURNAL.

A conversation took place upon the discussion which has lately occurred in reference to the Journal; when it was proposed by Mr. Fry, seconded by Dr. Martin, and resolved *nem. con.*

"That this meeting desires to express its high value for the British Medical Journal as the organ of the Association; and that it would see with regret any change which would either diminish the size or the frequency of publication of the Journal."

PAPERS AND COMMUNICATIONS.

The following papers were then read:

1. Forced Flexion of the Fore-Arm in Wounds of its Vessels or of the deep Palmar Arch, with two cases. By F. Fry, Esq.
2. A Case of Strangulated Femoral Hernia in a Male. By John M. Burton, Esq.
3. A Case of Double Pneumonia complicated with Mania, and successfully treated by large doses of Opium. By John M. Burton, Esq.
4. Notes on Diphtheria; being a record of thirty cases. By the President.
5. Mr. Fry exhibited a Morbid Specimen of the Larynx, which he had removed from a patient who died from Diphtheria.
6. Mr. Allwork exhibited a Kidney, which he had removed from a patient who had died of Disease of the Suprarenal Capsules, and related the case.
7. Dr. Armstrong showed a Midwifery Loup.

The papers and communications will, by request, be published in the Journal.

The members then adjourned to dinner, having previously accorded their thanks to those gentlemen who had contributed to the scientific objects of the Meeting, and to the President for having again travelled so great a distance to take the chair. Coffee was served at eight o'clock.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, October 31st, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

ON THE STRENGTH, FLEXIBILITY, AND CURVATURES OF THE VERTEBRAL COLUMN. BY JOHN BISHOP, ESQ., F.R.S.

After some observations on the mechanical properties of the spine in relation to its curves, Mr. Bishop stated that in his opinion permanent lateral distortion was due to influences principally of habit and occupation, which caused the horizontal line of the pelvis to be tilted to an angle with the column. Among these, for instance, was prolonged or habitual standing on one leg. This was admitted as a cause by Delpech; but he also believed the presence of some organic changes to be necessary. The only means of restoring the equilibrium of the trunk will then be, to call into action the muscles of the opposite side, while those towards which the side is turned are to be kept in a quiescent state. It was formerly supposed, that the latter had distorted the spine by spasmodic contraction, and they used therefore to be divided. The mechanical effect of the action of these muscles, besides bending the spine to one side, is also to rotate the spine on a

vertical axis; so that some degree of twist is always associated with lateral curvature. The flexibility of the spine in the different regions depends on the position, size, and power of the ligaments; on the size and form of the articular surfaces; but mostly on the qualities of the intervertebral cartilages. These bodies attracted attention from a very early period, but we are indebted to Weber for a description of them. He says that each intervertebral cartilage is composed of perpendicular laminæ, consisting of tubes formed of fibres meeting each other obliquely. These tubes bend into a curved form when pressure is applied. The motion of the spine is dependent on the length, breadth, and thickness of these cartilages; and the flexibility in different regions varies accordingly. According to Weber, the degree of flexibility varies inversely as the height of the cartilages. The motion of the vertebræ differs in kind and amount in different parts. Some say that the vertebræ, when flexed, move on a constant axis; others hold that there are two axes, one passing through the bodies of the vertebræ, the other through the intervertebral cartilages; while others hold that the spine moves on an axis which changes its position. The intervertebral cartilages hold the bones together with such force that fracture of the bones occurs more readily than dislocation. The cartilages do not appear to react when greatly extended; but when moderately stretched, they are very elastic. The amount of motion between any two vertebræ is very limited; but the aggregate action of the whole is very considerable. The treatment of lateral curvature usually followed was regarded by Mr. Bishop as very unsatisfactory, in not being based on dynamic laws. He believed that the lateral curvature —to which he desired especially to draw attention—was the result of mechanical forces acting on the spine, not necessarily connected with disease of the bones. Some of the plans of treatment employed were noticed and criticised by him; such as the placing the body in a frame, and attempting to press on the vertebræ, as practised by Ambroise Paré; the use of pulleys and straps; division of muscles; the prone position; etc. The treatment must be mechanical, and should consist in applying a neutralising force equal to that which produced the deformity. It has been proposed, when bad attitudes are habitually assumed, such as standing on one leg, to cause the individual to wear an apparatus which shall remind him whenever he is assuming an improper position. To resist the effect of the muscles in curving and rotating the spine, Mr. Bishop recommended that the patient should rest for an hour or two daily on the side towards which the column is bent.

Dr. Edward Smith asked whether, assuming that lateral curvature was produced by leaning to one side, the muscles on that side would not be necessarily shortened, and whether their division would not expedite the cure by enabling those on the other side to act with more freedom.

Mr. Hunt believed that lateral curvature was very common in girls from standing on one leg. He had seen a case in a girl aged 9, in which, from the habit referred to, one of the feet could not be placed on the ground. There was no disease of the joint; and the affection was removed by perseveringly keeping the feet down. Curvature had not appeared; but no doubt it would have done so if treatment had not been resorted to.

Mr. Cornish asked in what percentage of cases of lateral curvature it was not necessary to use any apparatus whatever?

Dr. Salter described his theory of the antero-posterior curvature which occurs in asthma, which has been given in this Journal. He wished to ask Mr. Bishop's opinion as to its correctness.

Mr. De Méric referred to the treatment of curvatures and distortions by what was called the movement cure. His system had certainly been carried far beyond its proper limits; but within these its principles were rational, inasmuch as they consisted in exciting the muscles whose action was less than natural, and placing those at rest the motion of which was exaggerated. The system of exciting sets of muscles, and even special sets of muscles, to action, had been carried out to great perfection in the application of electricity.

Mr. Canton referred to the antero-posterior curvature of the lumbar region, known under the name of lordosis, and which was not uncommon in women who were accustomed to carry baskets slung in front of them. He had twice met with this affection in younger individuals, not from the cause referred to.

After some observations from Mr. Streeter,

Mr. Bishop said that there might be cases of antero-posterior curvature without disease of the bones, as was especially observed in old people.

Editor's Letter Box.

INQUIRY INTO CERTAIN CASES OF DEATH.

Sir,—The plan proposed by Dr. Brown, for inquiring into *certain* cases of death, might, with a little alteration, be made to apply *to all* cases of sudden or suspicious deaths: in fact, to supersede the coroner's court.

That the verdict of a coroner's jury is frequently erroneous and opposed to medical science, is a fact that can be abundantly corroborated by country practitioners. The case supplied by Dr. Falshaw, of Ramsbottom, and which appeared in your Journal on September 17th, is a good illustration. In that instance, the jury returned a verdict to the effect that the deceased woman had died from the effects of a violent vegetable alkaloid poison, a verdict which was not supported by a particle of evidence, and to which the medical evidence was directly opposed. Suppose that poor woman's life had been insured, or that she had belonged to a club, or was on a *dead* list, her sorrowing relatives would have been deprived of all pecuniary assistance, in consequence of the verdict of the coroner's jury—a verdict which Dr. Falshaw says was entirely fallacious and indefensible. I am, etc., Lex.

November 1859.

INQUIRY INTO CERTAIN CAUSES OF DEATH.

Letter from G. E. Nicholas, Esq.

Sir,—In corroboration of the views expressed in this week's Journal, by my learned friend, Dr. Brown of Chatham, on the above subject, and in consideration of the great importance which that subject possesses, not only to the profession but to the whole community, I send for publication the following letter from the rejected letter-basket of the *Times* of August 22nd, ult.

"*To the Editor of the Times.*

"Sir,—'Detected crimes of secret murder, especially murder by poison, are but the samples of countless undetected crimes of a like nature.'

"The foregoing observation, which appeared in one of your recent leading articles, called forth by a consideration of the circumstances involved in the trial of Dr. Smethurst, will, I think, find an echo in the moral convictions entertained by the public on this subject, who must feel that, however certainly, by the powerful aid of science, detection generally follows the commission of such crimes when suspicion has been once aroused, the law does not at present exercise its full powers towards the precluding the possibility of their occurrence.

"Allow me space for a few remarks on this subject. When a death occurs, and a medical man has been in attendance, the cause of death is, as your readers are aware, certified by him (although not invariably, for the law is not compulsory on this point). The registrar of deaths of the district, on receiving such medical certificate, furnishes the clergyman with another certificate to the effect that the death has been duly registered, and the funeral takes place. In such cases, as much security as the law could contemplate, is provided for. But what of the hundreds who pass to the grave without the intervention of such medical certificate? The majority are buried in pursuance of the certificate of the registrar only, who registers the cause of death according to the best information which he can obtain, but which consists always of hearsay evidence. What of these and the rest? When a sudden death occurs, or when, in the absence of medical attendance, any suspicious circumstances have arisen, the whole responsibility of the matter devolves upon the summoning-officer of the coroner, who is usually the beadle of the parish. This functionary makes inquiry, and if it shall seem to his learned and scientific mind that further investigation is necessary, he communicates his opinion to the coroner, who forthwith deliberates upon the trustworthy evidence brought to his notice, and thereon determines upon the necessity or otherwise of summoning his court. Moreover, in cases of sudden death, in cases where there has been no medical treatment, and, in short, in all cases where no suspicious circumstances have transpired, the coroner invariably dispenses with medical testimony, and the death is almost as invariably ascribed to *fits* or *heart disease*.

"Now, sir, is not this very like a farce? for of what use is the coroner's inquest—the object of which is essentially the

determination of the cause of death—without medical testimony? The consequence is, that by far the greater number of inquests take place without the slightest necessity for them (as seems to be well understood by county magistrates), to the loss of the money of the rate-payers, and the great inconvenience and loss of time of the jury; while the portal, through which the perpetrators of secret poisoning may escape undetected, still remains open and undefended.

"The cart is before the horse. The remedy is obvious. *Medical testimony should in all cases precede the legal inquiry.* A medical officer should be appointed, whose duty should consist in inquiring into and reporting upon the cause of death in all cases where the cause of death has not been certified by a duly registered medical man; and in informing the coroner whenever legal investigation becomes necessary. By such means, the object of the coroner's inquest could be completely fulfilled, and the much needed security to society be insured."

I am, etc.,

G. E. Nicholas.

4, Church Row, Wandsworth, October 29th, 1859.

THE FEEDING OF CHILDREN.

Letter from L. W. Sedgwick, M.D.

Sir,—I cordially concur in what Dr. Brown says in your last issue, on the subject of suction-feeding of infants. The great mortality in children brought up by hand, depends on a neglect of this fact. Latterly, I have strongly recommended a feeding-bottle, made by O'Connell of Bury, Lancashire, to all my patients. It combines simplicity, cleanliness, and utility, in a greater degree than any other bottle I have seen. The food is not poured into the infant's mouth, as in the ordinary bottle, but it is obtained by a real sucking process, pleasant and most useful to the child.

I am, etc.,

Leonard W. Sedgwick, M.D.

Borobridge, November 1st, 1859.

ADMINISTRATION OF COD-LIVER OIL.

Letter from Isaac Watmough, M.D.

Sir,—As cod-liver oil is so extensively used, and every day almost we hear of the difficulties to be overcome when the remedy is prescribed, some recommending one vehicle and some another, it may be useful to know that a little salt placed on the tongue immediately after the oil is taken (on a little water), completely removes the unpleasant taste, and prevents nausea. This hint was given me by my daughter lately; and having tested its good effects, I am induced to give it more extensive circulation than I can do personally, by communicating the fact to the readers of the British Medical Journal.

I am, etc., Isaac Watmough.

Pocklington, Yorkshire, October 31, 1859.

THE EMPLOYMENT OF MERCURY IN TRAUMATIC INFLAMMATION OF THE EYE.

Sir,—I do not think there is any opposition between the two opinions which Mr. Harrinson has quoted. If he will reperuse the case on which he is commenting, he will see that the treatment was directed to the iritis which followed the wound, and in no respect to the wound itself, which, as it involved the conjunctiva only, was unimportant. Mr. Poland's opinion, on the contrary, refers, I should imagine, to the primary treatment of incised wounds of the eye. I will quote from Mr. White Cooper's work two precisely similar opinions on these two subjects. As to the primary treatment, this justly esteemed author remarks: "In many cases of wound of the eye, in clean incisions implicating the cornea or the sclerotic only, mercury is really very seldom required," etc. (*On Injuries of the Eye*, p. 149.) As to traumatic iritis, we find, a few pages further on: "Traumatic iritis sets in about the fourth day.... The eye will present the unmistakeable vascular zone, discoloration of iris, and rigid pupil, speedily becoming fringed with effused lymph, binding it to the capsule of the lens. In such a case, mercury will be necessary, and should be administered in such form as will most rapidly affect the system." (*Ibid.*, p. 154.)

In fact, it is not difficult to see that the two opinions, which Mr. Harrinson calls "diverse", are really identical; mercury being deprecated in the first case for the same reason as it is recommended in the second; viz., on account of its power in lowering vascular action, and promoting absorption of the effused fluids. As some amount of vascular action and effusion is necessary in penetrating wounds, in order to procure that speedy union which is the primary object in such cases, the administration of a drug which has a tendency to abolish these processes must, when efficient, be injurious; but the very same considerations persuade us to make use of it when vision is endangered by effused lymph and excessive vascular action, and still more if there be no wound in the cornea or sclerotic.

I am, etc., Your Reporter.

November 3rd, 1859.

THE JOURNAL.

Letter from John Dix, Esq.

Sir,—I hope the explanation of Sir Henry Cooper, "that the resolution of the meeting at Beverley was not to discontinue the Journal, but to diminish the frequency of the issue, the extent of the change being purposely left an open question," has cleared away the misapprehension and error which has heretofore surrounded the Journal discussion, and most effectually obscured and kept out of sight the question really at issue.

Mr. Terry will now see that the decision does not lie between a Journal and an annual volume of *Transactions*. Mr. Daniell may observe that I have not, as he supposes, "advanced the dangerous doctrine that the Association can exist without the Journal"; and that I desire, *not* to deprive him of "the records of cases furnished at annual meetings of the Association, and at the various Branches," but to supply him with these, and more than these, at a cheaper cost; and my friend Dr. Ranking will perceive that I have no wish to rob his study-table of the Journal. Dr. Barker, if he reads my last letter, will find it proved from your own editorial figures that the Association was not "stagnant" in the days of the small fortnightly Journal; whilst the editor of the *Lancet* may discover that I have never raised the question, which he says "has been particularly put by Mr. Dix, as to the possibility of publishing in the *Lancet* all such information as may be useful to the Association," in lieu of having a Journal of our own. Thus I am saved the trouble of any extended answer to these criticisms on the present movement. I would merely observe, that perhaps many of these gentlemen will, on reconsideration, agree with me that some medium may possibly exist between our present "costly weekly Journal", and no journal at all; and I shall not be surprised to find them voting on my side, when the question comes to be decided.

There now remains to me the very unpleasant task of replying to Dr. H. Sandwith. His expression of astonishment I entirely reciprocate. The perusal of his letter has occasioned me not merely surprise, but extreme regret. I regret that I should have unwittingly annoyed him, though I cannot admit the justice of his plaint; and I am surprised that he should have thought it necessary publicly to bring against me so serious an accusation, without first granting me the opportunity of private explanation, which, I feel certain, would have prevented him from publishing his most unaccountable epistle. But as his charge against me—of taking his name in vain—has been made in the Journal, my answer must be conveyed through the same channel.

In my last letter I pointed out the inconvenience and absurdity of encumbering the pages of the Journal with personality and squabbling. I do not intend to break through my own rule of right; and it seems to me that the easiest way of settling this matter is to place, side by side, the two resolutions passed at Beverley, leaving those who take any interest in this dispute to form their own judgment on the assertion of Dr. Sandwith, that "he was not prepared to join Mr. Dix in his crusade against the Journal."

Mr. Dix proposed, Sir H. Cooper seconded, and it was resolved unanimously—

"That in the opinion of this Branch the funds of the Association are injudiciously expended on a *weekly* journal, which is the sole cause of the present financial difficulty, and we believe that the existing debt would be most easily liquidated by a discontinuance of the *weekly* publication; by which also the number and usefulness of our society might be largely extended, and its general interests greatly furthered."

Dr. Sandwith moved, Mr. H. Gibson seconded, and it was resolved *nem. con.*

"That in the opinion of this meeting an alteration of the form and frequency of publication of the Journal is desirable, so as not only to lessen the debt, but also to allow of the reissue of *Transactions*."

What, may I ask, is Dr. Sandwith's interpretation of the first resolution, and what is the difference between it and his own? Is it possible that he has so misunderstood the whole tenor of my remarks, and the purport of my resolution, as to believe that our views are in antagonism on the general question, that the Association needs a journal,—as in his letter he would make it appear? Did we at Beverley stultify ourselves by unanimously agreeing to two incompatible and contradictory resolutions—the one advocating the suppression and entire annihilation of the Journal, and the other "an alteration in the form and frequency of its issue"? If such has been the opinion of Dr. H. Sandwith, the letter of Sir Henry Cooper has probably by this time rectified his ideas on the matter.

Nor must it be forgotten that Dr. H. Sandwith *voted for my resolution;* and, having done so—not heartily, it seems—he then brings forward resolution No. 2. I objected to this, believing any such decision, binding us as to our future course, to be altogether premature and unnecessary; and that all details as to the extent of change would be better left for future consideration. I objected to this resolution, also, because I believed it to be more destructive to the Journal than mine, and to necessitate far more radical and sweeping changes than I ever proposed or contemplated. An annual volume of *Transactions* would most effectually starve the Journal, by abstracting, not merely its funds, but its pabulum also, in the shape of papers and contributions.

Yet the proposer of this resolution *was not prepared to join the crusade of Mr. Dix against the* Journal! and rates me in no measured terms for claiming him as a supporter of this movement. Surely there is some lack of logical acumen here.

Lastly, I have to remark that, if Dr. Thos. Sandwith entertained "the opinion, founded on the assumption that the Journal absorbed all our income, that a monthly journal might answer every purpose", I have no doubt that he will be of the same opinion still, though the assumption should be proved incorrect—which, however, has yet to be done; for *the purpose to be answered is the same*, whether we have a debt or a surplus. Many, perhaps, will be biassed in this matter by pecuniary considerations, and feel inclined to advocate a weekly journal, if they believe that we can afford it. I would strongly urge such persons to defer their decision for the present, and await the issue of the question I have so long vainly asked, as to the real amount of our debt. I would warn them against taking it for granted that my statements on this point are inaccurate, merely because they have been disputed; for I believe it is an axiom, both in law and in logic, that mere contradiction is not refutation, and simple denial is not disproof.

I am, etc.,

John Dix.

Hull, October 31st, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Hovell, D. De Berdt, Esq., Surgeon, Clapton, on Oct. 26.

*Lankester, Edwin, M.D., F.R.S., Savile Row, W., on Oct. 26.

*Salter, H. Hyde, M.D., Montague Street, W.C., on Oct. 30.

Of daughters, the wives of—

Bazire, Victor, M.D., at 4, Queen Square, W.C., on Oct. 29.

*Sanders, Charles, Esq., Chigwell, on Oct. 28. (Stillborn.)

Smith, Henry, Esq., Surgeon, Caroline Street, W.C., on Oct. 28.

Williams, D. W., M.D., Dollryd, Llangollen, on Oct. 28.

MARRIAGES.

Adams, Andrew L., M.D., 22nd Regiment, to Bertha Jane, eldest daughter of F. Grundy, Esq., of Ardwick, at Manchester, on October 26th.

Davies, John, Esq., Surgeon-Major Royal Army, to Charlotte W., eldest daughter of the late R. W. Bartell, Esq., at Swannington, Norfolk, on October 26th.

Delafons, the Rev. Harcourt, rector of Tiffield, Hants, to Helen, only daughter of Wm. Rogers, M.D., at Stonehouse, Devon, on October 20th.

Lightfoot, W. M., Esq., Edenbridge, to Madeline E., second daughter of Robert Merry, M.D., of Hemel Hempstead, on on October 26th.

Locock, the Rev. Alfred H., incumbent of Lensford, second son of Sir C. Locock, Bart., M.D., to Anna Maria, youngest daughter of the late Archdeacon Dealty, rector of Clapham, at Battersea, on October 27th.

Pinyon, Peter, Esq., Surgeon, Benenden, Kent, to Fanny W., only child of the late Charles Beale, Esq., on Oct. 20.

Sandwith, the Rev. Henry, M.D., son of *Humphry Sandwith, M.D., Hull, to Annie, second daughter of Charles Wright, Esq., North Anston, Yorkshire, on October 26th.

DEATHS.

Behan. On October 21st, at Cheltenham, aged 16, Richard J., eldest son of the late R. J. Behan, Esq., Bombay Medical Service.

Brown. On October 27th, at 108, Blackman Street, S.E., Robert M., eldest son of R. G. Brown, Esq., Surgeon.

Hairby, Wm., Esq., Surgeon, at Marlborough Place, Walworth Road, aged 66, on October 30th.

Kirk, Thomas, Esq., Surgeon, at Dublin, aged 64, on Oct. 17.

Malcolm, William, M.D., at Perth, on October 30th.

Mansell, Fitzwilliam, M.D., Deputy Inspector-General of Hospitals and Fleets, at Haslar, aged 59, on Oct. 23.

Miller, James C., Esq., Surgeon, at King Street, Finsbury, aged 60, on October 31st.

APPOINTMENTS.

*Collingwood, Cuthbert, M.B., M.R.C.P., elected Physician to the Northern Hospital, Liverpool.

PASS LISTS.

Royal College of Physicians of London. Fellows admitted at a meeting of the Comitia Majora, held on Saturday, October 22nd:—

Alison, S. Scott, London
Bardsley, Sir J. L., Manchester
Barnes, Robert, London
Bird, James, London
Bucknill, J. C., Exminster
Davies, John B., Birmingham
Embleton, Dennis, Durham
Fleming, Alex., Birmingham
Francis, D. J. T., Northampton
Gueneau de Mussy, Henri, London
Hare, Charles J., London
Hunt, Henry, London
Jackson, John, London
Mapleton, Henry, London
Marcet, William, London
Martin, Robert, London
Murchison, Charles, London
Noble, Daniel, Manchester
Reynolds, John R., London
Sandwith, Humphry, Hull
Smith, Sir Andrew, London
Vose, James R. W., Liverpool

Royal College of Surgeons. Members admitted at a meeting of the Court of Examiners, on October 28th:—

Antrobus, Daniel, Talk-on-the-Hill, Staffordshire
Ayre, Joseph B., Totteridge
Barlow, Robert, Dalston
Bromley, Henry, Rippingall, Lincolnshire
Butler, William, Islington
Cheetham, Samuel Howard, Stockport
Edwardes, David, Great Russell Street, Covent Garden
Fendick, Robert, Bristol
Furner, Charles, Brighton
Hallows, John S., Liverpool
Horton, George E., Dudley
Howse, W., Burford, Oxon
Jackson, George H., Lower Tottenham
Jacobson, T. E., Sleaford
Jeffs, R. S., Lisson Grove
Kempster, F. H., Euston Sq.
Levick, C. H., Stratford
Millin, Edward H., Coventry
Myers, Arthur B. R., Army
Olive, George, Northampton
Payne, Charles Wm., Hoxne, Suffolk
Peplow, Joseph, Great Russell Street, Bloomsbury
Ramsay, J. A., Great Thetford
Rygate, John J., London
Starke, A. G. H., Honiton
Somerville, Chas., Bloxwich
Stevens, Wm., Fulham Road
Trend, T. W., Bridgewater
Tubbs, William J., Upwell, Wisbeach
Webster, Joseph, Golcar
Williams, Wm. R., St. John's Wood

Apothecaries' Hall. Licentiates admitted on *Thursday, October 27th*, 1859:—

Colbeck, T. W., Kensington
Griffith, R., Carnarvon
Johnson, J., Hogsthorpe
May, J., Stoke Damerel
Wilders, J. S., Birmingham

The following gentleman also, on the same day, passed his first examination:—

Drake, T.

HEALTH OF LONDON—OCTOBER 29th, 1859.

[From the Registrar-General's Report.]

		Births.	Deaths.
During week	Boys .. 823 / Girls .. 822	1645	.. 1048
Average of corresponding weeks 1849-58..		1564	.. 1125

Among the causes of death were—bronchitis, 58; pneumonia, 43; phthisis, 155; hooping-cough, 15; scarlatina, 91; diphtheria, 11; small-pox, 22.

Barometer:

Highest (Thurs.) 29·; lowest (Tues.) 29·2; mean 29·36 in.

Thermometer:

In sun—highest (Fri.) 65°; lowest (Mon.) 39°.
In shade—highest (Fri.) 56°; lowest (Mon.) 26·5°.
Mean—38°; difference from mean of 43 yrs.—8.8°.
Range—during week, 29·5°; mean daily, 15·3°.
Mean humidity of air (*saturation*=100), 90.
Mean direction of wind, S.W.—Rain in inches, 0.96.

LONDON MEDICAL REGISTRATION ASSOCIATION.

The first anniversary meeting of this body was held at the Freemasons' Tavern, Great Queen Street, on Wednesday last, November 2, at 3 p.m. The chair was taken by the President, George Webster, M.D., who, after a few observations, in which he congratulated the members on the vigour of the Society, called on the Honorary Secretary for the Report. The Honorary Secretary (Dr. Ladd) thereon read a report of the proceedings of the Association from its institution; after which, a motion for the adoption of the report was duly proposed, seconded, and carried unanimously. The meeting then proceeded to elect officers for the ensuing year. On the motion of the President, seconded by Mr. Bottomley, William Fergusson, Esq., F.R.S., was chosen President for the ensuing year: and the chair was at once vacated by Dr. Webster, and taken by Mr. Fergusson, who thanked the members. After an unanimous vote of thanks to the past president, the election of officers was proceeded with. The following gives the entire result:—

President—William Fergusson, Esq., F.R.S.; *Vice-Presidents*—Thomas Ansell, M.D. (Bow); George Bottomley, Esq. (Croydon); John Brady, Esq., M.P.; James Copland, M.D., F.R.S.; Charles Cowan, M.D. (Reading); William Sands Cox, Esq. (Birmingham); John Erichsen, Esq.; Sir John Fife, (Newcastle-upon-Tyne); James Ranald Martin, Esq., F.R.S.; Professor Owen, D.C.L., F.R.S.; John Propert, Esq.; William Harcourt Ranking, M.D. (Norwich); Robert Bentley Todd, M.D., F.R.S.; Alexander Tweedie, M.D., F.R.S.; James Richard W. Vose, M.D. (Liverpool); Thomas Wakley, Esq.; George Webster, M.D. (Dulwich); Charles J. B. Williams, M.D., F.R.S.; *Treasurer*—John Lavies, Esq., 5, Great George Street, Westminster; *Honorary Secretary*—Theodore Edward Ladd, M.D., 50, Walcot Place East, Lambeth; *Secretary*—George S. Brent, Esq., 19, Keppel Street, Russell Square; *Committee*—Adams, William, Esq.; Bain, W. P., M.D.; Bowkett, T. E., Esq.; Bradford, W. J., M.D.; Brendon, P., Esq., Cattlin, W. A., Esq.; Clark, Charles, Esq.; Clarke, James Fernandez, Esq.; Clifton, N. H., Esq.; Cregeen, J. J., M.D.; Dansey, G. F., Esq.; Dover, Frederick, Esq.; Doubleday, E., Esq.; Faxon, A. W., Esq.; Garty, F. B., Esq.; Hillier, Thomas, M.B.; Hogg, Jabez, Esq.; Humble, W. E., M.D.; Jeffree, John, Esq.; Jones, Handfield, M.B.Cantab.; Jones, J. D., M.D.; Kirby, E. A., Esq.; Ledger, Mathew, Esq.; Lord, Charles F. J., Esq.; O'Connor, William, M.D.; Routh, C. H. F., M.D.; Savage, H., M.D.; Tilt, E. J., M.D.; Wright, H. G., M.D.

A series of rules and bye-laws were then submitted to the meeting and approved. The following are the rules.

Rules. 1. This Association shall be called the "London Medical Registration Association." 2. The objects of this Association shall be to watch the working of the Medical Act; to suppress illegal practice; and to assist the Registrar under the Medical Act, in securing a correct Registration. 3. All Practitioners of Orthodox Medicine, who are entitled to be registered under the Medical Act, shall be eligible to become Members, and none others shall be allowed to be Members. 4. Each Member shall pay an Annual Subscription of not less than Ten Shillings; and no Member shall be entitled to exercise the privilege of Membership, whose Subscription is two months in arrear. 5. The affairs of the Association shall be conducted by a President, Vice-Presidents, a Treasurer, an Honorary Secretary, a Secretary (who shall be a paid officer); and a Committee of Thirty Members. 6. The President, Vice-Presidents, Treasurer, and Honorary Secretary, as well as the Honorary Secretaries of Affiliated Registration Associations, shall be *ex-officio* Members of the Committee. 7. The Annual Subscription of Local Associations desirous of being affiliated with the "London Medical Registration Association," shall be at the rate of One Guinea for every twenty Members, or any less number. 8. The President, Vice-Presidents, Treasurer, and Secretaries, shall be elected at the Annual General Meeting of the Members, to be held early in November, yearly; and all the Officers, except the President, shall be eligible for re-election. 9. One-third of the Members of the Committee shall retire annually, and the remainder shall be eligible for re-election.

It was evidently the feeling of the Meeting, as well as of the Committee, that it is not desirable at present to interfere with practitioners who have only one legal qualification, or to attempt to define the strict legal meaning of medical titles. Before work of this kind is undertaken, the energies of the Association should be, it was observed, directed to the extermination of illegal practitioners who are altogether outside the profession.

NORFOLK AND NORWICH MEDICAL REGISTRATION ASSOCIATION.

At a meeting of the Norfolk and Norwich Medical Registration Association, held at the Hospital, on November 1st, 1859—Dr. Ranking, President, in the chair—the following resolutions were unanimously agreed upon:—

1. That a fund be established, to enable the Registration Association to carry into effect the recent Medical Act, with respect to the prosecution of illegal practitioners.
2. That each member of the Association be requested to contribute the sum of ten shillings, for the purpose of carrying into effect the foregoing resolution.
3. That every registered member of the profession in this district be solicited to contribute, either by donation or subscription, towards the objects of the Association.
4. That a sub-committee be appointed, consisting of the President, Secretaries, and five other members, to make all necessary arrangements.

Proposed Institution for Paralytics. A meeting, presided over by the Lord Mayor, was held on Wednesday, in the Egyptian Hall, Mansion House, for the purpose of establishing an institution for persons suffering under paralysis and epilepsy. The Lord Mayor said he would state how the design had originated. A young lady, suffering from paralysis, fancied that, having all the comforts of life, and yet being deprived of the use of her limbs, she could not do better than institute a hospital for paralytic and epileptic patients. The lady accordingly wrote to him, to ask his consent to call a public meeting for the purpose of founding a hospital for those who were so diseased. He, who had himself suffered much (from paralysis) during the past year, readily consented to call a public meeting; and the young lady generously set apart the sum of £200 for the purpose of commencing a fund. If in his own experience he had suffered a great deal, surrounded as he had been with all the comforts of life, and by all the attention and aid which medical science could supply, what must not the poor, and wretched, and miserable suffer, who were left in their own homes to pine under the disease? And if it was further evident that the disease was subject to medical treatment, he need hardly point out the necessity of founding an institution for the special treatment and cure of it. It was not intended the funds contributed by the charitable should be expended in erecting a splendid building which might exhibit itself to the public eye and please the public taste. The intention, so far as he could gather, was to take a house in an airy situation, at a small expense, and begin upon a small scale, trusting to the merits of the case and to a benevolent public. The object was divided into two parts; one was to relieve and sustain patients in the hospital during the time required; and the other was to form a fund to allow a weekly sum of money for the relief of poor persons who would rather remain at home. There were many hundreds afflicted with diseases who preferred medical attendance at home, where they were attended by affectionate relatives; and it was a difficult task to say a word in condemnation of a feeling which was so universally prevalent

among the poor. From the day the notion of establishing the hospital was first broached, he received innumerable letters from all parts of the country, and from all ranks in society, approving of the design, promising subscriptions, and giving support. His Worship then announced a list of promised contributions, among which were donations from Miss Burdett Coutts, and Lord Ward, of £100 each. Viscount Raynham moved the following resolution: "That this meeting, having had its attention directed to the fact, that among the many noble London charities no special aid is accorded to paralysed and epileptic patients, considers the proposed hospital for the relief of the paralysed and epileptic pre-eminently deserving of the support of the public at large, and pledges itself to use every endeavour to promote its success." Sir C. Aldis briefly seconded the resolution, which was adopted. On the motion of Alderman Hale, seconded by Mr. A. Clark, a committee was appointed for carrying out the objects of the institution. The Lord Mayor announced that, according to a rough calculation, the sum subscribed in the room, and promised, was upwards of £800. A vote of thanks to the Lord Mayor having been passed, the meeting separated.

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity. The half-yearly general meeting of the members of this Society was held on October 26th, to acquaint the members with the affairs of the Society during the preceding six months. From the last half-year's balance-sheet, it appeared that thirty-eight widows had received £717 : 10, half yearly relief; and twenty-three children, £164; with £25 as a grant towards self-maintenance; that £139 : 9 : 3 had been spent in necessary expenses; and that there are three hundred and ninety members on the list. A new law was carried, authorising a grant, in certain special cases, to the widows or children of such gentlemen as had, after two years subscription, ceased to be members of the Society from non-payment of subscription during fifteen months, provided the non-payment had arisen from occasions over which the members had no control. The following members were elected officers and directors for the ensuing twelve months:—*President:* Thomas Arthur Stone, Esq. *Vice-Presidents:* Martin Ware, Esq.; Everard A. Brande, Esq.; John Nussey, Esq.; Sir B. C. Brodie, Bart., F.R.S.; Peter M. Latham, M.D.; John Bacot, Esq.; Thomas Turner, M.D.; D. Henry Walne, Esq.; A. J. Sutherland, M.D., F.R.S.; Edward Tegart, Esq.; Edward Stanley, Esq., F.R.S.; George Burrows, M.D., F.R.S. *Treasurers:* John Miles, Esq.; John Clarke, M.D. (Acting); James T. Ware, Esq. *Directors:* B. G. Babington, M.D., F.R.S.; John Weatherfield, Esq.; John J. Sawyer, Esq.; Thomas Brown, Esq.; C. J. B. Aldis, M.D.; William Dickinson, Esq.; Richard S. Eyles, Esq.; Henry Sterry, Esq.; G. Hamilton Roe, M.D.; Harvey K. Owen, Esq.; Henry Lee, Esq.; Robert B. Todd, M.D., F.R.S.; Robert Nairne, M.D.; William Cathrow, Esq.; Edgar Barker, Esq.; James Paget, Esq., F.R.S.; John Adams, Esq.; Frederick J. Farre, M.D.; A. B. Barnes, Esq.; Edward Dew, Esq.; John Love, Esq.; H. A. Pitman, M.D.; Charles Collambell, Esq.; Benjamin Travers, Esq.

The Chancellorship of the University of Edinburgh. The General Council of the University ot Edinburgh met on October 28tb, in the Music Hall, at 12 o'clock. Sir David Brewster, Principal, presided. Professor Christison nominated, and Sir George Clerk seconded, the Duke of Buccleuch, as Chancellor of the University. The Solicitor-General, seconded by Dr. Alexander Wood, proposed Lord Brougham. The speaking lasted till two o'clock, and the roll of 1,393 members was then called over, which occupied the meeting till nearly five o'clock, the doors of the hall being meanwhile strictly closed. The numbers as intimated, were:—Lord Brougham, 654; the Duke of Buccleuch, 419: majority for Lord Brougham, 235. The result was received with loud cheers by Lord Brougham's supporters, and a large crowd waited the result outside. In the evening, Lord Brougham's election was celebrated by the ringing of the bells of the city churches.—At 7, the Council again met to elect an assessor to the University Court. Lord Neaves, seconded by Professor Syme, proposed Sir John M'Neill; Dr. Douglas Maclagan, seconded by Mr. Morton, proposed Solicitor-General Maitland. The numbers were:—For the Solicitor-General, 272; Sir John M'Neill, 184: majority, 88.

York Medical School. This institution has been closed: the Council of the Royal College of Surgeons having refused to recognise the York County Hospital as qualifying students by attendance on its practice.

TO CORRESPONDENTS.

Unregistered Poor-Law Officers. Mr. Griffin has requested us to insert that Mr. Shirley, whose name appears in his list to the Poor-Law Board as not registered, is a registered medical officer; and that the error has arisen in consequence of his change of residence after registration. On the election of this gentleman by the Guildford Board of Guardians, another candidate's testimonials were set aside because he was not registered; an example worthy of imitation by all other boards.

L.R.C.P.Ed., M.R.C.S.Eng., L.M.Lond. The Medical Act (Clause xxxi) reserves to Colleges of Physicians the right of prohibiting members of their body from suing in a court of law. The same clause of the same Act provides that every registered person "shall be entitled according to his qualification or qualifications, to practise medicine or surgery, or medicine and surgery, as the case may be, in any part of Her Majesty's Dominions, and to demand and recover in any court of law . . . reasonable charges," etc.; subject to the reservation above mentioned. Hence any medical and any surgical qualification, as we read the Act, make a man a legally qualified practitioner, a term which does not necessarily imply the privilege of suing in a court of law for remuneration. We should, however, have drawn attention to the clause to which we have referred regarding physicians, in our answer to "Chirurgicus" in last number.

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Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Mr. W. Cadge; Dr. Day; Mr. A. B. Steele; Mr. Jas. Reid; Dr. E. Lawford; Dr. Routh; Mr. G. E. Nicholas; Dr. C. Collingwood; Mr. J. Ormond; Mr. P. Martin; Dr. Whytehead; Mr. I. Harrinson; Mr. Jas. Dulvey; Mr. T. Holmes; Dr. T. Littleton; Mr. R. S. Stedman; Dr. Inman; Mr. C. J. Evans; Dr. Watmough; Dr. S. W. J. Merriman; Lex; Mr. O. Pemberton; Mr. Griffin; Dr. W. O. Markham; Mr. Boult; Mr. C. H. Roper; Dr. A. T. H. Waters; Mr. J. Sharp; Mr. Jos. White; Dr. Styrap; Mr. G. Horn-by; Dr. Thorburn; Mr. Jno. Dix; Mr. T. W. Crosse; Dr. Sedgwick; Mr. W. Selfe; and Mr. Redfern Davies.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. A System of Instruction in Qualitative Chemical Analysis. By Dr. C. Remigius Fresenius. Fifth Edition. Edited by J. Lloyd Bullock, F.C.S. London: Churchill. 1859.
2. An Expository Lexicon of the Terms, Ancient and Modern, in Medical and General Science. By *R. G. Mayne, M.D. Part IX. London: Churchill. 1859.

ADVERTISEMENTS.

Fourth Edition, just published, price 2s. 6d., by post for 32 stamps.

A Guide to the Treatment of Diseases of the Skin; for the Use of the Student and General Practitioner. By THOMAS HUNT, Surgeon to the Western Dispensary for Diseases of the Skin. This edition contains two new chapters; one on the Vegetable Parasites of the Human Skin, the other on Metastasis in its practical bearings.

London: T. Richards, 37, Great Queen Street.

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London: Henry Renshaw, 356, Strand.

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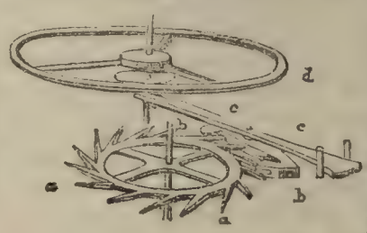
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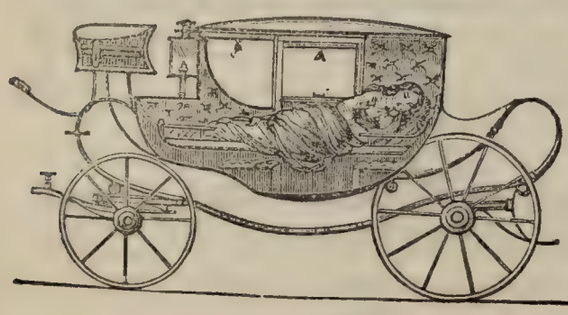
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EDITED BY ANDREW WYNTER, M.D.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

UNIVERSITY COLLEGE HOSPITAL.

I. VARICOCELE TREATED BY M. VIDAL'S METHOD.

Under the care of J. E. ERICHSEN, Esq.

[*From his Case-Book.*]

JAMES J., aged 32, a labourer, was admitted under Mr. Erichsen's care on August 12th, for varicocele. He had suffered for twelve months from pains in the back, and found relief from cupping. He had had gonorrhœa. Three months ago, he felt an aching pain in the left testicle, and the veins were then found to be much enlarged. He had since found some relief from keeping the scrotum supported, so as to be able to go about with little inconvenience; but whenever the support was withdrawn, he felt a severe sense of fulness, with very great pain extending from the loins downwards.

On examination, a tumour, with the knotty feeling characteristic of enlarged veins, was found on the left testicle, with its base downwards, and its apex extending towards the inguinal region. It diminished in size when he lay down.

Mr. Erichsen proceeded forthwith to operate, after the method recommended by Vidal. This is thus described by M. Guérin. A silver wire, in a straight needle, is passed across the skin of the scrotum, behind the distended veins, and another in front; and their ends are twisted together, so as to make of the two a single cord. During this movement of torsion, the veins get finally entangled around the wires, so as to be pressed upon at several points. A piece of bandage, rolled up, is then laid upon the skin of the scrotum, between the two ends of the wire; and they are twisted upon it, so as to produce an amount of strangulation proportioned to the tightness with which they are twisted. The constriction is augmented gradually every day, till the skin is at length divided. (Guérin, *Elem. de Chir. Opératoire*. Paris: 1855. P. 514.) In practice, a perforated pin is used, instead of the anterior wire; and the silver thread is tightened by twisting this. The instrument can be obtained at most of the best shops.

The tension was increased by twisting up the pin daily till August 21st, when the irritation so produced caused severe pain extending up towards the inguinal region, tenderness of the abdomen, full pulse, and severe headache. As the wire seemed now to have done its work, it was withdrawn.

The patient was kept in the house for ten days longer, and was then discharged, the tumour having disappeared.

II. VARICOCELE TREATED BY M. VIDAL'S METHOD.

Under the care of R. QUAIN, Esq.

[*From Notes by* W. L. WINTERBOTHAM, ESQ.]

Geo. B., aged 20, was admitted on August 23rd, under the care of Mr. Quain. He had had an attack of gonorrhœa about Christmas, which was followed by orchitis, aggravated by a blow, and by abscess in the neighbourhood of the testicle. He had also had syphilis, both primary and secondary. He applied for relief on account of aching pains in the limbs and head, having no idea that the scrotal veins were enlarged.

On admission, a large mass of varicose veins was found around the left scrotal cord, almost entirely surrounding it. There was an excoriated sore on the scrotum, and a large patch of dry mucous tubercle over the pubes. The patient complained of a good deal of dragging pain when he stood up, and the veins then became very prominent.

The testicle was supported by means of a T bandage, and the secondary symptoms treated in the appropriate manner, when, on September 8th, he was judged sufficiently well to be operated on. The operation was performed by Mr. Marshall, after the method of Vidal. On the next day, the scrotum was rather swollen; and on the 11th, it is noted that the needle was causing some amount of irritation: it was accordingly withdrawn on the 13th, at which time there was a great deal of swelling in the veins and cellular tissue of the scrotum; but the testicle itself was unaffected. The swelling remained almost stationary for some time, but without any prominent symptoms. It decreased gradually, under the use of discutient lotions and hot poultices; and on October 1st, it is noticed that it was almost gone.

REMARKS. The advantage of this method, besides its easy application, is, that the veins are obliterated by the previous pressure before being cut through by the wire, and thus the risk of phlebitis is obviated. A similar plan has been used in this Hospital by Mr. H. Thompson, in the treatment of varicose veins of the leg; and with good results.

ST. BARTHOLOMEW'S HOSPITAL.

EXTRAVASATION OF URINE.

Under the care of HOLMES COOTE, Esq.

ALEXANDER NELSON, aged 8, was admitted into St. Bartholomew's Hospital, under the care of Mr. Coote, on April 24th, 1858, on account of extravasation of urine, of thirty hours duration, without assignable cause. The scrotum was distended, and in parts inclined to mortify. The extravasation involved the perinæum and lower part of the abdomen.

Mr. Coote made free incisions into the scrotum. A grooved staff passed freely into the bladder. An incision, as in the lateral operation of lithotomy, was made. A knife was carried through the prostate, when about half an ounce of turbid urine escaped at one gush from the bladder. The boy had some brandy and other stimulants. He recovered without a bad symptom, and was discharged well on June 28th. He has since applied for relief from a slight stricture of the urethra.

REMARKS. In a recent number, we quoted a case, also under Mr. Coote's care, in which the above practice—of cutting into the bladder on account of extravasation of urine—was followed, but without success. We are therefore the more pleased to be able to record this instance of the complete success of the practice. Its *rationale* is based on the necessity for making an opening into the urethra which shall be in a favourable position, in respect to the external wound, for the ready and complete evacuation of the urine, and which shall be behind the point at which the urethra has given way; so that no fresh effusion may find its way into the sloughing cellular tissue of the perinæum. When the point at which the urethra has given way is known, and that tube can be reached behind this point by an incision in the median line, whether of the scrotum or perinæum, such treatment will be probably the best, and will fulfil the above indications; but when, as here, the situation of the lesion is unknown, or is too far back to be accessible, or when the urethra cannot be recognised behind the perforation, it will probably be found best to do the radical operation at once, as in the above case—a proceeding which adds little to the risks of the serious operation which has become necessary, while it ensures that great point, the quiet of the diseased parts. It aims, in fact, in this latter respect, at the same end as Mr. Cock's proposal of opening the bladder from the rectum; but is more applicable than that plan to cases in which the stricture has given way, since it also fulfils the indications for incising the perinæum.

The above case was also remarkable on account of the tender age of the patient, and the absence of a history of injury or abscess; to one of which causes, nevertheless, it seems almost necessary to refer the extravasation.

LIVERPOOL ROYAL INFIRMARY.

ACUTE RHEUMATISM.

By Thomas Inman, M.D.

Wm. Hitchfield, aged 34, was admitted, with rheumatic fever, on October 7th. The pain in his joints was severe, and the perspiration excessive, but not very odorous. Lime-juice was freely administered, but without any marked effect. For the next fortnight, the sweating was most profuse, and accompanied by large numbers of sudamina; the heart was unaffected. As no change was apparent, the treatment was changed on October 21st, and twenty minims of the tincture of sesquichloride of iron given three times a day; improvement was manifest in twenty-four hours; the pain and sweating were decidedly diminished; and in four days the skin was natural, and the pains materially abated. On the 28th, the rheumatic attack was over; and, though much weakness remained, he was able to get up on October 31st.

Remarks. This case illustrates many points:—1. It corroborates what I have before noticed, that those cases of acute rheumatism are the worst in which the perspiration is most profuse. 2. It is the first in which I have known lime-juice to fail. (I must note, however, that I had a similar case some years ago at the Northern Hospital, where I administered lime-juice for three weeks before it effected any apparent change.) 3. It shows that great improvement may occur with a diminution of the perspiration; and, consequently, that the cutaneous secretion is not an eliminative effort of nature, which we ought necessarily to encourage. 4. Coupling together the facts, that in acute rheumatism the blood is as poor in globules and as rich in fibrine as it is in consumption, Bright's disease, and anæmia; that the cases in which the fever is the worst, are those in whom there is some hereditary or acquired constitutional debility; that the intensity of the disease is augmented and the complications increased by venesection, salivation, and purgation; and that such debilitating treatment prolongs convalescence, if it do not actually prevent it; must we not conclude that the sweating in this disease is more analogous to that in consumption and ague than it is to anything else? 5. Referring to a preceding paper of mine in the Journal upon the influence of vitality on the secretions, may we not ask whether the well known sour smell of rheumatic sweating is not due to its rapid decomposition *after* it has become external to the skin; and consequently, that it is no more proof of the elimination of lactic acid, etc., than an ammoniacal smell from the bed-pan is a proof that the kidney and bowels are eliminating ammonia from the system? I certainly can recall instances in which the perspiration has smelt rheumatic, when the sole complaint was debility, and conversely, I have known many cases of mild rheumatic fever where the perspiration did not smell sour.

Original Communications.

DIPHTHERIA, AFFECTING THE THROAT, AND TO A SLIGHT EXTENT THE AIR-PASSAGES: PARALYSIS: RECOVERY.

By A. Ransome, B.A., M.B.Cantab., M.R.C.S., etc.

Mr. A. B., aged 21, strong, usually very healthy, had lately been working at mechanical engineering. For the last few weeks he had been exerting himself greatly in mounting engines, sometimes working all night, at a place which is situated upon a damp clay soil. Four months ago, he had a slight attack of erysipelas of the head, neck, and shoulders; but since then has been quite well until February 20th. At this time, the weather was close, misty, and rainy, with but little wind.

February 20th. In the evening, he began to complain of sore-throat; and next day, the throat being much swollen and very painful, he left the works, and went to Manchester, where he consulted my father. He found the fauces very much swollen and inflamed; thought a quinsy was threatening; and ordered five leeches, which were applied that evening, after the patient's arrival at home, whither he went at once.

February 22nd—third day. In the evening, I was hurriedly sent for, and saw him at 6.15 P.M. He had not slept the previous night, and had been left alone all day. The leeches had bled freely; but the neck and face were very much swollen, and excessively tender behind the jaws. His face was much flushed, with a heavy, oppressed aspect; he breathed thickly; and spoke in a hoarse whisper, but, when requested to do so, could give tone to his voice. His skin was bathed in perspiration. Pulse soft, compressible, 92. The tongue was very foul, and covered with a brownish fur. His bowels had been freely moved by a purge in the morning. The interior of the mouth was dark and congested, but not livid, except at the back of the pharynx. The left half of the back part of the mouth was much swollen, and projected forwards: it was covered with a greyish exudation, uneven in thickness, and semitransparent in parts, well defined superiorly, about the junction of the hard with the soft palate; inferiorly, having no well defined outline, but thin and straggling down into the pharynx. The right side of the mouth was not swollen, and exhibited no trace of membrane. I at once dissolved about two scruples of nitrate of silver in two drachms of water, and applied it freely with lint all round and over the exudation, and ordered the following:—

℞ Potassæ chloratis ℥j; infusi cinchonæ ʒviiss; tinctur. cinch. ʒss. M. Fiat mistura cujus sumat ʒj 4tis horis.

℞ Liquoris sodæ chlorinatæ ʒj; sodæ biborat. ʒj; aquæ ʒvij. M. Fiat gargarisma. To be used frequently.

11 P.M. There was no appearance of spreading superiorly, but suspicious patches of exudation were straggling downwards into the pharynx. The mouth was retouched with the caustic solution.

Feb. 23rd—fourth day. 9 A.M. He slept a little the first part of the night, but not afterwards. He drank freely of white wine whey, and a small cupful of beef-tea. The swelling of the throat was much the same. The large surface, touched with nitrate of silver, seemed to be pushed up from behind by further exudation from the mucous membrane. With the blunt ends of dressing scissors, I detached the membrane to a great extent, and then with the scissors severed the upper part from the rest, which adhered more closely. The surface of the mucous membrane beneath was *unbroken*, glistening, dark, and congested. The exudation detached was hardened and white on the surface upon which the caustic had acted, but beneath it was semitransparent and gelatinous. Under the microscope, it appeared to be composed of unorganised exudation, seemingly fibrous, with exudation-corpuscles, mostly nucleated, scattered sparsely amongst it, and many minute granules. There was no trace of mycelium, or vegetable formation of any kind.

6 P.M. He seemed better in the day, and had less pain. He had taken nourishment well (beef-tea, and eggs beaten up with wine and milk, or tea) every four hours. That part of the throat from which the membrane was separated this morning was quite clear of exudation, but congested. The remainder of the exudation was looking more detached. I was able with polypus-forceps to seize and bring away nearly the whole in one piece, without violence—altogether about the size of a crown-piece, about one-fourth of an inch thick at the upper part, thin below. Other small portions near the posterior molar teeth, and on the uvula, were also removed. There was very slight bleeding from the lower part of the surface, from which the lower fragment had been detached. I touched the whole surface with tincture of sesquichloride of iron, and ordered hot sponges to be applied to the exterior of the throat until redness was produced.

℞ Quinæ disulphatis gr. xvj; acidi nitrici diluti ℥j; acidi hydrochlorici diluti ℥ij; syrup. aurant. ʒss; inf. aurant. ad Oss. M. Fiat mistura. Two tablespoonfuls every four hours.

Feb. 24th—fifth day. He passed a bad night, with but little sleep; and seemed depressed. He spoke very thickly, but not hoarsely. He had no headache. Pulse 92. The bowels were not open. The tongue was very foul. The urine was said to be thick, high coloured; it was not preserved. There was more general swelling about the throat, but no œdema. The greater part of the surface from which the exudation was detached was still clear, but dusky red. About the centre or lower part, from which there was slight bleeding yesterday, was an irregular yellow exudation (slough?). The right side of the mouth and uvula was much more swollen, and dusky red, filling up the back of the mouth so that there was no seeing the pharynx. Over the end of the uvula, and on the left side, were irregular patches of yellowish exudation, unequal in thickness, semitransparent in parts, and probably extending into the pharynx. With the polypus-forceps I removed several of the patches, and applied solution of nitrate of silver to the surface. He was ordered to continue wine and nourishment *ad libitum* every four hours. The medicine and gargle were repeated, and half an ounce of castor oil was given. With the microscope I examined the patches of membrane, no caustic

having been applied to it. It was slightly different from that examined before, still having apparently a basis of fibrous exudation, with many masses of epithelium; but the corpuscles were much more abundant, and varying in size, very few being nucleated.

5 P.M. He seemed brighter; had no headache. The skin was cool. Pulse 88. His tongue was cleaner. The bowels had been well opened by the castor oil. His speech was very thick, but, when the voice was exerted, still clear. No fresh patches of exudation were to be observed, but some portions were still to be seen between the uvula and tonsils. The swelling was so great as to prevent any view of the pharynx. A quantity of *black* tenacious mucus was adherent to the roof of the mouth, and in the nose. When this was removed, the membrane beneath was healthy looking. He was ordered a drachm of powder of yellow bark, with brandy and milk, every eight hours, alternately with the quinine mixture.

Feb. 26th—sixth day. 1 A.M. There was slight extension of the patches, which were visible. Solution of nitrate of silver was again used.

9 A.M. He had been slightly rambling in the night, and complained much of pain in the throat, extending into the ears, especially the left. There was less swelling of the throat, and no *apparent* extension of the exudation; but one large patch on the left side of the velum palati, being evidently loosened, was removed gently. The surface of the mucous membrane beneath seemed tender and granular, and bled a little. The bowels had not been again moved. Pulse 68, weak, compressible. The medicine was continued, and he was ordered to take five grains of Dover's powder at bedtime.

Feb. 26th—seventh day. 9 A.M. He slept badly. The swelling of the throat was rather less. On the velum palati, on the same spot where the patch was removed yesterday, another had appeared. The enlarged uvula and tonsils still hid the pharynx; but extending downwards and backwards on the left side was a patch of sloughy yellow matter, which seemed to come from a depression (ulceration?) of the surface. The cinchona powder made him sick this morning. The bowels were not open. Pulse 72. I touched the throat with dilute nitromuriatic acid, and ordered a soap enema, and the cinchona to be omitted. Quinine mixture was ordered every four hours, with nourishment.

5 P.M. The enema operated, and brought away a dark coloured lumpy motion. His urine was in good quantity. He was ordered to take five grains of Dover's powder at bedtime.

Feb. 27th—eighth day. He looked clearer and brighter again, but said he felt very weak. He slept much better, but his head ached a little. He had been taking plenty of nourishment during the day and night, but complained that the wine caused intense pain in the ears, and that, unless he held his nose whilst drinking, the fluids returned through it. He brought away large quantities of thick muco-purulent matter through the nose. The bowels were not open. Pulse 76. The external swelling was still diminishing, and internally also it was less; but the pharynx and the back of the uvula, as far as could be seen, were covered with a mass of yellow matter, which had probably been hidden from view before. The solution of nitrate of silver was applied very freely with a sponge, exciting violent retching and coughing, which cleared away large quantities of yellow muco-purulent matter, which was similar to that which he had been parting with through the nose; and also several large irregular patches of exudation, one-fourth of an inch thick, similar in appearance to that which was removed at the very commencement, but with a little speckling of blood on the side which was adherent to the mucous membrane. It was evident that the disease had been spreading unseen into the pharynx. The quinine mixture was omitted; the cinchona mixture was repeated; and he was ordered to take eight grains of Dover's powder.

℞ Aluminis ʒiss; tinct. capsici ʒj; infusi rosæ ad ℥viij. M. Fiat gargarisma.

He was ordered to inhale creasote vapour (four minims on hot water).

11 P.M. He got up for an hour in the evening, and felt rather relieved. The removal of the yellow matter now displayed the left tonsil slightly excavated by ulceration.

Feb. 28th—ninth day. He looked brighter; slept better. His head ached a little. The external swelling was still diminishing. His bowels had not been open till after a soap enema; the motions were similar to the last, but more offensive. The ulcer on the left tonsil was cleaner, but ragged and excavated.

March 1st—tenth day. 1 A.M. Pulse 60, full. The small patch of matter before mentioned, on the velum palati, still remained, but seemed to be separating. Two ounces of decoction of matico were added to the gargle.

9 A.M. There was general slight improvement in the aspect. The bowels were open in the morning with soap enema. Pulse 76, full. The ulcer in the throat looked rather cleaner, but much excavated. He brought away yellow mucus from the nostrils, as before, but rather tinged with blood. His urine was scanty, loaded with lithates, acid, highly albuminous, and contained numerous casts of uriniferous tubes and oval or circular epithelium, with amorphous lithates. The medicine and Dover's powder were repeated.

March 2nd—eleventh day. There was more decided improvement in the general aspect. The ulcer on the left tonsil was cleaner, but large and ragged. There was less swelling of the throat; the mucous membrane had a healthier appearance, not so congested. No ulceration or exudation could be seen on the right side. His bowels were not open; the tongue was cleaner; pulse 76. He slept well. He had two irregular cuts on the right hand when the illness commenced; these had not shown any tendency to heal, and now looked sloughy; they were being poulticed with linseed.

℞ Aluminis ʒiss; tincturæ capsici ʒj; decocti matico Oss. M. Fiat gargarisma. To be used every four hours.

He continues to use the creasote inhalation, with relief.

March 10th—nineteenth day. He continued in much the same state until the present date, gradually improving in general appearance, and able to leave his room. The ulcer, although sometimes looking better, did not heal (black wash was daily used to it). Moreover, when a glimpse could be obtained of the back of the uvula, ulceration was evidently going on behind, as well as in front of the velum. To-day, a perforation was observed just above the left anterior pillar of the fauces. The urine had been regularly examined every other day; it was always albuminous, and loaded with lithates; one day displaying, under the microscope, crystals—acicular quadrangular prisms; on other two days containing both large and small casts of tubes.

℞ Tannin. ʒj; tinct. myrrhæ ʒij; infusi rosæ ad ℥viij. M. Fiat gargarisma. To be used occasionally.

March 11th—twentieth day. The ulcer had eaten completely through the anterior pillars. He did not swallow readily; the food lodged behind the velum, and was often coughed or hawked back again.

℞ Tinct. ferri sesquichlor. ʒiiss; syr. aurant. ℥ss; inf. gentian. co. ad Oss. M. Fiat mistura. One ounce to be taken every four hours.

March 16th—twenty-fifth day. The ulcer continued obstinate, but, on the whole, there was a general improvement. He could now swallow solids better, but the food was still sometimes coughed or retched back again. When the surface of the throat was touched in applying anything, it seemed rather callous and insensible. The albumen in the urine had been gradually diminishing since the last date, and was now absent.

March 26th. He began to complain of numbness in his tongue, which felt large and foreign to the mouth. The sense of taste was impaired. The ulcer was still healing. He did not seem to gain strength. It took him an hour and a half to eat dinner. I ordered moderate Faradisation to the muscles of the neck.

March 27th. After the use of the galvanic apparatus, he felt very faint for a short time. I ordered—

℞ Tinct. ferri sesquichlor. ʒij; syrup. zingiber. ℥ss; infusi nucis vomicæ ℥iij; inf. gentianæ comp. ad ℥viij. M. Fiat mistura cujus sumat ℥j ter die.

The numbness gradually spread from the tongue into the lips, cheeks, neck, sides of the head; and on

March 28th, he felt tingling in the tips of the fingers, which changed to numbness, spreading up both arms above the elbows. There was also loss of power of grasping.

March 29th. In addition to the above medicine, a blister was applied to the nape of the neck, and one-sixteenth of a grain of strychnia sprinkled upon the raw surface. The galvanism was discontinued.

March 30th. One-eighth of a grain of strychnia was sprinkled upon the blister; this caused the formation of a thin white slough, which could readily be raised from the sore, leaving a dark red surface. The use of strychnia endermically was therefore discontinued; and in a few days, with simple water dressing, the blister healed. In the medicine, the infusion of nux vomica was omitted, and a grain of strychnia was substituted; the dose then was gradually raised from one-sixteenth to one-eighth of a grain four times a day.

He improved in general appearance, but gradually lost voluntary muscular energy all over the body. For three or four weeks, commencing about the middle of April, his sight (ordinarily perfect) was affected to an extent which prevented him from reading anything but large print, and he became so deaf that he was unable to join in ordinary conversation. Early in May, he went to the seaside, but continued to get more feeble, and frequently fell down in walking across the room, and was then unable to rise without assistance. After staying at the seaside a fortnight without benefit, and no twitching or other effects being produced by the strychnia, the dose of this medicine was increased from one-eighth of a grain four times to one-fourth of a grain three times a day. After the fourth dose, he was suddenly seized with violent tetanic convulsions; and his own account of his sensations is so graphic, that I give it here:—"Ten minutes after taking a dose of the medicine, I experienced a sense of much swelling about the face, followed instantly by sharp twitchings of the lips and distortion of the countenance. Tears followed involuntarily, but certainly they were not the effect of pain. After this, and two minutes after the first symptoms, followed a succession of violent fits of twitching, producing the most excruciating pain, making me during each fit, and for a few minutes after, speechless. The first fit lasted three or four minutes, and was followed by an interval of the same length of time. Each succeeding fit was of the same severity, but was shorter in duration than the one before it, and was followed by a longer interval of partial relief. Intense pain lasted three hours; and in twelve hours I was comparatively easy, though in my feet I was conscious of the effect for forty-eight hours. The pain during the fit was comparable to the lifting of the flesh from every bone. During the intervals, it was much like the effort of the limb to swell when tightly made up with bandages. The activity of the brain, even while I was speechless, was very remarkable. Up to the time of this attack, the medicine, though it had been taken a long time, had not produced the slightest effect."

A week after the tetanic seizure, he began to improve; no medical treatment, except sea-bathing, being employed; and he continued steadily to gain power in his muscles. He is now (July 30th) in vigorous health, and can walk several miles.

Throughout the illness he displayed a remarkable courage and power of endurance (pluck); and to this, together with the admirable nursing and feeding he got, his recovery may be in great measure ascribed.

Bowdon, near Manchester, Nov. 9th, 1859.

STATISTICS OF ONE THOUSAND CASES IN OBSTETRICS.

By I. Harrinson, Esq., F.R.C.S., Fellow of the Obstetrical Society.

[*Read before the Reading Pathological Society, August 17th*, 1859.]

[*Concluded from page* 889.]

Premature Children born alive.—Fifteen cases.

No.	Month of gestation.	Sex.	Presentation.	Causes.
1	8	M.	Natural	Diarrhœa from eating sprats
2	7	M.	Do.	Syphilis
3	7	F.	Placenta	Preternatural presentation
4	8	M.	Natural	Hæmorrhage of mother
5	7	F.	Feet and cord	Induced labour
6	8	M.	Natural	Profuse liquor amnii
7	7	M.	Do.	Travelling
8	8	F.	Do.	Syphilis
9	7	F.	Do.	Phthisis
10	8	F.	Do.	Debility
11	8	F.	Do.	Fright from thunder
12	7	F.	Do.	Mental distress
13	7	M.	Do.	Debility
14	7	F.	Do.	Syphilis
15	8	M.	Do.	Debility

There were seven cases at 8 months; and eight at 7 months. Of the children, seven were males and eight females. All the presentations were natural, except two; viz., one placental and one of feet and cord.

Premature Children born dead.—Fifty-three cases.

No.	Month of gestation.	Sex.	Presentation.	How long dead.	Cause.
1	9	M.	Natural	7 days	Intrafœtal
2	7	F.	Do.	In birth	Concealed accidental hæmorrhage
3	9	F.	Hand and cord	In birth	Preternatural presentation
4	8	F.	Natural	3 days	Diseased placenta
5	9	M.	Funis	In birth	Pressure on cord
6	9	F.	Natural		Fright(?)
7	9	M.	Feet	In birth	Pressure
8	7	F.	Placenta	In birth	Pressure
9	7	M.	Feet	3 days	Diseased placenta
10	9	M.	Face	In birth	Pressure
11	9	M.	Breech	Some days	Diseased placenta
12	9	M.	Breech	In birth	Pressure
13	9	M.	Breech	In birth	Pressure
14	9	F.	Feet	In birth	Pressure
15	7	M.	Natural	14 days	Diseased placenta
16	7	F.	Do.	4 days	Diseased placenta
17	7	M.	Do.	4 days	Syphilis
18	9	M.	Do.	4 days	Diseased placenta
19	9	M.	Cord	In birth	Preternatural presentation
20	7	M.	Natural	Some wks.	Syphilis
21	7	F.	Breech	14 days	Syphilis
22	7	F.	Natural	14 days	Diseased placenta
23	8	F.	Do.	2 days	Diseased placenta
24	9	M.	Breech	Some days	Lingering labour: tumour
25	7	F.	Natural	Some days	Syphilis
26	7	M.	Do.	10 days	Syphilis
27	9	F.	Do.	10 days	Diseased placenta
28	8	F.	Do.	1 month	Syphilis
29	7	M.	Do.	Some days	Diseased placenta
30	8	F.	Breech	In birth	Induced labour
31	7	M.	Do.	6 weeks	Diseased placenta
32	7	F.	Do.	Some days	Intrafœtal
33	8	M.	Natural	Some days	Diseased placenta
34	7	F.	Feet and head		Syphilis
35	8	M.	Breech		Diseased placenta
36	8	F.	Natural		Diseased placenta
37	7	M.	Do.	In birth	Perforation: hæmorrhage
38	7	M.	Breech		Syphilis
39	9	F.	Natural	Some days	Intrafœtal
40	7	F.	Do.		Intrafœtal
41	7	F.	Do.		Intrafœtal
42	8	M.	Do.	In birth	Perforation
43	9	M.	Do.	Some days	Diseased placenta
44	9	F.	Breech	In birth	Pressure
45	9	F.	Natural	Some days	Twins
46	9	F.	Do.	Some days	Twins
47	9	F.	Do.	In birth	Craniotomy
48	8	F.	Breech	3 weeks	Syphilis
49	9	F.	Natural	Some hrs.	Stomach derangement
50	9	M.	Face to pubes	10 days	Separation of placenta from a fall
51	9	M.	Natural	Some days	Diseased placenta
52	9	M.	Do.	In birth	Hydrocephalus: perforation
53	9	F.	Do.	In birth	Perforation

There were at nine months, 25 cases; at eight months, 8; and at seven months, 20. There were 26 males and 27 females. The presentations were—natural, 32; lower extremities, 16; arm, 1; cord, 2; placenta, 1; face, 1.

It would appear that seven months' children are more frequent than eight months'. The preponderance of preternatural presentations in premature children, is in accordance with universal experience.

The causes of death in 53 still-born children were:—Diseased placenta, 14 cases; syphilis, 10; intrafœtal or non-ascertained, 10; accidents, 2—viz., lifting a heavy weight, and a fall, in both, inducing partial separation of the placenta; turning, 2; breech presentations, 3; fright, 1; presentation of

unis, 2; face presentation, 1; want of assistance, 3; perforation, 5.

The cases of diseased placenta occurred in women labouring under a cachexia, natural or induced. Syphilis produced similar changes in the placenta and its membranes.

In the non-ascertained cases, there was nothing either in the fœtus, placenta, or mother, apparently accounting for death.

Deformities, Irregularities, etc., of Children.

Hypospadias	2	Contracted Intestines	3
Double Hare-lip and Cleft-palate	3	Conical head	1
Heavy children (one weighing 13 pounds, and the other 13½ pounds)	2	Born with two Teeth	1
Cephalæmatomata	4	Spina Bifida	1
		Acromial end of each Clavicle absent	1

Irregularities, etc., of the Cord., occurred as follows:—

Over the neck	151	Prolapsus	6
Arm and Shoulder	4	Diseased	3
Leg, Foot, and Ankle	11	Ruptured	4
Thigh	4	Knots	7

The length varied from fifty-five to six inches. All were harmless deviations, with the exception of the cases of prolapsus, before considered. The diseased cases, where the cord was much thickened, were from syphilis. The ruptures occurred from sudden delivery while standing. There was no injury either to the mother or child. The knots occurred where there was no unusual length of cord, or quantity of liquor amnii. There were six single and one double knots.

The Placenta. I regret to have nothing to say about the diseases of the placenta, further than it was in that state usually called fatty, and with masses of blood, in a more or less advanced stage of transformation. It was obliged to be removed in five cases; it was battledore-shaped in seventeen, and putrid in one case.

Of the five cases of removal, three occurred in the first year of recorded practice. In all, save one, the child was born before I arrived; and in two the fingers were sufficient for its removal. In the great majority of cases, irregular contraction at the fundus uteri is the cause of its retention; and the proper management of the uterus, after the birth of the child, is the preventive remedy.

There is no case of adhesion of the placenta. In the earlier years of my unrecorded practice, notwithstanding the cautious hints of my much respected teacher, Dr. Robert Lee, of its rarity, I was meeting with this deviation rather frequently than otherwise, and congratulated myself on my good fortune in meeting with, and my dexterity in overcoming, such unusual difficulties. A few more years experience, however, and a more careful attention to the management of the placenta, first compelled me to doubt, and then utterly reject, my former conclusion. I now must agree with what Dr. Lee *then* taught: "I never met with a clear unequivocal case of morbid adhesion."

These cases are usually described as contractions of the uterus, with morbid adhesion of the placenta. How can such a combination exist? Looking at the large surface which the placenta occupies in the fully distended uterus, it would appear to be impossible for contraction to occur, without at the same time separating the attached placenta. We may conclude, therefore, that if there be contraction, there cannot be adhesion; and if there be adhesion, there cannot be contraction. Also, the membrana decidua is not liable to adhesion.

I am fully aware of the deceitful feeling communicated to the fingers in getting away a placenta from a contracted fundus. In such cases, the evidence of the fingers is to be more than doubted—it is to be disbelieved.

I do not mean to deny that morbid adhesion may not occasionally exist in greatly diseased states; but to assert, that in the great majority of cases there is no adhesion, but simply incarceration.

After-illness occurred as follows:—

Intestinal Irritation	14 cases.
Uterine Phlebitis, with ditto	1 „
Phlegmasia Dolens	3 „
Irritation from Morbid Infection	1 „
Mania	1 „
Variola	1 „
Rheumatic Fever	1 „

This class includes only the graver manifestations of mischief. Duration of labour here also does not appear to be the exciting cause of after-illness, as the mean was only eight hours.

Some of the cases of intestinal irritation were very severe; often, doubtlessly, confounded with, and not readily distinguished from, cases of puerperal fever.

The morbid infection arose in this way. While making a *post mortem* examination, I was called to a labour. Intense irritation followed, and she narrowly escaped with her life.

Only one case of uterine cellulitis is reported. Swelling of the left iliac region followed, and it was three months before the patient was quite well. A profuse discharge of pus suddenly occurred from the vagina.

Death occurred in nine cases.

No.	Age.	Pregnancy.	Duration of labour.	Sex.	Labour.	Death occurred after delivery.	Cause of death.
			hours.			days.	
1	33	3	7	F.	Natural	4	Abdominal inflammation (epidemic).
2	39	1	12	F.	Do.	6	Phlebitis from scarlatina.*
3	27	2	2	F.	Do.; 7 mos.; child dead.	8	Puerperal inflammation. Had intractable chorea when a child.
4	36	1	26	F.	Natural	6	Erysipelas by infection.†
5	21	1	8	M.	Do.	4	Convulsions: albuminous urine.
6	36	2	11	M.	Do.; face to pubes.	6	Scarlatina.(?)
7	35	3	12	M.			Concealed accidental hæmorrhage.
8	38	7	8	F.	Natural; 7 mos.; child dead.		Do. do. do.
9	34	5	12	M.	Natural	11	Fright‡ and exposure to cold.

Length of labour cannot be said to have induced these unfavourable results, as the mean duration was only eleven hours. In two cases, I was, without doubt, the unfortunate medium of morbid infection; and these two out of the nine may be considered as arising from preventable causes.

The case of convulsions might and probably would have been prevented by timely interference; and the one from fright, cold, etc., by greater care. The remaining five were beyond human control, I think, in their prevention; and, I trust, in their cure.

The list, as a whole, is sufficiently dark to demand a more vigilant attention to premonitory signs, and a more comprehensive view than is usually taken of anticipatory treatment.

Many curious and some instructive fragments remain to be considered; but I must now end.

This is my essay in statistics, and I shall consider twice before I attempt a similar task. It is not what I wished. You must be content with the failing execution of good intentions.

In the words of an able writer, I may conclude, *longo intervallo*:—"I must console myself with the reflection, that life is not long enough to do more than one's best, whatever that may be; that they who are ever taking aim, make no hits; that they who never venture, never gain; that to be ever safe, is to be ever feeble; and that to do some substantial good, is the recompense for much incidental imperfection."

* I was attending several cases of malignant scarlatina, and had opened an abscess in a fatal case immediately before seeing the patient.

† Before and during the time of my attendance on this patient, I was frequently visiting a lady residing close by, who had erysipelas and retention of urine, requiring the frequent use of the catheter. Without doubt, I was the medium of communication.

‡ The nurse fell down drunk, and was reported dead.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, NOVEMBER 12th, 1859.

THE BRITISH MEDICAL ASSOCIATION.

In accordance with one of the laws of the Association, which provides that the Journal shall contain, "at least once in each year, a list of members of the Association," a list of the members for the present year is published in this day's number. The number of names amounts to 2,301, being 131 in excess of that which appeared in the Journal of July 24th, 1858. We have received also the names of nearly thirty gentlemen (of whom nine belong to the South Midland Branch, nine to Cornwall, and five to Devon) who have been elected for the purpose of joining at the commencement of 1860; their names, however, cannot properly appear in a list which is intended to shew the actual strength of the Association.

The publication of the list affords an occasion for offering a few observations on the objects of the Association, and on the means by which these are sought to be carried out.

Founded in 1832 by Sir Charles Hastings, under the name of the "Provincial Medical and Surgical Association," this body had placed before it, as its general objects, the advancement of medical science, and the maintenance of the honour and respectability of the profession generally in the provinces. The means by which it was endeavoured to carry out these objects were: the holding of annual meetings of the members in the principal towns; the publication of an annual volume of *Transactions;* and the establishment, in a few years, of a Journal as the official and scientific organ of the Association.

There can be no question that, from the time of its first organisation, the Provincial Medical and Surgical Association effected a great amount of good in the profession: and this it did, not more by its public acts than by its gradual operation in diffusing a healthy tone of professional feeling, and breaking down the barriers which separated the practitioner from his fellows in more distant parts, and even from his neighbours. It gave the profession an opportunity of union, and of action unfettered by the opposition or the supineness of any of the bodies to which they nominally belonged.

There still was, however, something in the constitution of the Association which limited its utility. In the beginning of 1853 (the Association then numbering in its ranks many of the practitioners in the metropolis as well as in the country districts) the Journal, which had been published fortnightly in Worcester, under the name of the *Provincial Medical and Surgical Journal*, was enlarged in size and published weekly, in London, under the name of the Association Medical Journal. At the annual meeting held at Birmingham in 1856, it having been for some time strongly felt that the name of "Provincial" was incompatible with the catholic character of the Association, which sought to unite the whole body of legitimate practitioners in the kingdom, it was resolved that its title should thenceforth be the "British Medical Association." Changes in the laws were also made, by which the representation in its council was equally, under certain conditions, distributed among the members.

The British Medical Association is, as at present constituted, a body essentially liberal in its organisation. It admits to its ranks all legally qualified practitioners of orthodox medicine in the kingdom, whatever be their conventional standing in the profession, or in their respective localities; and each member has, through the meetings or the Journal, an equal voice in the discussion of all subjects brought forward. Professional impropriety or misconduct alone can exclude any legally qualified practitioner from the privileges of membership.

With the exception of its sphere of action being more comprehensive, the primary objects of the Association are the same as those for which it was first formed. They are thus expressed in Law 2:

"The objects of the Association are—the promotion of medical science, and the maintenance of the honour and interests of the medical profession."

The extent to which the Association, during the twenty-seven years of its existence, has promoted these objects, can be best understood by those who are acquainted with the state of the profession before its formation. Isolated from each other, the members of the medical body had no common centre of action, and their voice was powerless to influence the state, on any subject with which they were concerned; and the opportunities of forming and renewing professional friendships, which should result in moral as well as in intellectual advantage, were few and rare. But now we can look back on the Association as having brought into friendly contact many hundreds of professional men who would otherwise, in all probability, have remained isolated from each other, and has thus tended greatly to the diffusion of that *esprit de corps* which ought to animate the members of a liberal profession, and which is indispensable to the carrying out of any object of importance, social, scientific, or political.

From an early period of its existence, the important subject of medical reform engaged the earnest attention of the Association. It took on itself the task of bringing the general wishes of the profession into a tangible form, and pressing them on the notice of the legislature. In this arduous duty it often met with what might have been felt as discouragement; it persevered steadily, however, and it is gratifying to be able to reflect that the Medical Act of 1858 was mainly founded on principles adopted and actively supported by the Association, and that its maturation and passing were in great measure due to the activity of our body. It will be for the Association, in the time to come, to notice the operation of the Act, and to point out what may be required to render it more fitted for the regulation of the profession.

Other matters of public and professional interest also come legitimately under the notice of the Association. Of these are, public vaccination; the sale of poisons; the treatment of medical officers in the public services; the means of securing to the profession a proper representation in parliament; etc. In regard to several of these, although the Association has produced a certain amount of good, there is yet much to be done;

and in each, and all of them, the Association, with the additional weight given to it by increased numbers, and with steady exertion, is the body on whom properly devolves the duty of obtaining such reforms as are required.

In promoting the advancement of medical knowledge also, the Association has done good service; both by the reading and discussion of papers at its meetings, and through the publication in the Journal and the *Transactions*, of numerous contributions of much value.

The principal means by which the objects of the Association are carried out, are the annual meetings, the formation of district branches, and the publication of a weekly Journal, as an organ of communication between the members.

The annual *réunions* of the Association are looked forward to and remembered with pleasure. At these, old friendships are renewed and confirmed; new ones are formed; a healthy state of professional feeling is maintained; and the past proceedings of the Association are reviewed, and its future plan of action is decided on.

A most important feature in the organisation of the Association is the formation of Branches, consisting of the members residing in the various districts. These Branches are spread over the greater part of England and Wales; and it would be highly conducive to the interests of the Parent body, if every part of the kingdom had its Branch. These Branches, although in general subordinate to the Parent Association, have their organisation and mode of action. The members of them meet at intervals varying from two months to one year; and the result of their labours, in whatever direction, has been such as to materially promote the general objects of the Association. As a proof of the value attached to these bodies by the Association, the members belonging to them have alone the power of electing the representative Council. In speaking of the Branches, we would suggest that the formation of district societies or meetings within and subject to the larger Branches, as has been done in the South-Eastern Branch, would be of great utility to the Association.

We have now to notice the position of the Journal with respect to the Association. It should be distinctly understood that the publication of a journal is not the prime *object* of the Association. If it were so, it would probably be sufficient to publish a periodical monthly, or even quarterly. The Journal is one of the main *instruments* of carrying out the intentions of the Association; and, in order that this duty may be performed with the greatest efficiency, it is published weekly. The Journal holds the members in constant communication with each other. In its character as the reporter of the proceedings of the sections and individual members of the Association, it at once makes these known to the whole body; its pages are always ready to maintain the honour and interest of the medical profession and of its members; while it also aims at rendering its readers well informed on the progress of medical science. It is for the associates, as well as the editor, to constantly endeavour to increase the efficiency of the Journal.

The British Medical Association now numbers, as we have seen, two thousand three hundred members, including a large proportion of the physicians and surgeons of the various hospitals and infirmaries. But the numerical strength of the Association, great as it is, is not yet what it ought to be. The list ought to contain the name of every respectable practitioner in the kingdom. This is a thing to be rather hoped for than at once expected; but a great step towards it might be made, if those who have not yet joined the Association would only reflect on the advantages that must arise from belonging to a body of their brethren always ready to encourage and co-operate with them in their labours, and to advise and support them on all occasions when oppressed by professional difficulties or by public injustice. And, indeed, since the British Medical Association is the only body which affords free scope for the exercise of that *esprit de corps* which ought to characterise our profession—since, on this ground, its sentiments are accepted by public bodies as the sentiments of the profession—it becomes the duty of every practitioner who has not yet joined its ranks to do so without delay, and thus to increase that power of which its past proceedings have given earnest. For the interest of medical science, also, every medical man should join the Association. The meetings of the Branches and the pages of the Journal furnish him with the means of acquiring and imparting professional information.

Those who are already members, and who appreciate the advantages of belonging to the British Medical Association, we would urge to use their individual exertions in procuring the adhesion of those who are yet outside our body. The present is especially a fitting time for operation, as the admission of a member always dates from the first day of January; and, if the influence of members were used as extensively as it should be used among their professional friends during the next six weeks, the coming year would open with the enrolment of a number of recruits greater than on any other occasion.

THE WEEK.

The news columns of this day's number contain a brief abstract of the proceedings at four trials which have recently taken place under the provisions of the Medical Act. In two instances, the parties had simply been practising—it may have been orthodox medicine—and using medical titles, without being registered; in one case, the accused was a homœopathic practitioner, who grounded his pretensions on the possession of a diploma from an American homœopathic institution; and the remaining case was that of an advertising herb-doctor, who also claimed his right to use a medical title as a member of a transatlantic "Reformed College of Physicians". In the former three cases, the defendants were convicted; and one of them was fined in the sum of £10, while the other two were each mulcted of the nominal penalty of forty shillings. In the case of the herb-doctor, tried at Bristol, the magistrates deferred their decision: but we hope that no leniency will be shewn to this individual, who is a member of the regular testimonial-advertising class, and has, as far as we can learn, a strong touch of the Kahn in his composition. In comparing these prosecutions, both with each other and those that have preceded, there are two or three striking points to be observed. In the first place, the unfortunate decision of Mr. Jardine with regard to the validity of the *Register*, has given the cue to the defendants and their legal advisers to endeavour to impede or set aside the proceedings by frivolous objection to the publica-

tion, notwithstanding the express provision of the Act recognising the authorised printed copy of the *Register* as evidence in all courts of law. We are glad to see, that the objection to the *Register* is, in by far the majority of instances, overruled by the magistrates. Next, it is very plain that every medical man who conducts a prosecution against an unqualified practitioner must be prepared to submit to an unlimited amount of badgering and even abuse—even though he act in an official rather than in an individual capacity. Here is a specimen of the choice insinuations which were thrown at Dr. Chevallier, in one of the trials which we notice to-day. Dr. Chevallier is being cross-examined by the prisoner's legal adviser..

"Witness. I came to Halesworth to look at the plate myself.
"Mr. Palmer. You, a physician, and in an extensive practice!
"Witness. I considered it my duty.
"Mr. Palmer. Your duty! so you left your practice and your patients to lay a common information. You! a graduate of the University of Oxford, and not educated at Bow Street, descend to that of a common informer! May I ask what part of your duty it was?
"Witness. It was part of my duty to assist the Registrar. The reason why I came was to avoid the idea that it was a personal matter with the medical gentlemen of this vicinity.
"Mr. Palmer. Why there are five hundred persons in this town who could have given you the information.
"Witness. I dare say there were."

And this is the way in which, using their well known license of speech to it fullest extent, those legal gentlemen who think right to defend a poacher on a sister profession, think to discourage men who are doing their duty! But we trust that such words as those of Mr. Palmer will simply be regarded as merely

"Full of sound and fury,
Signifying nothing."

Men in the position of Dr. Chevallier are performing a duty both to the profession and to the public. The profession thank them heartily for their courage in the performance of the duty; and the public will thank them, if not now, certainly in the next generation.

We have before us in the *Morning Post* of November 7th, an analysis of the votes given by the professions of divinity, law, and medicine respectively, at the recent election of Lord Brougham as Chancellor of the University of Edinburgh. The numbers were as follows:—

	Brougham.	Buccleuch.	Total.
Lawyers - -	117	142	259
Clergy - -	151	138	289
Medical doctors and surgeons	153	47	200

The votes of the medical electors had a special value in this contest. The Scotch lawyers are very conservative; hence it occurred that, while many of the members of the bar voted for Lord Brougham, a great majority of the writers to the signet gave their suffrages to the Duke of Buccleuch. With the clergy, the contest seems to have included a battle between the members of the established church on the one hand, and the combined forces of the free church and the dissenters on the other; the former, almost to a man, voting for the Duke of Buccleuch; the latter, to a man, supporting Lord Brougham. Medical men are mixed up with all parties and classes; and hence their votes are taken as fairly representing public opinion. Of the two hundred medical members of council who voted, one hundred and fifty-three polled for Lord Brougham. The number of medical votes appears small; but this is explained by the fact that a Scotch medical degree does not qualify for a vote in an University, unless its holder has had four years resident university education.

The first annual meeting of the General Medical Provident and Mutual Aid Association of France was held in Paris, on the 30th and 31st of October, under the presidency of M. Rayer. After an address by the President, the Secretary (M. Amédée Latour) read a long report on the organisation and progress of the Society, the number of members of which had reached 1557. There were also 1014 demands for admission under consideration; so that it was expected that there would soon be more than 2500 members on the roll. The outlay of the Society, in consequence of necessary preliminary expenditure, had exceeded the income; but the deficiency—above 4000 *francs*, or £160—had been discharged by private generosity. We quote a few of the concluding words of M. Latour's address, feeling that they may be equally well applied to the British Medical Association, or to any similar body.

"L'Association a modifié, adouci les mœurs professionelles; par elle chacun a senti que la dignité de soi-même fait la dignité de tous; par elle tout le monde a compris que, pour que la famille médicale fût une réalité, le respect pour tous ses membres était une condition aussi rigoureuse que dans la famille naturelle, parceque, comme elle, elle commande la mutualité des servicès et la solidarité des actes; par elle, enfin, les médecins ont senti la puissance et la charme de cette douce et sainte chose, la confraternité, expression plus familiale encore que professionelle, et qui largement comprise, loyalement pratiquée, résume nos droits les plus impresciptibles comme nos plus impérieux devoirs."

Association Intelligence.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The following are the Laws of the Association regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous.

"If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

"The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members can also make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Philip H. Williams, M.D., *General Secretary.*

Worcester, November 1859.

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Williams, W. Esq. Guilsborough, near Northampton

NORTHUMBERLAND.

Number of Members..8.
Branch..None.

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Number of Members..29.
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Wright, James, Esq. Bottesford, near Nottingham
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Freeborn, Richard F. L.R.C.P.Ed. Oxford
Giles, R. M.D. Oxford
Hansard, Richard J. Esq. Surgeon to the Radcliffe Infirmary, Oxford
Hester, James Torry, Esq. Surgeon to the Radcliffe Infirmary, Oxford
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Rye, Arthur Brisley, Esq. Banbury
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Wise, Robert Stanton, M.D. Banbury

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Jones, Robert, Esq. Strefford, near Shrewsbury
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SOMERSET

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Crang, James, Esq. Timsbury, near Bath
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Fox, E. F. Esq. Brislington, near Bristol
Fox, F. K. M.D. Brislington House, near Bristol
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Coleman, John Major, M.D. Wolverhampton
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Duncalfe, Henry, Esq. West Bromwich
Dunn, William, Esq. Wolverhampton
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Hancox, William M. Esq. Bilston
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Lowe, George, Esq. Burton-on-Trent
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Partridge, S. Esq. Darlaston, near Wednesbury
Ransom, T. W. Esq. Darlaston, near Wednesbury
Rowley, Thomas, M.D. Physician to the Dispensary, Lichfield
Ryan, Michael, M.D. Newcastle-under-Lyne
Sandford, Richard, Esq. Surgeon to the South Staffordshire General Hospital, Wolverhampton
Seddon, Joshua, M.D. Longdon, Rugeley
Somerville, Charles, L.R.C.P. Bloxwich, Walsall
Thomson, Spencer, M.D. Burton-on-Trent
Troutbeck, James, Esq. Tunstall
Turner, Samuel M. Esq. Surgeon to the North Staffordshire Infirmary, Newcastle-under-Lyne
Underhill, Thomas, Esq. Tipton
Underhill, William L. Esq. Great Bridge, Tipton
Walker, Henry, M.D. Brierly Hill
Walker, Joseph, Esq. Burslem
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Wheatcroft, John, Esq. Cannock, near Rugeley
Whymper, G. Esq. Walsall

SUFFOLK.

Number of Members..49.
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Beck, Henry, Esq. Needham Market
Brame, Samuel S. Esq. Surgeon to the Infirmary, Lowestoft
Bullen, George, Esq. Senior Surgeon to the East Suffolk Hospital, Ipswich
Bullen, George, jun. Ipswich
Chevallier, Barrington, M.D. The Grove, Ipswich
Cooper, William, Esq. Bury St. Edmund's
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Ebden, W. H. Esq. Haughley
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Faircloth, Richard, Esq. Newmarket
Freeman, Spencer, Esq. Stowmarket
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Gramshaw, H. Esq. Laxfield
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Growse, Robert, Esq. Bildestone
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Haward, Frederick, Esq. Halesworth
Hele, Nicholas F. Esq. Aldeburgh
Image, W. Edmund, Esq. Surgeon to the Bury and Suffolk Hospital, Bury St. Edmund's
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Kilner, John, Esq. Bury St. Edmund's
King, George, Esq. Hartest, Bury St. Edmund's
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Muriel, John Thomas, Esq. Hadleigh
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Simpson, E. Esq. Long Melford, Sudbury
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SURREY.

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Napper, Albert, Esq. Cranley, near Guildford
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Stedman, James R. M.D. Guildford
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SUSSEX.

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Davey, H. W. R. Esq. Steyne, Worthing
Davies, R. Coker, Esq. Rye
De Mierre, Albert, M.D. St. Leonard's-on-Sea
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Eden, Thomas E. Esq. Brighton
Elliott, R. Esq. Surgeon to the Infirmary, Chichester
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Jones, Charles S. Esq. Chichester
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Lawrence, John, Esq. Consulting Surgeon to the Sussex County Hospital, Brighton
Lowdell, George, Esq. Surgeon to the Sussex County Hospital, Brighton
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Weekes, Richard, Esq. Hurstpierpoint
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Bucknill, Samuel, Esq. Rugby
Bucknill, S. Birch, M.D. Rugby
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Busby, Ralph Augustus, Esq. Leamington
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Chavasse, Samuel, Esq. Birmingham
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Elkington, John, Esq. Erdington, Birmingham
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Howkins, Thomas, Esq. Birmingham
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Johnson, David, Esq. Birmingham
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Peddie, Alexander, M.D. Edinburgh
Sanderson, Alexander M. Esq. Musselburgh
Seller, William, M.D. Edinburgh
Struthers, James, M.D. Leith
Struthers, John, M.D. Edinburgh
Simpson, Alexander R. M.D. Edinburgh
Simpson, J. Y. M.D. Professor of Midwifery in the University, Edinburgh
Thomson, Lawrence R. M.D. Belmont, Dalkeith
Watson, Patrick Heron, M.D. Lecturer on Surgery, Edinburgh
Wood, Alexander, M.D. Edinburgh
Wood, Andrew, M.D. Edinburgh

FIFE.

Number of Members..14.
Adamson, John, M.D. St. Andrew's
Archibald, David, M.D. St. Andrew's
Bell, James M. M.D. Kettle, near Lady Bank
Bonnar, George Lindsay, M.D. Cupar
Day, George Edward, M.D. Professor of Anatomy and Medicine, St. Andrew's
Laing, George, Esq. Ferryport-on-Craig
Lawrence, George, M.D. Crail
Low, Andrew, Esq. Ferryport-on-Craig
Lyell, John, M.D. Newburgh
Macarthur, Alexander J. M.D. Anstruther
Scott, R. S. M.D. Leuchars
Spence, William, M.D. Litham, Lady Bank
Troup, Francis, Esq. Auchtermuchty
Wiseman, Robert, Esq. Cupar

FORFARSHIRE.

Number of Members..5.
Bell, Robert, M.D. Dundee
Gibson, W. Lockhart, M.D. Dundee
Monro, William, M.D. Consulting Physician to the Infirmary, Dundee
Murray, David, M.D. Carnoustie
Nimmo, Matthew, Esq. Dundee

HADDINGTONSHIRE.

Number of Members..1.
Lorimer, Robert, M.D. Haddington

KINCARDINESHIRE.

Number of Members..1.
Henderson, Joseph, Esq. Auchenblae

LANARKSHIRE.

Number of Members..7.
Anderson, Andrew, M.D. Professor of Medicine in Anderson's University, Glasgow
Barrie, John T. M.D. Newarthill, Motherwell
Bell, J. M.D. Professor of Botany in Anderson's University, Glasgow
Cowan, John B. M.D. Lecturer on Medical Jurisprudence in Anderson's University, Glasgow
Macleod, George H. B. M.D. Lecturer on Military Surgery in Anderson's University, Glasgow
Watson, James, M.D. President of the Faculty of Physicians and Surgeons, Glasgow
Weir, William, M.D. Physician to the Royal Infirmary, Glasgow

MORAYSHIRE.

Number of Members..1.
Innes, John G. Esq. Forres

NAIRN.

Number of Members..1.
Grigor, John, M.D. Nairn

PERTHSHIRE.

Number of Members..4.
Absolon, George W. M.D. Perth
Clark, George B. Esq. Princeland, Cupar-Angus
Gairdner, Matthew B. M.D. Crieff
Wylie, James, Esq. Errol

ROXBURGHSHIRE.

Number of Members..3.
Brown, Wm. Nimmo, M.D. Melrose
Clarkson, James B. Esq. Melrose
Thomson, George W. M.D. Hawick

STIRLINGSHIRE.

Number of Members..2.
Moffat, Robert, M.D. Polmont
Paterson, Alexander, M.D. Bridge-of-Allan

IRELAND.

CORK.

Number of Members..1.
Gordon, Sir John, M.D. Cork

DUBLIN.

Number of Members..23.
Branch..Dublin.
Beatty, P. Esq. Dublin
Betty, John, M.D. Dublin
Bolland, E. H. M.D. Dublin
Collins, Thomas, Esq. Dublin
Daly, James, M.B. Dublin
Gorman, William Esq. Dublin
Harrison, William I. Esq. Dublin
Holmes, Charles, M.D. Dublin
Leet, Charles Henry, M.D. Dublin
Long, P. W. M.D. Kingstown, Dublin
Lyon, R. Esq. Dublin
McMunn, John, M.D. Dublin
Madden, William, M.D. Dublin
Madden, William, jun. M.D. Dublin
Moore, William D. M.B. Dublin

Mulock, Robert, M.D. Dublin
Nalty, John, M.D. Dublin
Nolan, Henry P. M.D. Dublin
O'Flaherty, Jeremiah, Esq. Kingstown
Owens, George B. M.D. Dublin
Pakenham, Daniel, Esq. Dublin
Shaw, C. Esq. Dublin
Shea, John, M.D. Dublin

FERMANAGH.

Number of Members..1.
Mahood, George, M.D. Enniskillen

WATERFORD.

Number of Members..1.
Mackesy, Thomas L. M.D. Waterford

FOREIGN COUNTRIES.

Number of Members..11.
Ashenheim, Lewis, M.D. Falmouth, Jamaica
Charles, Thomas, Esq. Sydney, Australia
Cogswell, Charles, M.D. Halifax
Cotes, Henry, Esq. H.E.I.C.S. Rajpootana Field Force, Neemuch, Bombay
Fayrer, Joseph, M.D. Bengal Army, Calcutta
Imlach, C. M.D. Bombay
Lund, George, M.D. Madeira
Macpherson, Hugh, Esq. Bengal Medical Service, Calcutta
Nicholson, T. M.D. Antigua, West Indies
Sammut, Joseph Balthazar, M.D. Malta
Whittell, Horatio Thomas, M.D. Adelaide, Australia

HONORARY MEMBERS.

Newnham, William, Esq., Tunbridge Wells.
Traill, T. Stewart, M.D., Professor of Medical Jurisprudence in the University of Edinburgh.

CORRESPONDING MEMBERS.

Australia.

Hobson, E. C. M.D. Naturalist to the Colony of Van Dieman's Land, Hobart Town

Belgium.

Nebau, N. Lebaund, M.D. Physician in ordinary to the King of the Belgians, First Physician to the Military Hospital, Brussels

Brazil.

De Simoni, Luis Vicente, M.D. Secretary of the Imperial Academy of Medicine of Rio Janeiro

Denmark.

Callisen, Adolph Carl Peter, Doctor of Medicine and Surgery, Librarian to the Royal Chirurgical Academy, Copenhagen
Otto, C. M.D. Professor of Pharmacology and Forensic Medicine in the University of Copenhagen

Dresden.

Pincoffs, Peter, M.D.

East Indies.

O'Shaughnessy, Sir W. B. M.D. Calcutta

France.

Andral, M. M.D. Professor to the Faculty of Medicine, Paris
Louis, P. C. A. M.D. Paris
Velpeau, Alf. A. L. M. M.D. Professor of Clinical Surgery to the Faculty of Medicine, Paris

Germany.

Marx, Karl Frederich Heinrich, M.D. Professor of Medicine in the University of Göttingen
Mühry, N. A. M.D. Hanover
Oppenheim, Fr. Wilh. M.D. Hamburgh
Rokitansky, Carl, M.D. Professor of Pathological Anatomy in the University of Vienna

Holland.

Schroeder van der Kolk, J. L. M.D. Professor of Anatomy and Physiology in the University of Utrecht

Vrolik, Willem, M.D. Professor of Anatomy in the Athenæum of Amsterdam, Member of the First Class of the Royal Institute of the Netherlands

Italy.

Bufalini, Maurizio, M.D. Professor of Clinical Medicine at the Hospital Santa Maria, Florence
Lanza, Vicenzo, M.D. Professor of Practical Medicine in the Royal University of Naples

Portugal.

Leitao, Antonio Jose de Lima, M.D. Physician to the Hospital San Lazaro, Lisbon

Russia.

Marcus, F. C. M.D. Chief Physician to the Galitzin Hospital, Moscow
Seidlitz, Carl Von, M.D. Professor of Clinical Medicine in the Imperial Medico-Chirurgical Academy, St. Petersburgh

Spain.

Seoane, Mateo, M.D. Member of the Council of the University of Salamanca

Sweden and Norway.

Holst, D. M.D. Professor of Medicine in the Royal Frederick's University, Christiana
Retzius, Andreas Andolph, M.D. Chir. M. Inspector of the Carolinian Institution, and Professor of Anatomy, M.R.C.S. Stockholm
Retzius, Magnus Christian, M.D. Physician to the King of Sweden, Professor of Chemistry in the Royal Military Academy of Stockholm

Switzerland.

Lombard, Henry Clermont, M.D. Joint Physician to the Hospital of Geneva

United States of America.

Dunglison, Robley, M.D. Professor of Materia Medica, etc. Jefferson College, Philadelphia
Gibson, William, M.D. Professor of Surgery, Pennsylvania
Ware, John, M.D. Professor of Medicine, Cambridge University, Boston
Warren, John C. M.D. Professor of Anatomy and Surgery, Harward University, Boston
Wood, George B. M.D. Professor of Materia Medica and Pharmacy in the University of Pennsylvania, one of the Physicians of the Pennsylvania Hospital

LAWS OF THE BRITISH MEDICAL ASSOCIATION.

NAME.

1. The Association shall be called "The British Medical Association".

OBJECTS.

2. The objects of the Association are—the promotion of medical science, and the maintenance of the honour and interests of the medical profession.

MEMBERS.

3. The Association shall consist of Ordinary, Honorary, and Corresponding Members, being duly qualified members of the medical profession.

COUNCIL AND OFFICERS.

4. The Association shall be governed by a Council. The officers of the Association shall be—

1. A President.
2. Vice-Presidents.
3. President of the Council.
4. Treasurer.
5. Secretary.

PRESIDENT.

5. The office of President shall be conferred on some member resident in the district in which the Annual Meeting is held, in the year in which his presidency commences.

VICE-PRESIDENTS.

6. The Vice-Presidents of the Association, who have been appointed after fulfilling the office of President, shall continue to enjoy the office for life; and the office of Vice-President shall be hereafter conferred, as an honorary distinction for life, on the retiring President, by a vote of the members at the Annual Meeting.

COUNCIL.

7. The Council shall consist of the President, the President-elect, the President of Council, the Treasurer, and the Secretary of the Association, together with those members who shall be elected annually, according to Law 8. Its meetings shall be held at the time and place of the Annual Meeting, and at other times and places, if summoned by the President of the Council, or by the Committee of Council, or by a requisition signed by twenty members of Council.

ELECTION AND DUTIES OF COUNCIL.

8. Each District Branch shall, in such manner as they think fit, before the General Annual Meeting, elect members who shall represent the Branch in the Council for the ensuing year, according to the following scheme.—In a Branch consisting of not less than twenty members, one member shall be elected as representative, in addition to the Honorary Secretary. If the members amount to more than twenty, for every number of twenty additional members, each Branch shall be entitled to choose one additional representative. A complete list of the members thus chosen shall be sent to the Secretary at least a fortnight before the Annual Meeting, and they shall continue in office till the close of the official year, when they may be either re-appointed or superseded. The duties of the Council shall be:—1. To agree upon a Report to be presented to the Annual General Meeting of the Association. 2. To nominate a President, to be submitted for election to the Annual Meeting. 3. To elect by voting papers ten members of the Council, who, together with the President of the Association for the year, the President of Council, the Secretary of the Association, and one Secretary from each Branch, shall constitute the Committee of Council for the ensuing year.

4. To propose the place of meeting of the Association for the ensuing year. 5. To nominate gentlemen to read such addresses as may be deemed expedient at the Annual Meeting of the ensuing year. 6. To determine the order of business of the General Meeting, so far as that is not determined by the laws relating to General Meetings.

PRESIDENT OF THE COUNCIL.

9. The President of the Council shall be, in the first instance, Sir Charles Hastings, permanently; and on any vacancy occurring, the President shall be elected by the Council at the Annual Meeting for a term of three years.

TREASURER.

10. The Treasurer shall be in the first instance Sir Charles Hastings, permanently; and, on any vacancy occurring, the Treasurer shall be elected at a General Meeting of the Association, and shall hold his office during pleasure.

SECRETARY.

11. There shall be one paid Secretary, resident in some convenient locality, so as to communicate readily with the President of the Council and the Committee of Council. His duties shall be to be present at the meetings of the Association, of the Council, and of the Committee of Council; to record their minutes; to conduct the correspondence of the Association; to superintend the collection of subscriptions, and the enforcement of the laws as regards those in arrear; and otherwise to obey the directions of the Council and Committee of Council. The Secretary shall be elected at an Annual or Special Meeting of the Association. The offices of Secretary and Editor of the Journal shall not be held by the same person.

INTERIM OFFICERS.

12. In the event of the death or resignation of any of the officers of the Association, the Committee of Council shall have power to appoint a successor in his stead; such appointment, except in the case of the President, to be *ad interim*, and only till confirmed at an Annual or Special Meeting.

COMMITTEE OF COUNCIL.

13. The Committee of Council shall manage the affairs of the Association in the intervals between the general meetings; they shall meet not less than twice in the year, and shall be presided over by the President of the Council; or, in his absence, by a Chairman appointed by the meeting. The Committee of Council shall appoint the Editor of the Journal, who shall be responsible to them for its management; they shall direct any other publications of the Association, and shall take cognizance of any matter which may require immediate decision. Five members to be a quorum. The Secretary shall call a meeting of the Committee at any time on receiving a requisition from five of its members, the object for which the meeting is called being specified.

ADMISSION OF MEMBERS.

14. Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch.

SUBSCRIPTION.

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

EXPULSION OF MEMBERS.

17. If a member be accused of professional impropriety or misconduct, a majority of three-fourths of those present at an Annual or Special General Meeting may determine that the member offending be expelled from the Association; but no measure of this kind shall be adopted unless the accused shall have had two months notice of the charges to be brought against him.

HONORARY MEMBERS.

18. Honorary Members may be elected by the general body, on the recommendation of the Council at an Annual Meeting; they shall be members of the medical profession, of scientific eminence, or who may have rendered some distinguished service to the Association. Gentlemen having these qualifications, but residing in the colonies or in foreign countries, may be elected Corresponding Members. Honorary and Corresponding Members shall not be entitled to any further privilege than that of attendance at the meetings of the Association, and to the receipt by any such member of copies of any memoir or communication of his printed by the Association.

ANNUAL MEETING.

19. The Annual Meeting shall be held at a period to be fixed by the Committee of Council; the place of meeting being determined prospectively in each year by the vote of the Association. At this meeting the Council shall present a Report, detailing the general state, proceedings, and pecuniary condition of the Association. One or more Addresses in Medicine or Surgery shall be read by gentlemen appointed to that office in the previous year. Cases and Communications on Medical subjects may be read, and general business shall be transacted in such order as the Council may determine. The order of business shall be regulated and announced, as far as possible, at the commencement of the meeting.

SPECIAL MEETINGS.

20. The Committee of Council shall have the power to call a Special General Meeting of the Association at any time; and they shall do so within *four* weeks after receiving a requisition to that effect, signed by at least *fifty* members. The notice calling the meeting shall state the objects for which the meeting is called, and no other business shall be transacted.

NEW LAWS.

21. Any member wishing to propose a new Law, or an alteration of an existing Law, must send notice to the Secretary at least *two* months previous to the Annual Meeting, and specify the change proposed. The Secretary shall immediately cause such notice to be published in the Journal, which publication shall be repeated three times at least, and it shall be announced in the Report of the Council.

BENEVOLENT FUND.

22. A Medical Benevolent Society, under such regulations as may be approved by the Council, shall be connected with the Association. It shall be called the "Benevolent Fund of the British Medical Association".

FINANCIAL REPORT.

23. The Committee of Council shall annually prepare a statement of accounts up to the last day of each year, and a Report upon the financial condition of the Association, which shall be published in the Journal within the first three months of the year. The accounts shall be previously audited every year by two auditors appointed at the preceding Annual Meeting, and not holding any other office in the general Association.

PUBLICATIONS.

24. The Journal, under the title of the "British Medical Journal: being the Journal of the British Medical Association", shall be published weekly in London, and shall be conducted by a paid Editor, who shall be responsible for all that appears in its pages, except such matter as may be printed by direction of the Council, and Committee of Council. The Journal shall contain papers on medical science; and shall be considered the medium of communication between the members of the Association. In it shall be inserted all intimations of places and times of meeting, whether of the Association or the Branches; notices of motions, etc.; at least once in each year a list of the members of the Association; and any other Association business that the Council or Committee of Council may direct. *Transactions* shall be published occasionally, if the funds of the Association permit.

DISTRICT BRANCHES.

25. For the purposes of self-government, and for wider diffusion of the benefits of the Association, the members shall be united into District Branches. Any number of members meeting together may form themselves into a Branch of the Association; but no Branch consisting of less than *twenty* members shall have the privilege of sending a representative to the Council.

26. The District Branches shall be free to govern themselves as their respective members shall think fit; but no Branch law shall be valid which in the opinion of the Committee of Council shall contravene any fundamental law of the Association.

27. The District Branches shall each pay their own expenses.

Philip H. Williams, M.D., *Secretary.*

Worcester, November, 1859.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, November 2nd, 1859.

Edward Rigby, M.D., President, in the Chair.

Twenty-eight gentlemen were elected into the Society, and the names of thirteen were read as candidates for the Fellowship.

A number of eminent obstetricians were proposed by the Council for election as Honorary Fellows, according to the bye-laws. They will be balloted for at the next meeting of the Society, in December.

COMMUNICATIONS.

A Case of Craniotomy, in which Delivery was readily effected by Turning, after Perforation, when Instrumental Extraction was found impossible, etc. By F. W. Mackenzie, M.D. The conjugate diameter, at the brim, was only two inches and three-eighths. As the woman had arrived at the full term of gestation, it was thought necessary to perforate the cranium; but all subsequent attempts at extraction by the crotchet and craniotomy forceps failed. Turning was, however, easily performed, and the child brought away. The mother died, apparently from exhaustion, a few hours afterwards. The paper concluded with the suggestion that turning should be had recourse to in all cases of craniotomy similar to the one detailed.

A New Principle of Treatment and Apparatus for Vesico-Vaginal Fistula. By Robert Battey, M.D., of Georgia, United States. The principle which the author proposes to introduce in the treatment of this affection, is moderate pressure upon the approximated edges of the fistula, with the object of so condensing the tissue as to make a watertight joint, through which it shall be impossible for the urine to flow. The apparatus is so constructed as to give a power over an obstinate fistula for its ready closure, not heretofore possessed by any of the appliances in use—a power, also, which may be usefully exerted for bringing down the uterus and vagina so as to render the fistula easily accessible. It is so constructed as to permit a full inspection of the edges of the fistula up to the last step of the operation, so that the operator may determine, by the eye, the exact coaptation of the edges. The compress and splint are combined in a simple leaden bar, which has a row of perforations on one edge and notches on the other; by this arrangement enabling the operator to avail himself of the advantages above mentioned.

ON THE STATISTICS OF MIDWIFERY, FROM THE RECORDS OF PRIVATE PRACTICE. BY ROBERT DUNN, ESQ.

In this paper was comprised a summary view of the author's midwifery records for twenty years. He began by expressing his conviction that the records of private practice might be usefully and advantageously contrasted with the statistics of lying-in hospitals and public institutions; and that, while his own experience could only be brought to bear upon the working and middle classes of society, he hoped—seeing how important was the influence which the different modes and habits of life had upon the parturient process—that other Fellows of the Society would not be wanting to supply the desiderata in relation to the other grades and ranks of social life; not only to the highest, to those living in the lap of luxury, surrounded by the elegancies, and enjoying all the indulgences of life, but also to the lowest, to those sunk in the depths of indigence, ignorance, and penury, and often without even the ordinary comforts of life. The author considered that what had been said of statistics in relation to medicine in general, applied with peculiar force to obstetrics in particular; for what we wanted in midwifery "were facts, comparable facts, numerous facts, well observed, carefully arranged, minutely classified, and acutely analysed."

From 1831 to 1850, a period of twenty years, he had registered 4049 cases of midwifery as occurring in his practice. Of these, after deducting 228 for premature births, there were 2,133 male, and 1,688 female children. In regard to plurality of infants, there were two cases of triplets, and forty-five of twins. He had met with three cases of monstrosity, one of which was worthy of notice, and had been put upon record in *The Lancet* for April 27th, 1844. It was that form of monstrosity which Dr. A. G. Otto has designated *Monstrum humanum sereniforme.* He had met with one instance of the hydatidiform or vesicular mole, and several cases of cranial blood-swellings, three of hare-lip, four of cleft palate, three of spina bifida, and five of imperforate anus. In one of the last, Amussat's operation for artificial anus in the left lumbar region was attempted, but was not successful. The descending colon was found to be impervious, and not larger than a crow-quill.

There were 170 still-born children in all, from various causes, and in 30 cases death was attributable to the pressure of the cranial bones upon the brain in tedious and difficult labours. There were 60 instances of preternatural presentations. Of 11 cases in which there was a prolapsus of the funis, 8 were born dead; and of these, in 3 instances, the cord came down with the head, in 2 with the head and arm, in 1 with the foot, and in 2 with the shoulder. Of 25 breech presentations, 9 were still-born; and of these 5 were putrid. There were 3 face presentations, 1 child dead; 11 cases face to pubes; 2 head and arm, both dead: 3 hand, and 3 footling cases.

In the use of the forceps the author confessed to have had but slender experience. Impressed with the importance of the maxim, that "a meddlesome midwifery is a bad midwifery," he had always, in the absence of danger to the life of the mother, and when convinced in his own mind that the natural efforts would effect delivery, been content to wait, and had avoided instrumental interference. He had had ten cases of craniotomy; two proved fatal to the mothers—one from sloughing of the bladder, the other from a tumour at the neck of the womb. Once satisfied that the child was dead, he had never hesitated to have recourse, without delay, to craniotomy. The use of the stethoscope, in such cases, he considered of paramount importance. Of placenta prævia, six cases had occurred in his practice: three since the promulgation of Dr. Simpson's views and mode of treatment. He gave a brief narrative of two of these: one as having presented evidence to his own mind that the detached portion of the placenta, from its appearance and condition, had afforded the channel through which the blood had gushed; and the other as being an instance of the instantaneous arrest of the hæmorrhage as soon as the placenta had been entirely and completely separated from the uterus. He had met with thirty cases of adherent placenta requiring the introduction of the hand into the uterus; and four instances of the hour-glass contraction. He had witnessed two fatal cases from sheer exhaustion after delivery, where the hæmorrhage before the birth of the child had been great; and one fatal case of internal flooding. Other fatal cases of exhaustion he referred to, which were unconnected with the loss of blood. One interesting and instructive case had come under his notice, in which, while the mother lay in a state of coma from an apoplectic seizure, and the phenomena of life were reduced to a mere series of automatic movements, a fœtus of five or six months was expelled from the womb. Of twelve cases of puerperal fever which had occurred, three were acute, and terminated fatally. In one of these, the placenta had been found adherent, with hour-glass contraction of the uterus, and great hæmorrhage. In all, excepting where an hereditary tendency existed to mental disease, the loss of blood had been great. Of puerperal convulsions, he had met with four cases—none fatal; of phlegmasia dolens, six, and two proved fatal; of scarlatina, three, and one died.

Dr. Barnes made some brief observations on Mr. Dunn's treatment of his cases of placenta prævia, to which Dr. Waller replied, as he had partly been responsible for their management.

Dr. Tanner remarked that the ruling law in Mr. Dunn's practice seemed to have been the old proverb that "meddlesome midwifery is bad." Dr. Tanner considered that this rule was the cause of a great deal of mischief. In practice, it was not only necessary to consider the life of the mother, but also to how great an extent we might beneficially mitigate her sufferings. A lingering labour could hardly be otherwise than injurious to both mother and child. Although his practice had been much smaller than Mr. Dunn's, yet during the last twelve years he had employed the forceps much more frequently than this gentleman, and had obtained only the happiest results

from such a proceeding. He had never found the slightest mischief result from it, either to offspring or parent.

Mr. Baker Brown was glad to hear the opinion just expressed by Dr. Tanner. In almost all the cases of vesico-vaginal fistula which had come under his care, this accident had happened from the long retention of the fœtal head in the pelvis, giving rise to inflammation and sloughing. In reply to an observation from Dr. Graily Hewitt, that he had traced cases of vesico-vaginal fistula to the improper use of instruments, Mr. Brown stated that he had only known of one such instance.

Editor's Letter Box.

THE EMPLOYMENT OF MERCURY IN TRAUMATIC INFLAMMATION OF THE EYE.

Letter from I. Harrinson, Esq.

Sir,—Your reporter has taken a much too limited view of my question. My aim was to get the expression of an opinion on the use of mercury in traumatic, in opposition to its use in (so-called) idiopathic inflammation. There is, I believe, an increasing conviction, that mercury is injurious in traumatic inflammation, ophthalmic and general. "In traumatic inflammation of the eye, mercury is utterly useless," says Mr. Critchett. Mr. Liston raised his voice against the use of mercury in traumatic inflammation.

If your reporter will discourse practically on the use of mercury in traumatic inflammation in general, and in that of the eye in particular, in the same admirable and unanswerable manner that Dr. Markham has done on the subject of pericarditis in your last number, he will confer a great benefit on practical medicine.

There is no more profitable theme than this for a report in the British Medical Journal.

I am, etc., I. Harrinson.

Reading, November 7th, 1859.

THE JOURNAL CONTROVERSY.

Letter from A. B. Steele, Esq.

Sir,—In this controversy, both parties appear to have lost sight of the most important feature in the discussion; namely, in what way the Journal can be improved and rendered more useful and popular. I am therefore at issue with each party. Against the voluminous arguments of Mr. Dix, and his supporters, I distinctly maintain that the weekly Journal is essential to the success and progress of the Association; and, further, that it is a publication which reflects much credit upon its editor.

On the other hand, I cannot agree with Sir J. Forbes and his followers, that it is worth some 50 per cent. more than we pay for it, or that it is equal in value or merit to the other weekly medical journals. There is, I believe, much room for improvement, and it is in no dissatisfied or contentious spirit, but with an earnest desire to see the organ of our Association progress and improve, that I venture to point out what in my opinions are defects, requiring and admitting of a remedy. In the medical news department we are often deficient, and generally behind hand. Associates who wish to be *au courant* with all that is passing in the medical world, cannot therefore rely upon their own Journal, but must have recourse to the *Lancet* or *Medical Times and Gazette*.

As an illustration of this, I may state, that of the numerous prosecutions which have taken place since the passing of the Medical Act, but very few have been reported in our columns. The important case, Fitzpatrick *versus* Hallows, was made the subject of a leader; but no report of the hearing was given. Last week a case was published at length in the *Lancet*, but did not appear in the Journal. This is not, I think, as it should be. The Medical Act has been called the bill of the Association, and we ought certainly to be furnished with all intelligence connected with it.

The reports of the medical societies in London frequently appear a week after they have been published in the other journals. This perhaps is not of great importance; but it is yielding the palm to our competitors as caterers of early intelligence. One more count completes my indictment. The editor's box should be closed against all letters which extend to the unreasonable length of four columns and upwards. They are sheer waste of type and space; and if you, Mr. Editor, or the authors, suppose that one reader in a hundred has patience to wade through them, I believe you are much mistaken.

The Journal has been accused (most unjustly as I conceive) of having brought the Association into debt. Our pecuniary difficulties are, I believe, attributable to a more natural cause; namely, our loose financial system. As long as persons are permitted to enjoy the privileges of membership, and to receive the Journal without being made to pay for either, so long may we expect to be behind hand in our cash account; and, without wishing to dishonour the fine feeling and high-minded generosity of those who volunteer to pay off our bad debt, I nevertheless regard it as unsound and unjust financial policy to tax those who pay their subscriptions regularly, in order to make up the deficiencies of defaulters.

Let the future efforts of our controversial associates be directed towards maturing a plan for the improvement of our Journal; and if more money be wanted to make it what it ought to be, viz., the leading medical journal of the day, let the case be fully and fairly stated; and confident I am that the appeal to our associates will not be made in vain.

I am, etc., A. B. Steele.

Liverpool, November 8th, 1859.

[We take Mr. Steele's remarks, as they are given, in a kindly spirit: but on one or two points we must reply. In the news department, it is often impossible for us, with the present small size of the Journal, to keep strictly *au courant* with the course of events. Articles in type are frequently delayed merely from want of room. The account of the trial to which Mr. Steele refers as having been published in last week's *Lancet*, did not reach us until after last week's Journal had gone to press. An abstract of the case appears in to-day's number. Mr. Steele will observe that, since the commencement of the present session, our reports of the medical societies have been given at the earliest possible period after the meeting. Ed.]

THE MEDICAL ACT.

Sir,—For the last thirty years or more, repeated efforts have been made to obtain a medical bill for the regulation of the profession, and the subversion of quackery. We have at length obtained an Act, but the fable "Parturient montes: nascetur ridiculus mus," was never more fully brought to pass. The Apothecaries' Act of 1815 has lost its power to prosecute; the one just obtained has only power over men who assume titles they never possessed; but the daring quack carries on his nefarious pretensions with greater vigour than before.

Then, again, a double qualification has of late years been considered indispensable to the duly qualified practitioner; now, however, there are men stepping into practice with only one qualification—they find it comparatively easy to obtain the higher qualification of surgeon, and thereby obtain a *locus* in the Registry; whilst, in several instances, they remain almost totally ignorant of the classics, chemistry, and the practice of medicine, and dare not stand before the court at Blackfriars. I could point out to you instance upon instance of this kind, and I would ask, is it right and just that these pseudo-practitioners should take the charge of medical cases, as it were in the spirit of rivalry, over the more competent and duly qualified man. It is positively mischievous; but you will doubtless exclaim, such cannot recover in medical cases; and, on the other hand, the pure L.S.A. cannot recover any charge he may make in surgery. People, however, in their ignorance, employ the half qualified, and they pay him—nay, the quack himself does "not lose his reward."

Moreover, the druggist prescribes as before, charges, and recovers. Beyond this, I know numbers who not only prescribe over the counter, but visit cases as regularly as the qualified man.

Again, I agree with Mr. Griffin, there are scores of persons holding poor-law appointments having no qualification whatever, or in some instances only a single one. Can this be just and right towards others, or the poor themselves?

Once more; the L.S.A. appears to be sorely offended because, by the new medical Act, he is deprived of an assumed title—and here it is the Act becomes useful. I tell the L.S.A. he is no more a surgeon than I was before I obtained my diploma in Lincoln's-Inn-Fields. His certificate distinctly states "*he is duly qualified to practise as an apothecary.*" Let him read again. Apothecary he is until he obtains a higher title. To style himself "surgeon," *minus* a diploma, he might as well

place a brass plate on his door, having upon it "Doctor A," or "Doctor B." No, no! I practised several years as L.S.A.; but subsequently passed my examination, with eight others, at the College of Surgeons, and thus became Surgeon. To those who feel aggrieved at being stripped of their false plume, I would gently say, "Go, and do likewise;" but it is not likely the court will grant their diploma without an examination of the candidate, nor would it be just to the public at large, or to the members as a body. I am, etc., Beta.

November 3rd, 1859.

PUBLIC VACCINATION.

Sir,—I do not think that the present arrangement about vaccination works well, nor do I think it *just* to more than half the medical men.

Some persons of respectable appearance avail themselves of the Act, and get their children vaccinated by the parish doctor. Their next door neighbour, perhaps, would not allow their children, on any account, to come under his hands, but they do not see why they should pay for having their children vaccinated, when so and so gets it done for nothing. So, between their dislike to the parish doctor, and the objection of paying their own, the children are not vaccinated at all.

Again, some who are not patients of the parish doctor do have their children vaccinated by him; and that is the thin edge of a wedge to split off the former medical attendant. The doctor vaccinates; calls to see the child; recommends a little medicine; calls to see the effect; the mother, it may be, having the doctor in the house, says, that "Mary Ann is not very well; now you are here, Mr. B., you may just as well say what you think of her." Mr. B. thinks Mary Ann not well, but that a little medicine will put her right; he sends it, and, by following it up, gets the family altogether.

The plan I would recommend is this. Let the registrar leave an order with the parents to have the child vaccinated by a registered practitioner before a certain date. The medical man who vaccinates the child will take that order (with as many more as he can get), and at the end of three months send them to the registrar for payment. The registrar will present them to the Board of Guardians, and get the money, with the usual three pence for collecting. The medical man would give the parents a certificate of successful vaccination.

I am, etc., L.R.C.P., M.R.C.S., L.M.

November 1859.

MEDICAL TITLES.

Sir,—I was much amused and instructed last week by the letter from a "Surgeon and Apothecary," which appeared in your Journal, regarding the medical titles and their meaning, as applied to the new Medical Act; and I agree with your correspondent in thinking that it would be far more creditable to individuals of the medical profession to endeavour to uproot the *real enemies* of it, than to interfere with each other, who really possess qualifications, as in the case of "Fitzpatrick *versus* Hallows." I presume that, according to the strict interpretation of the law, an M.R.C.S. can only claim for attendance in surgical cases; the proportion of which, in general practice, would be very few; and that from his surgery he cannot prescribe legally for any medical case whatever. An L.A.C. has the right of prescribing for medical and general cases, with midwifery, and its consequences; although, in fact, he cannot, it appears, append the dignity of surgeon on his door; yet, without it, he acts in every medical and surgical capacity. Can the new act, or any other act, affect him in so doing? if so, I shall be glad to be informed of it, and to what extent.

I am, etc., An Old Practitioner and Associate.

November 5th, 1859.

MEDICAL MEN WITH ONE QUALIFICATION.

Sir,—In your leading article of last week, upon the subject of "Medical Registration," you state, that "it has been decided wisely we think, not to meddle, for the present, at least, with medical men practising with a single qualification." Surely, sir, you do not mean to infer, that medical men and old practitioners are to go to school again, who possess a single qualification under the new Act, whether it may be M.R.C.S. or L.A.C. or any other qualification! If so, what will become of some of the leading surgeons of the day, and many other honourable members of the profession? Should it be the habit of the medical associations to pry into the qualifications of registered practitioners, I consider that the new Act in many cases will prove a curse instead of a benefit to the profession, and defeat the object for which it was intended. The Medical Act of 1815 was not retrospective, neither would it be just towards any legally qualified practitioner that the present one should be. I enclose my card. I am, etc.,

An Old Associate and Practitioner.

November 10th, 1858.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of a son, the wife of—

Hulme, Edward C., Esq., 19, Gower Street, on Nov. 5th.

Of daughters, the wives of—

*Bull, Henry G., M.D., Hereford, on November 6th.

*Macaulay, Thomas, jun., Esq., Kibworth.

Powell, Henry, M.D., Coventry, on November 1st.

*Waters, Allan, Esq., Exmouth.

MARRIAGES.

Barker, Francis O., M.D., 3rd Regiment, to Louisa Ann, second daughter of James 'Espinasse, Esq., Recorder of Rochester, at Boxley, Kent, on November 3rd.

*Borham, William H., L.R.C.P., Cambridge Terrace, to Ellen G., only daughter of the late Wm. G. Cave, Esq., of Sunbury, at Camberwell, on November 5th.

Close, Lieut.-Col. Frederick A., Bengal Army, to Eliza M. M., daughter of the late W. J. Thomson, M.D., of Arbroath, at St. James's, Piccadilly, on November 2nd.

Cracroft, Lieut. B., Bengal Army, to Catherine, daughter of John Hilliard, M.D., at Benares, on September 20th.

Farncombe, John, Esq., of Bishopstone, Sussex, to Anne, daughter of *Bell Fletcher, M.D., of Birmingham, on November 1st.

Hicks, George B., Esq., Surgeon, Old Street Road, to Harriett M., eldest daughter of J. T. Blackmore, Esq., Surgeon, Canonbury, at Islington, on November 3rd.

Wyatt, John, Esq., Battalion Surgeon Coldstream Guards, to Mary Ann, widow of the Rev. Thomas Evans, of Plas Gogarth, at Llandudno, on November 5th.

DEATHS.

Abram, J. F., Esq., Surgeon, late of Kensington, at Northend, Fulham, on November 4th.

Cholmeley, Henry, M.D., Madras Army, Staff-Surgeon and Medical Storekeeper at Rangoon, at Calcutta, aged 33, on September 9th.

Cockson. On October 30th, at Brixton, aged 67, Helen, widow of the late James Cockson, Esq., Surgeon, of Macclesfield.

Cornelius. On November 6th, Eliza, the wife of James C. Cornelius, Esq., Surgeon, Canonbury.

Darwin, Sir Francis S., M.D., at Breadsall, near Derby, aged 73, on November 6th.

Eastcott, Richard D., Esq., Surgeon, at Camden Town, on November 1st.

Everest, George, M.D., Surgeon Royal Navy, on board the *Earl of Eglinton*, in his passage from Hongkong, aged 38.

Hatch, George E. F., Esq., Surgeon-Superintendent in the Government Emigration Service, in the wreck of the *Royal Charter*, on October 26th.

Leath, J. G., M.D., late Army Medical Staff, at Notting Hill, aged 82, on October 21st.

MacCormack. On October 6th, in the assault of the fort of the Island of Bate, East Indies, aged 20, Lieut. J. W. Mac Cormack, 28th Regiment, only son of M. J. MacCormack, M.D., Bedfordshire Militia.

Paine. On November 1st, at Brighton, aged 29, John Gosling, second son of Samuel Paine, Esq., Surgeon.

Pinching. On November 5th, at Gravesend, Marion, wife of *Charles J. Pinching, Esq., Surgeon.

Turner. On November 21st, at High Wycombe, aged 20, Mary, eldest daughter of *John Turner, Esq.

Williamson, Wm., M.D., late of Cupar, at Brighton, aged 43, on November 5th.

APPOINTMENTS.

The following medical officers of the Navy have been appointed Honorary Physicians to Her Majesty:—

Bryson, A., M.D., F.R.S., Inspector-General of Hospitals and Fleets.

Liddell, Sir J., C.B., M.D., F.R.S., Director-General of the Medical Department of the Navy.

Nisbet, A., M.D., Inspector-General of Hospitals and Fleets.

Wilson J., (b), M.D., F.R.S., Inspector-General of Hospitals and Fleets.

And the following have been appointed Honorary Surgeons:—

Dunn, T. R., M.D., Deputy Inspector-General of Hospitals and Fleets.

Evans, O., M.D., Deputy Inspector-General of Hospitals and Fleets.

Johnston, J. W., M.D., Deputy Inspector-General of Hospitals and Fleets.

Stewart, J. G., M.D., Deputy Inspector-General of Hospitals and Fleets.

PASS LISTS.

Royal College of Physicians of London. The following gentlemen were, on October 19th, elected members of the College:—

Black, Cornelius, Chesterfield
Bryson, Alexander, Barnes
Burder, George F., Clifton
Castaneda, M., Albany Street
Camps, William, Park Street
Christie, Thos. B., Hackney
Chevallier, B., Ipswich
Collum, R., Chester Place, W.
Cooper, Clarence, H.M. Madras Service
Copeman, Edward, Norwich
Cooper, Sir Henry, Knt., Hull
Davies, Thomas, Chester
Davis, William, Bath
Davis, John, Bristol
Duffin, A., Langham Place
Duke, Abraham, Rugby
Dymock, Archibald, Louth
Fox, Edward Long, Bristol
Gurney, Henry C., Nice
Higgins, Charles H., Claughton, Birkenhead
Hodges, Edward, Bath
Jephson, John H., Conduit Street West
Kebbell, William, Brighton
Kitching, George, Enfield
Kinglake, Hamilton, Taunton
Lewis, Thomas, Carmarthen
Lund, George, Madeira
Maxwell, W. B. C., Winchelsea
Paine, William H., Stroud
Paul, John H., Camberwell
Phillips, H. J., Kensington Gate
Pickstock, G. N., Paignton
Ransom, W. H., Nottingham
Rankin, Wm. H., Norwich
Robertson, Wm. H., Buxton
Robertson, John, Sudbury
Roe, Wm. H., Park Street
Rogers, W. R., Berners Street
Ross, Andrew, Waterloo, Portsmouth
Scott, William, Huddersfield
Smart, T. W. W., Northiem, Sussex
Spencer, John, Regent's Park Terrace
Stanton, John, Upper George Street
Stevens, Henry, St. Luke's Hospital
Tunstall, James, Bath
Wade, W. F., Birmingham
Wane, D., Grafton Street, W.
Willett, E. S., Isleworth
Wilson, E. T., Hen Castle, near Tenby
Wollaston, R., Cheltenham
Wynter, Andrew, Coleherne Court, Old Brompton

Royal College of Surgeons. Members admitted at a meeting of the Court of Examiners, on November 4th:—

Baxter, Joseph, Clitheroe, Lancashire
Blakely, Samuel, Aughnacloy, co. Tyrone
Couper, John, Finsbury Circus
Peniston, J., Bury, Lancashire
Crofts, William Carrick, Church Gresley
St. John, Charles, Foulis Terrace, Brompton

University of St. Andrew's. List of gentlemen on whom the Degree of Doctor of Medicine was conferred on October 21st and 22nd, 1859:—

Adams, James, M.R.C.S., Farmingham
Allen, John, M.R.C.S., L.A.C., and L.M., Longton, Staffordshire
Andrews, Onslow, M.R.C.S. and L.A.C., Monmouth
Blake, Robert H., M.R.C.S. and L.A.C., London
Bloxam, William, M.R.C.S., London
Bogge, Edward B., M.R.C.S., L.A.C., and L.M., Newthorpe, near Nottingham
Buchanan, John H., Lanarkshire
Buckmaster, Wm., M.R.C.S., L.A.C., and L.M., co. Cork
Chappell, Jno. Jas., M.R.C.S., L.A.C., and L.M., Axmouth
Clarke, John, L.R.C.Phy. and M.R.C.S., London
Cockcroft, Midgley, M.R.C.S. and L.A.C., Masham, Yorksh.
Coghlan, John J., M.R.C.S., London
Davis, Henry, F.R.C.S. by exam. and L.A.C., London
Downs, Peter, M.R.C.S. and L.A.C., Stockport, Cheshire
Dyer, William George T., M.R.C.S., London
Eagland, W. H., M.R.C.S., L.A.C., and L.M., Guisborough
Emanuel, Leonard, M.R.C.S., London
Evans, Nicholl, M.R.C.S., Stoke Newington
Foreman, William, Wigan, Lancashire
Fox, Luther O., F.R.C.S., L.R.C.P.Ed. and L.A.C., Broughton, Hants
Goldsmith, John, M.R.C.S. and L.A.C., Hambledon
Graves, F. G., M.R.C.S. and L.A.C., Southam, Warwicksh.
Harris, Wm. H., M.R.C.S. and L.A.C., H.M.E.I.S.
Heginbothom, E., M.R.C.S., L.A.C., and L.M., Calcutta
Hembrough, J., F.R.C.S. and L.A.C., Waltham, Grimsby
Hepworth, Wm. B., M.R.C.S. and L.A.C., Armley, near Leeds, Yorkshire
Hodgson, Jas. B., M.R.C.S. and L.A.C., Preston
Hurt, Samuel, M.R.C.S. and L.A.C., Mansfield
Jones, Wm. G., M.R.C.S., L.A.C., and L.M., St. Ann's Dispensary, Liverpool
Kitchener, Thomas, London
Lake, Wm. C., M.R.C.S. and L.A.C., Teignmouth, Devon
Leach, J., M.R.C.S., L.A.C., and L.M., Shaw, near Oldham
Lynes, Edward, M.R.C.S, L.A.C., and L.M., Coventry
M'Keever, John, M.R.C.S., Guy's Hospital
Morris, John P., M.R.C.S. and L.A.C., Lewes, Sussex
Morris, William, M.R.C.S., London
Murphy, Joseph B., M.R.C.S., R.N., West Ella, Yorkshire
Ogden, James, M.R.C.P., Manchester
Pattullo, William, L.R.C.S.Ed., Alyth, Perthshire
Rattray, John, L.R.C.S.Ed., Lanarkshire
Rawdon, Henry G., M.R.C.S., L.A.C., and L.M., Liverpool
Ridings, James S., M.R.C.S., Assist.-Surg. H.M.I.A.
Ridley, Joseph S., M.R.C.S. and L.M., Heywood, Lancash.
Rowdon, Henry M., M.R.C.S., London
Sedgwick, Leonard W., M.R.C.S. and L.A.C., Borough Bridge, Yorkshire
Spencer, Henry B., M.R.C.S. and L.A.C., Wantage, Berks
Taylor, Henry M., L.A.C., Manchester
Thomas, J. L., M.R.C.S. and L.A.C., Pwllheli, Carnarvonsh.
Ward, Henry D., M.R.C.S., L.A.C., and L.M., Blyth, Northumberland
White, Francis T., M.R.C.S. and L.A.C., Rawreth, Essex
Wiglesworth, Thomas, M.R.C.S. and L.M., Blakeney, Gloucestershire

Examination for Honours:—

First Class.

Bloxam, William, M.D., Duke Street, London

HEALTH OF LONDON—NOVEMBER 5TH, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... {Boys .. 980 / Girls .. 908}	1888 ..	1182
Average of corresponding weeks 1849-58..	1570 ..	1141

Among the causes of death were—bronchitis, 90; pneumonia, 73; hooping-cough, 25; phthisis, 158; scarlatina, 89; diphtheria, 8; want of breast-milk, 11.

Barometer:

Highest (Wed.) 29·636; lowest (Tues.) 28·756; mean 29·218 in.

Thermometer:

In sun—highest (Thurs.) 67·7°; lowest (Fri.) 54°.
In shade—highest (Tues.) 58°; lowest (Sun.) 34·8°.
Mean—47·6°; difference from mean of 43 yrs. +1.4°.
Range—during week, 23·2°; mean daily, 12·5°.

Mean humidity of air (*saturation*=100), 85.

Mean direction of wind, S.W.—Rain in inches, 0.97.

PROSECUTIONS UNDER THE MEDICAL ACT.

Several prosecutions have within the last few days taken place in the country, of persons who have been practising in contravention of the Medical Act.

At the Halesworth Petty Sessions, an action was brought by Dr. Chevallier, Honorary Secretary of the Ipswich Registration Association, against Frederick Woodcock Pedgrift, for having, on the 5th of August last, wilfully and falsely pretended to be a general practitioner and a surgeon. It was proved by the evidence of two persons—one a member and the other the agent of a club called the "Rational Sick and Burial Association"—that Mr. Pedgrift had attended the former as a medical practitioner, giving him medicine for what he described as "a stoppage of water and an abscess in the kidney". The charge of pretending to be a surgeon was supported by the evidence of Dr. Chevallier, who stated that he had visited Halesworth on

October 12th, and had observed a plate with the name of Mr. Pedgrift, and Mr. Irwin, surgeon, accoucheur, etc. The plate was enclosed in one frame. He would have, as a stranger, taken Mr. Pedgrift to be a medical man. In answer to a question from the counsel for the defence, Dr. Chevallier said he had come to Halesworth to look at the plate, for the purpose of assisting the Registrar, and to avoid the idea that the prosecution was a personal matter with the medical men of the vicinity. The bench of magistrates adjudged the defendent to pay a penalty of £10 in each case, with costs. An application for a case was made by the defendant's counsel, but was refused.

At the Bristol Police Court, on October 29th, Thomas Airey, of Castle Street, Bristol, was charged with using the name and title of "Doctor", and affixing the letters M.R.C.S. and M.R.C.P. to his name. A labourer named Higgins deposed that he had observed in the defendant's window, "Dr. Airey—Advice gratis", and over the door "M.R.C.S." and "M.R.C.P."; that, on inquiring for "Surgeon Airey", the defendant had answered to that designation; that the defendant examined him, and gave him medicine, which "nearly burned his inside out"; and that he had heard the defendant (who, it appears, delivers lectures of some kind) state that he was a qualified practitioner. Confirmatory evidence was given by Dr. Parsons of Bristol, and by a person named Slee. Dr. Parsons produced the *Medical Register*. The legal defender of Airey argued at some length in favour of the defendant, by alleging that he at no time whatever represented himself to be a member of the Royal College of Surgeons; for he had made it known to the public, both in his handbills and in the newspaper advertisements, that he was not registered in England. The diplomas which had been produced conclusively showed he was in a position to act as a doctor; and the initials M.R.C.S. referred to his being a Member of the Reformed College of Surgeons, as the diplomas showed; of course there was nothing royal in America. He then cited a case from the *Lancet* in reference to the official register, where, in Lincolnshire, it was held, upon the authority of Mr. Jardine of London, the register was not correct, inasmuch as there were appendices published, according to the evidence of Dr. Parsons. Moreover, this information could not be sustained; for foreigners were permitted to practise in this country. In conclusion, the learned counsel called attention to the fact that, as far back as August last, the defendant had actually made application to be registered, and the application was still under consideration. The Bench deferred judgment.

On October 31st, two cases were tried before the magistrates at Oldham. The first case was that of William Smith, a homœopathic practitioner, charged on the information of Dr. Armitage, secretary to the Oldham District Medical Registration Association, with having, on October 22nd, wilfully and falsely taken the name and title of a doctor of medicine. The defendant, it seems, has a degree from "The Pennsylvania College of Homœopathic Medicine, Philadelphia." It was proved by the testimony of a woman named Butler, that he had given her medicine, and had signed a medical certificate for her, as she belonged to a club. An attempt was made by the defendant to set aside the *Register*, when produced in evidence, on the grounds that, having been published in July, it could not be the *Register* which was ordered by the Medical Act to be published in January; and that it was not a correct register. The defendant represented that he had applied to be registered under a foreign qualification, and that there had not been time for the Medical Council to examine this. He moved for an adjournment, to prove that he had done everything he could to get registered, and to show that the prosecution he was subjected to was persecution, that it was trumpery and hasty. The undue haste which had been shown on the part of his prosecutors to get him stated to be an unqualified practitioner before the council had decided on his case, was a side blow at him. He wished to show that the annoyance he was subjected to arose from the position he had attained as an homœopathic practitioner.

A similar charge was brought against Joseph Staveacre, of Oldham. It was proved that he had filled up a printed form of a sick certificate for a member of a "Village School Sick and Benefit Society;" and that he had on his door a plate denoting that he was a surgeon. It was pleaded that, whether possessing a diploma or not, he had been well educated, having attended lectures on medicine; and objection was taken, as in the former case, to the printed copy of the Register. The presiding magistrate said the object of the Medical Act of 1858 was to enable people to distinguish between qualified and unqualified persons. William Smith had been summoned under the 40th section, for having "wilfully and falsely pretended to be, and taken and used, the title of doctor of medicine," thereby implying that he was registered under the act of 1858, whereby he had subjected himself to a penalty not exceeding £20. The bench were unanimously of opinion that the case had been clearly proved against him; and they therefore inflicted the nominal penalty of 40s. and costs, as it was the first offence. In the case of Joseph Staveacre, the bench were also of opinion that the case was proved, and they regretted to see that a practitioner who had acquired a position in the town for so many years, should have made himself liable to the law, but having a regard to their duty, they inflicted on him a penalty of 40s. and costs. Mr. Ponsonby said, in any future cases, the Medical Association would press for the highest penalty.

Mr. Holker (the legal adviser of Staveacre), asked for a case for the Queen's Bench, but subsequently the fines and costs were paid in both instances.

Royal College of Surgeons of Edinburgh. The following office-bearers were elected on October 19th.—*President:* Douglas Maclagan, M.D.; *Treasurer:* John Gairdner, M.D.; *Secretary:* J. Scott, W.S.; *President's Council:* J. S. Combe, M.D.; J. Simson, M.D.; A. Wood, M.D.; R. Omond, M.D.; Patrick S. K. Newbigging, M.D.; John Struthers, M.D.; *Librarian:* Archibald Inglis, M.D.; *Library Committee:* Archibald Inglis, M.D., *Convener;* Richard Huie, M.D.; Patrick S. K. Newbigging, M.D.; James Robertson, M.D.; William Husband, M.D.; *Curators of Museum, ex officio:* Professor Syme; Professor Miller; *Ordinary:* John Struthers, M.D.; James D. Gillespie, M.D.; Joseph Lister; Patrick H. Watson, M.D.; Henry D. Littlejohn, M.D.; Alex. Mackenzie Edwards; Thomas Williamson, M.D.; David Wilson, M.D.; William Walker; R. E. S. Jackson, M.D.; *Examiners:* John Gairdner, M.D.; James Simson, M.D.; Richard Huie, M.D.; William Dumbreck, M.D.; Archibald Inglis, M.D.; Andrew Wood, M.D.; Robert Omond, M.D.; Patrick S. K. Newbigging, M.D.; Benjamin Bell; James Dunsmure, M.D.; John Struthers, M.D.; James Spence; *Inspector of Students' Course of Study:* James Simson, M.D.; *Assessors to Examiners:* David Maclagan, M.D.; James S. Combe, M.D.; James Syme; Samuel A. Pagan, M.D.; *Conservator of Museum:* William R. Sanders, M.D.; *Officer:* John Dickie.

University College, London. The Council held their first session of the academical year 1859-60, on Saturday last. Bequests to the hospital were reported; viz.: by Richard Joseph Reed, late of Middle Temple Lane, gentleman, £100; by Mrs. Hannah Bull, of Earl Court, Old Brompton, widow, £100; by Mrs. Mary Ann Worley, of Stony Stratford, £1,000; by Mr. Sigismund Stiebel, late of Gordon Square, £200, free of duty. On the recommendation of the hospital committee, the name of Mr. Frederick D. Goldsmid was added to the list of Vice-Presidents of the hospital. A vote of thanks was passed to Sir Francis Goldsmid for his eloquent address and courteous conduct in the chair at the presentation of medals to the students of the faculty of medicine, on the opening of the medical session on the 3rd of October. The Longridge Prize of £40, for general proficiency in medicine and surgery, by the recommendation of the faculty of medicine, was conferred on Mr. Thomas Charles Kirby. The award of Dr. Fellowes's Clinical gold medals, for the best observations on cases in the hospital, to Mr. Thomas Charles Kirby and Mr. Augustus Mawley, equal in merit, was reported.

College of Dentists. A course of six lectures on the surgery of the mouth and jaws is being delivered at this institution by Mr. Erichsen. The first lecture was delivered on Tuesday, October 25th, and the lectures are being continued on the evenings of alternate Tuesdays. In the course the following subjects are treated of:—Malformations; Injuries; Diseases of the Periosteum and Bone; Tumours of the Lower Jaw; Diseases and Tumours of the Upper Jaw; The Influence of Diseased Teeth in exciting various surgical affections; and the influence of Syphilis on the Teeth.

The Medical Schools. We learn that there are, at the present time, 1,063 gentlemen pursuing their professional studies at the twelve Metropolitan Schools, being an excess of 42 over the number of last year. This, however, is only from the return of those who have duly registered, as we have reason to know there are several who, from carelessness or other causes, have not yet done so.

TO CORRESPONDENTS.

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ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

M.R.C.S. BY EXAMINATION IN ANATOMY, PHYSIOLOGY, AND SURGERY. Your letter came too late.

Communications have been received from:—MR. GRIFFIN; BETA; AN OLD PRACTITIONER AND ASSOCIATE; DR. HERAPATH; MR. O. PEMBERTON; MR. HARRINSON; L.R.C.P., M.R.C.S.; DR. SKINNER; MR. DUNCALFE; MR. T. M. STONE; DR. D. KENT JONES; H. R. H.; MR. T. HOLMES; DR. T. INMAN; MR. PETER MARTIN; MR. A. B. STEELE; DR. EDWARD SMITH; MR. C. J. EVANS; and DR. A. RANSOME.

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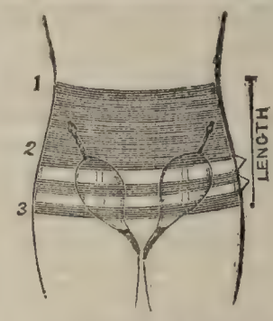
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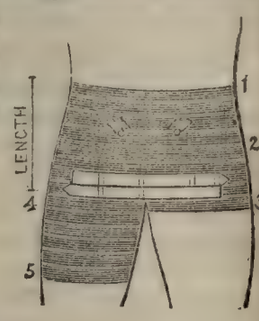
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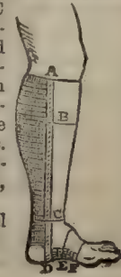
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CLI.] LONDON: SATURDAY, NOVEMBER 19, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

GUY'S HOSPITAL.

WOUND OF THE INTERNAL JUGULAR VEIN: PYÆMIA.

Under the care of J. BIRKETT, Esq.

[*From Notes by* H. OWENS, Esq.]

JAMES FADDEN, aged 30, was admitted on May 15th, having been struck with a knife on the neck in a fight. He fell down immediately after the blow, and was picked up bleeding profusely. On being brought to the Hospital, a wound was found, about two inches in length, on the left side of the neck, passing through the substance of the sterno-mastoid muscle, in a direction somewhat parallel to the course of its fibres. There was a good deal of venous hæmorrhage, rendering it necessary to fill the wound with sponges, and pressure was applied, as no vessel could be seen so as to tie it. The bleeding was by this means arrested.

On removing the sponge, on the following day, it was found to have adhered rather firmly, by means of the fibrine of the blood, to the surrounding parts. On wiping the wound, a clot could be seen at its anterior part, dipping down deeply towards the subclavian vein.

No further bleeding occurred for the next few days; but the wound became sloughy, and some matter collected, which was evacuated by enlarging the wound in the integuments. He seemed to be doing well until May 22 (seven days after the injury), when he shivered slightly. Next day, a more severe rigor occurred, followed by cough and the expectoration of tenacious rusty phlegm. The violence of the cough caused the wound to bleed afresh. Mr. Birkett accordingly determined to enlarge it, and seek for the bleeding vessel. This being done (May 24th), a deep hole was found behind the clavicle, and a small piece of adherent fibrine could just be distinguished at the bottom. On moving this plug, venous hæmorrhage immediately occurred, and filled the wound. The plug, therefore, was not further disturbed; Mr. Birkett being now satisfied that there was a wound of either the internal jugular or subclavian vein. The wound was again plugged, and the plug allowed to remain for two days, during which no bleeding occurred. After this, it was necessary to remove the plug; and then the bleeding recurred at intervals in small quantities. Dr. Wilks examined his chest on the 24th, and detected signs of pneumonia on both sides. On the following day, he was so much worse that his depositions were taken by the magistrate. He continued to linger (rallying slightly about the 29th) till June 3rd, when he died, nineteen days after the accident.

On *post mortem* examination, the left brachiocephalic vein and its branches were traced, and thus the seat of injury was at once exposed. This was on the outer side of the internal jugular, about half an inch above its junction with the subclavian. The wound in the vein was sloughy, and now appeared round, occupying about half the circumference of the vessel. It would just have admitted the passage of a pea. It contained a soft clot, which was easily removed, leaving its passage free. The vein for some distance around was inflamed through all its coats, and these were thickened and infiltrated with lymph; and the interior of the vein was occupied by layers of firmly adherent lymph. This was the case with the jugular above the wound, and below it, reaching into the subclavian and brachiocephalic. All around the vein, suppuration extended and proceeded down into the chest, in the anterior mediastinum. The lungs were full of large abscesses, and there was a secondary abscess also on the surface of the spleen.

Mr. Birkett observed, that the most interesting point in this case was the development of pyæmia as a consequence of a direct and immediate communication between a large vein and a deep wound so situated that, if suppuration took place, the pus would collect, and probably enter the wounded vein. So long as adhesive inflammation existed, no ill result followed; but as soon as pus collected in the wound, the patient quickly had marked signs of pyæmia. This shows the practical importance of always endeavouring to obtain adhesion of a wound in connexion with a large vein. In this case, pressure might have been made on the wound with a pad or the finger, and the case treated like a wound of a vein in phlebotomy; but probably the situation and size of the opening would have precluded the success of such treatment.

WESTMINSTER HOSPITAL.

CASES OF STRICTURE OF THE URETHRA TREATED BY "SLITTING UP".

Under the care of W. A. HILLMAN, Esq.

WE have recently had the opportunity of watching a few cases of stricture, which have been treated at this Hospital by the plan introduced there by Mr. Holt; and as this method has been now in use there sufficiently long for the surgeons of the institution to form an opinion decidedly in its favour, we have thought that a notice of it, accompanied by the notes of two cases, with which we have been favoured by Mr. Hillman, might prove useful. The method consists in dilating the stricture, if necessary, until it is sufficiently relaxed to allow of the passage of an instrument about the size of a No. 3 catheter. The patient is then placed under the influence of chloroform, and the "stricture-dilator" is introduced. This instrument resembles somewhat a catheter, only slightly curved at the end, and split down the middle, so as to consist of two longitudinal half-cylinders, which admit of being separated to some extent, and are fixed on a central stem or axis. When the instrument is fairly in the bladder, the spring or collar which connects the blades is relaxed, and a large perforated rod, about the size of Nos. 10-12 catheter, bevelled off at the end, is fixed on the central axis, and forcibly driven down the urethra. The effect of this is to suddenly dilate, and in most cases to rupture, the tissues of which the stricture is composed; as is evidenced by the escape of a few drops of blood. The dilator is now withdrawn, and a No. 10 or 12 catheter (according to the size of the urethra) is introduced, and the water drawn off. This catheter is taken out, and the patient sent to bed, and generally a stimulant given. He is left quiet during the following day; and, on the second day from the operation, this catheter is reintroduced, and generally passes readily. Sometimes the stricture, or the urethra, may have contracted again to the size of No. 8. This plan is extensively followed by Mr. Holt, Mr. Hillman, and Mr. Power; and a very great number of cases altogether have now been treated in this manner, the greater number having been under Mr. Holt's care. No bad symptoms have followed in any case; and we are informed that the stricture shows no greater tendency to re-contract than is noticed after any other plan, and that several persons have been seen in whom the cure had already lasted three years.

We need hardly dwell on the advantages of a plan which, if successful, saves so much time and suffering as is involved in the treatment of a severe stricture by the ordinary method of dilatation; and if the forcible rupture of a stricture should prove as safe a proceeding in the hands of others as it has done in those of the surgeons of this hospital, we do not doubt that it will soon come into more general use.

CASE I. T. W. has suffered from urethral stricture for about fourteen years, the symptoms having gradually become more and more severe. He sometimes passed water in a very small

stream, but more frequently only in drops; in his own words, he "was always making water". There was considerable admixture of mucus and pus with the urine, and he suffered from considerable prolapse of the rectum.

On his admission, a No. 1 catheter could not be pased into the bladder; but after a short stay in the Hospital, a No. 1, and subsequently a No. 3, silver catheter was passed with some difficulty. After a short residence in the Hospital, whilst he was under the influence of chloroform, Mr. Holt's "stricture dilator" was introduced, and the stricture split up. The dilator having been withdrawn, a No. 10 silver catheter was passed into the bladder, the bladder emptied, and the catheter removed, a few drops only of blood being lost. He had some smarting pain, as the urine passed along the urethra, for two or three days, but no unfavourable symptom of any kind followed the operation.

He was shortly discharged from the Hospital, passing his urine in a good stream, without pain, and was not obliged to empty the bladder at night, as he could retain more than a pint of urine without inconvenience, the mucus and pus having disappeared, and the prolapse of the rectum nearly subsided.

Case II. P. F., aged 56, was admitted under Mr. Hillman's care, on September 13th. He had suffered from stricture of the urethra for at least sixteen or eighteen years. The urine passed in an exceedingly narrow stream, almost indeed drop by drop; and the bladder was so contracted and irritable that it would retain scarcely any water. The patient was in the Hospital for four weeks before any instrument could be introduced into the bladder; after five attempts, however, a silver catheter, smaller than No. 1, was passed, and subsequently a No. 3.

October 18th. The "stricture dilator" having been introduced, and the patient put under the influence of chloroform, the stricture was split up, a No. 10 silver catheter was introduced; the bladder was emptied, and the catheter immediately withdrawn. A few drops only of blood escaped from the urethra. He was made warm in bed; had some hot gin and water administered. No bad symptom followed.

He left the Hospital much improved in general health, passing his urine in a good stream; the bladder having so far recovered its healthy condition, that there was no necessity for him to pass urine during the night.

HULL GENERAL INFIRMARY.

I. SUPPOSED HYDATID TUMOUR OF LIVER: EVACUATION OF CYST: RECOVERY.

Under the care of Owen Daly, M.D.

[*Communicated by* C. J. Evans, Esq., *House-Surgeon.*]

Michael Growras, a Russian sailor, aged 35, was admitted under the care of Dr. Daly, on August 15th, 1858. He had been ill some weeks, but no satisfactory history could be obtained. He complained of great pain and tenderness in the right hypochondriac region, which was enlarged and more prominent than natural; and there was extensive dulness on percussion. The swelling was not at all defined. He was not jaundiced. His countenance was anxious. The pulse was small and feeble. The following mixture was prescribed.

℞ Æther. chloric. ʒj; tinct. camph. comp. ʒiss; mist. camph. ad ℥viij. M. Fiat mistura, cujus sumat ʒi 4tis horis.

He was ordered to have three ounces of wine; and a sinapism applied to the affected part.

Aug. 16th. There is still great tenderness of the right side. The pulse has a better volume. Eight leeches were ordered to be applied to the right side, to be followed by mercurial plaster. Beef-tea was given.

Aug. 18th. Some little relief was obtained from the leeches. He was directed to take five grains of hydrargyrum cum cretâ twice a day.

August 23rd. There is less tenderness of the side. The bowels are regular. He was ordered milk diet. A plaster of ammoniacum and mercury was applied to the left side.

Sept. 3rd. A gradual and slight improvement has continued to take place up to the present time; but to-day he is not so well. His countenance is very anxious; pulse very small and feeble.

℞ Ammoniæ sesquicarb. ℈ij; ætheris chloric. ʒiss; aquæ menthæ ad ℥viij. M. Fiat mistura cujus sumat ʒj 4tis horis.

The wine was ordered to be increased to four ounces daily.

Sept. 4th. He has vomited a large quantity (two or three potfuls) of greenish-brown fluid; otherwise he feels better.

℞ Mist. effervesc. ℥viij; acidi hydrocyanici ♏x. M. Fiat mistura cujus capiat ʒj 4tis horis.

The fluid vomited was of specific gravity 1020, of acid reaction, albuminous.

Sept. 5th. He has vomited more of the same kind of fluid. The right side seems to bulge less than before. He was ordered to omit the pills, and to have emplastrum ferri applied to the right side. Two scruples of carbonate of soda were added to the effervescing mixture.

The vomiting ceased after two or three days, and a gradual and marked improvement then took place, the right side assuming its natural shape and appearance.

Sept. 29th. He was ordered to omit the wine, and to have instead a pint of porter daily, and full diet.

℞ Mist. quinæ ℥viij; æther. chloric. ʒiss. M. Fiat mistura cujus capiat ʒj ter die.

He was discharged cured on October 25th.

Remarks. There are several points of interest in this case worthy of note. He was first treated on the supposition that he was labouring under hepatitis, somewhat chronic in character; but the apparent enlargement of the liver was greater than usual in such cases. But little if any improvement followed the plan pursued. The sudden accession of the vomiting threw a fresh light upon the case, and suggested the probability of there being a hydatid cyst of the liver. If this were so, the cyst must have burst into the cavity of the stomach, this organ having become adherent to the liver. After the vomiting had entirely ceased, the man quickly improved, and made a good recovery.

In favour of its being a hydatid cyst, is the fact of the suddenness of the attack of vomiting, the corresponding subsidence of the bulging of the side, and the subsequent quick recovery of the patient. Against it, the following may be adduced; viz., the large quantity of fluid (more than a gallon), which could hardly have been contained in a cyst of the liver; and the fact of no cysts or portion of cyst being discovered in the fluid, which was most carefully examined for that purpose. Had even a portion of cyst-wall been found, all doubt would have been set at rest. The sudden commencement and equally sudden cessation of the vomiting would hardly be consistent with the idea of an attack of pyrosis, which otherwise would suggest itself to one's mind.

II. ABSCESS OF KIDNEY: DISCHARGE OF RENAL CALCULI FROM THE LOINS: DEATH: AUTOPSY.

Under the care of Owen Daly, M.D.

[*Communicated by* C. J. Evans, Esq., *House-Surgeon.*]

George Chapman, aged 44, was admitted under the care of Dr. Daly, on September 2nd, 1858. For the following history I am indebted to the kindness of Mr. Morley, of Barton-on-Humber, under whose care the patient had previously been. It is in his own words:—

"Last October (eleven months ago), he was attacked with periodical shivering fits, resembling similar attacks from which he had suffered when in the Black Sea, during the Russian war. He was treated then, and on the present occasion, for ague; and took quinine for a long time, without benefit. Some weeks after he had been under my care, I detected a large abdominal tumour in the left hypochondriac region, reaching nearly to the crest of the ilium. I supposed this tumour to be an enlarged spleen, until he began to pass pus in his urine, after which symptom had continued some time, an abscess presented itself in the loins, which I opened, and gave exit to some very fœtid matter. A fistula remained, from which clear fluid, of a urinous odour, constantly trickled. I collected some, and found it consisted chiefly of albumen. From fifteen to twenty small calculi, like millet-seeds, subsequently escaped, settling the point as to the seat of the disease. . . . You will no doubt have observed his bronzed skin; he is naturally dark, but has become much darker since this illness. . . . He has been taking tincture of sesquichloride of iron for weeks, with benefit."

On admission, he complained of weakness and aching pain in the loins. There was the mark of an old cicatrix in the left

lumbar region, which was puckered and contracted. Some small hard bodies (calculi) could also be felt deep seated beneath the integuments in this region, near the spine. His urine contained a considerable amount of pus, and was of specific gravity 1010. His general health was tolerably good; his skin generally was dark.

℞ Tincturæ ferri sesquichloridi ʒiss; infusi quassiæ ʒviij. M. Fiat mist. Capiat ʒj ter die.

Full diet was ordered.

This plan was continued for a fortnight, without much improvement.

September 17th. He was ordered—

℞ Acidi gallici gr. v; confectionis rosæ q. s. ut fiat pilula bis die sumenda.

He was ordered to have half a pint of porter daily.

Both his general health and the state of his urine improved considerably under this treatment. The latter, however, still contained a small quantity of pus.

October 23rd. He was made an out-patient, at his own request.

Whilst in hospital, an incision was made in his back, and several small round calculi removed from beneath the lumbar fascia. Others, amounting in all to about thirty, worked themselves out through the wound, which subsequently healed.

He continued an out-patient up to January 1st, 1859, when he was readmitted into the house. His urine now contained little or no pus. But it would be tedious to relate the further progress of the case in detail. He was again put on the tincture of muriate of iron; subsequently, mineral acids and quinine, with generous diet. An issue was made in his loins, but he could not bear it. His urine at one time was perfectly free from pus, or any other sediment; but it subsequently returned. He left again in February; presented himself for the last time on April 30th, bringing thirty or forty more small calculi, which had been discharged from his back; and on May 28th he died, with symptoms of uræmic poisoning, under the care of Mr. Morley, through whose kindness I enjoyed the opportunity of being present at the *post mortem* examination. A small slough was passed *per urethram* a few days before death.

Autopsy, forty-eight hours after death. There was considerable emaciation. All rigidity had passed off. The heart was soft and flabby, otherwise apparently healthy; it was not opened. The liver was paler than natural; the right lobe was enlarged. The right kidney was more than twice the natural size; on section, it was pale, soft, and fatty, having undergone the fatty degeneration; the tubular portion was very indistinct; its capsule was adherent throughout. In the situation of the left kidney, which was not to be recognised, was a mass of almost cartilaginous hardness, from which, on pressure, a quantity of pus flowed. On section, it was seen to be riddled with abscesses, and contained numerous small calculi, like those which had been extracted from his back; and a few larger ones, which took the shape of the part in which they lay. Some of the smaller ones were firmly imbedded lower



a. Smaller calculi removed from the back.
b. Calculi removed from kidney after death. } Natural size.

down in the course of the ureter, as if on their way towards the bladder. When this hard mass was removed, one of the ribs was found to be denuded of periosteum. The right suprarenal capsule was apparently healthy; the left was not to be seen; nor was the ureter on this side at all distinguishable. The bladder was empty and contracted, healthy. The other organs (head not examined) were healthy. The calculi were composed chiefly of uric acid, with a small proportion of earthy phosphate.

Original Communications.

ON THE PATHOLOGY AND TREATMENT OF GALL-STONES.

By J. L. W. Thudichum, M.D.

[*Read before the Medical Society of London, October 17th*, 1859.]

Those who engage in *post mortem* examinations of the human body have not rarely an opportunity afforded to them of examining concretions in the gall-bladder or gall-ducts. These already for several centuries have engaged the attention of the learned, or roused the wonder of the curious. To either it must be a subject of astonishment that a large number of solid hard bodies should be met with, filling almost the entire cavity of a receptacle destined to hold a mild and innocuous fluid, and that yet there should have been no symptoms during the life of the individual who carried those concretions in his biliary organs, indicating their presence. There is no doubt that, in the majority of these cases, life came to a premature termination by some general disorder, not indeed produced by those foreign bodies, nor having any direct connection with the mere fact of their presence, but perhaps linked, however remotely, to the cause that originally produced them. Gall-stones, as we meet them in the dead body, are the residue of a pathological process, the nature of which it is then mostly too late to assertain by direct inquiry.

To many mortals, on the other hand, gall-stones prove by no means mild and innocuous customers, and by frequent and painful effects only too sensibly remind them of their existence. These painful and sometimes fatal attacks the physician is called upon to relieve, to heal, or, as the case may, be to prevent. Like the morbid anatomist, the practical physician has to deal with the consequences of a disease which is itself not the object of his immediate care. We may compare both investigators to the geologist, whose inquiry into the history of an outburnt volcano has to be carried on upon the ashes and the lava, or other rocky products, and upon the large features of their conformation. It is impossible to observe their direct genesis,—the fire that produced them is long since extinct.

An inquiry into the pathology of gall-stones is, therefore, mostly an inquiry into causes so remote and obscure, that the difficulties encountered in such a proceding are amongst the greatest which medical science has to battle with. Accordingly, our positive knowledge of those causes at present amounts to very little or nothing; surmise has taken the lead, and has assigned various causes, such as the predisposition of age and sex, the individual disposition or diathesis, which, like all diatheses, is but a circumlocution of the mystery. Among the alleged causes, we find climate, excess of rest and long sleeping, and unwholesome food, and a variety of other indifferent circumstances, which, on a stringent scrutiny, must stand aside as incompetent.

In thus acknowledging at the outset, that the primary disease which causes gall-stones is quite unknown, that it is not even ascertained whether the disorder is a local disease of the liver-cells, or a decomposition of the bile, analogous to those decompositions of the urine which produce the uric acid calculus, or a general disorder of the blood, or of the portal blood in particular, I do not mean to surrender all hope for a fair solution of the question in a comparatively short time. The study of the structure and composition of gall-stones has already taught us much; and, so soon as the chemistry of the liver and bile shall be well understood, we shall be in a position to approach the problem from both sides, during life and after death, by physiological research and experiment, as well as by the anatomical and chemical examination of the dead body.

Having instituted some inquiries in that direction, I have made such experiences as my limited opportunities and materials did admit of. One observation at least has been to me a fruitful source of reflection and information, and in communicating it to you linked to a few others of more practical import, I have consulted not only my wish to contribute an instalment towards the great capital of science which we are accumulating, but also my desire of profiting by the opinions and the advice of my professional brethren.

Case I. This case is one of several in which Mr. Holmes, of St. George's Hospital, kindly afforded me an opportunity of examining the livers and bile of deceased persons. The notes

relative to the case were given to me from the register of St. George's Hospital, by Dr. G. G. Rogers.

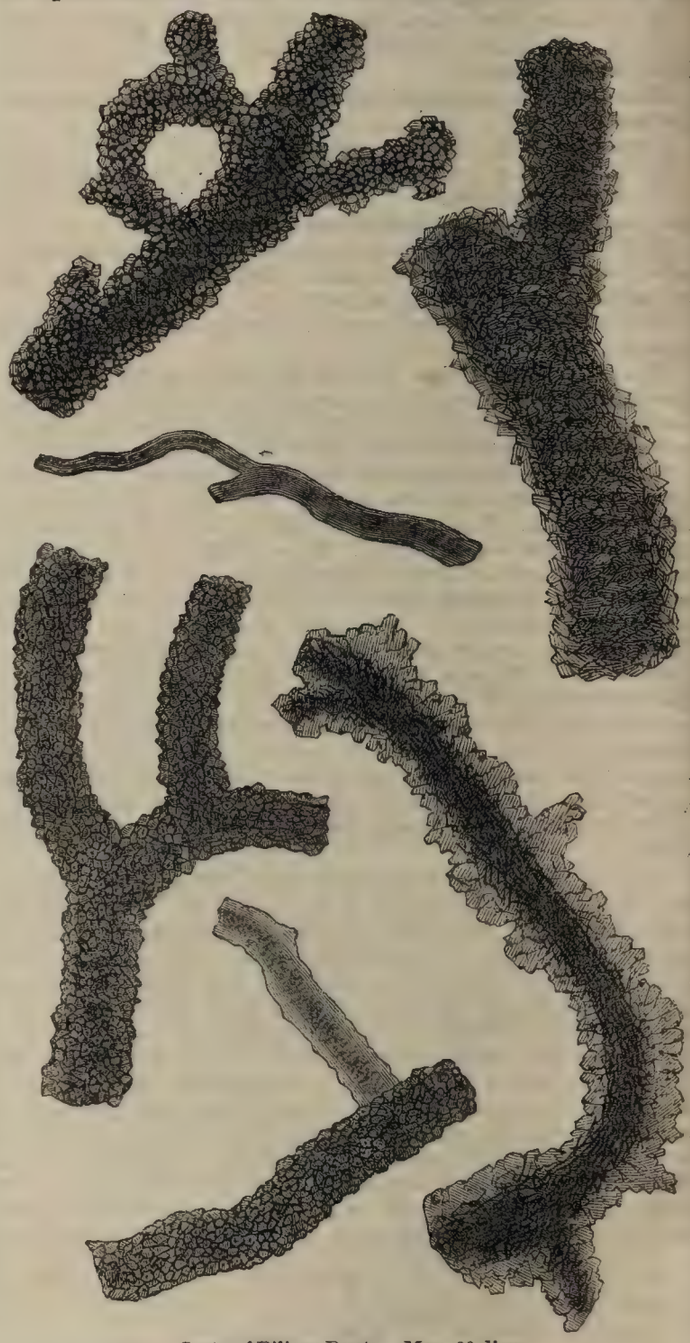
"Sarah Paine, married, aged 60, was admitted into St. George's Hospital, on June 23rd, 1858, under the care of Dr. Pitman. She had anasarca of the lower extremities, dyspnœa, and livid countenance. She stated that she had been ill six weeks, with pain at the chest and palpitation. Once or twice she spat a little blood. There was no history of rheumatism, but the action of the heart was violent, and a murmur could be heard at the apex, with prolongation of the first sound at the base. Digitalis was given with nitric ether and acetate of potass every six hours, and she was purged with calomel and jalap. This treatment relieved the dropsy, but the breathing grew more oppressed, amounting to orthopnœa. She got but little sleep, and was more harassed by cough. None of the urine could be saved for examination, but the cardiac symptoms were quite sufficient to account for the dropsy, and she had never been troubled with any diminution in the quantity of urine, pain in the loins, etc. As the breathing grew worse, a blister was applied between the shoulders; infusion of roses with dilute mineral acids being given to check the hæmoptysis. She sank within a week from the time of admission. (Signed) G. G. R."

"The examination of the body was instituted twenty-six hours after death. Externally, the body appeared in good condition. The subarachnoid space contained a good deal of fluid, and the brain was watery. Otherwise the cranial contents were natural. There was much fluid in both pleural cavities, and extensive adhesions in the right. The upper parts of both lungs were healthy, but both contained extensive extravasations of blood at their bases. This extravasation had consolidated all the base of each lung for the space of about an inch. The heart was of large size. The edges of the mitral valve were much thickened, especially on the auricular aspect, and the orifice so contracted, as only to admit the point of the forefinger. The aortic valves were also thickened, and very rigid. The ribs were much pressed in, apparently by tight lacing. The liver was (apparently) healthy, except that at its sharp edge a rounded mass, about the size of a walnut was found, which was of a semisolid consistence, and whitish colour, and contained the bags of numerous hydatids, attached to which, as I was informed (by Dr. Thudichum), the hooklets of the echinococcus were found in large numbers. The gall-bladder was large, and contained numerous gall-stones, but the duct did not seem obstructed. The spleen and suprarenal glands were healthy. The kidneys were healthy; except that there was a deep depression on the surface of the right, probably the mark of an old cyst. The abdominal aorta was extensively atheromatous. The ovaries were shrunken. The os uteri was closed by a plug of gelatinous lymph, and the cavity of the uterus contained some turbid fluid. (St. George's Hospital Register, 1858. No. 1623. P. M. E. No. 177.)

(Signed) "T. Holmes."

On examining the bile in the gall-bladder, I found it to consist of a homogeneous fluid, containing little colouring matter in solution, but a large amount of brownish-yellow colouring matter, together with many crystals of cholesterine were suspended in it. The bile and colouring matters dissolved in alcohol, yielding a yellow solution, which was separated from mucus and epithelium by filtration. The alcohol was distilled off, and the residue tested with sugar and sulphuric acid. But no colour-test could be obtained with the greatest care, and although the test was repeated several times: *there was not a trace of biliary acid in this fluid.* But it contained some margaric and stearic acids, which, together with the cholesterine, crystallized from the concentrated extract.

The gall-stones were sixteen in number. On dividing the largest one into two halves, I found a large nucleus of brown pulpy matter, which could easily be removed with the point of a knife, or washed away with a brisk stream of water from a wash-bottle or so-called blow-bottle. When collected in a white china dish, the matter appeared to be composed of thread-like fibres, of different diameters, some a quarter of an inch long; some shorter pieces were one-sixteenth of an inch in thickness. All were cylindrical, as if moulded in tubes; many had branches, others were divided dichotomically. The thinnest portions had a diffuse broom-like end, as if the matter had not had time or quality to solidify in the tubular form, or as if it had solidified in a bag-like enlargement of the cylinder, in which the rest of the cast was moulded. The matter composing these productions was granular, without a trace of crystallization of any kind; was purely yellow in the thinnest branches, but became the darker brown, the thicker the forms grew. All further description becomes at once unnecessary, by the faithful representations of the more striking portions which I have caused to be executed by Mr. Lens Aldous. Some forty or fifty medical gentlemen, to whom I had an opportunity of submitting both the specimens and their drawings, have borne witness to the



Casts of Biliary Ducts. Mag. 80 diam.

accuracy of the representation. All of them agreed with me that these peculiar formations can be nothing else but *casts of the biliary ducts.*

I had often searched human livers for some analogue to the casts of the uriniferous tubules, but in vain; and I should certainly not have dreamed of finding them in the centre of gall-stones. I have since examined many, but only old and dry gall-stones; most of them contain a nucleus of colouring matter, which has very great analogy to the matter forming the casts, but their shape I have not found repeated. It is indeed a mere chance whether such casts shall be preserved, or whether they, on being discharged from their place of formation, shall pass into the intestinal canal. And even where they arrive in the gall-bladder, and become entangled and covered with cholesterine, evidently a secondary occurrence, it is again a mere chance whether they shall not be so surrounded and interlaced by cholesterine crystals, that, on breaking the stone, they must necessarily come to pieces. They are so fragile, that the mere weight of a thin glass cover, as used for microscopical preparations, was sufficient to crush the thinner ones. When shaken in the watch-glasses, in which I kept them, moistened with glycerine, the mere friction of one against the other would damage and disintegrate the most characteristic feature. About half the number of gall-stones, and

among them some large sized ones, although containing a good brown nucleus, yet did not admit of the separation of characteristic casts, although among the *débris* I could distinguish fragments of casts with ease and certainty.

The material of the casts was not chemically homogeneous. Alcohol extracted a yellow portion; another portion, probably bilifulvine, remained. Some had a peculiarly ragged or variably projecting outline, which made me examine for cylindrical epithelial cells; but, however great the probability that such cells might adhere to the circumference, or enter into the body of the casts, being epithelium proper to the biliary ducts, certain it is that no such formations could be identified.

Numerous are the reflections suggested by this observation. The pathological process which effected the effusion of a congealing colouring matter into the biliary ducts was probably an acute one; if it involved only a portion of the liver, it probably presented itself at the time under the form of a true bilious attack, that is to say, a derangement of digestion, fever, headache, and a yellowish colouration of the skin, and albuginea of the eyes. If the process involved the greater part or the whole of the biliary ducts, it must have shown itself under the form of acute jaundice. It is not impossible, or rather probable, that those forms of idiopathic jaundice which hitherto have been ascribed to spasmodic closure of the duct, or to failing secretory activity, a sort of paralysis of the liver may hereafter find an explanation by the discovery of a real and material obstruction of the passages of the bile by formations similar to those which I have described. Frerichs saw a case of jaundice coming to a favourable crisis by the discharge of brown flakes and threads, which were very conspicuous upon the light coloured fæces, and ushered in the reappearance of the ordinary brown colour of the evacuations.

The branched calculi of Plater, and the branched gall-stones which Fauconneau-Dufresne in one instance discovered in the finer ramifications of the biliary ducts, have perhaps some analogy to the casts of the bile-ducts brought under your notice.

In continuing for a moment the consideration of the etiology of gall-stones, I beg to offer some fragmentary speculations on the possible or probable circumstances which may produce gall-stones. It remains yet to be ascertained whether a foreign body in the gall-bladder can simply predispose the cholesterine to crystallise upon it, or whether a change in the composition of the bile must precede that separation, as alkaline urine must precede the phosphatic incrustation of foreign bodies in the urinary bladder. There are cholesteric calculi containing pins, flukes, or ascarides as nuclei. I shall have an opportunity of bringing some experiments on this question before you on a subsequent occasion, as it seems to admit of a satisfactory solution. At present we must allow, that the nucleus being given, whether it be a foreign body, or casts of the biliary ducts, or amorphous precipitated colouring matter, or blood, or cast off epithelium, or even the problematical mucus—the subsequent crystallization of cholesterine may be either a consequence of the effects of the nucleus upon the bile and gall-bladder, or a continuation of the cause which produced the nucleus. The casts may have acted as foreign bodies simply, or the liver-cells, which effused the abnormal congealing matter, may have thrown out an excess of cholesterine, or bile incapable of holding the ordinary quantity of cholesterine in solution.

As there are gall-stones which possess no tangible nucleus, but consist throughout of pure pearl-white cholesterine, the circumstances under which cholesterine may crystallize from bile, are particularly deserving of investigation. Excess of cholesterine merely, which Chevreul thought to have found, though a very likely thing to occur, is in itself not sufficient to explain its precipitation; a change or destruction of its solvent, taurocholic acid, on its passage through the ducts and bladder, seems essential. This change may be produced by specific disease of the liver-tissue, by retention of bile and subsequent endosmotic changes, or by decomposition of bile from any cause. Bile, whether stagnating in the human body, or in a glass bottle, on decomposition setting in, gives up its cholesterine in a crystallised form.

This decomposition of the solvent of cholesterine, once set up in the gall-bladder, continues, like ammoniacal urine in the urinary bladder, to contaminate all fresh portions of bile poured out into the gall-bladder, and to precipitate their cholesterine, and often their colouring matter upon the centres of attraction. In this manner are formed the layers of gall-stones, which in their concentricity exhibit the periodical growth of the concretions. Mixed with the cholesterine layers are patches or layers of colouring matter, namely, bilifulvine and biliverdine, in various proportions and shades. Bistearate of lime in star-like crystallized small masses, and a little phosphate of lime mixed with shrivelled cylindrical epithelial cells, make up the list of constituents which we observe in the greatest number of ordinary gall-stones. Concretions, consisting of pigment, or inspissated bile, or of phosphate and carbonate of lime, have a different pathological, and by their rarity, less practical significance.

As a proof that the above considerations are at least in part based upon personal observations, I will mention the following cases as having afforded the starting point for my reflections.

Case II. In a female, dead from pulmonary phthisis, I found a globular gall-stone in the bladder, suspended in green thin bile. The concretion was white, like mother-o'-pearl, and there was no trace of a coloured nucleus. The whole seemed to consist of cholesterine, mixed with a trace of bistearate of lime, both uncoloured. It had not caused any symptoms during life.

Case III. In the liver of a boy, dead from general tuberculosis, with tubercles in all the organs (including the muscular substance of the heart, a very rare occurrence), I found lumps of mere inspissated bile and epithelium, formed in cysts, which, although communicating with afferent biliary ducts, yet had no outlet, and were evidently enlargements of a portion of the obliterated gall-duct.

The symptoms produced by gall-stones after their formation are so very characteristic and well known, that a repetition of general facts is uncalled for. Most of the lasting and obstinate symptoms centre in pain, due to inflammation or ulceration of the gall-bladder, or adjacent portions of liver or intestine. Distinct from these rarer chronic effects, are the more common manifestations of the passage of gall-stones into or through one or other of the ducts. The typical nature of these attacks mostly ensures their diagnosis. The pain and sickness, the band round the lower part of the chest, and other distinctly referred local sensations, indicate a gall-stone in the cystic duct. It may lodge there and close it for ever, and such an occurrence is not the worst issue of the disease. But when the gall-stone passes into the common duct, jaundice and vomiting, and more rarely a partial or entire absence of biliary colouring matter from the fæces, lead our diagnosis. In this manner small concretions may be got rid of; larger concretions, up to an inch in length or diameter, are more rarely passed in this manner. So far as I know, there is, however, no case on record of a person, who during life suffered well authenticated attacks of passages of gall-stones, and was after death found not to harbour some concretion in his biliary passages.

Gall-stones not rarely cause inflammation of the gall-bladder and adjacent portion of the liver. I have seen a circumscribed inflammation proceed to the peritoneal convex surface of the liver, and cause adhesion to the anterior abdominal parietes. When the exudation is more copious, and the process less chronic, abscess is sometimes formed, which happily mostly empties itself into the cavity of the duodenum, more rarely into some other portion of the intestinal cavity, or into the peritoneal cavity, and in this case with rapidly fatal effects. In some extremely rare cases the abscess proceeds along the urachus into the urinary bladder. A case in which the abscess opened into the duodenum has fallen under my observation. The patient discharged suddenly with the greatest relief a quantity of purulent fluid, mixed with the pills, which his attendants believed to have passed unchanged through his body. They were evidently gall-stones, but had been poured away before I could examine them. Even without this confirmation, the case left no room for doubt.

The following case, which I had an opportunity of treating for several years, and watching to its conclusion, will be an appropriate introduction to the important question of treatment. It shows that gall-stones may exist in the gall-bladder during forty years, produce recurrent attacks, and yet, with prudent living and medical assistance, the patient may live to eighty.

Case IV. In the year 1853, I was requested to attend a gentleman, aged 75, who, after having enjoyed excellent health for many years, was suddenly taken ill with the usual symptoms of the passage of gall-stones. On being questioned, he remembered having passed a gall-stone thirty-five years ago, which had been found bodily in the evacuations. Some slighter symptoms made a continuance of other concretions in the gall-bladder, during the whole time which had elapsed since that occurrence, very probable. With the use of opium and occa-

sional large draughts of warm water when the sickness seemed greatest, he recovered from that attack. The gall-stones, no doubt, passed successfully, which, from the presence of severe jaundice, is more probable than that they receded and returned into the bladder.

In the following year, he had another and more severe attack. It is probable that in this attack the false passage was formed from the gall-bladder to the duodenum, which I discovered at the *post mortem* examination, and the cystic termination of which enclosed an impacted calculus. The attack terminated with the discharge of gall-stones, brown biliary matter, and subsequent bilious diarrhœa.

From that time he began to take the celebrated mixture of turpentine and ether, and with so much apparent benefit, that during the subsequent four years the old gentleman allowed few days to pass without taking from half a drachm to a drachm of the mixture.

At the beginning of last winter his general health began to fail. A settled pain in the region of the gall bladder indicated chronic inflammation there. Notwithstanding all suitable treatment, he sank and died, very nearly eighty years old.

The *post mortem* examination revealed a gall-bladder full of calculi as the primary disease. Exudative plastic inflammation pervaded all neighbouring tissues.

The gall-stones were pulpy outside, and seemed to be made up of soft brown colouring matters; in the centre they were made up of crystallised cholesterine. I shew the dried bladder, containing one hard stone enclosed in the false passage. The others are removed. By this softness the theoretical value of the ether and turpentine mixture assumes a sort of empirical confirmation; although, on strict scrutiny, the direct solvent action of these substances cannot well be understood.

In the *symptomatic treatment of the passage of gall-stones* we have to rely mainly upon opium, which is sometimes better borne in the form of pills than that of tincture. We must carefully guard the patient from an overdose of this drug, which he is even more apt to take on his own account, from the torturing pain he is suffering, than the practitioner is likely to prescribe it. Nevertheless, severe narcotism sometimes follows large doses of opium—when the pain which caused them to be given suddenly ceases, from local causes. Such a case happened in Ireland some years ago, and was the subject of a painful legal inquiry. Happily, the life of the patient, who was a member of Parliament and a large estate proprietor, ended fatally only a few days after the severe narcotic symptoms had been successfully combated, so that the death and the narcotism stood in no immediate connection with each other. Whatever be our opinion, this case suggests caution.

Persons afflicted with dormant gall-stones should regulate their living in the most careful way possible, avoid all and every description of spirituous liquors, and let fruit and cereals, and light vegetables, enter largely upon their dietary.

In decided cases of gall-stones in the bladder, where continuous symptoms or repeated passages of concrements are observed, the surgeons should consider the propriety of planning and performing an operation for the extraction of these foreign bodies, either in a direct manner, or by forming a biliary fistula, and adopting a lithotriptic proceeding.

The operation is much slighter than lithotomy. Compared to such operations upon the abdominal organs as extirpation of ovarian tumours, it sinks into insignificance. If, for example, an incision was made a little above the lower edge of the liver, just large enough to admit the forefinger into the peritoneal cavity, the gall-bladder might be explored, and the presence or absence of calculi determined with the greatest certainty and the least danger. If calculi are present, the gall-bladder is seized with a small hook, pulled into the abdominal wound, and fixed there without being opened. In six days a good and passable fistula will be established, which, after a fortnight or three weeks, will be sufficiently consolidated to admit of the introduction of an instrument, by which such soft calculi may easily be crushed. The calculi once removed, I make no manner of doubt that the fistula would heal up by itself. I am certain that, with proper care and dexterity, surgeons might make a number of these operations successful, and have few failures; considering always that cases suitable for the operation would perhaps be half as common as cases for lithotomy.

Before knowing the cause and origin of gall-stones a little better, prevention is out of the question. But general hygiene will here do as much as in other diseases.

The above remarks may, perhaps, appear insignificant to gentlemen of longer experience, and the results of my researches small to those possessing more extensive opportunities than myself. I hope that such of my hearers as enjoy either will make up my deficiencies. If, in full consciousness of these latter, I have nevertheless come forward, I have done so upon the principle that, however small our light, we ought not to put it under the bushel, but let it shine before the people. Should it be very dull, then I hope that my friends, in the discussion, will give it the benefit of a suitable trimming.

PATHOLOGICAL AND THERAPEUTICAL CONSIDERATIONS RELATIVE TO INFLAMMATION AND FEVER.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

In the following pages I shall attempt to give a *rationale* of the principal phenomena observed in inflammation and fever, with particular reference to recent neuro-pathological researches.

1. It is well known that the arteries of the abdominal and pelvic viscera, of the thoracic, and of the encephalon, are surrounded with nervous plexuses derived from the sympathetic system. The filaments of these nerves accompany the vessels to their finer ramifications, if not to their ultimate; and are distributed to their coats in no inconsiderable measure. In the limbs the arteries are accompanied by no such distinct sympathetic plexuses; the cerebro-spinal cords appear to take their place. By microscopic examination I have found that nerve filaments, in all respects similar to those of the visceral sympathetic, are given off from the finer ramifications of the cerebro-spinal nerves. They are in all probability distributed much in the same manner as the visceral nerves above mentioned. As branches from the ganglia of the sympathetic join the spinal nerves, it is no more than might have been expected that they would appear again at the peripheral expansions of the latter. The external carotid artery is surrounded by a plexus which accompanies each of its divisions. These are, therefore, similarly circumstanced to the visceral arteries of the three great cavities, which might have been anticipated considering their distribution.

In structure, the sympathetic nerves are found to consist of two kinds:—white tubular fibres, evidently identical with cerebro-spinal; and nucleated nerve bands, peculiar to the ganglionic nerves. The latter are known as fibres of Remak, and their nervous character is denied by several authorities. Bidder and Volkmann describe another variety of fibres which may be distinguished as the "fine tubular," and which they regard as peculiar to the sympathetic system. These have not the double contour, and are but half the size of the ordinary cerebro-spinal. I agree with Todd and Bowman, in adopting Remak's view. However this be, it seems unquestionable that there are fibres in the sympathetic derived from the cerebro-spinal system, as well as others which arise in the various ganglia belonging to it. Anatomically, therefore, the sympathetic is a compound nerve, partly independent, and partly an offset of the nervous system of animal life.

2. Physiological observation accords with the above data, and extends them. The connection of the ganglionic nerves with the *tissues* of the part to which they proceed is proved by the influence of stimuli acting upon these nerves, or their centres, to excite muscular contractions or glandular secretion; and by the occurrence of pain, or reflex movements, when irritation is set up in the mucous surfaces, or other parts. The movements of the intestines and heart are unquestionably capable of being influenced by stimuli applied to their sympathetic nerves, or the related ganglia. The flow of gastric juice, of bile, and of pancreatic fluid, is produced by the stimulation of the mucous surface of the stomach and duodenum by the food. This stimulation is reflected through their nerves upon the several glandular organs. An irritant purgative causes griping pain and increased peristaltic motion. Muscular contractions can be influenced, in parts supplied with ganglionic nerves, by impulses originating in the brain or spinal cord: and conversely, the states of organs supplied with ganglionic nerves make themselves felt in the cerebral and spinal nervous centres. The effect of emotions upon the heart and the intestines is notorious, as well as the influence of intestinal disorder in producing headache, amaurosis, or tinnitus aurium, and of worms in causing convulsions.

The control exercised by the sympathetic nerves upon the vessels they accompany is very apparent in blushing, and in many pathological phenomena which will be hereafter alluded

to. The most striking evidence of this is, however, afforded by the experiments of Bernard. It is well known that in paralysis from disease of the brain or spinal cord, the temperature of the paralysed parts, as a rule, is lowered. This was found to occur when the anterior or posterior roots of the spinal nerves, or the root of the fifth pair, or that of the facial, were divided. The loss was not very considerable, varying from about 3° to 7° of Fah. When the sympathetic nerve in the neck was divided, or the superior cervical ganglion extirpated, the following phenomena were observed. The temperature of the operated side increased rapidly, and in a quarter of an hour after the operation had risen 11° Fah. The arteries and small vessels dilated, and became much more full of blood than those of the opposite side; the pupil contracted, as well as the palpebral opening, while the globe of the eye appeared depressed in the orbit. The hyperæmia which is the immediate result of the operation subsides considerably in a day or two; but the elevation of temperature is much more persistent, lasting, in rabbits, sixteen to eighteen days; in dogs, six weeks to two months. Not only the superficial parts, but the deep seated, and even the blood returning by the jugular vein, can be shown to be hotter than the corresponding parts of the healthy side, or than they themselves were previously. It is an important circumstance, observed by Bernard and Brown-Séquard, that the temperature on the sound side falls below its previous figure; the difference in one experiment amounting to 5½° Fah. The phenomena now described are more prominently marked in healthy and vigorous animals than in those that are weakly, and in those that are digesting food than in those that are fasting. When an animal whose cervical sympathetic has been divided on one side is exposed to a temperature above that of its own body, the side where the nerve is entire gains heat, while the the other remains almost unchanged, and before long no difference can be detected by the thermometer between the two. On the other hand, when an animal similarly circumstanced is placed in a medium considerably colder than its own body, the difference between the normal and the operated side becomes more prominently marked. The former loses heat much faster than the latter, and the thermometer shows that it may become as much as 21° Fah. colder than its fellow. If the upper end of the divided sympathetic is galvanised, all the effects produced by the previous operation disappear, and are replaced by their converse. The pupil dilates, as well as the palpebral opening, and the eyeball projects from the orbit. Instead of being active, the circulation becomes weak; the conjunctiva, nostrils, and ears, which were red, become pale. The temperature falls below the normal figure, while, curiously enough, that of the opposite side increases notably. According to Brown-Séquard, the effects produced by a transverse lateral section of half the spinal cord, in the dorsal region, on the posterior limb of the corresponding side, are exactly similar to those we have been considering. The condition, also, of the opposite sides in both cases is quite similar: "both receive less blood than usual, their temperature diminishes, their nutrition is less active, and their vital properties also diminish." Bernard remarks, that although he has watched, for a length of time, animals who had undergone division of the cervical sympathetic, he has never seen any œdema or inflammatory action supervene in the abnormally hot parts so long as the animal continued in good health. But if they fell sick, either spontaneously, or from the effect of other operations, the mucous membranes of the eye and nose, on the operated side *only*, became very red, swelled, and poured out purulent matter abundantly. If the animal's health improved, these inflammatory phenomena ceased. This highly important observation I can quite confirm from my own experience. A cat, on which I operated, had severe purulent ophthalmia of the left eye for five or six days, after which it spontaneously declined. Sixteen days after the operation the left ear was 15° Fah. hotter than the right. She had been debilitated by an unsuccessful attempt to divide the renal nerves on one side.

The cause of the elevated temperature of the parts lying in the range of the divided sympathetic is attributed by Brown-Séquard and Walter to the increased afflux of blood, to the hyperæmia. Bernard, however, opposes this view, because the temperature does not vary when the hyperæmia declines; because hyperæmia occurs when the fifth nerve is divided, but is attended with diminished temperature; because ligature of the veins of each ear, and consequent gorging of the vessels with blood, lowers the temperature of the parts, which again rises on the side on which the sympathetic is subsequently divided. It is true that if the carotid is tied, and the sympathetic afterwards divided on the same side, no calorification takes place; but if the sympathetic be first divided, and calorification have come on, ligature of the carotid does not lower the temperature to that of the sound side.

Another argument which may be used in support of Bernard's opinion, is, that the temperature in the paralysed parts exceeds by 2° or 3° in some cases, the normal temperature of internal parts, as of the rectum. On the whole, it seems to me decidedly most probable that the increase of heat is not due solely to hyperæmic afflux, but that accelerated tissue-change also plays a considerable part in its causation.

Bernard doubts that the effect of dividing the sympathetic is to paralyse the arteries, and so cause their dilatation; he states, on the contrary, that the first perceived effect is the contraction of the carotid, and he looks on the subsequent dilatation of the vessels as the result of an afflux of blood to the part*. However, the contraction of the pupil, which is doubtless occasioned by the loss of the antagonist action of the radiating fibres of the iris, seems to indicate that the withdrawal of the influence of the sympathetic does tend to paralyse contractile tissues, and the very positive result of galvanising the divided nerve supports the same idea. There is nothing anomalous, as Bernard seems to think, in arterial paralysis promoting more active circulation. On the contrary, it is perfectly evident that the only result of arterial action must be to diminish the afflux of blood to the part. This is well seen when the arteries in the frog's web are made to contract by the application of cold; whole tracts of capillaries appear empty and deprived of blood. On warming the web, the arteries immediately dilate, and pour in blood abundantly. When a nervous trunk is divided, for instance, the sciatic, containing motor, sensory, and sympathetic fibres, all the changes are produced which naturally result from the suspension of the influence of these several fibres. However, the calorification in this case is somewhat diminished by the refrigerating tendency of the paralysis of the motor and sensory fibres.

Analogous experiments made by other observers are strongly corroborative of Bernard's statements. Jaschkowitz shows that section of the sympathetic plexus of the spleen causes congestion of blood, softening, and tension of the capsule. If part only of the plexus is divided, the corresponding part of the spleen only is affected. Samuel, in experiments upon rabbits, dogs, and cats, found that the hyperæmia of the intestinal mucous membrane, produced by extirpation of the cœliac plexus, was so great, that it exceeded all pathological hyperæmias hitherto known. The secretion of the mucous membrane is increased by the operation, but not to the same degree as in violent diarrhœa. Wharton Jones finds that after removal of the lower part of the spinal cord, and the roots of the nerves, the arteries of the webs in a frog retain all their contractility, or are even more than usually disposed to be constricted. If now the ischiatic nerve be divided on one side, "the result is that the skin of the extremity subjected to the experiment becomes, even to the naked eye, redder from vascular congestion than that of the opposite extremity, and on examination of the web under the microscope, the arteries are found considerably dilated. In the web of the opposite extremity, on the contrary, the arteries are seen still much constricted, some even to closure."

Practical conclusion. Paralysis of the vaso-motor nerves of any organ may throw that organ into a condition of hurried and disordered nutrition, attended with hyperæmic afflux; and, if the part be predisposed, actual severe inflammation may result.

3. Attention has lately been directed by Pfluger and Lister to certain nerve phenomena, which the former terms inhibitory *(hemmungs)*, and supposes to belong to a certain set or system of nerve fibres, whose sole function is to arrest or diminish action. Lister, on the contrary, concludes from his inquiries *(Proceedings of the Royal Society*, No. 32, page 367*)*, "that one and the same afferent nerve may, according as it is operating mildly or energetically, either exalt or depress the functions of the nervous centre on which it acts. It is, I believe (he says), upon this that all inhibitory influence depends, and I suspect that the principle will be found to admit of a very general application in physiology." The following are instances of inhibitory action. The poles of a galvanic apparatus being fixed to the spinous processes of the ninth and twelfth dorsal vertebræ of a rabbit, currents were passed through the spine (of course affecting the cord), with the effect of inducing "complete relaxation and quiescence of

* Plus tard cette artère et ses divisions deviennent plus grosses et sont en quelque sorte distendues par un appel de sang qui se fait dans les parties correspondantes; mais cet effet, loin de ressembler à une paralysie, amène une circulation plus active. (P. 509.)

the small intestines, which had been previously in considerable movement, while the muscles of the limbs were thrown into spasmodic action, but on the discontinuance of the galvanism, the previous intestinal motion returned." Weaker currents were then passed, and "markedly increased the action of the intestines in every instance during the first twenty-five minutes." In the next half hour the increase of action from the galvanism, though still distinct, was less strongly marked, and "at the end of that period" with stronger currents, "the inhibiting influence was also found to be much less complete than before, indicating that the parts of the nervous apparatus concerned were in a less active condition, no doubt in consequence of exhaustion." Increased movements of the intestines were produced by direct irritation of the cord with a fine needle. It was very worthy of remark, that violent struggling of the rabbit, "when the intestines were in pretty free movement, was followed by absolute and universal quiescence of those organs for several seconds." This showed that an inhibitory action was capable of being produced naturally as well as artificially.

The slowing or arrest of the action of the heart by irritation of the vagus, seems to be due to an action of this kind, *Vide* Bernard's experiments (*Leçons sur le Système Nerveux*, tome ii, page 392.)

In a paper on inhibitory influence published in the British Medical Journal, February 5th, 1859, I have endeavoured to show that pathological phenomena are not unfrequent, which seem to be of this character. I modify, however, the statement of Mr. Lister, so far as to believe that it is not the energetic operation of an afferent nerve that causes inhibitory action, but its being injuriously affected by some impression made upon it. The enfeebled state of the nerve itself, or of the centre to which it proceeds, or the severity of the impression may give rise to the peculiar effect. Instances are quoted further on (p. 106), of inhibitory paralysis resulting from cold, and the following is a good instance of the same occurrence from another cause.

O. J., male, aged 37, got a whitlow on last phalanx of left thumb, the lymphatics were inflamed, and the axillary glands swelled, the whole arm was very painful. While the limb was in this state, one morning he found that he saw double, and had a squint in the left eye. At the Ophthalmic Hospital, it was found that the external rectus muscle was completely paralysed, and he had severe circumorbital pain. It was supposed that there was periosteal inflammation about the orbit, and iodide of potassium was given; the whitlow was poulticed, and the arm fomented. After a month of this treatment, there was no improvement of the eyes, but the arm inflammation had quite subsided. A piece of dead bone was now removed from the seat of the whitlow; soon after which the squint disappeared, as well as the pain in the arm, and about the orbit. The external rectus had quite recovered its power. (*Medical Times and Gazette*, January 29th, 1859.)

Dr. Watson refers to the production of amaurosis without visible change in the eye, in consequence apparently of the dental irritation, the blindness ceasing after the extraction of some teeth which had grown irregularly. He quotes from Mr. Lawrence an interesting case in which the extraction of a carious tooth with a splinter of wood projecting from one of its fangs procured the restoration of the sight of the eye of the same side which had been lost entirely for thirteen months. In such cases, the paralysis of the retina on the optic tubercles may fairly be designated inhibitory. Two cases of amaurosis, and one of ptosis, are recorded by Mr. Hancock (*Lancet*, January 22nd, 1859), as cured by the removal of decayed or overcrowded teeth. The pathology of these is no doubt the same. In the same communication, a case of lockjaw, and of extreme wry neck, are mentioned, as having yielded to the same measure. This shows that it depends very much on the condition of the nervous centre which is affected, what the result of an irritation shall be, whether paralyzing, or exciting. So, in some persons, opium causes powerlessness (a degree of paralysis), in others, it tones and prevents fatigue.

Practical conclusion. The nervous centre connected with a motor, vaso-motor, special sensory, and probably with a common sensory nerve, may be incapacitated from its function in consequence of an irritation transmitted from some distant part. Such paralysis may be termed *inhibitory*.

4. The phenomena of fully developed inflammation, as seen by the naked eye, are notorious, and do not require description here. The heat, redness, pain, and swelling, are accounted for by the hyperæmia and the exudation; some part, however, of the excess of heat being probably due to increased metamorphic processes taking place in the inflamed area. The phenomena observed by the aid of the microscope are as follows. After the application of the irritant (I used dilute liquor ammoniæ or its vapour), the blood is seen to traverse the capillaries more and more slowly, to oscillate, and at last to stop, the corpuscles becoming all compacted together into a red mass. It is abundantly evident that the arrest is not caused by the sticking of red or white corpuscles to the capillary walls, but by the interruption of those conditions which in health make the transit of the blood-globules easy; or, perhaps, by the setting up of a morbid attraction. It is equally manifest that neither contraction nor dilatation of the arteries or veins has anything to do with the production of stasis, at least of inflammatory stasis. The starting point of this is clearly from the capillaries. The stasis of blood may affect at first only a few capillaries, gradually it spreads and becomes very extensive. If a strong irritant is freely applied at once, stasis takes place almost immediately; too quickly to observe its mode of production. All around the stasis the circulation goes on very actively. The blood in the seat of stagnation is of a darker red than natural. During complete and universal stasis, the blood is seen sometimes flowing backwards in the veins, as if attracted towards the inflamed part, while at the same moment the arteries are pouring in fresh streams. At other times the current in the veins is only more or less retarded. The arteries may be seen in various states, either normal or slightly contracted, or empty and contracted, to one half or less of their diameter, or they are filled up with stagnant red globules, or they exhibit red corpuscles moving to and fro, driven forward by the heart's impulse, and again receding. The two latter states are often consecutive, the first being observed in complete repletion and stasis. When resolution takes place in a part, the blood which was stagnant and filled up the capillaries, begins at first to move very slightly, presenting a feeble oscillation. It has lost its adhesion to the walls of the vessels, but the corpuscles still adhere to each other. The oscillation increases, the obstructing mass is pushed onward, and projects into some vessel which is traversed by moving blood. The corpuscles separate from each other, sometimes one or two are swept away in the current at a time, sometimes a small clot containing several. At last all are dispersed, except perhaps some red corpuscles, which still adhere to the side of the vessel, by their flat surface, or as I once saw, by one extremity. Adhesion of some red corpuscles to the capillary walls may be seen where the stream is slackening in commencing stasis, but it is most evident that the cause of the stasis is not mere adhesiveness or mechanical obstruction. The epithelium of the inflamed web becomes manifestly more opaque and granular, and often separates. Mr. Lister has observed that the pigment in the frog undergoes a remarkable change in an inflamed area, becoming diffused into the radiating processes of the containing cells, while in healthy parts it is concentrated around the nucleus. The same effect is produced by division of the sciatic nerve, so that the change seems to indicate a loss of power in the cell comparable to the paralysis of a muscle. Additional evidence is thus furnished of the loss of functional power resulting from inflammation.

It is probable that in all inflammations, of whatever character, or however caused, the visible phenomena are such as above described. Only it must be remembered, that in inflammations, such as we ordinarily meet with in warm-blooded creatures, there is not the same amount of stasis as is seen in the frog's web. This is an extreme result tending in the direction of gangrene. The vitality of the inflamed tissues is lowered, they are more or less incapacitated for functional operation, their nutrition is arrested, and in consequence, their cohesive power is impaired, and they become soft or brittle. It is quite certain that during inflammation the afflux of blood to the part is vastly increased, as proved by Lawrence's well-known experiment. The throbbing of the arteries so often spoken of as increased action is really, as far as regards themselves, a proof of debility; a sign that they yield more than they would in health to the increased impulse of the heart. In many inflammations, notably in the subcutaneous phlegmons, large or small, the tendency to suppuration is very marked, and when once the inflammation is fairly set up, extremely difficult to withstand. Until suppuration has occurred, it is found impossible to arrest the hyperæmic afflux, but when this has taken place, and the pus has escaped, it subsides spontaneously. It really seems as if a morbid development of force took place in the inflamed part, which did not subside until it had spent itself in cell production.

[*To be continued.*]

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY

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Lecture IV.

Urine in Disease. *Arrangement of the Subject. Diathesis.* Excess or Deficiency of Water and the Organic Constituents present in Health. *Excess of Water: Diabetes Insipidus: Deficiency of Water: Increased Acidity of Urine: Principles of Treatment: Nitric Acid in the Urine: Ammonia: on Detecting Urea in the Blood or Serum: on Detecting Ammonia in the Breath: Urea; Excess of Urea; Deficiency of Urea: Colouring Matter: Excess of Uric Acid and Urates: Principles of Treatment: Extractive Matters: General Remarks on the Increase of the Organic Constituents, with Analyses: Analyses of Urine in Chorea: Analyses of Urine in Skin-Disease.* Excess or Deficiency of the Inorganic Constituents present in Health. *Chloride of Sodium; its Diminution in Acute Inflammations: Sulphates; Increase in Cases of Chorea, Rheumatic Fever, etc.: Influence of Remedies: Alkaline Phosphates; Increased Secretion of Alkaline Phosphates in Inflammation of the Brain; Analyses; Earthy Phosphates; Increase in the Urine of Cases of Mollities Ossium; Analyses.*

[*Continued from page* 852.]

Excess or Deficiency of the Inorganic Constituents.

In disease, the inorganic salts vary greatly in quantity. Sometimes the saline constituents are very deficient. This deficiency may depend upon the nature of the food, or it may be due to the *formation* of a diminished proportion of some of the salts in the organism. The sulphates, and the phosphates in part, being formed in the body, will vary under many circumstances. In some conditions of the system, when much disintegration of tissue takes place, a greater quantity of sulphur and phosphorus is oxidised, and the corresponding acids are formed in unusually large proportion, and excreted in the urine. In certain inflammatory conditions of the system, it would appear that the chloride of sodium, being required at the seat of these changes in considerable quantity, is prevented from passing off from the system in the urine. In certain cases of disease of the kidney, it is important to notice if the proportion of the saline constituents to the organic matter is very much increased. In some states of renal disease, in which the secreting structure of the kidney is so much impaired that the separation of urea and organic matter is very much interfered with, a proportion of saline matter considerably larger than the urine contains in health, escapes.

Let me now draw your attention to some of the most important variations in the excretion of saline matter in disease.

Chloride of Sodium. The fluctuations observed in the quantity of common salt excreted in the urine are very great even in health. The circumstances which affect the proportion of chloride of sodium are very numerous, and these are greatly increased in disease. It was found by Redtenbacher, many years since, that in pneumonia the quantity of chloride in the urine gradually decreased as the inflammation advanced; and that in many instances, when the lung became hepatised, not a trace could be detected in the urine. Some years ago, I determined quantitatively the amount of chloride in the urine from day to day in cases of acute pneumonia, and the following case illustrates very well the changes which occur in the urine in this affection.

The patient was a plasterer, aged 24, and was under the care of Dr. Budd. On the third day of the disease, there was dulness two inches below the left mamma in front, and behind over the space below the spine of the scapula. Bronchial breathing and bronchophony were audible over the lower angle of the scapula. Expectoration viscid, frothy, and slightly rusty; pulse 144, small and weak; respirations, 52.

On the fourth day of the disease, bronchial breathing and bronchophony were more distinct. Pulse, 116; respirations, 28. He was treated with small doses of antimonial wine, and was put upon milk diet and beef-tea. Turpentine stupes were applied to the chest. He progressed favourably, was convalescent within three weeks after the commencement of the attack, and was discharged well in little more than four weeks.

13. *Fourth day* of the disease. Urine high coloured; acid; specific gravity, 1017; contained a little albumen.

14. *Fifth day.* Acid; specific gravity, 1013; natural colour.

15. *Sixth day.* Acid; specific gravity, 1016; pale; still contained a trace of albumen.

16. *Tenth day.* Acid; specific gravity, 1022; no albumen.

17. *Twenty-second day.* Acid specific gravity, 1016; pale; no albumen.

Analysis.

	13		14	15	
Water	956·60		957·40	954·00	
Solid matter	43·40	100·00	42·60	46·00	100·00
Organic matter	40·28	92·82		44·64	97·05
Fixed salts	3·12	7·18		1·36	2·95
Chloride of sodium	0		traces	0	

	16		17	
Water	955·00		968·40	
Solid matter	45·00	100·00	31·60	100·00
Organic matter	42·12	93·64	23·26	73·61
Fixed salts	2·88	6·4	8·34	26·39
Chloride of sodium	0		4·56	14.43

The decrease of the fixed salts generally, during the stage of hepatisation is remarkable. The last analysis of the urine, when the patient was well, shows the healthy proportion. In vol. xxxv of the *Medico-Chirurgical Transactions* will be found several other cases showing similar results. In some of the cases, it was shown that, although there was not a trace of chloride in the urine, and the blood contained less than its normal proportion, the sputa were very rich in chloride of sodium. In one case, it amounted to upwards of 18 grains in 100 of the solid matter of the sputum. In a fatal case, much chloride was found in the products effused into the air-cells of the lung. In most exudations, and in growing tissues, there is a considerable amount of chloride of sodium. In acute inflammations generally, the proportion of chloride in the urine gradually diminishes until the disease is at its height. When resolution occurs, the chloride reappears, and gradually increases as convalescence advances, until it attains its normal standard. The amount of chloride in the urine is much influenced by the nature of the food, and by the quantity of fluid taken, as remarked when considering the chloride in healthy urine; but the results above described cannot be explained in this manner; for, although patients take less food when they are ill, and therefore less salt, the same results are observed if salt be given to them. Moreover, the disappearance is gradual, and the reappearance is marked by a change in the symptoms of the disease, although the food has remained the same during the whole period of the illness. I have expressed the opinion that, in all probability, the chloride is attracted from the blood in undue proportion to the point where the inflammatory changes are taking place; and that, instead of passing through the organism as it does in health, it accumulates at this point until a certain stage of the morbid process is passed, when it is reabsorbed into the blood, and excreted by the ordinary channel. The precise office which the salt plays in these processes is not understood; but certainly, in all the specimens of inflammatory lymph that I have examined, I have always found common salt present in large quantity. In many cases of bronchitis, acute rheumatism, pleurisy, in some cases of skin-disease, and in some other instances in which its absence would appear to be merely an accidental circumstance, no salt can be detected in the urine. We cannot, therefore, regard this diminished proportion or absence of chloride in the urine as a point of any value in the diagnosis of pneumonia, although it must be looked upon as a fact of great interest with reference to the morbid changes which are taking place at the time. The conclusions to which I arrived, after examining the urine, blood, sputum, and inflammatory products, in several cases of pneumonia, are as follows:

1. That in pneumonia there is a total absence of chloride of sodium from the urine at or about the period of hepatisation of the lung.

2. That, soon after resolution of the inflammation, the chloride is again present in the urine, and often in considerable quantity.

3. That, at this period (resolution), the serum of the blood is found to contain a greater amount of chloride than in health.

4. That the presence of chloride of sodium in the urine may be taken as evidence of the existence of a greater quantity of the salt in the blood than is required for the wants of the system generally, or, at least, of an amount sufficient for that purpose; and that the absence of the salt from the urine indicates that the circulating fluid contains less than the normal quantity.

5. That the sputa in pneumonia contain a greater quantity of fixed chloride than healthy pulmonary mucus, if there be not much less than a normal amount in the blood, although there be a complete absence of the salt from the urine. In all cases, however, there is found in the sputa a quantity many times greater than exists in an equal amount of blood at the same period of the disease. The absolute amount present is subject to variation at different periods of the disease, and in different cases.

6. That, in one case which was fatal, the proportion of chloride present in the sputum underwent a decrease, while the amount of solid matter, and especially the extractive matters, increased in quantity. At the same time, the sputum became acid; and in the matters expectorated within the last few hours of the patient's life, a large quantity of grape-sugar was found; but, in that obtained on the day previous to his death, none could be detected.

7. The absence of chloride of sodium from the urine during the stage of hepatisation seems to depend upon a determination of this salt to the inflamed lung; and, when resolution occurs, this force of attraction ceases, and whatever salt has been retained in the lung is reabsorbed, and appears in the urine as usual.

Analysis 18 represents the composition of the urine in an extreme case of *elephantiasis Græcorum*, occurring in a boy about twelve years of age, who was in the hospital some years ago, under Dr. Todd. The emaciation was extreme, and there were a great number of large ulcerated tubercles all over the body, which discharged freely. The absence of the chloride may perhaps be accounted for by the presence of exudation and cell development at the bases of these numerous ulcers. The urine was acid; specific gravity 1020.

Analysis 18.

Water	960·0	
Solid matter	40·0	100·00
Fixed salts	4·51	11·27

The ash consisted of sulphates and phosphates, with a mere *trace of chloride*.

Analysis 19.

Another specimen about two months after the last. Specific gravity, 1014; acid.

Water	965·1	
Solid matter	34·9	100·00
Urea	13·97	40·02
Extractives	16·06	46·01
Uric acid	·31	·88
Alkaline salts	4·07	11·66
Earthy salts	·49	1·40
Sulphuric acid	·422	1·20
Phosphoric acid	1·389	3·98
Chloride of sodium	*not a trace.*	

It is difficult to account for the absence of the chloride in the following analysis. The urine was obtained from a woman aged 31, suffering from hysterical coma. About eleven ounces were drawn off by a catheter. The patient was quiet; skin cool; tongue covered with a thick white fur; pulse 135; respiration 18; sensation very much impaired. The patient did not notice a very severe pinch with the nails.

Analysis 20.

Water	921·41	
Solid matter	78·59	100·00
Uric acid	·57	·72
Urea extractives, etc.	67·70	86·15
Fixed salts	10·32	13·13

The salts contained sulphates and phosphates, but *not a trace of chloride* was present.

Sulphates. I have already observed that the proportion of sulphates usually varies according to the urea; and it follows that, in diseases characterised by a considerable disintegration of muscular tissue, we shall find an unusual amount of sulphate in the urine. In *chorea*, the increase of the sulphate and urea is often very considerable; but there are conditions in which the increase of the sulphates does not appear to be associated with the formation of urea to a correspondingly large amount. An increase in the quantity of sulphate in the urine, in cases of *rheumatic* fever, is noticed in some of Dr. Bence Jones's analyses. In one case, on the fifth day, the urine had a specific gravity of 1026, and yielded 11·89 grains of sulphate of baryta. Dr. Parkes has shown, by some very careful experiments on four cases, that in rheumatic fever the sulphuric acid is greatly increased. In one case, 52½ grains of sulphuric acid and 5½ grains of unoxidised sulphur were excreted in twenty-four hours. The urea was not increased in the same degree. This increase of sulphate is not observed in typhoid fever and scarlatina. It *does not*, therefore, depend merely on increase of temperature. Dr. Parkes suggests that in the blood, in acute rheumatism, there may exist a material richer in sulphur than albumen. Potash increases the tendency of this substance to disintegrate; and hence, whenever liquor potassæ is given, the proportion of sulphates in the urine is augmented.

Urinary constituents.	Condition in rheumatic fever.	Effect produced by liquor potassæ in large doses.
Solids	Increased	Still more increased
Water	Greatly diminished	Slightly increased
Uric acid	Increased	Slightly increased
Sulphur	In considerable quantity	Probably increased
Chlorine	Diminished	Unaffected
Sulphuric acid	Greatly increased	Still more increased*

In many cases of skin-disease, I have found the relative proportion of the sulphates to be considerably augmented. This is well illustrated in Analysis 5, which gives the composition of the urine of a boy suffering from eczema.

[*To be continued.*]

Transactions of Branches.

SOUTH-MIDLAND BRANCH.

ŒDEMA OF THE GLOTTIS, FOLLOWING THE ACCIDENTAL DRINKING OF SULPHURIC ACID: TRACHEOTOMY: WITH REMARKS ON THE OPERATION.

By E. Lawford, M.D., Leighton Buzzard.

[*Read October 6th*, 1859.]

I will, with your permission, call the attention of the members to a case which occurred in my practice, in which inflammation and œdema of the glottis followed the accidental swallowing of sulphuric acid, and in which the operation of tracheotomy was resorted to, in order to relieve the symptoms of impending suffocation. I will then make a few remarks on the danger and difficulty attending this operation; on the surgical appliances which have been introduced for the purpose of simplifying it; and I will lastly call your attention to an instrument made for me by Mr. Coxeter of London, calculated to steady the windpipe at the moment of its division, to prevent the injurious effects of pressure, and to act at the same time as a director for the knife.

In the month of July 1852, I received a hasty summons to attend on a young person of about fourteen years of age, who was reported to have taken poison. On arriving at the house, I found her labouring for breath; the respiration was noisy and croup-like; and, on examining the mouth, I found the lips excoriated, and the lining membrane of the mouth and fauces of a white or ash colour. There was intense pain in the region of the windpipe, and, in fact, every symptom of poisoning by a corrosive irritant.

On inquiry, I found that the patient had arrived home fatigued from a long walk; and, seeing a ginger-beer bottle on the table, she had taken for granted that it contained ginger-beer,

* The influence of liquor potassæ on the urine in rheumatic fever. (*Med.-Chir. Review*, vol. xiii, page 248.)

and had attempted to drink some of it. No sooner, however, was the fluid (which turned out to be the vitriol of commerce) introduced into the mouth than it was ejected with violence; and the symptoms and signs which I have mentioned presented themselves immediately. In an hour from the time of the accident, the breathing became somewhat more quiet; the noisy respiration, which appeared to result from the spasmodic contraction of the glottis, had in some measure subsided; the patient was able to swallow liquids; and, consequently, carbonate of magnesia with water was administered, alternated occasionally with milk, gruel, and oil.

The patient passed a restless and distressing night, and in the morning I found marked symptoms of laryngitis. There were restlessness and anxiety depicted in the countenance, occasional attacks of spasmodic breathing, difficulty of deglutition, husky voice, crowing inspiration, and occasional cough. The mucous membrane of the palate was congested and swollen. Some powders, consisting of calomel, opium, and antimony, were prescribed; hot fomentations were applied over the region of the larynx, and a blister at the back of the neck; and a light nutritious diet was given during the day. The symptoms continued the same during the day, with the exception of some increase of restlessness as evening advanced; but during the night they increased in severity, and it became evident that asphyxia was setting in. There was great exhaustion. The pulse was quick and small; cold skin; clammy perspiration; and lividity of the countenance. The patient was, in fact, sinking from the effects of effusion into the areolar tissue of the larynx, and was *in extremis*. It became evident that there was only one course open, and that was the admission of air through the rings of the trachea. Under these circumstances, I consulted with my late partner; and we determined to give the patient the only chance which appeared to remain.

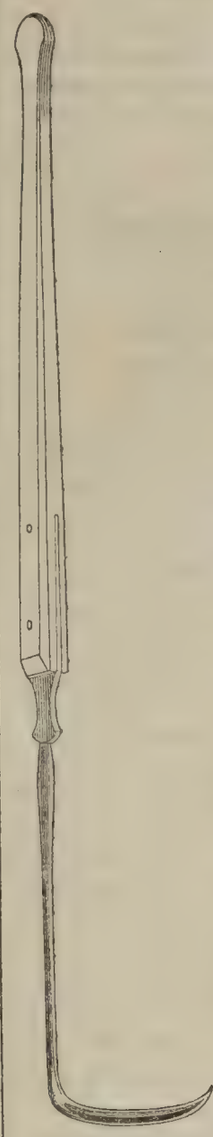
And here I would say a word or two on the desperate circumstances under which this operation has sometimes been performed by surgeons. I find, for instance, a case reported in the *Lancet*, October 1856, occurring in the practice of Mr. Quain, the surgeon at University College Hospital, where the child became asphyxiated while he was performing the operation of tracheotomy, but was recovered by inflating the lungs, and lived for three days afterwards. Indeed, I think there is hardly a limit short of actual death to the performance of this operation, or a period at which the surgeon would not be justified in trying it. We must bear in mind, in dealing with these cases, that the extinction of *animal* life is always anterior to that of *organic* life; that, consequently, *actual* death is a later event than *apparent* death; and that reanimation is always *possible* so long as the organic functions are performed.

The operation was performed in the usual way. An incision was made below the cricoid cartilage, in the mesial line, and continued for an inch and a half downwards towards the sternum. The sterno-hyoid and thyroid muscles were pushed on one side, and the trachea exposed. A scalpel was then cautiously introduced into it, and three rings divided upwards. The hæmorrhage was trifling, and ceased almost immediately after the cannula was introduced. This was secured by means of tapes round the neck.

The effect on the patient was instantaneous. The colour returned to the face; the lips lost their lividity; the breathing became more quiet, and the pulse firmer. The neck was enveloped in some light material, and directions were given that the apartment should be kept moderately warm, not lower than 65° Fahrenheit; and, after administering some light nourishment, the patient was left for the night. She passed a tolerably comfortable night, sleeping occasionally; and in the morning continued the same; and we had great reason to hope that she would have progressed favourably; but, towards night, bronchial symptoms set in; they increased in severity; she was unable to take food, and sank the following morning.

On the cannula being removed from the neck, and the wound enlarged, it was noticed that the membrane downwards, in the direction of the bronchial tubes, was highly vascular, and exhibited every indication of extension of the inflammation in that direction; and above, the mucous membrane was also vascular and swollen.

And now I have to make a remark or two on one source of difficulty attending this operation of tracheotomy: it is one which I think every surgeon who has operated has experienced. I allude to the difficulty of keeping the trachea from rolling. This is particularly experienced in young subjects, where the adipose tissue is abundant, and the trachea more deeply situated. Instruments have from time to time been introduced to the profession, calculated to overcome this difficulty. One surgeon has advised a tenaculum to be used to elevate the tube. Another directs that the patient should be requested to perform the act of swallowing; and, at the moment when the tube is elevated and fixed by this action of the muscles, the favourable moment should be seized, and the scalpel immediately introduced. This would be all very well, provided the patient will obey directions; but children and half-asphyxiated people will not or cannot obey such directions, and we must do that which is necessary to be done for them. Now, it strikes me that there are three requisites in an instrument for the safety and expedition of this operation:—1. A transfixer, to steady the larynx; 2. A guard against the effects of antero-posterior pressure; and 3. A director for the knife. I say a guard against antero-posterior pressure; for I maintain that, in young subjects, the pressure necessary to carry the knife through the elastic rings would bring its point in dangerous proximity to the posterior wall; so much so that I think it is positively unsafe to open it without a director.



The instrument which I hold in my hand is the cassigna hook, and is in common use in the French hospitals. It transfixes, it elevates; but, inasmuch as the groove for the knife is on the convexity of the curve, it does not guard it; neither does it support the ring to be divided. Here is an instrument made after my directions by Mr. Coxeter, of London. It differs from the cassigna hook, inasmuch as the groove for the knife is on its concavity, and the shaft is bent. It is for you to say, gentlemen, if you think it calculated to answer the objects we have in view; viz., transfixing the larynx, preventing antero-posterior pressure, and guarding the knife.

Prosecution under the Medical Act. On November 8th, the Manchester city magistrates were occupied for some time in listening to legal arguments in connexion with the Medical Registration Act. A summons had been taken out, at the instance of the Medico-Ethical Society, against Mr. J. Healey, Rochdale Road, for holding himself forth to the public as a surgeon without being registered. Mr. Healey was before the court a few months ago; but the prosecution against him was withdrawn, on his undertaking to alter his sign so as to omit the word "surgeon". He had then no legal assistance; and, having subsequently been advised that the prosecution could not be sustained, he made no alteration in the sign, and was now again summoned. Mr. Cobbett appeared in support of the summons; and Mr. Torr, barrister, represented the defendant. Mr. Torr admitted that the defendant was not registered, but contended that the Act did not apply to him. The fortieth section (that under which he was summoned) was for "wilfully and falsely" pretending that he was a surgeon; whereas his client had two diplomas (produced), and had been a practitioner for many years; his abilities were not denied. Mr. Maude said the magistrates could not constitute themselves a court of examiners into the degree of medical qualification which a man might possess. The words "wilfully and falsely" merely meant something contrary to the Act. A penalty of £5 must be imposed; and the defendant might, if he desired, have a case for decision by another tribunal.

Royal Medical and Chirurgical Society. The first meeting of this society for the present session was held on Tuesday, November 8th: when papers were read on a case of Abdominal Aneurism arrested by Treatment, by Mr. Solly, F.R.S.; a case of Tubal Gestation, by Dr. R. Lee; and a case of Double Club-foot and Club-hand in the same Infant, by Holmes Coote, Esq. A report of the proceedings will appear in our next number.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, NOVEMBER 19th, 1859.

THE CASE OF SMETHURST.

The case of Smethurst, after months of delay, has at length been placed in a fair way of settlement; the Lord Chief Baron having received the following letter from the Home Secretary.

"Whitehall, Nov. 15, 1859.

"My Lord,—I have the honour to acknowledge the receipt of your Lordship's further report, of the 18th ult., on the case of Thomas Smethurst, who was convicted at the Central Criminal Court in August last of murder, and sentenced to death.

"As your Lordship suggests in that report that reference should be made to the judgment of medical and scientific persons selected by the Secretary of State, for the purpose of considering the symptoms and appearances of the deceased Isabella Banks, and the result of the analysis, I have sent the evidence, your Lordship's reports, and all the papers bearing upon the medical points of the case, to Sir Benjamin Brodie, from whom I have received a letter, of which I enclose you a copy, and who is of opinion that, although the facts are full of suspicion against Smethurst, there is not absolute and complete evidence of his guilt.

"After a very careful and anxious consideration of all the facts of this very peculiar case, I have come to the conclusion that there is sufficient doubt of the prisoner's guilt to render it my duty to advise the grant to him of a free pardon, which will be restricted to the particular offence of which he stands convicted; it being my intention to institute a prosecution against him for bigamy.

"The necessity which I have felt for advising Her Majesty to grant a free pardon in this case has not, as it appears to me, arisen from any defect in the constitution or proceedings of our criminal tribunals. It has arisen from the imperfection of medical science, and from the fallibility of judgment, in an obscure malady, even of skilful and experienced medical practitioners.

"I have, etc., "G. C. Lewis.

"The Lord Chief Baron, etc."

The fact that Sir B. Brodie has been fixed upon by the Home Secretary as the supreme arbitrator in this extraordinary case, is in itself a great compliment to the medical profession. We think we see in this act, moreover, something more than an acknowledgment of the great claims of the head of the profession to decide in a case eminently medical. We think we may look upon this act of the Home Secretary as the first official acknowledgment of Medicine as a new power in the State. The President of the Medical Council was the official person naturally communicated with by the Government; and the decision of our chief was no doubt gladly received by the perplexed Secretary as a happy means of release from an embarrassing position. That Sir B. Brodie has expressed the general opinion of the profession with respect to the guilt of Smethurst, there can be no doubt. The medical press, without an exception, dwelt upon the absence of sufficient proof; and we believe it was mainly owing to their energetic action that execution was stayed, and time was given for that second and more accurate weighing of the evidence which took place in the columns of the public press.

The imperfections of medical science are, we think, dwelt upon a little unfairly by Sir G. C. Lewis, as an excuse for the pardon he has advised Her Majesty to grant. Imperfect our science undoubtedly is, and the judgment of even the most experienced and skilful medical practitioners is fallible enough in obscure maladies; but it should not be forgotten that Smethurst's life was spared chiefly in consequence of our advancing knowledge of symptoms. The light thrown by midwifery on this case, in the evidence of Dr. Tyler Smith, clearly made men doubt who felt before quite certain of the prisoner's guilt. Twenty years ago he would have been hanged, for a certainty. The twelve jurymen would have taken a "common sense view" of the case, and his fate would have been sealed; but with more light comes more caution and doubt. Yet, strange to say, our progressive knowledge is charged against us. One thing, however, is quite clear; namely, that twelve men, picked at random among shopkeepers, are not fitted either by education or habit to weigh chemical or medical evidence. They may be very good judges of moral evidence; but here their capabilities end. We cannot, therefore, agree altogether with the Home Secretary when he absolves from all blame "the constitution and the proceedings of our criminal tribunals". It is a very common thing to find the verdicts of our juries reversed in trials involving the suspicion of insanity, and in such as the one under notice, where they have to give judgment in cases of conflicting medical testimony. This fact clearly proves that juries, as well as medical men, are very often fallible in the extreme.

Those who still believe in Smethurst's guilt will not be dissatisfied to find that he will not escape quite scatheless. He will be tried for bigamy; but, as the utmost sentence that can be inflicted for this offence is only four years penal servitude, he will not, in all probability, leave this country.

THE WORKING OF THE MEDICAL ACT.

There can be no fear that the zeal which has been exhibited by our medical registration associations and ethical societies is at all likely to die out, after a brilliant but transient flash. From week to week, there come under notice cases in which the activity of these bodies is called into play; and week by week a dislodgment, or at least a disturbance, is made of one or more persons whom the *Register* does not denote as being legally entitled to practise.

Nor does the utility of the extra-official support to the Act rest here. Whatever care is taken by the Registrar, it will unavoidably happen that, until the year 1815 shall have been receded from to a somewhat greater distance than now, persons will be found who will endeavour to claim registration on the ground of having been in practice before that year, and will even get placed on the *Register*. To assist in the elimination of such intruders into the *Register* where entrance has been gained on false representations, is one of the duties of the societies to which allusion has been made. Here is a case in point, which was adjudged on at the recent meeting of the Branch Council of Medical Education and Registration of England.

It appears that a John Lacey (formerly a gas-fitter, blacking-maker, etc.), of Shrewsbury, self-styled "Medical Herbalist,"

and agent of "Dr." Coffin, forwarded to the Registrar in April last a declaration made and sworn before Mr. John Gregory Brayne, a Justice of the Peace for that Borough, stating that he, the said John Lacey, was practising at the Old Bailey, in the City of London, as a medical practitioner, before the Apothecaries' Act of 1815 came into force; in consequence of which declaration, the Registrar inserted his name in "The *Medical Register*." The fact having become known to the Council of "The Salopian Medico-Ethical Society," an appeal against the Registrar's decision was soon afterwards made to the General Council of the United Kingdom, and by them referred to the Branch Council of England, who, at their meeting on the 19th October, ordered his name to be erased from the Register.

In our last number, we noticed *inter alia*, the case of a person named Airey, who had been brought before the Bristol magistrates on the charge of assuming professional titles, to which he had no right. The decision of the magistrates was pronounced on Saturday last. After referring to the clause in the Act, bearing on the case, and recapitulating the facts adduced at the previous examination, Mr. Naish, the presiding magistrate, observed that two questions arose for consideration:

"1. Did the defendant take and use the title and additions which have been alleged against him for the purpose of implying that he was registered under the Medical Act? and

"2. Did he so act for the purpose of implying that he was recognised by law as a physician and surgeon?"

On these, he delivered the following judgment:

"On the first point we think that reasonable doubt exists, and we therefore find that the defendant is not guilty of so much of the information as charges him with having done the acts in question for the purpose of thereby implying that he was registered under the Medical Act.

"On the second point we think that the words in sec. 40, 'recognised by law as a physician or surgeon,' mean that the person practising must be recognised by the *English law*. We think also that the Medical Act is *general* in its application, and that, although a person may be duly qualified according to the laws of a foreign country, he must satisfy the requirements of the Medical Act before he can legally practise in medicine or surgery in *England*.

"Under these circumstances, we find the defendant guilty of so much of the information as charges him with having done the acts in question for the purpose of implying that he was recognised by law as a physician and surgeon, whereas in fact he was not so recognised, and we convict him in a penalty of £20, and in default of distress one month's imprisonment."

This decision will probably be appealed against; and it was stated by Mr. Brice, the magistrate's clerk, that the Bench were very desirous that the case should be tried elsewhere, although they had acted to the best of their judgment. In deciding on the infliction of the highest penalty permitted by the Act, as well as in disposing of the quibbling objections against the *Register*, the Bristol magistrates have set an excellent example. In their conviction of the defendant, they placed the case on the very simple and common-sense grounds, that he had, in contravention of the Act, used titles implying that he was "recognised by law" as a practitioner: and the term "law" was interpreted to mean the law of England, irrespectively of that of any other nation—the indication of compliance with the law being the appearance of the name on the printed *Register*, or the proof, by the person objected to, of his being registered.

In concluding, we would call attention to the Medical Registration meetings which have within the last few days taken place in two of the most important districts of the kingdom. At Liverpool, a general meeting of the Registration Association of that town has been held, and the society has been duly organised. Its constitution and objects are analogous to those of the London Medical Registration Association. Its president is a highly valued member of the British Medical Association; among its vice-presidents is the present president of our body; and we observe the names of a number of our associates among its members. In Bristol, a meeting has been held, under the presidency of the President of the Bath and Bristol Branch, for the purpose of forming a Registration Association co-extensive with that Branch. A number of resolutions were passed; and the office of president for the next year was conferred on one of our associates, a physician of the highest standing in Bristol. There is one suggestion which we would make to our Bristol friends; that is, in framing rules in accordance with their third resolution, to word them so as to exclude homœopaths and other irregular practitioners. The London Registration Association has taken this precaution; and the Liverpool (and we believe other) Associations have done the same.

THE WEEK.

The superb contempt entertained by the military authorities for the civil power is at the present moment being exemplified at Rochester. In that town the military lunatic asylum appertaining to the Chatham garrison is situated; and this establishment, like many other public asylums in the kingdom, having become clogged with incurable cases, the authorities are determined to solve the difficulty of dealing with them in a way peculiar to their cloth—that is, by simply turning their hopelessly insane patients into the streets! The proposition is so monstrous, that our readers will scarcely believe it could be made in a Christian country. The Mayor of Rochester, however, has been informed that a madman will be let loose in the town at the very moment we are writing; and the civil authorities are enjoined to be in readiness to catch him before he commits any public outrage. The corporation of Rochester have, naturally enough, protested against being made chargeable with imperial liabilities of this nature; and we are not surprised that they have determined to resist this inhuman and doubtless illegal conduct on the part of the military authorities. There can be no doubt that the military arm of the service should have its hospital for insane incurables, where the afflicted soldier might pass the remainder of his days in the same comfort as incurably insane seamen do at the Haslar Hospital. In a moment like this, when our safety depends upon our soldiers, it does seem extraordinary that the military authorities should insult their best feelings by such extraordinary conduct.

A very gratifying testimony to the public benevolence of the town of Birmingham towards the General Hospital of that town has just taken place. This establishment, it appears, was in debt; and at the instance of Dr. Miller, the rector of the parish in which it stands, it was suggested that a particular Sunday should be set apart for a general collection in all the places of worship, in order to wipe out the burden. The suggestion was instantly acted upon; and churchman, dissenter, Jew, and Roman Catholic, on the day appointed, contributed their offerings at their various chapels in the sacred cause of humanity. The result was a subscription in one day of upwards of £3500—a splendid testimony this to the benefit the hospital has conferred upon the town, and to the public appreciation of the benevolent action of our glorious profession.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [General Meeting.]	White Lion, Bristol.	Thurs., Dec. 1st, 6.30 P.M.

BATH AND BRISTOL BRANCH.

DIPHTHERIA.

At the last Quarterly Meeting of the Bath and Bristol Branch, it was resolved that an inquiry should be set on foot with reference to diphtheria. Dr. William Davies, of Bath, will be obliged by answers to the following queries: the replies being numbered according to the questions.

1. Number of cases, ; age, ; sex, ; and general condition of patients.—2. Condition of throat, especially as regards the presence of false membrane, etc.—3. Mode of treatment; local and general.—4. Number of deaths.—5. Cause of death in fatal cases.—6. *Post mortem* appearances.—7. General remarks.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, November 14th, 1859.

Robert Wade, Esq., Vice-President, in the Chair.

PAIN AS A SYMPTOM OF DISEASE OF THE STOMACH.
BY S. O. HABERSHON, M.D.

Dr. Habershon commenced his paper by observing briefly on the difference in the value of pain as a sign of disease. As a general rule, mucous membranes were free from ordinary sensation, except at the external orifices, and were capable of undergoing a vast amount of pathological change without an increase of this sensation; the same was the case with the parenchymatous viscera. In serous membranes, on the other hand, almost every change was felt. In acute inflammation of these membranes, pain is often severe, as in pleurisy, peritonitis, synovitis, etc. In these cases, relief was capable of being obtained by rest; and the rest so obtained was not such as to interfere with life. Pericarditis formed an exception; here there was absence of pain, unless pleurisy were also present; and in pericarditis, rest of the organ was unattainable so as to be compatible with life.

With regard to pain as a symptom of disease of the stomach, the author set forth the following propositions, most of which he illustrated by cases. 1. Acute (so-called) inflammatory disease of the stomach may be free from pain if the mucous membrane alone be affected. It was commonly said that acute gastritis was very rare, and that its most usual cause was irritant poisoning: but this opinion, Dr. Habershon thought, arose from the comparative absence of pain in the disease, which he regarded as more common than is usually supposed. Even in irritant poisoning, if the mucous membrane alone be affected, there may be no pain beyond that which is produced by the violent muscular efforts of vomiting. In illustration of this, Dr. Habershon related two cases, one of poisoning by oxalic acid, followed by recovery; the other fatal, of poisoning by sulphuric acid, in which pain was absent. In the latter case, the mucous membrane of the stomach was found to be extensively destroyed; but the deeper structures were uninjured. He also referred to a case of poisoning by chloride of zinc, in which pain in the scrobiculus cordis was first complained of thirteen weeks after the accident. Death took place eight days afterwards; the stomach was found extensively ulcerated, and there was a perforation towards the cardiac end which was probably connected with the attack of pain. 2. Organic disease of the mucous membrane—*e.g.*, cancer,—may be comparatively free from pain. Cancer is often found deposited in the stomach where there has been no symptom of the disease in that organ during life. The author related a case of dropsy with cirrhosis of the liver, in which the anterior surface of the stomach was coated with a cancerous villous growth; the orifices were free. He had no pain in the stomach during life, nor vomiting. 3. Disease extending to the muscular and peritoneal coats of the stomach often produces severe pain, as in perforation. In some cases, Dr. Habershon had found branches of the pneumogastric nerve involved in the edges of ulcers. 4. The stomach is naturally capable of a certain amount of distension without sensation: but over distension of the organ produces severe pain. 5. Disease, especially acute, affecting the peritoneal covering of the stomach, is generally accompanied by severe pain. 6. Dr. Osborn has shewn that in some cases of gastric ulcer, the position which the patient assumes in order to obtain relief from pain, shows the seat of the disease. 7. In disease of the lesser curvature, near the pylorus, pain is felt as soon as food enters the stomach, and gives the idea of a disease of the œsophageal orifice. 8. Many conditions of functional disease of the stomach are entirely free from pain. 9. The pain in many so-called functional diseases of the organ is very severe; but it arises from a malcondition of the nerve-centres, and the intimate connection of the spinal and sympathetic nerves. 10. The effect of diseased conditions of the pneumogastric nerve, or of its branches, in connection with stomach disease, is a matter of interest. Vomiting has been produced by irritation of a reflex character; for example, in disease of the suprarenal capsules, the irritation here being communicated through the branches of the pneumogastric nerve distributed to these bodies. The dyspepsia of phthisis had been attributed to a similar cause; but, in Dr. Habershon's opinion, it more probably arose from the general state of malnutrition. 11. In functional disease of the stomach attended with pain after taking food, it is probable that severe disease of the pyloric orifice exists. 12. Pain may be produced by distension of the stomach, by gases arising from the decomposition of food. 13. In lesions of the stomach where pain may be expected, it is sometimes absent, from destruction of a portion of the pneumogastric nerves. 14. Pain at the scrobiculus cordis, simulating stomach-disease, often arises from other causes. It is often present with chronic bronchitis or obstructive valvular disease, being probably connected with an overfilled state of the right heart. 15. Aneurism of the abdominal aorta sometimes produces severe pain, which may be mistaken for that arising from a cancerous disease of the pylorus.

Dr. Gibbon objected to the statement (if he understood the author of the paper rightly) that disease of the muscular or serous coats of the stomach was necessarily attended with pain. He had seen ulceration—even perforating ulcer—attended with little or no pain, even when food was taken into the stomach; but, when the branches of the pneumogastric nerve were exposed, there was pain. He had met with a case of apparent gastritis from drinking iced champagne after dancing. There was at first severe spasmodic pain, almost producing collapse: but this did not continue. The patient invariably rejected his breakfast every morning after taking it. In this case, and in one which he had noticed of poisoning by chloride of antimony, the only food which the patients were able to tolerate was sopped beef.

The Chairman thought he had seen cases of perforating ulcer unattended with pain.

Dr. Mackenzie mentioned the case of a gentleman who for some time had signs of malignant disease of the stomach and digestive organs. In the course of time, a supposed cyst formed in the left hypochondriac region; which, after consultation with Mr. Quain, was opened, and a pint of fluid was discharged. The patient was relieved: but no pain was produced. He ultimately died of the cancerous disease, and, on *post mortem* examination, it was found that the supposed cyst was in reality the stomach, the opening of which had apparently been followed by no injury—the patient dying as he would otherwise have died.

Dr. Habershon said, with respect to the occurrence of pain in perforation, that almost any change, occurring slowly, may be unattended with pain. He had not intended to say that no disease of the muscular or serous coats of the stomach was without pain; but what he had especially wished to say was, that disease of the mucous membrane alone might be unattended with pain. He would ask the opinion of the Fellows of the Society on the question, whether the pain at the scrobiculus cordis in heart-disease was to be referred to the distention of the heart, or to the stomach.

Dr. Hyde Salter would corroborate the observations of Dr. Habershon as to the discrepancy often existing between the seat of pain and the seat of disease. The place, however, to which pain is referred is not haphazard; but the pain arising from the disease of a viscus in a cavity is referred to the

middle line of the body, at a point corresponding with the level of the diseased organ. Thus, in bronchitis, the pain is referred to the breast-bone or between the shoulder-blades. In disease of the stomach, the pain is referred to the scrobiculus cordis, and to the corresponding point in the spine. Again, in colic, the pain is generally between the stomach and the umbilicus, and also in the spine. This "fore and aft" character of the pain was also observed in other instances. Dr. Salter thought that the transfer of pain to the surface might explain the action of counterirritants to the external parts in inflammation of the viscera. The pain was probably reflex; and as the external sensation was affected by the vascular condition of the affected organ, through the sympathetic nerve, so, conversely, by the application of an irritant externally, at the seat of pain, a modification might be produced of the circulation of the diseased part.

Mr. Streeter called the attention of the society to the doctrines laid down by Sir Charles Bell regarding pain; and observed, in regard to Dr. Salter's view, that there were two remarkable exceptions,—viz., the pain in the right shoulder in liver-disease, and the pain and retraction of the testicle in disease of the kidney.

EPIDEMIOLOGICAL SOCIETY.

Monday, November 7th, 1859.

B. G. Babington, M.D., F.R.S., President, in the Chair.

PRESIDENT'S ADDRESS.

After the usual preliminary business of the meeting, Dr. Babington opened the session 1859-60 by an address, in the course of which he introduced an interesting *resumé* of the principal epidemics which had appeared in various parts of the world during the last twelve months, drawn up by Dr. McWilliam, the Secretary of the Society.

Cholera broke out in July last at Bombay and Poona, and almost simultaneously on the continent of Europe, selecting on this, as on former occasions, the city of Hamburgh as the scene of its development. It next appeared at Helsingfors, in the Gulf of Finland; and afterwards in Soultre, in Sweden; and, early in September, it declared itself in Stockholm. While cholera was prevailing in these northern latitudes, its appearance was also announced in Murcia, in the south-eastern part of Spain. This disease, however, soon abated here in the town; but it lingers still on the coast, as Alicante and Valentia are still considered as ports suspected of cholera infection. More recently, the disease had attacked Rotterdam and Bruges, at which latter place its progress was for some time most alarming. There was not, it appeared, any very satisfactory or trustworthy information with reference to the origin of the disease in any of the continental ports; but it was well known that, in the course of the past summer and autumn, cholera had been imported into several of the ports of this country by vessels from Hamburgh; viz., into the river Thames, in two different vessels; into Hull, Grimsby, Southampton, and North Shields. In the last named port, the disease was communicated to a lodging-house on shore, where it proved fatal to two of the inmates. From the time that the existence of cholera was known, our Government appear to have been fully alive to the necessity of taking measures against the invasion of this country by that scourge. Quarantine restriction was not resorted to, nor was the freedom of commerce or of intercourse with other countries at all interfered with; but every precaution short of these was taken by the authorities. All arrivals in the ports of this country, more especially in those having intercourse with Hamburgh, were carefully watched for cholera cases; and in those vessels where the disease did exist, a certain degree of isolation from other ships, and limitation of intercourse with the shore (but not such as to cause inconvenience), were recommended, and in all cases followed. The sick sailors brought into the Thames were at once transferred to the *Dreadnought;* and, had occasion required, cholera hospitals were ready for immediate use. The local authorities at such ports were exhorted to provide places of reception for poor passengers and seamen who might arrive suffering from cholera. They were also furnished with the admirable provisional memorandum drawn up by Mr. Simon, which earnestly urged upon local authorities the immediate and energetic exercise of the powers conferred on them by the Nuisances Removal Act during the prevalence of cholera, diarrhœa, diphtheria, typhus, or any other kind of fever; and which also contains concise and clear suggestions for the prevention and mitigation of these and other epidemic disorders.

Diarrhœa was unusually fatal in London during the past summer, and a death from cholera was occasionally to be found in the Reports of the Registrar-General. Partial outbreaks of cholera, as on the banks of the Itchen, near Southampton, were said to have occurred in some of the country districts; but nowhere in this country, except at Wick, in Caithness, and at Glass Houghton, in the parish of Castleford, near Pontefract, had the disease appeared in an epidemic form.

In the West Indies, *yellow fever* had been prevalent at several of the islands, more especially at Antigua, Trinadad, and St. Thomas. In the *La Plata*, which arrived last week at Southampton from St. Thomas, there had been fifteen deaths from yellow fever during the passage home. Much remained to be done in the way of improving military barracks in the West Indies; and, indeed, a thorough and minute inspection of all barracks in these islands seemed absolutely necessary, if we intend to put an end to, or at all events to mitigate, the evils of every-day occurrence in that part of our colonial possessions.

Scarlatina and *diphtheria* had prevailed in most parts of this country, and more especially in the rural districts. Diphtheria had also appeared in Australia. The origin and progress of this disease in a country like Australia, which had all along enjoyed a comparative exemption from epidemics, were subjects worthy of careful investigation.

Allusion was next made to the Permanent Public Health Act, which was happily carried through Parliament during last session. Among the important objects obtained with this Act was the placing of the public vaccination of England and Wales under medical supervision. The regulations for the necessary staff were most anxiously expected, and would, it was to be hoped, enable this country to realise to a far greater extent than it had yet done the benefit conferred by the magnificent discovery of Jenner. For its sins of omission in this respect, England was at this moment being scourged. The great small-pox epidemy, which commenced in 1857, had within the last twelve months had possession of this metropolis, within the limits of which scarcely less than one thousand persons have paid in this period by death, and probably ten times that amount by sickness, the penalty of their neglect of, or of the imperfect manner in which they have received the great prophylactic of, vaccination.

Dr. Babington concluded his address by exhorting the members to zeal in furnishing papers for the Society, and in regular attendance at the meetings.

ON ZYMOSIS. BY B. W. RICHARDSON, M.D.

Dr. Richardson first considered the process of fermentation as it occurs *out* of the body. He dwelt on the different views which have been held as to the nature of this process, explaining that they divided themselves into three groups—the vital, the physical, and the chemical. In regard to zymosis, or ferment *in* the body, the view generally held was linked with the idea of vital character of the fermentation process. The author then commented on the objections which might be urged against the vital hypothesis, and presented a reading of the subject which, resting on a basis purely chemical, explained much that was obscure and conflicting. He did not oppose the idea of zymosis; on the contrary, he gave to it a direct affirmative; but he argued in reference to three points—1. That the virus exciting the fermentation was simply an albuminous product; 2. That the virus was not by its *presence* the cause of the symptoms, but that the symptoms of the epidemics or zymotics were due to the presence of new chemical products resulting from the new chemical changes; 3. That the reappearance in some cases of the virus as an excrete was a necessary result, but that the origin of the virus was purely local. Dr. Richardson next passed on to show that, if the views he had advanced were tenable, they would explain many points which otherwise are all in confusion, would link certain diseases to the *zymotici* which are not at this moment ranged in that list, and would yet at the same time reduce the verbal list of zymotics to a few units. In the first place, he urged, the theory of zymosis, as he explained it, disclosed the reason of the analogy which exists between diseases acknowledged to be communicable, and certain other diseases which are not considered communicable, such as dissecting-room cholera. In the next place, it explained the reason why a small equally with a large quantity of poison introduced into the body excites the same intensity of effect. Thirdly, the theory suggested an alliance between diseases arising from the absorption of poisons, and diseases pro-

duced by changes occurring in the body spontaneously, such as rheumatic fever and tetanus. Fourthly, it explained why the majority of zymotic diseases got well of themselves. If the poisons of these diseases were vital, and increased or multiplied in the body, the reproduction would last so long as the material for the continuance of the reproduction were present. But if the process were simply chemical, as he supposed, there was a direct reason why the diseases ran a limited course, inasmuch as chemical changes, having no independent continuance when their causes were removed, ceased necessarily after a time, together with the symptoms excited by them during the period of their operation. Lastly, on the theory suggested by the author, an immense field was opened for direct experimental inquiry. Here scientific researches might take two directions, the one towards tracing the action of known poisons on animals, and exciting diseases analogous to the zymotic diseases after the synthetical method; the other towards ascertaining whether diseases so excited could be transferred to subjects previously unaffected. Dr. Richardson claimed tetanus to be essentially zymotic. His theory of its production in traumatic cases was, that the wound, in the process of healing, secreted a special albuminous product, which had the property of a ferment. This substance, absorbed into the body, excited new chemical changes; and, as a product of these, there was developed an alkaline or alkaloid substance, having properties analogous to those of strychnine. Whether the patient should or should not recover depended, therefore, on the circumstance of this produced poison being or not being eliminated from the system by the excretions, before the tetanic symptoms excited had progressed to a certain degree. If the symptoms were extended, or were moderate, or were moderated by medicinal means, the poison might be eliminated, and the patient might recover; or the reverse. In regard to tetanus, two experimental questions were open for solution; viz.: Will the secretions from a wound in a tetanic patient, introduced by another wound into a healthy animal, excite tetanus? Secondly, Are the secretions, say the urine, of a tetanic patient, capable, like strychnine in solution, of exciting tetanic spasm in a susceptible animal?

Mr. Radcliffe asked Dr. Richardson to explain the steps in the zymotic process a little more in detail.

The President asked the author to sketch out the line of experimental inquiry which he proposed to pursue.

Dr. Milroy thought the author's theory did not, as he had understood it, supply sufficient reason for the spontaneous development of certain zymotic disorders, such as cholera or typhus.

Dr. Camps suggested that the diseases which the author had excited in the inferior animals were not *the* diseases, but analogous affections.

Mr. Spencer Wells noticed the particulars of two cases of tetanus occurring in his own practice after ovariotomy.

The author having replied, Dr. Waller Lewis moved, and Dr. Milroy seconded, a vote of thanks to him for his paper; and the President, in putting the resolution to the vote, stated that he hoped Dr. Richardson would favour the Society with further records of his researches in this important field; and that, should he at any time require such assistance, a committee should be formed to observe the results of his experiments.

Editor's Letter Box.

THE JOURNAL: THE FINANCIAL CONDITION OF THE ASSOCIATION.

Letter from John Dix, Esq.

Sir,—Through the courtesy of our respected Treasurer, I have at length received an answer to the question I publicly asked some weeks ago, viz., What was the amount due to the printer and publisher at the end of the last year? Contrary to custom, no statement of liabilities, except the debt to the Treasurer (£297), was given in the last financial statement; yet, at this very time, the printer's bill—which there were no funds to meet—was "about £600", making a total of £897—the real debt of the Association at the commencement of 1859, and chargeable upon the income of that year.

This statement will probably be received with surprise, or even with incredulity, by many of our associates; yet I believe it to be accurate, indisputable, and even easy of proof. It is a matter of the greatest importance; and I need scarcely bespeak the special attention of every member of the Association to the following considerations.

The debt of the Association has always been exhibited under two heads, viz., the sum due to the Treasurer, and the sum due to the printer and publisher, at the end of each year. This division may be explained on the supposition that, when our account with the Treasurer is overdrawn to a certain amount, he declines to advance more money; and so the payment of outstanding bills is necessarily deferred till fresh subscriptions come in at the beginning of a new year. Of course when this happens the whole of the debts can be paid off; but thus a serious inroad is at once made upon the new income (which ought to meet the entire charges of the current year), so that before the year is ended the money is all expended, the Treasurer's account is again overdrawn, and unpaid bills again accumulate. Such was the state of affairs in 1855; such it was in 1858; and such it probably is now.

Here is a tabular statement of the debt since 1855, extracted from the published balance sheets of the respective years.

Year.		Debt.	Reference.
Dec. 31, 1855	Treasurer . .	692	Journal,* Aug. 9, 1856, p. 674.
	Printer, etc. .	602	
		£1294	
Dec. 31, 1856	Treasurer . .	475	Journal, August 8, 1857, p. 669.
	Printer . . .	527	
		£1002	
Dec. 31, 1857	Treasurer . .	300	Journal, August 7, 1858, p. 653.
	Printer . . .	538	
		£838	
Dec. 31, 1858	Treasurer . .	293	Journ., Aug. 6, 1859.
	Printer . . .	600	Private letter from Sir C. Hastings.
		£893	

Hence we learn, that the sum due to the Treasurer is not a full representation of the debt of the Association, but that we must add thereto the amount owing for printing and publishing, and any other outstanding bills; and it is obvious that, if the debt on January 1, 1856, was £1294, it was £893 on January 1, 1859; whilst the decrease of the debt in this space of time is exactly shewn by the difference between these two sums, viz., £401.

Nor is there any mystery about the manner in which this reduction has been brought about. In the year 1856, the 10*s.* "call fund" produced £492,† being £91 *more than the entire diminution of the debt* since 1855. Hence it follows that, during this time, the *natural* income of the Association *has not equalled the expenditure*. On the contrary, except for the extra sum raised by special contribution, the liabilities of the Association at the commencement of the present year would have exceeded those of January 1, 1856, by this same sum of £91, and the debt would have been no less than £1385.

What becomes of the statement of the Council, "that since 1856 the debt has been considerably diminished" by means of the "call fund", and in consequence of "*the income having since that time exceeded our expenditure*"? what of the glaring inaccuracy contained in the editorial statement, that "the financial difficulty is not only not increasing, but rapidly proceeding to the vanishing point"? and that "out of the £2000 that hung over our heads five years ago, but little more than £300 now remains"? (See Journal, Oct. 8, 1859, p. 817.)

And what becomes of the document published as a balance sheet at the last general meeting, which mentions as our *only debt* the sum of £293 due to the treasurer—although we had then other debts of "about £600"—and which, by exhibiting a diminution of £7 in the treasurer's account, sought to cajole us into the belief that our income had exceeded our expenses? Whereas, it turns out that the suppressed debt had increased £62, viz., from £538 to £600. So, that instead of this illusory surplus of £7, there was an actual deficiency of £55, *by which sum the debt of the Association had been augmented*, viz., from

* In the last report of the Council (see Journal, Aug. 6, 1859, p. 628) it is stated that the debt in 1856 amounted to near £2000. This is clearly an error. The report on finance drawn up by a committee appointed specially for the purpose, shows a deficit of £1294, as I have given it above.

† The total accruing from the "call fund" was greater than the sum here given; the exact amount is not clearly shewn, but there is evidence that some portion of the income of 1857 arose from this source, although no mention is made of it in the *financial statement for the whole year*. But in a supplementary balance sheet for the *half-year* ending June 30, 1857, this item occurs—Arrears and *calls* £146. (See Journal, Aug. 8, 1857, p. 669.)

£838 at the end of 1857, to £893 the adverse balance on December 31, 1858.

Further comment on this matter would be for the present superfluous; I prefer to leave the naked facts—which I hope I have made sufficiently plain—to the calm and unprejudiced judgment of each brother associate. For my figures, I challenge the closest scrutiny; and for the convenience of those who wish to test their accuracy, I have appended a complete and minute reference to the various balance sheets from which my calculations have been made, which I hope will save others a great deal of the trouble and labour which this investigation has cost me.

I am, etc., John Dix.

Hull, November 15th, 1859.

[Mr. Dix arrives at the extraordinary conclusion, that the balance against us at the end of last year was £893, by the facile process of entirely ignoring the good debts owing to us. We have before pointed out this error in his method of calculation, and we must express our surprise that he again deliberately repeats it. We need scarcely say that his conclusions are totally illusory. With regard to his charge against the Council and Treasurer, of having *cajoled* the associates with respect to their accounts, we have no doubt those gentlemen will be able to answer it to the satisfaction of our readers. Editor.]

THE JOURNAL.

Letter from Joshua Parsons, Esq.

Sir,—Now the storm of debate caused by Mr. Dix's agitation has in some measure subsided, I wish to speak a word for the Journal, in the name of the country practitioners. We, as a class, have ever formed the backbone of the Association; and, from the list of members in this week's issue, appear not to have lost our relative importance in its ranks.

Amongst my country brethren, I have been for many years a strenuous advocate for the Association, and have ever found the promise of a weekly Journal the most potent and effective argument in its favour; and I wish to record my firm conviction, that the discontinuance of this boon would be the signal of withdrawal for hundreds. The true way to make our body prosper, is to increase the efficiency of the Journal by all possible means. Too many of my rural compeers cannot afford the price of all the medical periodicals, nor the time necessary for their perusal; and yet are loth to feel themselves debarred from most of the new opinions and practices which are daily springing up in the profession. To such, a most welcome addition to the ordinary contents of the Journal, would be a weekly or monthly summary of such practical hints, discoveries, or histories of new phases of disease, as may be found scattered in the medical literature of the period. An excellent illustration of my meaning will be seen in an article appearing in each monthly part of *Chambers's Edinburgh Journal*, entitled "The Month: Science and Arts". Such a summary, especially if accompanied by well timed editorial comments, would, I believe, be interesting to all, as indicating at one glance the set of medical opinion and practice; and its space would hardly be grudged by the more favoured dwellers in cities and large towns.

I am, etc., Joshua Parsons.

Beckington, Somerset, Nov. 15, 1859.

THE JOURNAL: FINANCIAL AFFAIRS.

Letter from George May, Jun., Esq.

Sir,—The importance of a good Journal to the welfare of the British Medical Association, has induced me to examine the financial reports presented at the last three annual meetings; and I venture to call your attention to the following statement.

The arrears in 1856, amounted to £666; in 1857, to £162; in 1858, to £498.

These sums are obtained by deducting the amount actually received from the estimated amount, calculated from the number of members. We may therefore fairly reckon the yearly loss at £400; but this does not represent the worst of the case, for each copy of the Journal costs the Association, say 10*s.* per annum (the Journal is estimated by Dr. Henry to cost 15*s.* 6*d.*). Therefore the loss of the subscriptions for the last three years, has involved an actual outlay of £200 per annum.

Does not this prove that there is something very defective in our present financial system? You are aware that the plan now followed is to allow members to pay their subscriptions either to the Treasurer, the Secretary, the Secretary of the Branch, or to the publisher of the Journal. The Secretary of each Branch is accustomed to apply for the subscription early in January; and, if the amount is not paid before the annual general meeting, it becomes the duty of the General Secretary to apply for it. This method leads to much confusion; and the Secretaries of the Branches become unwilling to ask for money, that may have been paid to other parties. I propose the following for your consideration:—

1. That every member of a Branch shall pay his subscription to the Secretary of that Branch.

2. That a report shall be made to the Executive Council each year, at its first meeting, of the members whose subscription is more than one year in arrear; and that a circular shall be sent by the Council to each defaulter, to inform him that the publications of the Society will be withheld.

3. That the names of all members whose subscriptions have been in arrear for three years, shall be reported to the Executive Council.

I hope this proposal will elicit an expression of opinion on this important object, and am, etc.,

George May, jun.

Reading, Nov. 1859.

THE JOURNAL.

Letter from Thomas T. Griffith, Esq.

Sir,—As no plan has been proposed by which the opinion of the Association at large can be obtained respecting the merits of its Journal, there seems to be a call upon each member interested in the subject to express his estimate of its value as a Journal adapted to the requirements of the Association. As one of its earliest members, I have had the opportunity of watching the rise and decline of its publications for the first years of its existence. The *Transactions* are a standing memorial to the intelligence, industry, and extensive information of the contributors to them, and must ever form valuable records of the special subjects treated of; but this was done more comprehensively and at greater length than the limits of a weekly journal could admit.

With regard to the Journal as now conducted, I am bound to say that it has afforded me week by week valuable information on topics the most interesting to a professional reader. It tells us not only what our fellow-associates are doing in the common field of professional duties, but it also seems to give us an insight into the details of their more private walk. It tells us of their success, their appointments, and well merited honours, whilst living; and pays a just tribute to their memories when no longer among us, and from their lives points a moral to the survivors. These are matters of social interest, which keep up a mutual sympathy, and by a pleasant bond, more deeply felt than described, draw us into closer union than the outward form of Association fellowship can ever do. Should the Journal cease to circulate among us, I for one should regret the absence of a friend whose visits are always agreeable and instructive.

I believe, in common with many others, that its pages might be enriched to a greater extent than at present, from those stores of individual knowledge and experience which otherwise will perish with their possessors. What valuable information would accumulate from details of cases of every day's occurrence! They would form a trustworthy basis for correct statistics, as coming from many different sources, and would afford a reliable body of evidence for the correction or confirmation of the views and practice of others engaged in the same field of labour, and who would thus find that the same diseases may present varied aspects without losing their essential characteristics.

It may fall to the lot of the few only to tie the abdominal aorta, or amputate at the hip-joint; but it must fall to the lot of all to have perilous and trying cases in midwifery, to meet with diseases, in themselves simple, rendered complicated and perplexing by the psychical and physical peculiarities of the patients. The sphere of each man's practice from local circumstances will often have a peculiar or modified character stamped upon his surgical cases. The severe injuries of the head and chest, the comminuted and complicated fractures of the limbs helping to solve the question of primary or secondary amputation, the casualties from blasting rocks, extensive burns, and the effects of noxious airs, will form the general practice of the surgeon in mining and manufacturing districts; whilst lacerated wounds, accidental hæmorrhages of every kind, will be

met with where agricultural and paper-making machinery are used. In all these cases, the best energies, all the information and experience, and all the resources of an active and intelligent and self-possessed mind, will be called for. The modifying influences of hereditary tendencies, age, health, habits, moral and physical, will be observed, and the resources of nature and her aims in the reparatory processes will afford matter of deep interest to the surgeon and physiologist; and, lastly, we have the opportunities of marking the varied phases of epidemics in their onset, progress and decline, and the effects of remedies in their treatment. These, and other matters of frequent occurrence could easily be recorded in the pages of our Journal, and in no other way be made so readily accessible to every member of the Association.

I am, etc., Thos. T. Griffith.

Wrexham, November 16th, 1859.

THE EMPLOYMENT OF MERCURY IN TRAUMATIC INFLAMMATION OF THE EYE.

Sir,—In answer to Mr. Harrinson's question, I beg to suggest that the first opinion is a sound one, and the second no less so; and that the two are "diverse", because the subjects are. The first is a question of treating a wound of the eye; the second refers to treatment of the inflammation following a wound, the wound possibly having healed. No one, I imagine, will doubt the tendency of mercury to prevent union of wounds in this organ, nor yet the power of mercury over traumatic iritis.

I am, etc.,
A Surgeon.

Old Steine, Brighton, Oct. 29th, 1259.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Doman, Edward W., Esq., Surgeon, Herne Bay, on Oct. 23.
Forster, J. C., Esq., Surgeon, Wellington Street, E.C., on November 16th.
Miller, —, M.D., Staff-Surgeon R.N., Grosvenor Place, Camberwell, on October 22nd.
Smiles, Wm., M.D., Bedford Square, on Nov. 15th.

Of daughters, the wives of—

*Butler, Frederick J., Esq., Surgeon, Winchester, on Nov. 14.
Canton, Alfred, Esq., Surgeon, 17, Great Marlborough Street, on November 14th.
Clark, F. Le Gros, Esq., Surgeon, at Lee, on November 9th.
Drury, J. S., M.D., 13, Radnor Place, W., on Nov. 14th.
Lowe, W. H., M.D., Balgreen, near Edinburgh, on Nov. 10.
May, William, M.D., at Oporto, on Oct. 20th.
Taylor, Charles, M.D., Camberwell, on November 10th.

MARRIAGES.

Barnard, George, M.D., Indian Army, to Emma Shakespear, third daughter of Thomas R. Clarke, Esq., of the East India House, at Mussooree, on September 28th.
Chapman, Alfred, Esq., Edenham, Ahuriri, New Zealand, to Elizabeth, eldest daughter of G. D. Monteith, Esq., Colonial Surgeon, Wellington, New Zealand, on August 29th.
Dick, John, M.D., Broombank, near Midcalder, to Bethia Hamilton, daughter of the late Rev. John Sommers, D.D., minister of Midcalder, at Edinburgh, on November 10th.
Harrison, Francis, Esq., Medical Staff Indian Army, to Elizabeth E. A., only child of John A. Woolls, Esq., of Fareham, late 9th Foot, on November 9th.
King, George H., M.B., of Horncastle, to Eliza, eldest daughter of William Gilliat, Esq., of Martin, at Ewerby, Sleaford, on November 9th.
Williams, William, Esq., of Whittlesea, to Susan Frances, third daughter of T. W. Burt, M.D., late H.E.I.C.S., at Tiverton, on November 11th.

DEATHS.

Coventry, John, Esq., Surgeon, at Cheltenham, aged 42, on November 12th.
Doman. On November 2nd, at Herne Bay, the wife of E. W. Doman, Esq., Surgeon.
Hine, D. B., Esq., Surgeon, at Ripley, aged 30, on Nov. 9.
Lloyd. On October 3rd, at Sammcattah, Madras, aged 10 weeks, Sophia E. D., only child of Edmund E. Lloyd, Esq., Assistant-Surgeon Madras Army.
McCulloch, George, M.D., Staff-Surgeon, late 5th Dragoon Guards, at Connaught Terrace, on October 31st.
May. On October 18th, at Oporto, William F., infant son of William May, M.D.
Shute. On November 9th, at Dursley, aged 70, Mary E., widow of the late Hardwicke Shute, M.D.
Wansbrough, Thomas W., M.D., aged 71, on November 9th.

APPOINTMENTS.

Lebert, M., has been appointed to the Chair of Clinical Medicine at Breslau, lately occupied by Frerichs.
*Little, John C., Esq., elected Mayor of Boston.
Williams, E., M.D., elected Mayor of Colchester.

PASS LISTS.

Royal College of Physicians of London. Fellows elected on November 2nd:—

Ayre, Joseph, Hull
Barclay, John, Leicester
Beale, Lionel S., London
Beattie, William, London
Black, James, Edinburgh
Cammack, Thomas, Spalding
Dickinson, Joseph, Liverpool
Evanson, Richard T., Torquay
Greenhow, Edwd. H., London
Hall, C. Radclyffe, Torquay
Hoskins, Samuel E., Guernsey
McWilliam, James O., London
Meryon, Edward, London
Odling, William, London
Olliffe, Sir Joseph, Paris
Parker, Nicholas, London
Pavy, Frederick W., London
Rolleston, George, Oxford
Thurnam, John, Devizes
Weber, Hermann, London

Apothecaries' Hall. Licentiates admitted on *Thursday, November 3rd*, 1859:—

Booth, S., jun., Huddersfield
Daniel, T. P., Beaminster
Hughes, A. J., Dartford
Ruck, David, Cirencester
White, Wm. Acraman, Frome, Somerset

The following gentlemen also, on the same day, passed their first examination:—

Duke, Stephen, Chichester
Hocking, J., St. Ives, Cornw.
Williams, John, Brecon, South Wales

Thursday, November 10th:—

Greene, John, Sedgley, Staffordshire
Simmons, B., Taunton College
Willis, William, Enniskillen

The following gentlemen also, on the same day, passed their first examination:—

Farrant, Samuel, Cullompton, Devonshire
March, Henry Colley, Newbury, Berkshire

HEALTH OF LONDON—NOVEMBER 12TH, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... {Boys .. 918 / Girls .. 930}	1848 ..	1051
Average of corresponding weeks 1849-58 ..	1592 ..	1174

Among the causes of death were—bronchitis, 102; pneumonia, 60; hooping-cough, 14; small-pox, 21; scarlatina, 98; diphtheria, 8. Of bricklayers, there died 1, of bricklayers' wives, 1, of bricklayers' children, 5; of carpenters, 8, carpenters' wives, 4, carpenters' children, 7; of painters, 8, painters' wives, 7, painters' children, 9; of plasterers' children, 1.

Barometer:

Highest (Thurs.) 30·555; lowest (Sat.) 29·360; mean 30·022 in.

Thermometer:

In sun—highest (Mon.) 66·2°; lowest (Thurs.) 50°.
In shade—highest (Sun.) 60·4°; lowest (Thurs.) 29°.
Mean—43·7°; difference from mean of 43 yrs.—0.9°.
Range—during week, 31·4°; mean daily, 13·0°.

Mean humidity of air (*saturation*=100), 78.
Mean direction of wind, variable.—Rain in inches, 0.52.

MEDICAL REGISTRATION.

LIVERPOOL MEDICAL REGISTRATION ASSOCIATION.

A general meeting of the members of this Association was held at the Medical Institution, Mount Pleasant, on Wednesday, November 9th, at 7 p.m. The Chair was taken by the President, Ellis Jones, Esq., and there were also present thirty-nine members, including Drs. Vose, Stookes, Waters, etc. The minutes of the last meeting having been confirmed, the Honorary Secretary (Mr. A. B. Steele), read the report of the Provisional Committee appointed at the last general meeting to draw up a code of laws, etc.

1. Dr. Vose proposed, and Mr. Desmond seconded—

"That the report be received."

This proposition was carried unanimously.

2. It was proposed by Mr. Godden, seconded by Mr. Mather, and carried unanimously—

"That the following gentlemen constitute the committee and office-bearers of the Association for the ensuing year; *President*—Ellis Jones, Esq.; *Vice-Presidents*—Edward Batty, Esq.; John P. Halton, Esq.; John Macnaught, M.D.; James Vose, M.D.; *Honorary Secretary and Treasurer*—Arthur B. Steele, Esq.; *Committee*—R. Y. Ackerley, Esq.; Henry Anderton, Esq. (Wavertree); E. R. Bickersteth, Esq.; T. Bickerton, Esq.; L. E. Desmond, Esq.; Joseph Dickinson, M.D.; King Ellison, Esq.; Joseph Godden, Esq. (Birkenhead); W. H. Manifold, Esq.; W. M'Cheane, Esq.; Hugh Neill, Esq.; John O'Bryen, M.D.; David Paterson, Esq.; Edward Parke, Esq. (West Derby); Henry Pritchard, Esq. (Fairfield); A. R. Stookes, M.D.; James Turnbull, M.D.; A. T. H. Waters, M.R.C.P."

3. The Honorary Secretary then read a code of rules and by-laws. The following are the rules:—

1. This Association shall be called "The Liverpool Medical Registration Association." 2. The objects of this Association shall be to watch the working of the Medical Act, to suppress illegal practice, and to assist the Registrar, under the Medical Act, in securing a correct registration. 3. All practitioners of orthodox medicine, who are entitled to be registered under the Medical Act, shall be eligible to become Members, and none others shall be allowed to be Members. 4. Each Member shall pay an annual subscription of five shillings; and no Member shall be entitled to exercise the privilege of membership whose subscription is two months in arrear. 5. The affairs of the Association shall be conducted by a President, four Vice-Presidents, an Honorary Secretary and Treasurer, and a Committee of eighteen members. 6. The President, Vice-Presidents, and Honorary Secretary, shall be *ex-officio* members of the Committee. 7. The President, Vice-Presidents, Honorary Secretary and Treasurer, and the Committee shall be elected at the Annual General Meeting of the members, to be held early in October; and all the Officers and the Members of the Committee shall be eligible for re-election.

The rules and bye-laws having been considered *seriatim*,

Mr. Hakes proposed, and Dr. Heywood Thomson seconded, the following resolution, which was carried unanimously—

"That the code of rules and bye-laws drawn up by the Provisional Committee, and now read to this meeting, be adopted, and constituted the laws for the future government of the Association."

A vote of thanks to the chairman, which was carried by acclamation, terminated the proceedings.

BRISTOL AND BATH MEDICAL REGISTRATION ASSOCIATION.

On Thursday, November 10th, a general meeting of the medical profession practising in Bath and Bristol, and the adjacent districts, was held at the Institution, Park Street, Bristol. The meeting was convened by circular; and the attendance of the profession was numerous. Dr. Davey, President of the Bath and Bristol Branch of the British Medical Association was proposed, and unanimously chosen chairman.

1. Dr. Herapath proposed, Mr. Stansfeld seconded, and it was carried unanimously—

"That this meeting considers it desirable that a Local Medical Registration Society should be formed for this district, to look after the general welfare of the profession."

2. Dr. Tunstall proposed, and Mr. J. J. Evans seconded, and it was carried by a majority—

"That the name of the Society be the Bristol and Bath Medical Registration Association; and that the district belonging thereto comprise an area of fifteen miles round Bristol and Bath respectively, as well as the towns of Wells, Shepton Mallet, Weston-super-Mare, Warminster, Swindon, Devizes, and their vicinities."

3. Dr. McDonald proposed, and Dr. W. Day seconded, and it was resolved—

"That all duly qualified practitioners in medicine and in surgery be eligible to become members of this Association; that in future admission shall be by ballot, and the affirmation of two-thirds of the members voting shall be necessary to secure the election."

4. Mr. Godfrey proposed, and Mr. E. S. Mayor seconded, and it was resolved unanimously—

"That the officers of this Association shall consist of a President, three Vice-Presidents, Committee, two Treasurers, two General Secretaries, and Local Secretaries when necessary."

5. Dr. Henderson proposed, Dr. Kay seconded—

"That the committee consist of twenty elected members with the officers of the society; ten to be residents of Bristol; five of Bath; and five of the country districts—five to form a quorum."

The following amendment was proposed by Dr. Davies, and seconded by Mr. Norman—

"That the committee shall consist of twenty members; ten to be elected by the Bristol district, ten by the Bath district, with a president to be chosen annually from each district."

The amendment was carried by a large majority: therefore the original resolution was lost.

6. Mr. D. Davies moved, and Mr. A. Smith seconded, and it was resolved unanimously—

"That the annual subscription be five shillings, payable in advance on the first of January."

7. Dr. Herapath proposed, and Dr. Budd seconded—

"That Dr. Symonds be elected president for the ensuing year,"

Which was carried by acclamation.

8. Dr. Tunstall proposed the election of three Vice-Presidents; when Dr. Davies moved as an amendment, and which was seconded by Mr. Stone—

"That the election of the remaining officers be by ballot; and that voting papers containing the list of members of the Registration Association shall be sent to each member in the district in which he resides, by the secretary of that district. Members shall vote for three Vice-Presidents, and twenty members of Committee: the members of each district voting for ten members only of their own district. The returns to be made to a general meeting of the Association to be held at this place on the 1st of December, at 3 p.m."

Mr. Evans moved, and Dr. Tunstall seconded—

"That the election of officers proceed in the same way as the election of President."

On these two amendments being put from the chair, the latter was lost by a large majority; and the former was carried almost unanimously.

9. The Secretaries of the Bath and Bristol Branch were then requested to act as Secretaries *pro tem.*; and the names of those present being read over, with hardly more than a single exception they all expressed their intention of joining.

10. Dr. Davies moved, Mr. Stone seconded, and it was carried by a large majority—

"That the same division of districts shall hold in the Registration Association as now exists in the Bath and Bristol Branch of the British Medical Association."

11. It was proposed by Mr. Prichard, seconded by Dr. Budd, and carried—

"That an advertisement be inserted in the Bath and Bristol papers, requesting any members of the medical profession who may be willing to join the Medical Registration Association, to send their names to Dr. Davey, Park Street, Bristol, on or before the 24th inst., in order that they might be ballotted for previous to their admission."

The meeting terminated with a vote of thanks to the managers of the Bristol Institution, for their kindness in allowing the use of their theatre; and also to the Chairman, Dr. Davey, for his able presidency; which were both carried unanimously.

POOR-LAW MEDICAL REFORM.

The following letter has been addressed by Mr. Griffin to the Medical Officers of Unions:—

"12, Royal Terrace, Weymouth, November 9th, 1859.

"Dear Sirs,—It is now some months since I had the pleasure of addressing you individually; but the time has arrived for us to prepare for the approaching session of Parliament, when I hope the Poor-Law Board will bring in a Bill for an amendment of the laws relating to the medical relief of the poor. Should they, however, decline to carry out the promises of their predecessors, it is right that we should be prepared with a Bill for an independent member of the House to introduce, and it is with this view I now submit for your consideration the draft of a Bill, which is an amendment of the one previously brought under your consideration. The alterations in it are founded upon the suggestions I have received. The dread of opposition to the defining of the class of persons to be entitled to medical relief has led me to omit that clause, though I still think it would be well for the sake of the community at large, that all poor persons whose earnings are only a few shillings per week, should have a right to gratuitous medical assistance, and not be left to the caprice of a relieving officer to give or withhold an order; this change would be the means of saving innumerable lives, and much loss to the poor-rates. The suggested alterations in the qualifications of future medical officers, are founded upon the double qualification required by the Poor-Law Board [Art. 168] coupled with those required by the Medical Act to allow of registration, and a desire that our Irish and Scotch brethren should have equal privileges with ourselves.

"The important clauses relative to remuneration, are founded upon the suggestions of the late President of the Poor-Law Board, the Right Hon. T. Sotheron-Estcourt; and, as the plan proposed is based upon just principles, I trust it will meet with your approval. The vaccination clauses may or may not be the subject of a separate Bill; but I think it right that we, as practical men, should lay before Parliament our views on the subject. The working of the vaccination act has, to a considerable extent, been a failure, and such it will continue to be, until medical men are fairly rewarded for their services. There are other clauses, though of minor importance, still worthy your attentive consideration, and I feel sure you will not fail to give me your candid opinion of them; but before doing this it would be well to call a meeting of your colleagues in each Union, to discuss the several sections. My sole object has been to frame an Act that will meet the requirements of the profession, the poor, and the rate-payers; without this combination it will be impossible for us to get the legislature to pass any Bill. The medical journals of the last few months, have, with their usual liberality, informed you that the cause has not been permitted to lie dormant; for, immediately upon the appointment of the present Poor-Law Board, I addressed a letter to them, the last paragraph of which is as follows:—'Once, again, I beg your Hon. Board will take up our cause without delay, and carry out the promises made by your honourable predecessors in office, and that you will carefully remodel a system which is cruel in the extreme to very many of your officers, and, I greatly fear, is also injurious to the sick poor." To this I received a reply 'that as soon as the Board is complete, your communication will be brought under the notice of the President.'

"On July 16th, I again addressed the Poor-Law Board, enclosing for their consideration the draft of a proposed Act of Parliament (in substance somewhat similar to the one I now send you, excepting the vaccination clauses.) To this I received the following reply:—'I am directed by the Poor-Law Board to acknowledge the receipt of your letter of the 16th instant, in which you transmit to them the draft of the Bill which you are desirous should be introduced into Parliament for the better regulation of medical relief to the poorer classes in England and Wales.' The answer, I grant, is a mere acknowledgment of the receipt of the Act; but still I feel sure the introduction of a Bill will follow, if you will act with decision, and respectfully demand that justice shall be done to the three parties concerned—the Union-surgeons, the poor, and the rate-payers.

"During the last session of Parliament, an excellent review of our previous labours, from the pen of a Union surgeon (I regret he will not allow me to publish his name), appeared in *Meliora*, a Quarterly Journal of Science. This I obtained leave to re-print, and sent to each M.P., in order that our cause might be brought before the attention of the new members, as well as kept in remembrance by those in the previous Parliament. I also sent with it a pamphlet containing the 'correspondence of Mr. Pullin with the Board of Guardians of St. Thomas Union, and the Poor-Law Board,' as the proceedings of the Guardians towards their medical officer, and the poor, were anything but creditable, and ought to be made known to the Members of the House of Commons, in order that they might see the necessity of a law which would protect the medical officer in the faithful discharge of his duty and could not be capriciously broken through by a Board of Guardians.

"It would give me great pleasure to call you together, and especially the Committee, to discuss the proposed Bill; but, as the expense to many of you would be considerable, I have adopted the course of sending the draft Act to such of you as are subscribers to the Association, or have been elected since January, 1858. I would gladly send a copy to all, but I do not feel justified in incurring a further outlay upon those who for upwards of three years have been passive spectators of our struggle, and have rendered us no assistance;—it is not, however, too late for them to subscribe; it is never too late to do well. For some months past, I have received but very few subscriptions, and the printing and postage of this Bill will entirely exhaust the resources of the Association. I must, therefore, again appeal to you for assistance, and trust you will endeavour to arouse your colleagues to a sense of their duty, and beg them not to allow a cause to flag after so much time and money have been expended. No one denies the justness of our complaints, but Parliament requires us to prove our case; we must, therefore, again and again, if need be, publish our *grievances*, and send a copy of our proposed Bill to each Member of Parliament, with a commentary on it—which cannot be done without money; a few shillings from each Union Medical Officer is all that is required; but, I regret to say, not half of the present officers have contributed a single shilling to prosecute this great labour, which, if successful, and successful it sooner or later must be, will increase and equalise their salaries, and elevate their status in the opinion of the world, and, need I add, it will conduce largely to the good of the poor, and be ultimately a saving to the rate-payers.

I am, dear Sirs, faithfully yours,

Richard Griffin, *Chairman.*

"To the Poor-Law Medical Officers, and the Committee especially."

☞ Subscriptions for 10s. and under may be forwarded in stamps or by Post-Office order.

TO CORRESPONDENTS.

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Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Communications have been received from:—Dr. P. H. Williams; Dr. Hassall; Mr. C. J. Evans; Mr. A. A. Johnson; Dr. Skinner; Mr. Dulvey; Dr. Radclyffe Hall; Mr. F. Fry; Dr. Armstrong; Mr. W. Sankey; Mr. R. S. Fowler; Mr. A. B. Steele; Mr. H. Terry, jun.; Mr. Crosby Leonard; Mr. Jno. Dix; A Surgeon; Mr. Oliver Pemberton; Mr. G. May, jun.; Mr. J. Parsons; Mr. A. G. Field; Mr. J. Jones; Mr. W. Webber; Dr. C. Handfield Jones; Dr. Herapath; Mr. T. Holmes; Dr. D. Thomson; Dr. Lionel Beale; Mr. S. H. Swayne; Mr. Edward Parke; Mr. F. J. Butler; Dr. J. Stone; Dr. R. Moffat; Mr. Richard Griffin; and Mr. T. Griffith.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Pathology and Treatment of Pulmonary Consumption; and the Local Medication of Pharyngeal, Laryngeal, Bronchial, and Nasal Diseases mistaken for, or associated with Phthisis. By *Jno. Hughes Bennett, M.D., F.R.S.E. Edinburgh: A. and C. Black. London: Longman & Co. 1859.

ADVERTISEMENTS.

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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

A SERIES OF FIVE CASES OF SCALP-WOUND.

By G. F. COOPER, Esq., Surgical Registrar.

CASE I. T. B., aged 21, was admitted on September 29th, under the care of Mr. Hawkins. Just before admission, he had fallen from a loft on to his head, a distance of about twenty feet; but was not stunned. On admission, there was a large scalp wound, reaching from the external angular process of the left frontal bone to the middle of the parietal suture, and thence to the left side of the occiput, so making a right angle; and this flap was torn off the pericranium downwards as far as the ear. There was a small piece of bone exposed at the left side of the frontal bone. The wound was a pretty clean cut, and was directly strapped up. On the next day he was rather drowsy; but had no great pain in the head. The pupils were regular, and acted well. The wound had almost entirely healed, but there was some œdematous swelling at its lower portion where the bone was exposed. The wound was torn open for about an inch in length to give free exit to any confined matter, and a poultice was applied.

October 1st. The wound, at its lower part, was discharging freely. There was a little erysipelas about the left side of his face. He was ordered a purgative.

October 5th. The erysipelas had gradually subsided, and the wound looked very healthy. The poultice was omitted, and simple water-dressing applied.

On the next day the wound burst out bleeding, which somewhat hindered the small remaining portion that was then unsound from healing; but from that date no untoward symptoms followed. The man was ordered tonics and good diet; and on the 28th he left the Hospital, quite well.

CASE II. G. C., aged 29, was admitted on March 17th, under the care of Mr. Hawkins. Just before admission he fell off the top of a cart containing gravel, the wheel of which passed over the right side of his head and shoulder. On admission, the upper half of the right ear was torn away from its attachments, and just in front of it there was a wound about the size of a half-crown, exposing the temporal artery, which could be seen beating; but not denuding the bone in any place. He had lost the sense of hearing on the right side since the accident. The wounds were brought into apposition with silver sutures, and water-dressing was applied. There was a fracture of the right clavicle, as well as of three or four ribs. He stated that he had been a very intemperate man. There were no bad symptoms, however, and the wound looked very well, till the 22nd, when he complained of being rather feverish. His tongue was furred. He had no appetite, and his skin was hot, but perspiring. There was a little redness around the wound. He was ordered salines, with Dover's powder.

March 24th. Last night he was rather delirious, and to-day his pulse was full, 120; the tongue was furred and tremulous. There was no pain in the head, but a little puffiness around the wound; otherwise it looked well. He was ordered salines, with twenty minims of tincture of opium every four hours.

March 25th. Last night he was very riotous and delirious; but, to-day, was rational when spoken to. There were some twitchings of the left side of his face; his skin was hot; the tongue was brown and dry. He was ordered four ounces of gin daily.

March 28th. He was not so delirious as he had been; his pulse was 120. The skin was still hot, and the tongue dry and brown. He sweated a little, but had had no rigors. There was more puffiness about the scalp, so a few incisions were made to set free any confined matter there might be. He complained of pain in his left groin and hand, and whenever he was moved he experienced great pain, which ran up the left side of his thigh and body, causing them to become at the same time contracted and rigid.

On the next day an abscess was opened in the left thumb, and there was more fulness of his left hip joint. He sweated profusely. The gin was increased to six ounces, and more porter was given.

March 30th. His right wrist-joint was opened, and much thick pus set free.

March 31st. He had become more delirious. He never had had any pain in his head, and when spoken to he answered rationally, and never had a rigor. The wound in his head was dry and sloughy. Fresh abscesses showed themselves in different parts of his body, and early on April 3rd he sank.

POST MORTEM APPEARANCES. The right ear was torn away from the head, and there was a large sloughy wound there, not exposing the bones, of about the size of a crown-piece, in the centre of which the meatus auditorius was seen. There was no injury to the tympanum, but there was a minute opening in the membrana tympani, which perhaps had existed before the accident. The cranial bones were uninjured. A small patch of the dura mater, corresponding to the scalp-wound, of about the size of a sixpenny piece, was sloughy; and the cortical tissue of the brain was softened to about the same extent, and to a slight depth. The membranes were here united to each other. The rest of the brain was healthy. The right clavicle was fractured; the fragments being bathed in a large quantity of offensive pus. The third, sixth, and eighth ribs were also fractured, and their fragments were likewise bathed in offensive pus. The lungs and abdominal viscera were healthy. Both hip-joints and the right wrist-joint were also filled with pus, of the same offensive character.

CASE III. J. H. aged 64, was admitted on July 21st, under the care of Mr. Tatum, for a scalp-wound about four or five inches in length, on the left side of the vertex, from which there was much hæmorrhage at the time. No bone was exposed, and the wound was a pretty clean cut. It was caused by his being thrown out of a cart on to the kerb-stone. He was not stunned by the fall. He had always been very intemperate.

July 23rd. He was delirious and noisy; evidently suffering from delirium tremens. He was ordered half a drachm of tincture of opium every four hours, with good diet and porter. The wound on the head had almost entirely healed by the first intention.

July 25th. He was rather quieter, but still very stupid. The scalp about the wound was puffy, and two days afterwards there was diffuse cellular inflammation beneath the occipito-frontalis, for which the house-surgeon made free incisions, which somewhat relieved him.

August 2nd. He had now become more delirious, constantly attempting to get out of bed, and was very slightly sensible. The whole of the scalp from the occiput to the middle of the forehead was undermined by a thin, unhealthy matter, which was discharged in large quantities from the wound. A small portion of the right parietal bone was now exposed. He had no sleep; his appetite was very poor; tongue dry and brown; pulse 120, and very weak. On the next day, he was ordered eight ounces of brandy daily, and as he had some diarrhœa, chalk and opium mixture.

August 5th. A small slough had now formed on the lower part of his back. There was more suppuration about the wound, and even sloughing of the integuments themselves had commenced. This sloughing gradually increased, and the man became daily more and more exhausted. No fresh symptoms showed themseives, and on August 12th he sank.

POST MORTEM APPEARANCES. A large portion of the scalp had

sloughed away, leaving the bones exposed. The visceral surface of the dura mater was smeared with lymph; the external surface was healthy. There was a considerable effusion of lymph and sero-purulent fluid in the sub-arachnoid space. The brain was in all respects healthy. All the other viscera were healthy.

Case iv. J. C., aged 40, was admitted on May 14th, under the care of Mr. Hawkins. At twelve o'clock of the night previous to his admission, he was standing at the bar of a public house, drinking some gin and water, he having had something to drink before; but his friends stated he was sober, when he suddenly fell backwards, and struck the back part of his head against a wall. When admitted, at 11 A.M., he was perfectly insensible, and his breathing stertorous, he having been in this state, his friends said, ever since the accident. There was an incised wound, about one inch in length, over the middle of the right parietal bone, but it did not lead down to bone, neither could any depression or fracture be detected. He had passed no urine since the accident, but his bladder did not appear at all distended. Both pupils were regular, and rather contracted, but they were constantly changing; the conjunctiva was insensible; the skin cold; pulse 96, and scarcely to be felt. There was whiffing from one of the corners of his mouth, but no paralysis. Five grains of calomel was directly put upon his tongue, and his head was shaven. At 3.30 P.M. he was becoming sensible, and answered when spoken to.

On the following day he was quite sensible. The pulse was 95, quiet. He had no pain in his head. The wound was healed.

May 17th. There was a little puffiness and pain around the wound, but they had disappeared by the next day.

May 19th. At 4 P.M., and 12 (midnight) yesterday, he had rigors, lasting each time for half an hour, and followed by profuse sweatings. To-day he complained of great general headache; the pulse was 80, soft; skin perspiring; tongue white, and rather furred. Three grains of calomel and five of Dover's powder were given at bed-time, and a senna draught the following morning. After the bowels had well acted, all these symptoms left him, and he had no return of them; on the 25th, he left the Hospital, quite well.

Case v. Johanna B., aged 59, was admitted on February 5th, under the care of Mr. Tatum. This woman was knocked down by a butcher's cart, the wheel of which passed over the left side of her head. She was immediately brought in for a large scalp-wound on the left side of her head, extending from the external angular process of the frontal bone to about the middle of the temporal ridge; the bone being exposed for the space of about a crown-piece, and the integuments being separated from the pericranium almost as high as the vertex, and below down to the ear. The parts, which were covered with mud, were cleaned, put into proper position, and strapped. The right ear was much lacerated at its lower part, a small piece of it having been torn completely off; and there was also a lacerated wound in front of it, over the right temple. The lower jaw was fractured in two places, corresponding in position to the bicuspid teeth, the intervening portion being quite loose. There was a considerable bruise just above the left mamma, but no fractured rib could be detected. There was no concussion of the brain. Her pulse was very slow and weak. She was ordered carbonate of ammonia with chloric ether, in camphor mixture, every four hours; with five ounces of port wine, and three of brandy. On the 7th, there was much erysipelas and swelling of both eyelids and left side of the face. The wound had become sloughy, and there was much puffiness around it, especially behind. She was very low, and had no appetite; but there was no sickness, nor any pain in the head.

February 9th. The erysipelas was still considerable. She had much bronchitis, having had it to a trifling extent for three weeks previous to her admission. There was great difficulty in bringing up the expectoration; but her breathing was relieved by the sitting posture, and after the application of a mustard poultice.

From this time her breathing became more difficult, and at times she was almost choked from the bronchitic expectoration that she had not the power of bringing up. The wound of the head became excessively sloughy and offensive, the matter burrowing much beneath the integuments, especially behind. She was supported as much as possible by beef-tea, brandy, etc.; but she gradually sank, and died on the 11th.

Post Mortem Appearances. There was a large sloughy wound on the left side of the head, in which a great part of that side of the frontal bone was exposed. Another wound also existed on the right side of the head, just in front of the ear, which was greatly lacerated. There was a quantity of very offensive pus in the cellular tissue, beneath the tendon of the occipito-frontalis. On removing the skull-cap, it was found that a small piece of the inner table had been slightly separated from the rest of the skull, at the anterior inferior angle of the left parietal bone, by a fissure running obliquely through the diploë. The effused blood on the edges of this fissure clearly showed that it had been produced during life. The fragment of the inner table so separated was about the size of a shilling. When found, it was slightly displaced inwards; but this might have been a result of the sawing, as the section ran through it. The brain seemed quite healthy. The lower jaw was found fractured in two places. The lungs were healthy, except considerable injection of the lining membrane of the bronchi.

Remarks. These five cases will point out most of the pathology of, and complications that are met with in, scalp-wounds. All of them show the two most common and almost invariable seats for the wound to take place; namely, firstly (and this is by far the more general of the two), in the loose cellular tissue, between the occipito-frontalis and the pericranium; and secondly, between the latter and the bones, where the adhesions, too, are but slight, except at the situation of the sutures.

The first case illustrates what extensive lacerations may occur in the scalp, and yet, on account of the very free supply of blood to that part, union may readily take place.

The second case appears to be one of those where contusion of the bone accompanies a simple scalp-wound. In these contusions, it is in the diploë that the mischief occurs; inflammation commences in it, which soon passes on to suppuration; and, on account of the very free communication its vessels have with those of the meninges of the brain, the latter become secondarily affected. It is also due to this suppuration taking place within the diploë, where, too, there are such large veins, that absorption of pus into the circulation of the blood readily takes place, and secondary deposits follow.

The third shows, when suppuration and sloughing beneath the occipito-frontalis does take place, how much more readily the pericranium is liable to become affected than the scalp itself; and this is easily to be explained, on account of the great difference there is between these two parts in their supply of blood. This case, too, is interesting from the great rarity of such extensive sloughing of the scalp.

The fourth is given to show how a surgeon may be deceived with symptoms of disease, especially in those affecting the head.

The fifth is interesting on account of the peculiar fissure on the internal plate of the skull, and no symptom whatever resulting from it.

WESTMINSTER HOSPITAL.

WOUND OF THE FEMORAL ARTERY AND VEIN.

By C. Holthouse, Esq.

In the British Medical Journal of May 7th, of the present year, there is reported a case of the above accident, which was under my care at the Westminster Hospital, and from which the patient was discharged cured on February 25th last. It may be interesting to know the condition of this man's limb six months after his discharge; he having been at work as a carpenter during nearly the whole of this time.

On August 12th, being out of employment, in consequence of the strike, he called on me, and the following note was made: "The sore on the heel has not yet cicatrised; there is some œdema of the foot and ankle; the internal and external saphena veins and their branches are larger and fuller than those of the opposite limb; the pulsation in the posterior tibial artery is less distinctly felt than in the other leg, but this may be partly accounted for by the œdema; there is no difference in the temperature of the limbs, though there was at first (the weather is very warm); the patient still experiences some numbness of the foot and calf of the leg, and cannot walk far or quickly, without bringing on an aching pain in the latter."

In the "remarks" which were appended to this case at the time of publication, a doubt was expressed as to its being the femoral vein which was wounded; but that it really was so, and that this vessel is now obliterated at the seat of the

wound, I think is proved by the evidences of obstructed venous circulation, which the above condition of the limb reveals.

Remarks. We were not aware, at the time of the publication of the above case, that there was any other on record in which the limb had been saved after a wound of both the artery and vein; but it appears that John Hunter made an endeavour, at any rate, to effect this object. In a manuscript copy of his lectures, from notes taken by Dr. John Clarke, with the inspection of which we have recently been favoured by the kindness of their present possessor, the following entry occurs:—"A. B. was working with a knife, and ran it into his thigh, and so wounded the crural artery where it passes through the third head of the triceps. A tumour was formed, with pulsation. A peculiar thrill arose in it. A tourniquet was applied, and a director passed into the wound. The parts were laid freely open; the artery found. A ligature was then made above and below the orifice. The vein bled, and was taken up too."

Unfortunately, the event of this case is not given; but it is more probable that the attempt to save the limb was successful than otherwise, from the very fact of the case being so dismissed, without any mention of gangrene or other evil consequence. At any rate, it is interesting to know that this great master of surgery thought it reasonable to attempt the preservation of the limb under these circumstances.

Original Communications.

PATHOLOGICAL AND THERAPEUTICAL CONSIDERATIONS RELATIVE TO INFLAMMATION AND FEVER.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

[*Continued from page* 940.]

5. *Various forms of Inflammation.* The most important distinction to be made between different instances of inflammation relates to the degree in which they approximate to the sthenic or to the asthenic type. On a due appreciation of this, the success of treatment wholly depends. In *sthenic* inflammation, the *tissue* of the part is prominently concerned, its nutritive force is deranged and perverted, rather than simply depressed; it is inapt for functional work, but highly resentful of stimulation. The latter, if powerful, may subdue the morbid state of the tissue, but if it fail to do this, exasperates it. Tonics that would induce contraction of the blood-vessels through their nerves, and so diminish the hyperæmia, irritate the diseased tissue, and increase the morbid action. The healthy play of the tissue in attraction and repulsion of blood is exchanged for morbid attraction, and so accumulation of blood takes place. The effective remedies are such as annul this state of tissue-irritation, depressants, contrastimulants, or tissue sedatives as I have termed them. Thus antimony is an efficient lung-sedative in sthenic bronchitis or pneumonia, and colchicum an articular sedative in sthenic gout and synovitis. An excellent example of this form of inflammation is so-called acute eczema, which is aggravated by arsenic, and cured by leeches, lead lotion, salines, and antimony.

In *asthenic* inflammation, on the other hand, the tissue is much more quiescent, much less susceptible of irritation, and tolerant of stimuli. It takes no notably active part in the inflammatory process, but (if a surface) simply allows the transudation of cell-developing exudation. The phenomena are chiefly dependent on vaso-motor nerve paralysis, and consequently diminish and cease under the use of nervine tonics. Thus quinine is most beneficial in asthenic pneumonia. Arsenic in asthenic rheumatism and eczema. It is most striking in the latter disorder to find the hyperæmia, exudation, and heat of skin, cease under the tonic remedy; one is involuntarily reminded of the result of galvanising the divided sympathetic nerve. The sthenic character is commonly exhibited in the earlier period of inflammation, and is replaced by the asthenic in the later. Either, however, may exist during the whole course of the disease. Sthenic inflammation is usually excited by some locally acting irritant, but it may be produced as well as asthenic by vaso-motor nerve paralysis, or may even originate spontaneously as in whitlow. The resemblance of the visible phenomena of sthenic and asthenic inflammation may be so close, that nothing but careful testing with remedies can make the distinction possible. Like chemical reagents, our drugs appeal to forces we cannot otherwise observe. It is, however, always to be remembered, that the perfectly typical cases of disease are rare, and that the majority are mixed, or intermediate between various types, and partake most of one or other. The term *substhenic* would designate correctly many such instances.

6. The modifications imposed on inflammation by the locality in which it occurs, the tissue which it affects, are noteworthy. In serous tissues, it is prone to spread over the surface, and to pour out copious effusions, which may be serous, fibrinous, or purulent; these mostly are more or less mixed. Even rheumatic inflammation commonly causes suppuration in this tissue. In mucous tissue, inflammation is also spreading, and gives rise early to exudation, which, as long as the basement surface is entire, contains no large amount of albumen, but chiefly the characteristic slimy principle mingled with varying amounts of pus-corpuscles and immature epithelial particles. The high vascularity of many mucous membranes, and the thinness and delicacy of their epithelium, very much promote the early occurrence of exudation of the fluid part of the blood, and even sometimes the escape of the solid corpuscles. In cutaneous tissue the spreading tendency is much less, and is chiefly manifested in asthenic forms of inflammation, as for instance, erysipelas. Exudation does not occur to any notable amount as long as the epidermis remains attached. In the subcutaneous and areolar tissue, sthenic inflammation soon becomes circumscribed by fibrinous effusion, in the more central parts of which suppuration takes place. In asthenic inflammation, the morbid process is not thus circumscribed, and spreads often extensively, causing great mischief and peril. Solid masses of tissue, as liver, kidneys, brain, muscles, are far less prone to be the seat of suppuration than surfaces, or areolar tissue. One cause of this is, that in these dense textures exudation takes place much more sparingly. Another is, that large masses of tissue persevere more steadily in their normal nutrition than thin membranes, and are far less liable to deviate into inflammation.

Acute and chronic designate the rate at which inflammation proceeds. Acute may be asthenic, chronic may be sthenic.

7. *Reaction* (morbid) signifies that the vital forces of the part or system affected are not utterly or almost overborne and prostrated, but that they *resent*, and are stimulated after a manner by the morbid impression. It is most true there is no such thing as an intelligent striving of the natural forces against the cause of disease, to throw it off, as it were; the fact being simply that they are excited to unusual and abnormal manifestations. They are excited to increased action; but that action is not in the right direction, it is injurious and wasteful. Still it shows that the power of the tissues is not extinguished, that they are yet life-full. He who has stood by the bed-side of the patient in malignant dysentery or cholera, and painfully witnessed the utter non-response of the system to all remedies, or he who has been striving for a long period to upstay a weakly nervous system, that is evermore relapsing into debility and prostration, is quite rejoiced at the signs of good, outspoken, hearty reaction. There is hope to be able to calm and guide the one, there is almost a sense of despair in the attempt to raise and sustain the other. The signs of (excessive) *reaction* are essentially those of inflammatory or sthenic fever, viz., vigorous action of the heart, strong full pulse, hot skin, red lips, increased tolerance of blood-letting. Local reaction is equivalent to sthenic inflammation and its results. *Collapse*, on the contrary, is marked by debility, feeble-pulse, cold skin, blueish lips, diminished tolerance of blood-letting. Its local manifestation is gangrene.

Increased action is a term often used, and often I think not correctly understood. It is essentially the same as reaction above described. It is therefore clear that it does not mean real increase of healthy power, more vigorous functional action, but only a greater amount of action of some kind. Compared to healthy action, it is like a river bursting its banks and spreading destruction all round, as contrasted with the same stream duly restrained, irrigating meadows, and turning water-mills.

The above remarks have reference of course to morbid states. There is healthy reaction, as after a shower-bath; and healthy increased action, as when a gland or a muscle perform its functions vigorously.

8. *Causes of Inflammation.* If friction be kept up for some length of time on a part which has been unaccustomed to it, say the hand, as in rowing, inflammatory phenomena are produced. Blisters form on the surface, *i.e.*, the epidermis is

raised by an exudation of fibrino-serous fluid from the cutis beneath, which is unduly injected with blood. If the irritating cause be withdrawn, the hyperæmia gradually ceases, and the effusion is reabsorbed. Here we have a clear case of inflammation produced by a locally acting mechanical cause. Effects essentially similar can be produced by irritants of a different kind, as heat, mustard, cantharides, the poison of gonorrhœa, the galvanic current. It is a point worthy of remark, that the susceptibility to inflammatory irritation from the above mentioned agencies differs much in different persons. One person can bear a mustard poultice for half an hour or more, another not for five minutes; one person's skin is readily blistered by cantharides, another's with great difficulty; the novice's hand is soon made "raw" by the oar, the practised oarsman's not at all. All this implies a difference in the nutritive power of the skin in different individuals; in some it is easily deranged from its normal operation, in others it adheres to it pertinaciously. The same is true of all other tissues, if any one is easily deranged from its normal mode of life and nutrition, that part is the weak point, the one which disease is sure to assail. This local weakness may be congenital, or acquired in various ways. When the whole system is possessed of considerable resisting power to the various perturbing causes, the fortunate possessor is said justly to have a strong constitution. This is a very different thing from having great muscular force.

Traumatic inflammations, though usually on a much larger scale, are essentially similar to those above considered. The injury deranges the normal nutritive actions of the part, prostrating them at first in a greater or less degree, and subsequently diverting them into morbid attraction and retention of blood, or into this combined with more or less of vaso-motor nerve-paralysis; in other words, into sthenic or substhenic inflammation.

Another class of inflammations are such as are produced by the reception of a substance into the blood, which acts as an irritant on one or more parts. Thus arsenic absorbed from a wound, or mucous surface, inflames the stomach; cantharides, swallowed, inflames the urinary organs; and so on. The poison may be generated in the system, as that of gout, or inhaled as those of variola and erysipelas.

In a third class of inflammations, we may affirm that the exciting cause is some imponderable. When malaria causes dysentery; or influenza bronchitis, or diarrhœa; or when some unknown influence excites cynanche tonsillaris, we have instances of the kind in question. To say, without further consideration, that these are produced by the reception of some atmospheric poison into the blood, and that they belong to the preceding class, seems to me an assertion very weakly supported. It will be well worth while to attempt some closer inquiry into the possible or probable causation of these inflammations. It cannot be doubted that cold, or cold and damp, may produce such effects, yet it is equally certain that they are not the only or chief causes. Catarrhal and other inflammations constantly arise without any exposure to cold and wet. The agencies which give rise to malarious disease and influenza are quite unknown to us, and it seems at any rate prudent for the present to regard them as of a distinct kind from other demonstrable and ponderable poisons. They may be rather peculiar forces, or states of matter, than isolable substances. It may be of some advantage if we take the injurious action of damp cold as an illustrative instance of their action. Here we do not think of a poison circulating in the blood, but of an *impression* made on some part of the surface, which is resented by some internal part. This injurious impression may be scarcely felt at the time it takes place, and its effects scarcely perceived till some hours after. See a remarkable instance of the effects of unfelt irritation in Brown-Séquard's Lecture XI (*Lancet*, 1858, p. 572). This is more striking than analogous cases where the irritating cause (a worm) affected the mucous surface. Sometimes it is immediate in its action, as when the sufferer feels the cold strike to his chest. In the latter case the result stands in no relation with any cutaneous sensation that we are cognisant of, and it has often a peculiar enfeebling or paralysing effect. Before proceeding further, I would say that the opinion that cold causes inflammation by repelling the blood from the surface, seems to me a very insufficient account of its action. If this were true, the severe cold of the arctic regions would far more often excite internal inflammation than is found to be the case.

I will now adduce some actual instances of the effects produced by cold, and endeavour to interpret them so as to show their bearing upon the production of internal inflammations. A writer in *Household Words* gives the following description of the cold of the Black Sea, evidently from personal experience. "It is bitterly cold (thin penetrating rain falling every now and then.) That clammy deadly cold of these climates, against which no clothes seem able to protect you. It is a cold which is not felt in the chest, nor hands, nor feet, as our cold in Europe is; but it is sure to strike first at the stomach. You were well just now, and trying with all the philosophy at your command to be jovial under difficulties; suddenly you are seized with agonizing pains just below the chest. In vain you try to make light of it. You are obliged to lean for support against the first thing or person at hand. Your extremities have become chilled and useless; you sit and double yourself up, hoping something from warmth and quiet; at last you lie down, and writhe in the intensity of your pain. If you are driven to take brandy (hot brandy and water is best), you feel a peculiar sickness for some minutes, and then the pain slowly subsides; but it leaves you stupid and depressed for hours afterwards, trembling and nervous. The only way to give yourself a chance of escape is by winding some twenty yards of silken or woollen sash tightly round your loins and abdomen. It is the custom of the country, the dress of the peasant and prince, and you will soon understand it has not been adopted without a reason. This was the commencement of that sickness which carried off numbers of our troops. The doctors called it cholera; it was only cold." Without fully agreeing with the last sentence, I yet entertain no doubt that the effects so graphically described were really produced by damp and cold, and there can be no question that such an influence would powerfully promote the operation of cholera-poison. The protection afforded by the ample sash can only be explained, I think, on the view of its warding off the operation of cold, and this opinion is confirmed by Mr. R. Martin's authority. He writes "the ample turban and khummerbund meet our eye at every step; the former to defend the head from the direct rays of a powerful sun; the latter for the purpose of preserving the important viscera of the abdomen from the deleterious impressions of cold. The khummerbund is certainly a most valuable part of the dress, and one that is extensively imitated throughout India by Europeans, in the form of a cotton or flannel waistband worn generally next the skin." Similar effects of cold are not unfrequent in our own country. A very robust medical man stated to me that during exposure to severe cold in Scotland, he had several times experienced a sensation about his epigastrium, as if he had "a toothache in his stomach." It does appear to me, that in these common facts, evidenced by the habitual practice of large masses of mankind, and approved by the sober judgment of the educated physician, there lies a truth which science has yet scarcely appreciated. The operation of cold described in the first quoted passage is evidently chiefly upon the solar plexus. This great nervous centre is as it were smitten with an influence half paralysing, half irritating, which appears to be the effect of cold acting on the contiguous cutaneous surface. This is surely a very remarkable circumstance, and but partially explicable by our present knowledge of the laws of nervous actions. How comes it to pass that the action of cold on the cutaneous extremities of some intercostal nerves should fall so peculiarly on a remote sympathetic centre, and this too situated so peculiarly *en face* of the part primarily affected? Why should not some other centre be affected? The phenomenon, however, is not an isolated one. The arrest of epistaxis by the application of cold to the back, of the catamenia by cold and wet to the feet, and of pulmonary hæmorrhage by ice to the spine and cardiac region, prove that an impression may be transmitted from cutaneous nerves to the vaso-motor of a remote internal part. The interesting fact lately ascertained by Brown-Séquard and Tholozan, is of the same kind. They find that immersion of one hand or foot in very cold water lowers notably the temperature of the corresponding part, and of this only. I have observed a very marked state of goose-skin of the anterior part of the trunk produced by the sudden application of cold water to the back: the skin at the upper semi-circumference of the nipples was rendered quite pale.

In all these instances, we have evidence of the action of cold through incident nerves upon various nervous centres, manifested in certain efferent nerves. It is, therefore, not inconceivable that, in certain cases, the effect may be more specially manifested in the centre itself. This seems certainly to be the case in the sudden deaths that have been occasioned by drinking cold water when the frame was exhausted. The sedative action of the cold upon the gastric nerves is communicated to the solar and cardiac plexus, and through the latter paralyses

the motion of the heart. To proceed. A man travelling on the outside of a coach is exposed to a cold wind blowing in his face, and in consequence becomes amaurotic to a notable extent. He is cured, not by depletion or mercury, but by stimulation of the skin of the face, forehead, temples. (Graves, *Clin. Med.*, 1st edit., p. 398.) The not unfrequent occurrence of paralysis of the portio dura from exposure to cold is, I am aware, often attributed to rheumatic inflammation causing effusion around the nerve in the Fallopian canal; but, besides that there seems little or no evidence to prove this from *post mortem* examination, it is very unlikely to hold good as the true explanation of all cases, seeing that in those common affections, viz., facial rheumatism and tympanic inflammation, paralysis of the portio dura is rarely observed. Romberg quotes J. Frank to the effect that seven of his patients were *suddenly* attacked with this paralytic affection from getting up in the morning and putting their heads out of window, and drawing back because they found it very cold. The supervention of the paralysis in these cases was surely too quick to be ascribed to inflammation and exudation. Dr. Graves records a case, p. 415, in which paraplegia came on in a man aged 32, as the result of exposure to cold and wet. Both motion and sensation were lost, or nearly so. The hands, about three weeks afterwards, were similarly affected, but to a less extent. He remarks: "To what can we attribute these symptoms, except to the influence of cold acting on the nervous filaments of the cutaneous surface of the limbs, extending its morbid impression to the spine, and thence reacting on the nerves so as to produce impairment of the power of motion and diminished sensation? The man certainly had no symptom of cerebral or spinal disease, nor was there anything connected with the state of the nervous centres which would lead to the supposition that the paraplegia was the result of an irritation originally affecting the brain or spinal cord." I have recently observed a case under Dr. Sibson's care, in St. Mary's Hospital, in which there had come on gradually considerable impairment of motion and sensation in the lower and upper limbs, with failure of masticating power. The symptoms dated from exposure to wet, he having stood on wet grass a whole morning, and the affection having commenced the next day. After about four months, he died in a kind of faint. The autopsy was very carefully made, but no morbid change was found in the brain, except some slight congestion, and a little serum in the lateral ventricles. The part of the spinal cord corresponding to the lower dorsal and upper lumbar regions appeared to be firmer than usual, whilst the upper part was much softer than this; but sections of both these portions revealed nothing unnatural in appearance, or worthy of remark. Careful microscopic examination of the spinal cord and pons Varolii detected nothing abnormal; there were no glomeruli, and no granular exudation on the vessels.

The following case is given by Dr. Copland, art. "Paralysis", p. 20. A gentleman, who had resided many years in an intertropical country, on his voyage across the Atlantic in the winter season, "was seized with general palsy of the powers of voluntary motion immediately after prolonged exposure to cold and wet. The functions of the brain were unaffected; and neither pain nor uneasiness was felt in the neck, or in any part of the spinal column, under any circumstances of position, flexure, rotation, or pressure. No evidence of inflammatory action, or of congestion in the spine, could be detected. Cutaneous transpiration was suppressed, and the bowels were costive and torpid; but he retained the sensibility of the surface, and command over the sphincters. He was treated at first upon the supposition of either serous effusion or vascular congestion having taken place in the spinal canal, but without receiving any benefit. He ultimately, however, quite recovered, by having a frequent recourse to warm baths containing stimulating substances."

To my own mind, the above mentioned cases render the conclusion legitimate, that cold operating on the cutaneous surface may so affect one or more nervous centres through incident nerves, that they are more or less entirely disabled from discharging their function. The centre belonging to a motor nerve, a sensory, or a special nerve, may be affected in this way. What is the exact nature of the change effected, we do not know; but it certainly seems not to involve any irremediable lesion of the structural elements. For all practical purposes, we had better think and speak of the change as a dynamic one—a simple loss of power—which we find to be restored by influences of an opposite kind to those which depressed it. In the case first cited, of the action of cold upon the solar plexus, the effect is partly pain, partly paralysis—just such a combination as is common in various neuralgiæ, where the affected part is numb and painful, to which Romberg applies the term anæsthesia dolorosa. The condition of the centre and of the nerves has much to do in determining the result of the impression of cold. If both are healthy, the centre will reflect the impression as a stimulus to vaso-motor nerves. If the centre is feeble, the nerves too sensitive, or the impression excessive, the dynamic organ may be gravely disordered, paralysed, or irritated; and this state may spread and extend to other associated or combined centres. It is very probable that this state of paralysis, or paralysis and irritation, is really an inhibitory phenomenon, the cold acting in the same way as the galvanism in the experiment quoted lower down. The same explanation will, I think, apply to the cases recorded by Stanley and Spencer Wells, of the occurrence of paralysis in connexion with inflamed kidneys; and to those mentioned by Graves, of the same consequence, after gastro-enteritis. The morbid impressions conveyed by ganglionic nerves to the cord, set up in the grey matter a state incompatible with its functional action. It is a very important fact, that if this state continue unremoved for some length of time, it is very apt to become permanent, or at least to yield very slowly to remedies. I am, of course, aware of the view maintained by Dr. Gull, that, in these cases, there exists inflammation and softening of the cord, which is not discoverable without microscopic examination; but I greatly doubt the possibility of admitting this view as expressing what invariably happens. Moreover, it is quite possible that a kind of degeneration might after a time take place in the part of the cord which at first was only functionally paralysed. Dr. Gull has recently published an interesting case of acute paraplegia, proving fatal in about three weeks from cystitis and peritonitis, in which the most careful microscopy detected nothing abnormal in the cord. (*Guy's Hospital Reports*, 1858.) Among the cases cited by Dr. Graves, in his lecture on *Paraplegia*, is a very interesting one which had been under Dr. Hutton's care. In this man's case, an almost sudden amendment took place in his paraplegia (which came on soon after prolonged exposure to cold and wet) on the dilatation of an urethral stricture by a bougie. Warm baths, and friction to his limbs, completed the cure. The rapid improvement in this case seems to me better explained on the view that the paralysis was of inhibitory origin, than on any other. The close stricture was a source of irritation to the spinal cord; and, on diminishing this, the grey matter of the centre resumed its healthy play. The same view will apply, I think, to the two cases related by Sir B. Brodie, pp. 12-13 of his work *On Local Nervous Affections*. A gentleman, lamed by pain in one instep, was cured in a quarter of an hour by passing a bougie for a stricture. A lady was cured of a similar pain by successful treatment of internal hæmorrhoids. These cases were instances of the irradiation of sensations, or at least of centripetal impressions; they are more familiar than those in which paralysis is the result, but the mechanism of both is the same. Some peculiar condition of the nervous centre determines the production of paralysis instead of pain. Perhaps, however, the neuralgic state in a sensory, and the paralytic in a motor nerve, may be closely allied, the result differing according to the different endowment. If neuralgia in the anæmic is "the prayer of the nerve for healthy blood", this surely implies a functional debility, which in a motor nerve would be paralysis or enfeeblement. The same idea is also hinted to us by the occurrence of anæsthesia dolorosa.

Now, to apply the above views to the production of internal inflammations, if it be admitted that the impression of cold conveyed to a nervous centre may there occasion such change as eventuates in the paralysis of musculo-motor nerves, it seems reasonable to conclude that the same impression acting on a sympathetic centre may cause paralysis of vaso-motor nerves. This, as already described, sets up active hyperæmia and increased local heat and tissue-change, which, in states of predisposition, readily passes into actual inflammation. It does not form an objection to the above theory of internal inflammations being produced by external impressions, to say that the effect is of much longer duration than the exciting cause. Instances can easily be adduced in which irritation of brief duration, causing no actual local lesion, has produced abiding disorder at a distance. Duchenne relates how, in Faradising a case of local paralysis of sensation with a powerful current, he once incautiously applied the current to the healthy muscles. The effect was, that sharp pains came on in the excited part, spread to the neck and head, and continued many days. Afterwards, the patient had cerebral symptoms, requiring the use of

derivatives. Such accidents frequently happened to him before experience had taught him to be wary of exciting sensitive parts too strongly.

Whether or not the above explanation be correct, as to the mode in which inflammation is set up in a remote part, as the consequence of a morbid impression upon the external or internal surface, there is no question that inflammations do originate in this way. Brown-Séquard relates that, "in animals in which the spinal cord has been divided at the level of the third or fourth lumbar vertebra, so that the posterior limbs cannot give any pain, and that, also, no irritation can be propagated from them to the viscera of the head, the chest, and most of those of the abdomen," no marked alterations were seen "similar to those which are so often observed in man and animals accidentally burnt, except in the bladder and rectum, and neighbouring organs. On the contrary, when the section of the spinal cord was made as high as the third dorsal vertebra, I have seen all the abdominal viscera in a state of congestion, very much resembling inflammation in many parts, with serous infiltrations and ecchymoses, two days after one of the legs had been burnt by boiling water. . . . In two cases, on animals on which the trunks of the sciatic and crural nerves in one limb had been divided as high as possible, I have not found a state of marked congestion in any viscus three days after I had carbonised this limb from the toes up to the middle of the thigh."

Mr. Paget cites the case of a testicle becoming inflamed to the degree of having lymph and pus deposited in its structure, as the consequence of the irritation of a fragment of calculus impacted in a healthy urethra. He sees no other explanation that can be given, except that the exercise of the nervous force in the testicle was disturbed through the medium of the morbidly affected nerves in the urethra. Dr. Graves relates a case in which a chicken-bone lodged in the œsophagus for about an hour, and produced much irritation and inflammation. About the third day ensuing, the patient got a violent rigor, "which terminated in a profuse perspiration, and ushered in a well marked inflammation of the neck of the bladder." Dr. Graves believes this to have been an instance of disease being propagated in a reflex manner to other and more distant parts. The so-called sympathetic ophthalmia, and the experience of Mr. Paget as to slight conjunctivitis of the left eye being excited by microscoping long with the other, are again instances of the same kind. So is the cure of ophthalmia as the result of the extraction of a carious tooth, recorded by Dr. Campbell.

In all cases of this kind, it is manifest that the nutrition of the secondarily inflamed part must be in a weakened state beforehand, so that its equilibrium is disturbed more readily than that of other parts: it is, in fact, predisposed. This is one element in the process; another is the relation of its nerves to those incident from the seat of irritation.

9. The views above offered are, I think, applicable to many cases of ordinary inflammatory disease, but by no means to all. In particular, I conceive the influenzal affections belong to the class which acknowledges a poisonous agent diffused through the circulation. The rheumatic, on the other hand, I am very much inclined to refer, at least in part, to the cold-excited class. How far the local irritant action of cold—as, *e. g.*, on the bronchial tubes—may operate as a cause of inflammation, seems to me doubtful. If it were a potent or frequent one, the intense cold of the Arctic regions would surely produce more marked effects than the milder cold of temperate climes. The previous state (the predisposing) is probably in all cases of prime importance in determining the result of impressions of cold, not acting as local irritants. Thus, in persons subjected to tropical heats, a chill produces effects which would not occur in those who had undergone no such debilitating influences. Persons in our own country, who are much exposed to heat, as bakers, are peculiarly liable to "take cold". The nervous centres are rendered more impressionable and mobile by the high temperature, and so more sensitive to cold.

10. In the above, mention has chiefly been made of the nerves and the tissues as factors in the process of inflammation; but there is reason to regard the blood as greatly, if not equally, concerned, In the case of such disease as the exanthemata, it is the vehicle of the original, as well as the source of the multiplied virus, which acts as an irritant to produce the various inflammations. But, further, the observations of M. Vanzetti (*Brit. and For. Med. Review*, July 1859), as to the results of interrupting the flow of blood through the main artery of an inflamed limb, go to show that, when the tissues are simply inflamed, the presence of moving blood acts upon them as an irritant, maintaining and increasing that morbid condition; and that the withdrawal of this cause of irritation for a time allows the morbid state to subside, after which the blood-flow may again be restored without reproducing the inflammation. These observations go far to justify venesection, employed as a means of diminishing the stress and force of the circulation.

[*To be continued.*]

CONTRIBUTIONS TO CLINICAL SURGERY.

By Oliver Pemberton, Esq., Surgeon to the General Hospital, and Lecturer on Surgical Pathology at Sydenham College, Birmingham.

VI.—Excision of the Knee.

The operation of excision of the knee in preference to amputation of the thigh, has now been resorted to in so many instances, in this the second epoch of its trial, that we might fairly conclude that its history, its complications, and its shortcomings had been told; that the cases in which it should be selected were recognised; that it was an operation in which the public possessed confidence as well as the profession; and that private individuals had experienced its benefits as well as hospital patients; in a word, that it was established in reputation as strongly as excision of the elbow, or as amputation at the ankle-joint. But, it is not so. We have yet to learn very much in connection with this operation before we can associate it with these and other well tried procedures of surgery.

The mere absence of excessive fatality will not be sufficient to establish its position. No surgeon, at all acquainted with the amount of shock, of hæmorrhage, and the other attendant circumstances of excision of the knee, will contend for one moment that the same amount of danger to life in general follows its performance, as does amputation of the thigh.

The great question is the utility of the limb preserved. The mechanic and the rustic have hitherto been the subjects to illustrate its desirability. We want to know how far they can make use of their limbs in their respective callings.

The time has gone by for us to look with deep interest on a rescued limb merely as such, in consequence of excision of the knee. We must now learn how far the remnant that has escaped will enable its possessor to labour for his living with the same facility as he would have done with a wooden substitute. A sufficient time has now elapsed for the rendering a true account on this important point, and both the public and the profession must anxiously expect to be told of the wearing powers possessed by limbs that underwent the operation in the the earlier portions of the last nine years.

Where the subjects submitted to operation had not attained full development of limb, the possession of this knowledge becomes of paramount importance, inasmuch as on the evidences afforded by such cases, more especially in regard to the question of subsequent parity of growth, will depend the establishment or the total rejection of the proceeding in similar instances for the future. With this view strongly before me, I shall submit to the profession what I may term "the further history of an excised knee-joint in the ungrown subject," comprising a period of nearly six years, and I shall add to this my experience of certain complications which may arise in connection with the operation generally, by a reference to the particulars of typical cases.

Case I. E. F., aged 12, a pale, strumous looking boy, of much intelligence, was admitted under my care in the General Hospital, Birmingham, December 20th, 1853, suffering from disease of the left knee, of fourteen months' duration. The following was the state of the joint. The leg of the affected limb formed a right angle with the thigh, from which position it could only be slightly altered by the exercise of great force, occasioning acute pain. The circumference of the joint was larger by three inches and a half than that of the opposite one. The integuments were shiny and painful. The apertures of four sinuses were apparent; and three of these communicated with carious bone. These openings were situated as follows: one over the external condyle; one over the internal condyle; one over the anterior surface of the femur; and a superficial one over the head of the fibula. His sufferings were very

great, especially at night, from the constant gnawing pain which he experienced. Under the influence of rest and good diet, the knee somewhat improved; in a month's time, however, hectic and diarrhœa manifested themselves, so as to necessitate an operation.

In consultation, my colleagues having agreed with me in the propriety of amputation, I was left to select the alternative of excision of the joint, if I thought fit. Accordingly, upon the 8th of February, 1854, the patient being under chloroform, I proceeded to extirpate the joint.

The mode in which this was accomplished in this, the first instance in which I had attempted to excise the knee-joint, is that which I have without variation adopted in subsequent instances, with the exception that in some few cases I have removed the sawn articular extremities separately, with the view of testing the comparative advantage of such a proceeding over the method which I have advocated, after Mulder* of removing them in their connected state.

Under chloroform, an incision was carried from a little above the outer to a little above the inner condyle, across the front of the joint, below the patella, dividing its ligament of insertion down to the spine of the tibia. The flap thus formed was turned back; and the cavity of the joint was fairly exposed. The disorganised soft parts having been cleared away from over the femur, it was sawn through above the condyles, without the aid of a spatula, or the introduction of a knife: the same process was next applied to the head of the tibia; and the articular extremities were then removed in their connected state, by a cautious dissection of the soft parts beneath, commencing from above downwards. The hæmorrhage was inconsiderable; no ligature was required. The amount of bone removed measured rather more than three inches and a half. About two inches and a half belonged to the femur; and about an inch to the tibia. The patella was left, its under surface being scraped. The head of the fibula was not interfered with.

The operation being finished, the leg was readily brought into a line with the thigh. The flap containing the patella was simply laid, in as accurate a state of apposition as possible, over the parts beneath, without the aid of sutures, and was covered with water dressing. The entire limb was then adjusted on a straight splint, reaching from the buttock to the ankle, furnished with a perinæal band, with a foot support, and with side pieces to the thigh and leg; the knee being left perfectly free on the sides and above, for the application and renewal of dressings.

In subsequent instances the swing cradle has been made use of for the purpose of suspending the entire limb, with its splint and dressings, and with the most satisfactory result, as the tedium resulting from long confinement in one position was greatly relieved by this most admirable contrivance.

Examination of the Diseased Parts. The synovial membrane was everywhere affected by disease. It presented a pulpy, thickened condition, and was of a brownish tint, and covered in places by bloody discolorations. The cartilage covering the tibial surface of the outer condyle was destroyed, as was also the corresponding surface of the semilunar cartilage of the tibia. The entire thickness of cartilage on the inner condyle and tibia was not altogether destroyed, but was in process of ulceration. The extremity of the femur above the condyles was blackened, and denuded of periosteum. The bone was soft and carious. Fresh osseous material had been thrown out behind the condyle and on the head of the tibia. The medullary canal of the bone did not present an unhealthy appearance.

No shock followed the operation; and but a single restless night marked the presence of any constitutional disturbance. The warmth of the limb, below the seat of operation, never varied. The patient had scarcely any pain, and could in the course of a fortnight exercise complete command over the muscles of the foot and leg.

Three months afterwards, the following note was made.

The healing of the wound had been retarded by the thickened character of the integuments. The parts in the situation of the joint were becoming firmer and more consolidated. The boy possessed perfect control over the movements of the foot, and turned it, with the entire limb, either inwards or outwards. The splint was discontinued, and the wound was firmly strapped and rolled.

Four months after the operation, the wound remained open slightly at the sides. A gutta percha splint was applied behind the joint; and the boy was directed to be out of doors on crutches. An accurate measurement was made of the two limbs, when it was found that the difference between them exactly corresponded to the amount of bone removed—namely, three inches and a half.

The patient remained in the hospital until October; more for the purpose of observation, than from any necessity. When discharged, eight months subsequently to the operation, the wound had entirely healed. One of the sinuses, existing previously to the operation, over the patella, still discharged. He could walk with the aid of a stick and a high-heeled shoe; the knee being supported by a leather case.

The union between the bones was altogether of a ligamentous or fibrous character, and admitted of free movement in any direction.

After the lapse of nearly six years, I place on record the condition of this patient's limb, and verify its description by a reference to the photograph from which the woodcut that accompanies these observations is taken.



October 1859. E. F. came to my house. He had grown in height, and had thickened considerably in his figure, but was somewhat diminutive for his age (18). The lower limbs presented a wonderful contrast in appearance. The one was strong, with the muscles, bones, and joints, well defined; the other, feeble and blighted. The sound limb, from the anterior superior spinous process of the ilium to the outer malleolus, measured thirty-four inches; the one subjected to operation, twenty-five! Thus showing a difference of nine inches: or a

* "Ossium fines separatim auferre, necessarium non duxit cl. Præceptor, uti fecerit exc. Park. Nullum inde oriebatur incommodum, et optime fines ossium exstirpari poterant. Hisce sublatis nusquam in parte vulneris profundiore detegebatur arteria poplitea; parum igitur durante ipsâ operatione metus aderat, ne illa læderetur." (Wachter, *Dissertatio Chirurgica de Articulis Exstirpandis*, p. 117.)

deficiency in growth as compared with the other of rather more than five inches since the operation. In the middle of the thigh, in the lower third, and round the calf of the leg, the measurements were sixteen, twelve, and twelve as opposed to thirteen, ten, and nine and a half. The foot of the limb operated on appeared to have expanded most, but even this was an inch and a half shorter than its fellow. The femur, the tibia, and the fibula of this limb were not larger than the same bones in a child of ten or twelve.

About the excised joint, the parts were sound, and free from pain on manipulation, a very moveable ligamentous or fibrous medium connecting the articular extremities. Notwithstanding the shortness and the flail-like joint, it was astonishing to see the power he possessed of extending the leg, and of bearing the entire weight of the body on it in walking, unaided by support of any kind; and it was quite clear that the disparity in length alone prevented him from realizing all the advantages that he might under other circumstances have obtained from the operation. With all these drawbacks, he works hard as a boat-builder, the limb being aided by a cork sole of some six or seven inches in height, and by a leather case at the knee.

The limb cannot, however, be deemed otherwise than an incumbrance, and with the best appliances to remedy the want of length, proving, after all, little better than a sad deformity.

In 1855, an authority on excision of the knee thus expresses his opinions on this question of subsequent growth.

"Another objection has been brought forward against the operation of excision, and which demands grave consideration. It has been asserted, that where the operation is performed in early life, the growth of the limb has been checked, and, consequently, that the lower extremities do not keep pace with each other, and hence one becomes so disproportioned to the other as to be ultimately useless." (Butcher, *On Excision of the Knee-Joint*, First Memoir, p. 46).

In 1857, the same writer reiterates these sentiments. "In my former essay I proved, by several instances, that the growth of the limb was not checked by excision of the joint in childhood; and am happy now again to confirm this most important fact." (2nd Memoir, p. 60.)

Speaking of excision of the knee, Mr. Syme writes: "I tried the operation nearly twenty years ago, on a boy, who perfectly recovered from it, and seemed at first to possess a limb little inferior to its fellow, except in so far as it was stiff at the knee. But, in the course of time, it was found that the growth of the two limbs was not equal, and that the one which had been the subject of operation gradually diminished in respective length, until it wanted several inches of reaching the ground when the patient stood erect." (*Pathology and Practice of Surgery*, p. 225: 1848.)

I have quoted the preceding remarks word for word, as they commence and end, in the eighteenth article of Mr. Syme's work, in preference to alluding to his mere opinion on the matter; for the same paragraph, in all its identity, has been frequently referred to and cavilled at during the past nine years.

Unhappily, in the case I have narrated, I fear that another "existing proof" of the fact *is* added to the only one that Mr. Butcher (First Memoir, page 46) could discover, when he wrote his first and second memoirs on excision of the knee, that the growth of the limb is at least sometimes checked when the operation is performed in early life. This most undaunted surgeon has, I fear, been led to adopt those conclusions on the question which his wishes and anticipations too clearly held in view. He does not write from his own experience, but strengthens the position he assumes by the communicated observations, amongst others, of Dr. Keith of Aberdeen, Mr. Page of Carlisle, and Mr. Jones of Jersey.

Dr. Keith's case was a boy, aged 9, from whose knee two inches of bone in the whole, about equal portions from the femur and tibia, were removed; three years afterwards, the limb was reported as "plump, and growing as fast as the sound limb." There was firm bony anchylosis.

Mr. Page's patient was a young lad, aged 17. Two inches and a half of the femur and tibia were removed. There was firm bony anchylosis. Reporting on his condition four years afterwards, he writes: "the growth of the stiff limb has quite kept pace with that of its fellow."

Mr. Jones's observations refer to the cases of three boys, aged respectively 7, 11, and 9. In the first instance, two inches and a quarter of bone were removed. There was bony anchylosis. In the second, rather more than four inches of the femur and tibia were removed. There was bony anchylosis. In the third, the exact measurement of bone removed is not mentioned; but there was bony anchylosis. This patient died at the end of twelve months; and Mr. Jones writes: "There cannot be a doubt that in this instance the limb, from which the joint was excised, kept pace with the other in every respect." Whilst in regard to the first mentioned cases no disparity of growth is hinted at.

From Dr. Keith, the distinguished surgeon of Aberdeen, I have received the following most lucid report of the present state of the boy's limb, on whom he operated nearly six years since. Dr. Keith's letter is dated October 12th, 1859; and he thus writes to me:—

"Dear Sir,—I have pleasure in replying to your favour of the 7th current, but have not the additional pleasure of reporting so favourably of John Hay's limb, as I seem to have felt warranted in doing three years ago.

"Be the cause what it may—and I shall be delighted to have your opinion on the subject—I, and I presume every one who has had experience in resection of the knee, feel convinced that growth to the length is all but arrested in the lower limb after every such operation.

"I delayed my answer until I should have opportunity to see and to measure John Hay's lower extremities; this I accomplished yesterday, and annex the result.

"He is now a stout healthy boy, in his fifteenth year; his left or sound lower limb long and well developed. His right limb is really plump to look at, but seems a mere appendage to his body, when compared with the other limb: the right limb being now *seven inches* shorter than the left limb, from the anterior superior spinous process of the ilium to the heel.

"At the thick of the thigh the left measures 17 inches round; the right, 16. Around the knee and patella: left, 12½ inches; right, 12. Around the calf of the leg: left, 11½ inches; right, 10½.

"In length, the left limb is 17 inches from the anterior superior spinous process of the ilium to the centre of the patella, and 17 inches from the same spot to the sole of the foot, in whole 34 inches; while the right was only 12½ to 14½, total, 27 inches.

"Yet, wearing a boot propped up by two steel rods seven inches long, he walks and runs with great ease and energy; and when I yesterday asked him, If he now wished the limb had been removed, he at once exclaimed: 'Oh, no! my leg is worth a thousand wooden ones; it is my own leg, sir, and I feel it to be so.' I daresay the poor fellow is right. The arrest of growth to the length is a mystery. Let me see that you solve it.

"To account for my statement made to Mr. Butcher three years ago, it is only necessary to state that exercise had developed the muscles so, that the limb was plump; he wore the same high-heeled boots that I had at first provided for him, so that no increase of disproportion in length had at that date taken place between the two limbs; but now my guess is, that the dwarfish little fellow had been standing still, and neither limb growing in length, it was only when he began to shoot out in earnest that the difference became apparent, and new boots with higher and higher props became the order of the day.

"Hay's right limb has an outward curve at the knee now, though anchylosis is perfect, and he thinks it is slowly increasing. That tendency from the hour of the operation has been often noted. How is it to be obviated?

"1. I think well of cutting the tendons forming the inner hamstring.

"2. Of slicing rather more off the inner than the outer condyle of the femur.

"3. Using a splinted knee-cap for life.

"The patella was spared in this case, and has strong union to both femur and tibia; and yet with all this the callus yields after five years."

The foregoing narrative of Dr. Keith will be attentively perused by practical surgeons. In two respects, his case possessed an advantage over mine. There was anchylosis; and but half the quantity of bone was removed. Notwithstanding, at the end of nearly six years, the deficiency of growth is measured by five inches—the same amount that was recorded in my case, and extending over the same period of observation, within three months.

The circumstances which led Dr. Keith to state, in the first instance, that the limb was "growing as fast as the sound limb", are, in my judgment, sufficiently explained by the presumption that neither limb had then grown, or, if they had

done so, it was only in a very limited degree. I had the same impression some two or three years after I had operated on E. F.; but I found subsequently that the real stride in development had not then commenced; and that, when it did, the limb subjected to operation did not partake in its advance.

The lateral yielding of the callus is not, in my experience, of frequent occurrence, where firm bony union has taken place. It may happen in young subjects, and, if so, forms another drawback to the proceeding being adopted in early years; but it certainly does not occur in adults. I should, however, always use in the ungrown limb a splinted knee-cap, as Dr. Keith suggests, to guard against the possibility of the event.

The next case, which was selected to illustrate the parity of growth, was under the care of Mr. Page. But the patient was seventeen years of age; and thus being past puberty, his condition cannot fairly be adduced in support of the theory.

Then we have Mr. Jones's three boys. The third boy, aged 9, died twelve months after the proceeding. His limb was found to have "kept pace with the other in every respect"—a statement, after what we have now ascertained, that cannot amount to any determination of the question at issue. The first and second boys, however, in whom large quantities of bone were removed, should now have their limbs reported on, as, from the length of time that has elapsed since the operations (eight and seven years), the evidence which their subsequent history could afford would be most important.

Being anxious to know about these cases, I wrote to Mr. Jones concerning them; but my letter arrived at Jersey at the time of the calamitous fire in the General Hospital, or I doubt not that I should have received the information I sought. As it is, I trust that the profession, through some other channel, will ere long be in possession of all the facts concerning their present state, which this most able surgeon can afford.

On what, let us inquire, when the operation of excision of the knee is performed in early life, and the subsequent growth of the limb does not correspond with its fellow—on what does this depend? Mr. Humphry says: "In young persons, care should be taken to make the section through the epiphyses of the tibia and femur; so that a thin layer of the epiphysis, with the cartilaginous medium that unites it with the shaft, is left upon each bone. If this precaution be taken, there is every reason to believe that the limb will keep pace in its growth with the opposite member." (*Med.-Chir. Trans.*, vol. xli., p. 216.) This opinion of so distinguished an authority on the development of the skeleton as Mr. Humphry, is entitled to every consideration, and, at first view, it appears plausible; but it is not borne out by facts.

Mr. Price writes: "Should the epiphyses of the bones be removed entirely, there can exist but slight doubt that arrest of further development will take place." (*Med. Times and Gazette*, April 23rd, 1859.) If this were so, there ought to have been an arrest in the growth of Mr. Jones's first and second instances, in which the bones must have been sawn through beyond their cartilaginous joinings, as well as in the boy operated on by Mr. Page, at whose age (9) an inch from either articular extremity could scarcely fail to go beyond the epiphysis.

On the other hand, Mr. Syme informs me (July 30th, 1859) that the articulating surfaces only were removed in the instance from which he drew the conclusions already cited, the bulging parts of the bones being left.

But, supposing that the bones in the thigh and leg do not grow when deprived of their heads, how are we to explain the want of growth in the case I have narrated, in the foot and the fibula, in the absence of the plea of want of use, inasmuch as the boy has worked his little limb for years with persevering activity?

That the theory of growth being arrested in young subjects by the removal of the heads of bones, is an untenable one, we have other facts in surgical experience to prove. Take, for illustration, amputation in the lower third of the thigh or leg, or at the ankle-joint. I have never found an arrest in the subsequent growth of the bones in my experience, in the first class of cases; and I am not aware of others having met with a different result. The complaint has been, rather, that the bone or bones in the stump become troublesome, and grow too much, so as even to require the removal of some inches at a period of years very distant from the operation. At the ankle-joint, I have especially watched the parity of growth. I had occasion to amputate at this articulation in an infant only twelve months of age, nearly six years since. The malleolar epiphyses were removed. The subsequent growth of the limb has been of the most perfect character—a condition invariably observed in several other instances where I have been called on to perform this operation at tender years.

That the limb may grow in the young subject after excision of the knee, the evidence which has been given me on the subject by my friend Mr. Humphry goes some way to prove, but not, from the age of the patient at this time, quite far enough to establish an accomplished fact, even in his well observed cases; but we must at the same time acknowledge that it may not do so—a conclusion that cannot fail to make us desire a further inquiry into the causes of failure in this respect, ere we determine to recommend the adoption of the operation in children generally.

The late Mr. Mackenzie hazarded the opinion that the want of anchylosis might exercise an influence on the subsequent growth of the limb. (*Monthly Journal of Medical Science*, June 1856.) He based it on Mr. Syme's case, in which the limb allowed a slight degree of flexion and extension; and, considering that my case afforded even greater mobility, the conjecture, but for Dr. Keith's illustration to the contrary, might have been deemed to be not unfounded.

It will be seen, however, that on the two points—the section through the epiphyses, and the union by anchylosis—Mr. Humphry's case is very conclusive in an argument of results. This able surgeon thus writes to me, July 22nd, 1859:—

"The only case I know of, in which sufficient time has elapsed to enable me to derive satisfactory information respecting the growth of the limb after excision of the knee, is that of William Child, related at page 196 of the last volume of the *Medico-Chirurgical Transactions*. The operation was performed in August 1855, when he was twelve years old; and in two months there was firm union between the bones. In consequence of your note, I drove over to examine the lad yesterday, and find that, during the interval of four years, the growth of the limb has proceeded *pari passu* with that of the other limb and of the rest of the body. The bones of the foot are quite as long as those of the other side—the tibia and fibula very nearly; certainly showing no greater difference than is due to the removal of a thin slice of the upper articular surface of the former. The femur is about an inch shorter than the other femur. The difference in this respect between the femur and the tibia is, I suppose, owing to the greater thickness of the slice removed from the condyles of the femur, in order to obtain a flat surface for union with the tibia."

A fair consideration, then, of the foregoing facts, leads us to certain conclusions affecting the operation of excision of the knee in young subjects. These are:—

Firstly. That the proceeding is liable to be attended by a want of corresponding growth in the limb subjected to operation, as compared with its fellow; the result being, that ultimately the member becomes not only useless, but is an incumbrance, as it has failed altogether to grow in proportion to the general expansion of the frame.

Secondly. That whilst we, at present, have no proof that the removal of the epiphyses, or the failure in obtaining anchylosis, exercise any material influence on the subsequent growth of the limb, it nevertheless appears probable that adequate growth is more likely to be attained where care has been taken to remove as small a portion of the articular extremities as possible, and anchylosis has resulted.

Having testified to the truth, so far as my own experience can guide me, on this deeply interesting question, as it affects the operation in early years, I shall now rest satisfied, trusting in the hope that we may yet reach the means whereby even this cause of failure may be removed, as time enables us to know more and more the results that may have been realised by others.

[*To be continued.*]

Fees for Medical Attendance. The association of physicians and *pharmaciens* of the department of the Somme agreed to the following declaration at a recent meeting:—All things necessary for ordinary life have long increased in price, while the fees of physicians have remained the same. On the other hand, in fixing the amount of fees, it is not sufficient only to take into account the number of visits; but account should also be taken of the severity of the disease, of the importance of the operation, of the risks undergone by the medical man, as well as of other circumstances, such as the social position and the pecuniary means of the patients. Therefore: 1. In future, physicians are entitled to a higher remuneration; 2. This remuneration will not be calculated upon the number of visits made, but according to the circumstances pointed out above.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY
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Lecture IV.

Urine in Disease. *Arrangement of the Subject. Diathesis.* Excess or Deficiency of Water and the Organic Constituents present in Health. *Excess of Water: Diabetes Insipidus: Deficiency of Water: Increased Acidity of Urine: Principles of Treatment: Nitric Acid in the Urine: Ammonia: on Detecting Urea in the Blood or Serum: on Detecting Ammonia in the Breath: Urea; Excess of Urea; Deficiency of Urea: Colouring Matter: Excess of Uric Acid and Urates: Principles of Treatment: Extractive Matters: General Remarks on the Increase of the Organic Constituents, with Analyses: Analyses of Urine in Chorea: Analyses of Urine in Skin-Disease.* Excess or Deficiency of the Inorganic Constituents present in Health. *Chloride of Sodium; its Diminution in Acute Inflammations: Sulphates; Increase in Cases of Chorea, Rheumatic Fever, etc.: Influence of Remedies: Alkaline Phosphates; Increased Secretion of Alkaline Phosphates in Inflammation of the Brain; Analyses; Earthy Phosphates; Increase in the Urine of Cases of Mollities Ossium; Analyses.*

Excess or Deficiency of the Inorganic Constituents.

[*Concluded from page 942.*]

Alkaline Phosphates. Much has already been said upon the quantity and origin of the alkaline phosphate in the urine; and I have brought forward evidence to show that the greater part of the phosphoric acid eliminated is carried into the organism in the food. A certain proportion, however, there can be little doubt, is formed in the body by the oxidation of the phosphorus of albuminous textures (nervous tissue). In diseases generally, the alterations which have been observed in the quantity of phosphate removed in the urine is to be attributed, to some extent, to the altered diet of the patient. It is reasonable to suppose that, in some conditions of the system in which a more than usual disintegration of tissues rich in phosphorus takes place, more phosphoric acid is formed in the organism than in health. This excess should be found in the urine in the form of alkaline phosphate, and the amount ought to correspond to the activity of the changes taking place. By ascertaining the proportion, we should be able to form an estimate of the quantity of phosphorus oxidised, and therefore of the nerve-tissue disintegrated, of which it was a component part. The really difficult part of the inquiry is to ascertain how much of the total proportion of phosphate present is derived from the food, and how much is actually formed in the organism. The sulphuric acid is almost entirely produced in the body; and there is not, therefore, the same difficulty in estimating the amount of sulphur oxidised, as there is in the case of the phosphorus.

Of late, the importance of this subject has been much increased by attempts to advance the experimental results already obtained in favour of the hypothesis, that the amount of phosphate excreted in the urine is to be regarded as an index of the activity of the nervous system. Those who labour to prove that all the changes in the body are the direct result of certain chemical decompositions, have not hesitated to bring forward these results in favour of their theory. It seems by some to have been regarded as a settled point, that the quantity of phosphate in the urine varies according to the amount of nervous tissue disintegrated; and it has been assumed that the quantity of work done by the brain is in direct proportion to the activity of the chemical changes going on in the nervous tissue. This question is obviously a most important one, and much more is involved in it than at first appears. I propose, therefore, to lay before you a few of the facts which have been ascertained; and I think we shall find that, in this matter, speculation has taken the place of reasoning founded upon facts and experimental observations.

Dr. Bence Jones, as is well known, has written several important papers upon this subject. The general conclusions to which he has arrived are the following:—

"In delirium tremens, and in other delirium, a remarkable increase in the amount of sulphates in the urine was frequently observed; and the total phosphates were in the same cases occasionally remarkably diminished.

"In acute inflammatory diseases of the nervous structures, during the most febrile symptoms, an increase was observed in the amount of sulphates in the urine; and the total amount of earthy and alkaline phosphates in these diseases appeared to be increased in the same proportion as the sulphates were increased." (*Phil. Trans.*, 1850, p. 66.)

"In fractures of the skull, the phosphatic salts increase only when any inflammatory action occurs in the brain; and in acute phrenitis, an excessive increase takes place. In delirium tremens, there is a marked deficiency of phosphates, unless they are introduced with the ingesta; an excess is, however, met with in some functional affections of the brain."

These conclusions are founded upon analyses of 1000 grains of urine, in eleven cases of delirium tremens and eight cases of acute inflammatory affections of the nervous centres. From these I select a few of the extremes.

Delirium Tremens and other forms of Delirium.

Case.	Sulphate of baryta per 1000 grains of urine.	Specific gravity.	Total phosphates.
8. Delirium tremens—thirteenth day	13·10	1037·4	9·83
10. Poisoned by laudanum; delirium and excitement—second day	7·83	1026·8	7·53
4. Delirium tremens—tenth day	17·31	1024·74	0·87
11. Delirium with phthisis—fourth night	6·97	1024·2	0·72

Inflammatory diseases of Nervous Structures, with Head Symptoms.

2. Inflammation of the brain—twelfth day	3·96	1018·7	5·14
Ditto—thirteenth day	11·23	1027·26	11·13
6. Inflammation of lungs, with tubercles and violent head symptoms—fourth day	8·55	1027·85	7·19
Ditto—sixth day	7·81	1026·1	6·43

The quantity of urine passed by the patients in twenty-four hours is not stated, nor is the amount of solid matter in 1000 grains of urine given. It is therefore very difficult from the above data to form an estimate of the total quantity of phosphate removed from the organism in twenty-four hours. Although many of the results, as far as they go, favour the above view, and especially when the numbers are considered with reference to the amount of solid matter estimated from the specific gravity, the increase of the phosphates, in cases of inflammation of nervous structures, cannot, I think, be regarded as an established truth.

I have estimated the quantity of phosphate in urine in various cases of disease. Some time since, I examined the urine of many patients in St. Luke's Hospital, for Dr. Sutherland, with the view of ascertaining the proportion of alkaline phosphate excreted in different cases of mania, dementia, paralysis of the insane, etc. (*Med.-Chir. Trans.*, vol. xxxviii, p. 261.) Forty-two analyses were made, and the following formula was filled up in each case.

Water.....
Solid matter .....
Organic matter.....
Saline matter .....
Phosphate precipitated by chloride of calcium and ammonia.....

Some interesting facts were made out, and the quantity of phosphates relatively to other constituents of the ash differed much from the healthy standard. Some of the results confirmed, as far as they went, Dr. Bence Jones's conclusions; but I do not think we can form a very positive conclusion from these data, seeing that, in some of the cases, the solid matter contained 10 or 12 per cent. of mixed phosphate; while in others only 3 or 4 per cent. was found; and this variation did

not always correspond to a difference in the symptoms. I subjoin a few of the most interesting results from two of the series of cases.

Paralysis of the Insane.

21. From a man, aged 36. First attack. It lasted two months. Complete recovery.

22. From a man, aged 45. First attack, of one month's duration. Not relieved.

23. From a man, aged 42. The specimen was taken on a day when he was very violent and noisy.

24. From the same, about three weeks afterwards, when the excitement had passed off.

Analyses.

	21		22	
Reaction	Acid.		Feebly alkaline.	
Specific gravity	1030		1015	
Water	912·6		959·4	
Solid matter	87·4	100·00	40·6	100·00
Fixed salts	21·42	24·50	13·31	32·7
Phosphate of lime precipitated by chloride of calcium and ammonia	5·18	5·92	1·57	3·86

	23		24	
Reaction	Neutral.		Acid.	
Specific gravity	1008		1016	
Water	988·6		958·2	
Solid matter	11·4	100·00	41·8	100·00
Fixed salts	4·74	41·57	8·45	20·21
Phosphate of lime precipitated by chloride of calcium and ammonia	2·90	25·44	2·86	6·84

It is important to observe that, in 23 and 24, 1000 grains of urine contained almost exactly the same quantity of phosphates, but that the proportion to the other constituents was very different; the solid matter in the first case containing the very large proportion of 25·44 per cent.; in the second, only 6·84 per cent.

Acute Mania, with Paroxysms.

25. From a man, aged 18, with meningitis. The present is the first attack, and has lasted three months. He recovered.

26. From a woman, aged 55. First attack, which has lasted about three months. She recovered.

27. From a man, aged 26. First attack, which has lasted six days. There was much exhaustion and emaciation. Weighs 7 st. 12 lb. Discharged uncured.

28. From a girl, aged 18. Second attack. Weighs only 6 st. 6 lb.

Analyses.

	25		26	
Reaction	Acid.		Feebly acid.	
Specific gravity	1020		1023	
Water	945·8		943·00	
Solid matter	54·2	100·00	57·60	
Fixed salts	12·91	23·81	15·10	26·49
Phosphate of lime precipitated by chloride of calcium and ammonia	6·05	11·16	7·14	12·52

	27		28	
Reaction	Acid.		Acid.	
Specific gravity	1033		1028	
Water	908·00		931·6	
Solid matter	92·00		68·4	
Fixed salts	13·18	14·32	20·33	29·72
Phosphate of lime precipitated by chloride of calcium and ammonia	9·73	10·57	4·49	6·56

It is much to be hoped that such observations will be further carried out by those who have the opportunity. Most valuable results would certainly be obtained, if the urine could be carefully collected for the twenty-four hours.

The conclusions at which Dr. Sutherland arrives, in his paper above referred to, are the following:—

1. A plus quantity of phosphates exists in the urine in the paroxysms of acute mania.

2. A minus quantity exists in the stage of exhaustion in mania, in acute dementia, and in the third stage of paralysis of the insane.

3. The plus and minus quantities of phosphates in the urine correspond with the quantitative analysis of the brain and of the blood; for a plus quantity of phosphorus is found in the brain, and a slight excess of albumen in the blood of maniacal patients; and a minus quantity of phosphorus and albumen are found in the brains of idiots, and a minus quantity of albumen in paralysis of the insane.

4. The plus quantity of phosphates in the urine of cases of acute mania denotes the expenditure of nervous force, and is not a proof of the existence of acute inflammation in this disease.

I have selected the following analyses from my note-book:—

Chronic Inflammation of the Brain.

Analysis 29 shows the proportion of phosphates in the urine of a man, aged 34, who had been suffering from a tumour pressing on the veins of Galen, causing dropsy of the ventricles of the brain. There were many symptoms of chronic inflammation. Specific gravity 1018, acid.

30. Three weeks after the first analysis, acid, clear, pale; specific gravity 1015.

31. After another interval of three weeks, clear, natural colour; specific gravity 1016.

Analyses.

	29		30	31	
Water	962·10		1000·00	956·3	
Solid matter	37·90	100·00		43·70	100·00
Organic matter	27·09	74·12		33·72	77·17
Fixed salts	9·81	25·88		9·98	22·83
Phosphate of lime precipitated by chloride of calcium and ammonia	2·74	7·22	3·53	3·92	8·97

Urine in Epilepsy.

32. From a man suffering from epileptic fits, occurring every five or ten minutes, for seventeen hours. He breathed stertorously the whole time, and no urine could be obtained during this period. Urine was obtained on the next day (June 10th), acid, specific gravity 1024. Contained an abundant deposit of urates.

33. From the same patient, on the 12th; acid, 1024. Contains a good deal of pus.

34. From the same patient, on the 19th; alkaline, 1017.

35. From a very intemperate patient, aged 59, who had epileptic fits every few minutes for thirty hours, followed by exhaustion (twelve hours) and death. There was complete loss of consciousness.

36. From a man, aged 53, suffering from slight general paralysis, with impaired speech (slight), intellect, and memory. Duration of illness, three years. Urine pale, clear; no albumen; feebly acid; specific gravity 1009.

Analyses.

	32		33	
Water	931·2		927·2	
Solid matter	68·80	100·00	72·80	100·00
Organic matter	58·35	86·27	51·01	85·18
Fixed salts	9·45	13·73	10·79	14·82
Phosphate precipitated by chloride of calcium and ammonia	6.96	10·11	3·92	5.38

	34		35	36	
Water	958·8		1000	976·7	
Solid matter	41·20	100·00		23·30	100·00
Organic matter	34·68	84·18		17·46	75·94
Fixed salts	6·52	15·82		5·84	25·06
Phosphate precipitated by chloride of calcium and ammonia	2·15	5·21	8·86	1·79	7.68

The quantity of phosphate in the first analysis is very great, especially when the small proportion of saline matter in the urine is taken into consideration. In Analysis 32, the ash consists of as much as 73·63 per cent. of phosphate; in 33, 36·30 per cent.; and in 34, the proportion is further diminished to 32·93 per cent.

Urine in Delirium Tremens and Puerperal Mania.

37. From a man, aged 36, on the fifth day of a slight attack of delirium tremens. He had had three severe attacks previously. Clear, high coloured; specific gravity 1015. The saline matter contained much sulphate, but not a trace of chloride.

38. From a man, aged 31, with delirium tremens of a fortnight's duration. Acid; specific gravity 1020.

39. From a woman with puerperal mania. Acid; specific gravity 1012.

Analyses.

	37		38	39
Water	959·32		1000·00	1000·00
Solid matter	40·68	100·00		
Organic matter				
Fixed salts	6·30	15·48		
Phosphate precipitated by chloride of calcium and ammonia	2·93	7·20	7·66	3·40

Urine in Health.

The following analyses show the varying quantity of the phosphates in the urine of a healthy man, twenty-three years of age. The large proportion of fixed salts depended upon the presence of much chloride of sodium.

40. Passed at 2½ P.M., immediately after dinner. Clear, natural colour; acid; specific gravity 1015.

41. Passed at 6 P.M. on the same day, after three hours reading. Acid; specific gravity 1011.

42. Passed at 2 P.M., immediately before dinner, on another day. Feebly acid; specific gravity 1022.

43. Passed at 6½ P.M., four hours after dinner. Acid; specific gravity 1026.

Analyses.

	40		41	
Water	963·60		972·4	
Solid matter	36·40	100.00	27·6	100·00
Organic matter	14·75	68·00	19·89	72·07
Fixed salts	11·65	32·00	7·71	27·93
Phosphate of lime precipitated by chloride of calcium and ammonia	2·62	7·19	1·92	6·95

	42		43	
Water	943.80		936.80	
Solid matter	56.20	100·00	63·20	100·00
Organic matter	37·80	67·26	30.38	63·84
Fixed salts	18·40	32·74	22·82	36·16
Phosphate of lime precipitated by chloride of calcium and ammonia	2·40	4·27	6·22	9·84

In the above analyses, can any relation be shown to exist between the symptoms of the patient and the proportion of phosphoric acid? In some, there is undoubtedly an indication of such a relation; but in others the proportion of phosphate is as great, although there was no evidence whatever of increased cerebral action or of inflammation. Without discussing the abstract question, I cannot think that the evidence at present obtained is sufficient to enable us to form a general conclusion. The inquiry is more difficult than it at first sight appears to be. Practically, we must determine how much phosphate is derived from the food, and how much from the oxidation of phosphorus. We have then to ascertain the proportion formed in the muscular system, as well as in the nervous structures. Dr. Hammond, who has carried on very many valuable researches upon subjects of this nature, has found that the phosphates in the urine are greatly increased after active exercise.

In any case of disease in which the excretion of an increased quantity of phosphates in the urine is suspected, we should ascertain—

1. The total quantity of phosphoric acid, in combination with alkalies, in the urine passed in the twenty-four hours.

2. The amount taken in the food within the same period of time.

To be more exact, the earthy phosphate in the urine should also be estimated, as well as that which passes off in the fæces.

I have not been able to ascertain that the quantity of phosphate excreted in the urine has ever been compared with the amount taken in the food, in diseases in which we should expect an increased disintegration of nervous tissue. Until experiments have been conducted so as to furnish us with positive data on this point, I do not think we are in a position to determine the question at issue. The results which have as yet been obtained are not sufficiently conclusive, as they fail to show even the total absolute amount of mixed phosphate eliminated from the body in twenty-four hours. One can hardly suppose that, in cases in which the greatest possible amount of disintegration of nervous tissue was occurring, a very great increase in the phosphate would be observed, considering how very much of the total quantity is derived from the food; and of the comparatively small amount *formed* in the organism, a considerable proportion originates in the muscular tissue. Very exact observations upon the in and out-going phosphates have therefore to be made before we can hope to have the fact established conclusively.

I have ventured to occupy much time in the discussion of this question, and have gone more into detail than perhaps its importance, in the opinion of many practical men, demands. Still, when a long train of theories is constructed, the truth of which entirely depends upon the accuracy and correct interpretation of the experimental results from which it starts, it behoves us to examine rigorously into the nature of this foundation; for until the fundamental facts have been firmly established, we cannot allow ourselves to be led by the reasoning, however logical it may be; or receive the conclusions, however closely they may follow on the premises. While, therefore, I do not deny that increased nervous action may be associated with the formation of an increased quantity of phosphoric acid, which is eliminated in the urine, I think that the facts hitherto advanced in favour of this view are by no means conclusive; and I therefore hold that we are not yet in a position to form any theory upon the nature of the changes occurring in health or disease, in cerebral action, regarded from this point of view.

Earthy Phosphates. The proportion of earthy phosphates does not seem to vary much in disease. Dr. Bence Jones has shown that, in cases in which the alkaline phosphates are increased, there is no corresponding increase in the proportion of earthy phosphates. Much of the earthy phosphate eliminated in the urine in health is doubtless derived from the food, but a certain proportion is set free in the disintegration of the tissues, especially the osseous tissues. An increase of earthy phosphate is observed in the urine in some very rare cases of disease, in which the earthy matter of the bones is absorbed (*mollities ossium*). In one acute case of this disease, Dr. Bence Jones (*Phil. Trans.*, 1848) obtained indistinct evidence of the presence of chlorine, and suggests that in future this substance should be searched for, as it may possibly be directly concerned in the removal of the earthy material from bones. This specimen of urine contained a peculiar substance of an albuminous nature. In 1000 grains, there were 1.20 gr. of earthy phosphate; and the solid matter contained 1·18 per cent. The analysis will be given in Lecture v, under *Albumen*. I have had opportunities of making analyses of the urine in two cases of mollities ossium. They were both well marked and fatal cases of the disease, and the specimens of urine were obtained shortly before death. The patients were quite bedridden, and the bones were so soft as to be readily indented by the finger.

44. This specimen of urine, from a woman suffering from mollities ossium, was sent to me by Dr. Chambers. The deposit contained oxalate of lime, with numerous stellate masses and separate crystals of triple phosphate. Reaction, acid; specific gravity, 1014.

45. From a case sent by Dr. Greenhalgh. Morning specimen.

46. Night specimen.

Analyses.

	44		45		46	
Water	971·9		965·2		960·88	
Solid matter	28·1	100	34·8	100·00	39·12	100·00
Urea	5·0	17·7				
Extractives	10·22	36·3				
Fixed salts	12·88	45·81	14·44	41·49	5·25	13·42
Earthy phosphs. precipitated by ammonia	1·185	4·21	·79	2·27	·4	1·02
Alkaline phosphs. precipitated by sulph. magnesia and ammonia	1·13	4·21	·86	2·47	1·3	3·32
Triple phosphs. filtered from the urine			·058	·16		

The large proportion of earthy phosphate in these analyses is a very interesting fact. In the first, the earthy actually exceeds the alkaline phosphate; and in the second, it is nearly equal to it. In healthy urine, the alkaline phosphate usually amounts to from ten to fifteen times as much as the earthy phosphate. The inorganic salts generally, are in considerable excess.

Excess of Earthy Phosphate, which has been shown so rarely to exist, must be carefully distinguished from the mere deposit of a certain amount in an insoluble form. The earthy phosphates very often form an insoluble deposit in urine. The characters of these salts will be described under *Urinary Deposits*. It is hardly necessary to observe, that the deposit does not depend necessarily upon the excretion of an excessive quantity, but is often due to a change having occurred in some of the constituents which normally hold these salts in solution. A small quantity of deposit of earthy phosphates makes a great show in urine; and it is obvious that a very large proportion might be held in solution in the urine, and thus escape detection, unless an analysis were made. In the case just cited, the greater part of the earthy phosphate was in *solution* in the urine. It is common enough to find the deposit in cases of dyspepsia and overwork, and it is often spoken of as indicating the destruction of nervous matter. In these conditions, the urine often becomes neutral or slightly alkaline, and this causes the precipitation of the phosphate. As before remarked, the quantity of the earthy phosphates is not perceptibly affected by those circumstances which influence the quantity of the alkaline phosphate; and, although an excess of earthy phosphate is of considerable importance, its existence depends upon morbid actions of a different nature. A diet composed of much sugar diminished the earthy phosphate in the urine (Böcker).

Of the principal Points to be ascertained from a Quantitative Analysis of Urine in Disease.

In clinical investigation, the principal points which it is important to ascertain with regard to the characters of the urine are the following:—

Quantity passed in twenty-four hours.

Specific gravity of specimens passed in the morning and evening.

Reaction of specimens in the morning, and about three hours after meals.

Colour; smell; consistence.

Presence or absence of a deposit. If present, its microscopical characters. (Lectures VIII, IX, X.)

Presence of any of the substances to be described in Lecture V—albumen, colouring matter of bile, sugar, etc.

Estimation of the quantity of constituents in 1000 grains of the mixed urine of twenty-four hours. From these data, the quantities passed in twenty-four hours are to be calculated.

	In 1000 grs.	In 24 hrs.
Water	—	—
Solid matter	—	—
Organic matter	—	—
Saline matter	—	—
Urea	—	—
Uric acid	—	—
Free acid	—	—
Extractives, etc.	—	—
Alkaline phosphates, or phosphoric acid	—	—
Earthy phosphates	—	—
Sulphates, or sulphuric acid	—	—
Chloride of sodium, or chlorine	—	—

In particular diseases, it is very desirable to ascertain the quantity of one or two constituents removed in the twenty-four hours; and very much valuable information with regard to the nature of many diseases might be obtained by a number of careful and exact analyses of this kind. It is not necessary to fill up the above scheme in every case. In some, it would be desirable to know the amount of urea and uric acid with precision; in others, the amount of urea and sulphates. In diseases of the nervous system, the exact amount of alkaline phosphates passed in the twenty-four hours should be noted, etc. Before the investigation is commenced, the observer should determine exactly the points he wishes to ascertain, construct a table, and fill up the several columns daily from his analysis-book. Every analysis should be made in precisely the same manner, and careful notes of the case should be recorded daily. If possible, analyses of the urine should be made after the patient is restored to health; so that the quantities of the various constituents eliminated from the body in a state of health and disease may be accurately compared, and the patient should be weighed at intervals while under observation.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, NOVEMBER 26th, 1859.

THE PUBLIC HEALTH.

There is something grand, almost epic, in the employment of the Registrar-General of deaths. Throughout the year, he has ever open before him the great book of death, which at stated times he casts up, and tells the nation what progress the great reaper has made among us. Unperplexed with the conflicting reports which paralyse the judgments of those who watch the fatal shears of Atropos from lower heights, he is enabled at every quarterly period to show where the hand of the destroyer has lain heavy upon city or county, where he has passed lightly by, and where the science and attention of man have loosened his hold over all but those who legitimately succumb to his final power. Without such an officer, we should never know how we were fighting the great fight with disease. Public Rumour, with her hundred tongues, would exaggerate our epidemics as she did in the olden time; and the minor causes of death would be passed by, which strike so many, but which leave such slight traces upon the public mind.

Pondering over the great volume of the mortality, the Registrar-General puts his finger on one corner of the map, and shows that, in Bradford, man, using his reason and his philanthropy, has within the last few years driven away the too frequent visits of the destroyer. During the ten years 1841-50, death struck down no less than twenty-six in the thousand. Then man came to the rescue of his fellow; a limit was put to the long hours of toil; some of the processes which tended to enervate the inhabitants were replaced by machine-work which cannot feel; the water and the sewerage were attended to; and, to use the poetical words of the Registrar-General, "through the incessant noises of machinery are often heard, as the day declines, pleasant voices singing the concerted songs of the Bradford minstrels." These influences, moral and physical, now tell their tale in the great book of life and death he reads out to the nation; and, instead of a mortality of twenty-six in the thousand, we are informed that, for the last three years, the death-rate in the town has been only twenty-one in the thousand. Here we see the King of Terrors almost as visibly driven away by the hand of man, as in some of those quaint old woodcuts of Albert Durer.

By the aid of the unerring tests furnished by the mortuary pages, the Registrar-General tells us of changes and fluctuations of the death-rate which even more astonish us. This year the grim visitant has left many of his

ordinary tracks in the great towns, and has strode forth into the country. The balmy air, the open heath, the verdant pasture, and the shady wood-side, have in some unaccountable manner lured him for a moment from his more congenial haunts in squalid courts and fever-stricken alleys. The mortality of the summer quarter in small towns and country parishes is above the average, to the extent of more than one death annually out of every thousand living: whilst the destroyer has stricken two in a thousand less than usual in the great town districts. Possibly the long drought, felt more in some country districts than in towns, followed by fever and diarrhœa, thus led the destroyer into "fresh fields and pastures new." Indeed, we are beginning to learn that the air where roses bloom may be heavy with death to man; and that even the mountain-top, where Hygiea loves to dwell, may be rendered by human neglect and perversity as fatal to life as the cellars of Liverpool or Glasgow.

Striking the balance for the whole of England, the Registrar tells us that the summer quarter just passed shows an excess of deaths over the corresponding quarter of last year, amounting to no fewer than six thousand and seventy-nine persons; but that the rate of mortality is still below the average.

Thus our great mortuary officer, who chronicles what shafts of death have sped, enables the country to make a rough-guess at the general condition of the public health. It seems to us, however, that the grim sums he is perpetually working out, only enable us to approximate to our true sanitary condition. His figures measure the severity of our diseases; they by no means inform us of the thousand sick beds from which death has turned aside. There may be an immense deal of sickness in the country, of which little trace is to be immediately found in the *Quarterly Reports*. To our mind, besides the Registrar of deaths, there should a Registrar of disease; an officer, who should attend to and indelibly fix on paper the records of those numerous evanescent diseases which pass and make no sign. Who knows what might result from an accurate register being kept of the common cold and influenzas that come under treatment?

It will be said, that the machinery for providing such an officer with materials is wanting. As far as private practice is concerned, there would, we admit, be an almost unsurmountable difficulty in collecting the records of recovered cases; but there still remains ample material from which we believe a book of diseases as well as of deaths could be made up. The Poor-law medical officers throughout the country make periodical returns of the cases of the pauper patients under their care, specifying the nature of the diseases; while, in most of the large hospitals, there is a record kept of every case that has been under treatment. Here, then, we already have the statistics of an overwhelming mass of disease, which only wants the touch of some philosophical intellect, like that of Dr. Farr, to cause it to bring forth golden fruit. Who knows what great patterns of disease, which now lie invisible to us, may not be evolved from the aggregation of the million small details which individually show nothing—just as some of the most perfect pictures have been painfully built up from the long buried heaps of tessellated stone found in some old Roman ruin? There should be a national book of life—diseased life—as well as one of death; and that the day will come when such a volume will be opened at stated times for the public inspection, we have no doubt whatever.

THE WEEK.

The martial ardour of our Spanish friends manifests itself in a hundred curious ways, but in no way more singularly than in its medical aspect. For instance, the editors of the *Espana* have agreed to give a box of surgical instruments to the surgeon who shall make the first amputation or arterial ligature on the field of battle, or in the ambulances. How many Spanish legs will be needlessly sacrificed in this race for the splendid prize of a box of surgical instruments, we will not stop to inquire. Rewards are not to be confined altogether to the operators, as we find that the *Espana* promises an orthopædic apparatus to the first soldier that shall undergo an amputation. There is something quite touching in this offer to the warrior. Hitherto, the laurel crown has been thought the fit reward for the soldier who suffers in the defence of his country's honour; but the Goddess of Victory henceforth will content herself with offering the Spanish soldier a wooden leg! Operator, and patient operated upon, being thus promised rewards, we may anticipate a fine burst of amputating at the outset of the campaign against the Moors; and those students who wish to study the surgery of war should not neglect such a favourable field for gaining experience. We do not anticipate, however, that, under such circumstances, they need expect any fine example of conservative surgery among the Spanish military surgeons.

The town has been astounded at the account in the *Times* of the arrival from Sebastopol of a shipload of bones—two hundred and thirty-seven tons of bones! We have heard such marvellous tales respecting the use made of the mortal remains of our heroes at Waterloo, that the public are anxious to know if the commercial spirit is already turning to account the bleaching bones of our Crimean soldiers. The suggestion is so horrible, that it has called forth a correspondence in the *Times*. We are assured by some confident "agent for ships with *similar* cargoes", that every precaution is taken by the authorities here to report where human bones are found during the discharge of the vessels. It is quite clear, therefore, that it is thought all the bones may not be those of horses, oxen, etc. But we may ask, Is not this examination a little too late? Would it not be better to make the examination before the bones are shipped, instead of horrifying the public with the bare possibility of their countrymen's bones being sent over here mixed with equine and bovine remains? We may, moreover, ask if the "authorities", thus placed to adjudicate between human bones and those of animals, are possessed with sufficient osteological science to properly perform their duties? Public feeling will certainly demand that the Government shall order a rigid inquiry into this matter; and, in case of the discovery of human remains, that the traffick should be at once discontinued, and the traffickers, if possible, indicted for thus desecrating the remains of our sacred dead.

The vaccination question, which has occupied so much of the attention of the profession of late, is now beginning to attract

the notice of the public press. Several letters in the *Times* have within the last few days drawn attention to the fact that small-pox is greatly on the increase throughout the country, and that there are signs of a degeneration of vaccine lymph, in consequence of its continued circulation through the human frame. This is a subject so fraught with interest to every class of the community, that we trust the Medical Council will speedily see the necessity of moving in the matter, more effectually than the Board of Health have yet done. Dr. Letheby, in an interesting communication to the *Times*, says:

"In the city of London the mortality from small-pox has risen during the last year from an annual proportion of 18 to 47; and during the last nine months the quarterly returns of death from it have been 4, 11, and 26—showing a very serious increase in the spread of the disease; and I believe that is very general throughout the country. The conclusions from it are, either that the protective power of the vaccine lymph is not so complete as it hitherto has been, or that the effect of it in the individual wears out after a few years, or that the operation of applying it is not properly performed. Since July last I have made especial inquiries into the particulars of 93 cases of the disease which have occurred in the city, and of which 34 were fatal; and the results are, that in 13 of the fatal cases, and 14 of the recoveries, vaccination had not been performed. In seven cases it had been done within a year of the attack, and in several within a month, the statement being that the arm had risen well. In eight cases the operation was not successful, and in many others it had been performed in early life—that is, some years before the attack. These facts would seem to show that vaccination is not protective; but there is great reason for believing that the operation is not always properly performed. It can never be considered successful unless the vesicles (three or four in number) are well developed, and go fully through their time of maturation and decay. The mere presence of a little pain and irritation in the arm, with even a slight formation of a vesicle, is no safegard to the disease.

"At the same time, it is possible that the lymph has degenerated and has become modified by frequent transmission through the human subject; and it might be that an occasional renewal of the vaccine matter from the cow would be advantageous. It is very probable, also, that the *materia morbi* which renders an individual susceptible of small-pox is regenerated in the system after its destruction by the vaccine virus; and therefore it may be necessary, as well as prudent, to protect the system by a second, or even a third vaccination, at intervals of a few years."

The fact of partial failures of this kind occurring throughout the country, has been seized hold of by such persons as Dr. Michell, of Bodmin, to denounce in the House of Commons the greatest medical discovery of the present century, not only as a delusion and a snare, but also a means of introducing the most loathsome diseases, before unknown, into the human frame. Unless the medical profession are willing to allow such statements as these to sink into the credulous mind of the public, it should turn its attention seriously to solve the difficulties which lie in the way of the successful application of Jenner's great discovery.

The somewhat frequent occurrence at Oxford, during late years, of fatal boat accidents on the Cherwell and the Isis, has roused the members of the University to endeavour to solve the problem, how to render a health-giving exercise innocent of the charge of being an occasional minister of death. On November 18th, a meeting, composed of about three hundred members, principally undergraduates, was held in the Radcliffe Library, for the purpose of taking the subject into consideration. Dr. Acland presided, and pointed out that the number of deaths from drowning was much smaller than is generally supposed, there having been only fifteen since 1828; and that the means of preventing fatal accidents lay in learning to swim. The meeting ultimately passed the following resolutions, with others:—

"That whereas the means for learning to swim in Oxford are inconvenient or insufficient, the Hebdomadal Council be requested to take into consideration the construction, and, if necessary, to undertake the management of a proper swimming bath, fit for daily use during the two winter terms, and conveniently placed.

"That the Council be requested also to consider whether they can obtain, and, if necessary, undertake the management of a good open swimming pool in the river, with a proper swimming master in attendance at certain hours of the day during the summer term.

"That the meeting offers the above resolutions to the attention of the Council, not only from the desire to diminish accidents, but from a wish to keep alive the English love of aquatic exercises, and to promote, as far as they can, the healthy as well as useful art of swimming for its own sake."

MEDICAL REGISTRATION.

NOTICE.

The Medical Registrar presents his compliments to the Editor of the British Medical Journal, and would be much obliged if attention could be drawn to an advertisement sent herewith, in order that qualified persons who are still unregistered, those especially who have obtained their qualifications in the course of the present year, may not lose their opportunity of appearing in the *General Register* for 1860.

Medical Registration Office, 32, Soho Square, London, W.,
November 21st, 1859.

Association Intelligence.

MEETING OF COMMITTEE OF COUNCIL.

The Committee will meet at the Queen's Hotel, Birmingham, on Tuesday, December 6th, at 1 o'clock.

The state of the Finances, particularly with reference to the publication of the Journal, will be considered; the Readers of the Addresses at the next Annual Meeting will be appointed; and other business will be transacted.

Philip H. Williams, M.D., *General Secretary.*

Worcester, November 22nd, 1859.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [General Meeting.]	White Lion, Bristol.	Thurs., Dec. 1st, 6.30 P.M.
Birmingham and Midland Counties. [Ordinary Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Dec. 8th, 6 P.M.
Midland. [Quarterly Meeting.]	Board Room, Infirmary, Derby.	Thurs., Dec. 8th, 3 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

BATH AND BRISTOL BRANCH.

DIPHTHERIA.

At the last Quarterly Meeting of the Bath and Bristol Branch, it was resolved that an inquiry should be set on foot with reference to diphtheria. Dr. William Davies, of Bath, will be obliged by answers to the following queries: the replies being numbered according to the questions.

1. Number of cases, ; age, ; sex, ; and general condition of patients.—2. Condition of throat, especially as regards the presence of false membrane, etc.—3. Mode of treatment; local and general.—4. Number of deaths.—5. Cause of death in fatal cases.—6. *Post mortem* appearances.—7. General remarks.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 8th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

This was the first meeting of the Session.

ANEURISM OF THE ABDOMINAL AORTA ARRESTED IN ITS PROGRESS. BY S. SOLLY, ESQ., F.R.S.

Mr. Solly was sent for, on October 16th, 1855, to see Captain W., aged about 30. He was suffering great agony, which he referred to the epigastric region: it was not much increased by manual pressure, but he could not lie flat on his back without additional suffering. Mr. Solly ordered a dose of croton oil; and, as soon as the bowels had acted freely, a grain of morphia, with three drops of tincture of aconite in water, every three hours. Four years and a half previously, he first suffered from pain in his abdomen, when following the hounds on a young and very unruly horse. When he arrived at home in the evening, this pain continued so acute as to oblige him at once to go to bed. Since that time, he had never been thoroughly well. But he said that he did not really suffer much until the last six months, when, the pains becoming more frequent, he consulted a London surgeon, who ordered him mercury with sarsaparilla, and friction to the back, telling him that he considered his affection spinal. These means seemed of some service; but on a hurried journey to Ireland, all his symptoms returned. The pains extended through the abdomen to the back and chest. He had frequent nausea, and at times vomiting, and almost always pain in the stomach after food, solid or liquid. In a letter, dated October 18th, Dr. Gibney of Cheltenham, under whose care the patient had been, intimated the probability of the case being one of aneurism of the cœliac axis. On October 19th, Mr. Solly met Dr. Watson in consultation. The patient was much relieved by the croton oil, and he had had a good night's rest. On examination, there was found to be a distinct pulsating tumour a little above the umbilicus, at about the bifurcation of the aorta. This pulsation was felt not merely from behind forwards, but laterally also. This fact had also been observed by Dr. Watson on his previous examination; and to both it was the confirming point in the conclusion. On listening carefully, there was heard, both with and without the stethoscope, a distinct *bruit de soufflet*. Neither Dr. Watson nor Mr. Solly had now any doubt that the tumour was an abdominal aneurism. The urine, examined by Mr. W. Tyrrell, was "pale, with a white sediment suspended in a small quantity of mucus, exhibiting under the microscope crystals of oxalate of lime." On October 29th, Mr. Leggatt, of William Street, Lowndes Square, residing within a few doors of Capt. W., was called in, and found him complaining of pain in the back. Three or four days after this date, when the bowels had been well emptied by purgatives, Mr. Leggatt satisfied himself of the existence of an aneurism. On November 7th, it was determined to administer chloroform; and having raised a blister by means of a heated iron spoon on each side of the lumbar vertebræ, opposite the seat of pain, to dress the raw surface with morphia. On November 12th, Dr. Todd confirmed the diagnosis of aneurism. On the 19th, the patient was suffering severely from pain and sickness. He was ordered a minim of creasote and two grains of disulphate of quinine every six hours; and a drachm of tincture of opium to be used in an injection. The next day, pulsation could not be felt in the right iliac artery: in the left iliac and femoral arteries, pulsation was distinct, but feeble. On the 29th, he was improving, and the sickness had been restrained: and he was ordered a mixture of quinine, dilute sulphuric acid, alum, and infusion of roses, in the hope of increasing the coagulum in the sac. As, however, this caused griping, it was discontinued on Dec. 3rd, and the quinine and creasote were resumed twice a day, to which, on January 4th, 1856, a quarter of a grain of sulphate of iron was added. On the 12th, after a consultation with Mr. Tufnell of Dublin, who advised confinement to the recumbent posture, a sofa was procured for him, with a rack movement, that would permit some alleviation of position without exertion. He was ordered to have daily four ounces of meat, eight ounces of bread, three ounces either of fruit or vegetables, and twenty-four ounces of water or tea; but no stimulants. On April 28th, the pulsation was less distinct, but was more diffused, and extended more in the direction of the right groin; the *bruit* was less clear, but could be heard almost as low as Poupart's ligament. His general health was improved; and, after submitting to the starving plan and absolute rest for about nine weeks, he travelled to Dover, and bore the journey well. In Dover, he was under the care of Mr. Sankey and Dr. Barton, and went on well until June 15th, when he was reported as gaining strength, and going out daily. Shortly afterwards, he was persuaded to accompany Lord Y. in his yacht on a cruise to Lymington. Here he walked for about half a mile, which was more than he had ever attempted at Dover, and from that time to the present the pain gradually increased, until, on account of its intensity, Mr. Solly was sent for on July 9th. The treatment which had been adopted in London with perfect success in relieving the pain—viz., chloroform, blistered surface dressed with morphia, and opium injections—had been again tried, but with only temporary relief. On examination, Mr. Solly found that the tumour was smaller, the pulsation much less distinct, and the *bruit* fainter; his radial pulse was stronger, he had gained flesh, his appearance was healthy, and his muscles were firm. Under these circumstances, Mr. Solly advised venesection to six ounces. He bore the bleeding well; no feeling of faintness followed, the pulse became softer, and for a time he was relieved. The blood, on the next morning, exhibited a firm coagulum, slightly cupped and buffed. The pain and sickness had now returned; Mr. Solly accordingly recommended a strong aperient, and a blister on the abdominal surface of the tumour to be dressed with morphia. On Sept. 5th, 1856, Mr. Solly saw his patient for the last time, in passing through London on his way to Cheltenham. There are no notes of his progress for about two years; but it appears that, in the mean time, he consulted several surgeons both in London and Dublin, and a London physician, who told him he had no aneurism. On Jan. 23rd, 1859, Mr. Solly was informed by Dr. Gibney that the patient, in consequence of the idea that he had no aneurism, had recommenced his hunting, driving four-in-hand, etc.; and thus he continued, until he died suddenly, on August 8th last, when under the care of Dr. Hoffmeister, of Cowes, who, with Dr. Cass, made a *post mortem* examination. Dr. Hoffmeister had been attending Captain W. for a week previously, during the whole of which time he had been suffering from very severe pain in the back and abdomen; there was marked abdominal pulsation, with a loud bellows murmur; he was occasionally soothed by opiates and chloroform. On visiting him one day, just after noon, he found him pallid and dying. It appeared that, the bowels having acted, he lay down in bed, and immediately afterwards called out from the agony of the pain, and suddenly became deadly pale and faint. The cause of Capt. W.'s death was, on *post mortem* examination, found to have been the bursting of an aneurism of the abdominal aorta, immediately above its bifurcation, nearly four inches in length and between two and three in breadth, the rupture taking place by a small opening at the back part of the aneurism, a little to the inner side and just above the origin of the left iliac artery. The coats of the aneurism, at the lower part, were plated with ossific deposits, and there were also fibrinous deposits. The cellular tissue behind the viscera was very extensively infiltrated with coagulated blood. The vertebræ were not diseased. Mr. Solly thought that if the patient had pursued the same plans by which the character of the aneurism was so much altered that eminent medical men doubted its existence, he might have lived many years; that the sac might have become firmly consolidated, its cavity obliterated, and the fatal termination averted.

HISTORY OF AN ADDITIONAL CASE OF TUBAL GESTATION. BY ROBERT LEE, M.D., F.R.S.

This case, which occurred in the practice of Mr. Gregory Forbes, was that of a woman, who, having menstruated profusely a month before her death, was seized with pain in the abdomen, on October 8th, followed by complete prostration. She died the following morning. On examination of the body, three pints of blood were found in the cavity of the abdomen, which had escaped from an opening in the left Fallopian tube, where an ovum had been developed. The embryo was not found at the time of the *post mortem*, nor was the amnion or vesicula umbilicalis discovered; and there was no deciduum in the cavity of the uterus. The Fallopian tube and ovarium were alone permitted to be removed; and these were examined, under spirit, by Dr. Lee, who found a deciduous membrane adhering to the inner surface of the tube, and enclosing the villi and membrane of the chorion on all sides. The

hæmorrhage was evidently traceable to a rupture in the decidua and adhering portion of the tube, by which a communication was established between the cells of the villi of the chorion and placenta and the sac of the peritoneum, through which the blood flowed from the cells of the chorion into the abdominal cavity.

A CASE OF DOUBLE CLUB-FOOT (TALIPES VARUS) AND CLUB-HAND IN THE SAME INFANT. BY HOLMES COOTE, ESQ.

The author read the particulars of a case of double club-foot and club-hand in the same infant. He remarked that such an occurrence was very rare, no similar specimen existing in the museum of the Royal Orthopædic Hospital. There were cases on record in which both hands and feet were congenitally *deformed;* but in the present instance, there was only displacement, the component parts of the hands being as perfect as were those of the feet in their abnormal position. He added some remarks upon the difference between deformities caused by arrest of development and displacements or alterations in form from mechanical pressure. He argued that club-foot, in its usual congenital form, was due to pressure during intrauterine life. Some preparations of deformity were exhibited.

MEDICAL SOCIETY OF LONDON.

Monday, November 21st, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

CLINICAL OBSERVATIONS.

Diphtheria, with Irritation and Paralysis of the Œsophagus. On July 29th, 1859, Dr. Rogers was sent for to see a young man, 24 or 25 years of age, a hosier. The patient was walking about in a state of great anxiety; and complained of sore-throat and difficulty of swallowing. The uvula was relaxed, and there were slight patches of exudation. The pulse was 100, rather feeble and low. In the early part of the week, he had had diarrhœa, which had been arrested by medicine obtained from a druggist, and his bowels had not been moved for three or four days. Dr. Rogers sent him an aperient draught, a mixture of quinine with chlorate of potash, and a gargle. On seeing him at half-past seven next morning, Dr. Rogers learned that he had passed a very restless night. His countenance was expressive of great distress. The pulse was 120. Dr. Rogers was informed that he had made attempts to take some of the medicine, and that he had not taken the aperient draught. As his bowels were still confined, Dr. Rogers gave him this draught: the patient attempted to swallow it, but immediately ejected it forcibly across the room. Mustard poultices were ordered to be applied to the throat. At 11 A.M., his condition was decidedly worse; he raised himself now and then in bed to remove the saliva which accumulated in his mouth. This he often spat out violently, and had during the night nearly filled a chamber-vessel with it. He was in continual motion; his pulse was 140; he had profuse perspiration and intense thirst. The symptoms, Dr. Rogers thought at this time, much resembled those of hydrophobia; but no information could be obtained of any injury likely to produce this disease having been received. Mr. Wade was called in consultation, and pronounced the case to be one of spasm of the œsophagus—the occurrence of which, however, he could not explain otherwise than by an extension of the diphtheria. Ice was now ordered to be given by the mouth, and calomel and morphia powders were prescribed. In the evening, his pulse was 160, and the restlessness continued. Blisters were applied to the throat, and a turpentine enema was given. On July 31st, he was more prostrated; he had swallowed nothing, and was constantly hawking and spitting. The medicines were continued, and beef-tea injections were ordered. On August 1st, the pulse was 160. He lay passive in the bed, except when he raised himself now and then to remove the saliva which accumulated in his mouth. In the afternoon, some beef-tea was introduced by means of the stomach-pump. After this, which was repeated next day, he was somewhat revived, and was taken on August 4th to the Middlesex Hospital, the power of swallowing being then still lost. With the idea that there was some effusion at the origin of the pneumogastric nerve, Dr. Corfe, the resident medical officer, had him cupped at the back of the neck. The administration of beef-tea was continued; in about a fortnight the power of swallowing began to return, and in six weeks the patient left the Hospital perfectly recovered. Dr. Rogers desired to have the opinion of the Fellows of the Society on this case. Dr. Corfe had told him that a similar case, in which the patient had died, had occurred in the Middlesex Hospital in the time of Sir Charles Bell. Dr. Rogers was inclined to think that the irritation, followed by palsy, of the œsophagus, was referrible to the same causes as had induced the diphtheria.

Dr. Mackenzie had reason to believe that the manifestation of diphtheria was not confined to the throat, but that it might produce disease of the mucous membrane in almost any part. It occurred in the rectum, being attended with the evacuation of fibrinous casts, and with great general prostration and nervous depression. In these cases, he had seen induced a condition of great irritability of the bladder, evidently dependent on the state of the rectum; and he believed that the irritability of the œsophagus in Dr. Rogers's case had been induced in a parallel manner.

Mr. Ernest Hart said that there were many cases on record which bore on that of Dr. Rogers. Faucial paralysis, paralysis of the soft palate, and general paralysis of the body, had each of them been frequently noted as sequelæ of diphtheria. Dr. Maingault had recorded, among the *Thèses de Paris*, a very interesting and extended series of cases of faucial, pharyngeal, and general paralysis; and Dr. Duchenne of Boulogne recommended, in such cases, the application of local Faradisation as a means of cure. Mr. Hart had met with such cases, and employed Faradisation successfully. M. Herpin, surgeon to the hospital of Tours, had recorded minutely the progress of paralysis following diphtheria in his own case. Dr. Gull, Dr. Kingsford, Mr. Thompson of Launceston, and others, had recorded cases. An interesting instance of a diphtheric affection, similar to that mentioned by Dr. Mackenzie, was put on record by M. Mahieu: it was a case of vaginal diphtheria, in which the specific character of the disease was proved additionally by its contagious influence on the child.

Dr. Salter asked in what way the inflammation of the rectum alluded to by Dr. Mackenzie differed from ordinary plastic inflammation of the part, such as had been seen long ago, where fibrinous flakes and casts were thrown off.

Dr. Mackenzie replied that in the diphtheritic inflammation the symptoms were acute; in the ordinary form, mentioned by Dr. Salter, they were chronic, and very passive. Sometimes the exudation would go on for weeks without constitutional disturbance or much suffering, and without the production of sympathetic irritation in other organs.

Dr. Camps believed that Dr. Rogers's case was one of reflex action affecting the organs supplied by the pneumogastric nerve.

Dr. Rogers said the view taken by Dr. Mackenzie would probably explain another case which had come under his notice, of a lad, aged 16, who had a diphtheritic patch on the right tonsil. This was detached by means of dilute nitric acid, and a patch of ulceration was left. The patient went on apparently well for some days, when he was suddenly seized with syncope, and was for a time insensible. He had been taking wine daily, but it had been omitted on the day when this occurred; it was now resumed, to the extent of half a pint daily. The ulcer was again touched with nitric acid. At about 11 A.M. he had a similar sudden attack, and died. No autopsy was allowed.

Hæmorrhage from the Bowels as a Sign of Polypus of the Rectum in Children. Mr. Bryant had found a very constant connexion to exist between hæmorrhage from the bowel and polypus of the rectum in children. At least twenty cases, all in children from ten years old and under, had been seen by him during the last two years; and many of them had been treated for piles. In most, the sanguineous discharge was constant, in others occasional; in some, it was connected with the act of defæcation; in others, it occurred independently. Straining was sometimes present; but he had not seen the discharge attended by prolapse. The polypus could be readily detected by digital examination. Mr. Bryant related some illustrative cases; and observed that, in cases of hæmorrhage from the rectum in children, the surgeon should at once examine. The polypus will be found generally one or two inches above the end of the gut, varying from the size of a pea to that of a small nut; and very moveable. The pedicle was always very simple. He had never seen piles in a child, and believed that cases so described were really cases of polypus. In reply to questions, Mr. Bryant said he believed the hæmorrhage to proceed from the polypus itself; this could be seen in cases where the tumour protruded. He had not been able to trace large vessels into the polypi; but that they were vascular, was evident from their colour, which was often nearly that of a black cherry. In the

cases he had related, there had been no dysentery, or other bowel irritation.

Excision of the Hip-Joint. Mr. P. C. Price exhibited a little boy, whose case was referred to at p. 298 of the Journal for April 10th, 1858. The head of the femur and a portion of the acetabulum had been removed, on account of strumous disease. Two years ago, the child was brought to Mr. Price with extensive disease of the joint, with diarrhœa, night-sweats, etc., and altogether in a very hopeless state. He was now able to move about without a crutch, and play with other boys. There was still a sinus remaining. The difference in the length of the two limbs did not seem greater than would unavoidably result from the removal of the head of the bone below the trochanters. He also related a case which had been under the care of Mr. Jones of Jersey, of a servant girl who had strumous disease of the hip-joint. Mr. Jones removed the diseased parts. In three months, the girl was walking about, and had since resumed her duties as a servant. Mr. Price observed that, in his experience, complete dislocation of the head of the femur was very rare in chronic disease of the hip-joint, although often supposed to exist; he had seen but two cases of it.

Obstinate Ulcer from a Bite. Mr. Gay related the case of a young woman who had been under his care with an obstinate ulcer on the back of the hand, which had, for about two years, resisted all treatment. Its edges were defined; the surrounding skin was elevated and hard; and its surface, which was of about the extent of three peas, discharged a thin matter. At last, Mr. Gay cut out the ulcer, and healing took place. The patient had been bitten in the situation of the ulcer by a child a year and a half old, who had at the time an eczematous eruption.

Editor's Letter Box.

PUBLIC VACCINATION.

Letter from Henry Terry, Jun., Esq.

Sir,—An anonymous correspondent, in the Journal of Nov. 12, writing on the above head, complains of the *injustice* of the present arrangement "to more than half the medical men". May I, in reply, ask him to refer to the Journal for October 28th and December 9th, 1853, where I have attempted to answer some of the objections that were then raised against the Act?

Your correspondent complains that some persons, "between their dislike to the parish doctor and their objection to pay their own", neglect vaccination altogether. This seems to me to divide the children vaccinated into two classes, viz., private and parish; and I cannot discover in it so great a grievance as your correspondent appears to do. However, the chief cause of complaint appears to be, that "some who are not patients of the parish doctor, do have their children vaccinated by him; and that is the thin edge of a wedge to split off the former medical attendant;" etc.

Having held a large Union district, with a vaccination appointment, for the last twelve or fourteen years, I hope I am not the only "parish doctor" who can altogether deny any such "mean" and "dishonourable" conduct as is here attributed to us. With equal truth I might imagine a *private* practitioner going round one of the parishes in my district, and persuading the poor not to take their children to Mr. —— for vaccination, seeing that he was only the "parish doctor". Will any one say that this has never been done? I feel satisfied that, with very few exceptions, and with an honourable man as public vaccinator, no man need be afraid of losing his patient *permanently* in the manner described by your correspondent, or even *temporarily;* and for this reason, that the usual plan of carrying out public vaccination is to cause the children to assemble together in the village school, or some other convenient place; and that it seems highly improbable that any respectable patients would submit to mix with the motley groups usually assembled there.

I am fully aware of the imperfections of the present Act; but I contend that, in any amendment of it, provision should be made that the children of all those who usually apply to the *union surgeon* in case of ordinary sickness, should be entitled to *gratuitous* vaccination from him only, leaving it optional with them (as it now is) to *pay* any other legally qualified man they may prefer. I am, etc., H. Terry, Jun.

Northampton, Nov. 15th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Lavies, Joseph C., M.D., Warwick Road, on Nov. 17.
Spackman, F. R., M.D., Harpenden, on Nov. 21. (Stillborn.)
Speer, Stanhope T., M.D., Cheltenham, on Nov. 21.

Of daughters, the wives of—

Andrews, Henry C., M.D., Oakley Square, on Nov. 15.
Dauglish, J., M.D., Tunbridge Wells, on Nov. 9. (Stillborn.)

MARRIAGES.

Hunt, John, Esq., Surgeon, of Tachbrook Street, Pimlico, to Matilda J. C., third daughter of A. Goold, Esq., of Belle Vue, Forest of Dean, at St. John's, Westminster, on Nov. 15.
Neill, James, Esq., Stone of Morphie, Montrose, to Victoria, daughter of *George Webster, M.D., Dulwich, at St. Giles's, Camberwell, on Nov. 16.
Staunton, George, Lieut.-Col. Cape Mounted Rifles, to Henrietta, youngest daughter of the late Bransby B. Cooper, Esq., F.R.S., Surgeon, at Hemel Hempstead, on Nov. 15.

DEATHS.

Carnegie, John, M.D., at Wimborne Minster, on Nov. 16.
Clifton. On November 6th, at Freiburg, Baden, Anthony C. Clifton, Esq., late of Welwyn, eldest son of *N. Clifton, Esq., Islington.
Leonard, Isaac, Esq., Surgeon, Bristol, aged 63, on Nov. 16.

APPOINTMENTS.

Alison, Scott, M.D., elected Physician to the Consumption Hospital at Brompton, in the room of Theophilus Thompson, M.D., resigned.
Barrett, Thomas, M.D., elected Mayor of Bath.
Bree, C. R., M.D., elected Physician to the Essex and Colchester Hospital.
Garrington, W. H., Esq., Surgeon, elected Mayor of Portsmouth.
*McCarogher, Joseph, M.D., elected Mayor of Chichester.

PASS LISTS.

University of London. Second M.B. Examination, 1859. The following is a list of candidates who obtained the degree of Bachelor of Medicine at the recent examination:—

Adams, Samuel Hoppus, University College
Crowfoot, William Miller, St. Bartholomew's Hospital
Davis, Theodore, St. Bartholomew's Hospital
Gasquet, Joseph Raymond, University College
Hill, Matthew Berkeley, University College
Jones, Philip Sydney, University College
Liddon, William, King's College
Marriott, Charles Hayes, University College
Moxon, Walter, Guy's Hospital
Robbs, William Edward, King's College
Sanson, Arthur Ernest, King's College
Simpson, Henry, University College
Thompson, Edmund Symes, King's College

Royal Colleges of Physicians and Surgeons of Edinburgh. The following gentlemen, having completed the course of study, and undergone the examinations prescribed for obtaining the double qualification, were admitted as Licentiates of both Colleges, on November 18th:—

Maclagan, D. P., Edinburgh
Moore, Michael J., Belfast
Reid, Patrick R., Kildare
Shaw, John C., Ceylon
Thom, Alexander, Edinburgh

Apothecaries' Hall. Licentiates admitted on *Thursday, November 17th*, 1859:—

Bankart, James, Leicester
M'Cann, John, Tonyn, county Longford, Ireland
Mawley, A., Birmingham
Taylor, J., Emsworth, Hants
White, E., Birmingham

The following gentlemen also, on the same day, passed their first examination :—

Braddon, Charles H., Upton-on-Severn, Worcestershire
Haynes, A. L., Evesham
Lovegrove, J. F., Maidenhead

HEALTH OF LONDON—NOVEMBER 19th, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... {Boys .. 958 / Girls .. 902}	1860 ..	1233
Average of corresponding weeks 1849-58 ..	1526 ..	1225

The cold and fogs of the week attacked the respiratory organs. The deaths from bronchitis, were 138; from pneumonia, 64, principally among children; from phthisis, 157; from scarlatina, 96; from diphtheria, 9; from small-pox, 29. Eight nonagenarians are returned as having died. Of bricklayers, 5 died in the week, of bricklayers' wives, 5, of bricklayers' children, 5; of carpenters, 9 died, of carpenters' wives, 6, of carpenters' children, 22; of masons, 2 died, of masons' wives, 2, of masons' children, 3; of painters, 4 died, of painters' wives, 3, of painters' children, 13; of plasterers, 2 died, of plasterers' wives, 2, of plasterers' children, 2.

Barometer:

Highest (Sun.) 30·209; lowest (Wed.) 30·085; mean 30·150 in.

Thermometer:

In sun—highest (Sun. & Sat.) 58°; lowest (Tues.) 41°.
In shade—highest (Sat.) 49°; lowest (Mon.) 25·5°.
Mean—37·6°; difference from mean of 43 yrs.—5.1°.
Range—during week, 23·5°; mean daily, 15·9°.

Mean humidity of air (*saturation*=100), 89.

Mean direction of wind, variable.—Rain in inches, 0.

University of St. Andrews. The following gentlemen have been elected as examiners for medical degrees for the year 1860, in addition to Dr. Day, the Chandos Professor of Anatomy and Medicine; and Mr. Connell, the Gray Professor of Chemistry (who is assisted by Dr. Heddle).

In Medicine: W. T. Gairdner, M.D., Lecturer on the Practice of Medicine, and on Clinical Medicine, Edinburgh; Alexander Wood, M.D., President of the Royal College of Physicians, Edinburgh.

In Surgery: George Buchanan, M.D., Surgeon to the Royal Infirmary, Glasgow; John Struthers, M.D., Assistant-Surgeon to the Royal Infirmary, Edinburgh, and Lecturer on Operative Surgery.

In Midwifery and the Diseases of Women and Children. A. Anderson, M.D., Professor of Medicine in the Andersonian University, Glasgow; J. Matthews Duncan, M.D., Lecturer on Midwifery, Edinburgh.

Medical Society of London. On Wednesday evening last, Dr. F. W. Pavy delivered the first of a course of three "Lettsomian Lectures" on "Certain Points connected with Diabetes." The other two lectures will be given on November 30th and December 7th, at half-past eight P.M. The hour of the ordinary meetings of this Society has recently been changed from eight to half-past eight P.M.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Communications have been received from:—Mr. Leonard; Dr. James Russell; Mr. J. Lang; The Medical Registrar; Dr. John Gairdner; Dr. Goode; Dr. F. Needham; Mr. J. Capes; Dr. G. R. Hilliard; Dr. Skinner; Mr. Harrinson; Mr. G. May, jun.; Dr. J. B. Pitt; Mr. W. Copney; Dr. Crossby; Mr. Holmes Coote; Dr. Mahood; Mr. Rumsey; Philalethes; Mr. Girvan; Dr. Mulock; Mr. T. Holmes; Dr. C. Handfield Jones; Dr. C. M. Durrant; Dr. Beale; and Mr. J. V. Solomon.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. The Nature and Treatment of Gout and Rheumatic Gout. By Alfred Baring Garrod, M.D., F.R.S. London: Walton and Maberly. 1859.
2. Blood-Disease. By J. Vaughan Hughes, M.D. London: Churchill. 1859.
3. On the Curative Treatment of Paralysis and Neuralgia and other Affections of the Nervous System with the Aid of Galvanism. By H. W. Lobb. Second Edition. London: Baillière. 1859.
4. The Practice of Hiring Wet Nurses (especially those from the "Fallen") considered as it Affects Public Health and Public Morals. London: John Churchill. 1859.

ADVERTISEMENTS.

This day, cloth, illustrated, 5s.

Paralysis and Neuralgia and other Affections of the NERVOUS SYSTEM, their Curative Treatment with the Aid of GALVANISM. By HARRY LOBB, L.S.A., M.R.C.S.E., etc., Author of "On some of the more Obscure Forms of Nervous Affections," etc.

London: H. Bailliere, 219, Regent Street.

8vo, cloth, with numerous Tables, price 15s.

Practical Midwifery: comprising an ACCOUNT of 13,748 DELIVERIES, which occurred in the DUBLIN LYING-IN HOSPITAL, during a Period of Seven Years, commencing November 1847.

By EDWARD B. SINCLAIR, A.B. T.C.D.,
Fellow of the King and Queen's College of Physicians in Ireland; Member of the Royal College of Surgeons of England; Ex-Assistant Physician to the Dublin Lying-in Hospital; etc. etc.: and
GEORGE JOHNSTON, M.D. Edin.,
Licentiate of the King and Queen's College of Physicians in Ireland; Member of the Royal College of Surgeons of England; Ex-Assistant Physician to the Dublin Lying-in Hospital; etc. etc.

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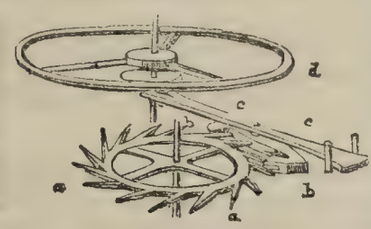
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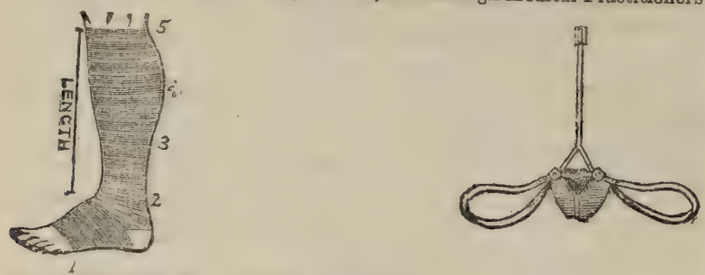
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

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No. CLIII.] LONDON: SATURDAY, DECEMBER 3, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

CASES OF EPILEPSY; WITH REMARKS.

By J. RUSSELL, M.D.

[*Clinical Clerks*—Messrs. WALLS and MAY.]

A SUCCESSION of cases of epilepsy, which have occurred to me in the practice of the Hospital, affords useful illustrations of some subjects connected with the disease.

The history of four cases exemplifies the effect of *mental influences* in inducing epilepsy; in two cases, the disease appears to have been the consequence of sudden intense emotion; in two, it occurred as the result of protracted worry and anxiety.

CASE I. J. P., aged 11, a healthy looking boy, four years ago, saw a man who had just cut his throat; shortly afterwards, he was greatly alarmed by a man running upon him in the dark, in a solitary place, from behind a tree. The latter occurrence affected him much more than the former; he made frequent reference to it, especially when passing near the spot; and his mother directly attributes his disease to the alarm it occasioned. He had a fit of the milder form of epilepsy about a month afterwards; and, after a repetition of similar fits with increasing frequency, for three years, he became the subject of fully developed epilepsy.

CASE II. T. C., aged 14, a pallid, cachectic boy, was much alarmed by a policeman, who threatened to take him to prison. He dreamt of the alarm at night: and was "very dull" during the following day, and in the course of the night had an epileptic fit. This happened two years and a half ago; and the fits have returned, at first in the night, of late with great frequency. His memory is too infirm to allow of his giving particulars as to the periods of their occurrence.

CASE III. A very interesting case, of a similar character, happened to me in the person of a man, aged 41, who had been greatly alarmed by a fire. In the course of the following three weeks, he had two slight attacks of an epileptic character; afterwards, his manner was thought to be peculiar, and his memory to be somewhat impaired. The fire dwelt on his mind; he talked of it incoherently in his sleep; and his wife told me that he was so uneasy at night, that she was afraid to go to sleep. He was always of an anxious temperament. Three months afterwards, he was seized in the night with a fit of epilepsy of great severity, and lay partially insensible for a fortnight. This occurred two years before I saw him; but he has not had any return of the fits.

CASE IV. J. G., aged 28, a very nervous, fanciful man, and of anxious temperament, has been working very late (till eleven or twelve o'clock) for some years, and has had much anxiety in his business. His sleep was disturbed by frightful dreams; and he now shouts so much in his sleep as seriously to disturb his fellow patients. He has also suffered from headache and vertigo, perspirations and palpitation; he lost flesh and became very nervous, and his mental powers enfeebled. Two months ago, he had two fits, apparently epileptic, in the night.

CASE V. Mrs. H., aged 21, a feeble, cachectic woman, has had much trouble for three years, from the intemperate habits of her husband. She has "fretted" much; and has often lain awake for two or three nights, thinking of her husband's cruelty, and of the poverty of her family. She has had frightful dreams; and her spirits have been much depressed. She has now been suckling for seven months, and has become feeble and pallid. Five weeks ago, she was taken with an epileptic fit whilst lifting some coal; and since that time she has had two others.

CASE VI. In a similar case, which happened to me at the Dispensary, an epileptic fit appeared to be, as it were, an explosion of long pent up care. A respectable married woman, whose husband had involved himself with a partner in an unprofitable business, had a store of money, which she concealed from him. This fund she doled out by little and little, as his necessities became pressing; at last she came to the final instalment: as she was bringing it down stairs, she fell into a fit of epilepsy, and four or five others followed in the course of the same day. During the fourteen years which have since elapsed, the fits have recurred many times; they never fail to happen if she be unusually anxious.

In the JOURNAL of March 6, 1858, I reported an instance of spasmodic croup presenting itself in six of seven children of one family. A family now in attendance at the Hospital manifests a similar tendency to epilepsy.

The mother is a very nervous woman, but is healthy; the father is healthy. A sister of the mother is at present insane. No member of either family, of the elder generation, had been subject to fits. A son died insane and epileptic; he resembled his mother.

CASE VII. Thomas, aged 19, strongly resembles his mother; he has dark complexion, and dark eyes. His first fit occurred about five years ago, having been preceded at times by "jerkings" in all parts of his body; a second happened in three months afterwards; and the intervals have gradually lessened until, at the present time, he has a fit once or twice in the week.

CASE VIII. William, aged 16, resembles his father's family; his complexion and his hair are light. He has had epilepsy for three years, the first fit having been preceded by severe pain in his head: the second followed in a month. The fits returned with increased frequency, and were especially occasioned by hard work, so that, whilst he was engaged in his business, they averaged one in a week.

CASE IX. Sarah, aged 14, has dark eyes, and resembles her mother. She has not menstruated. At the commencement of her disease, six years ago, ten fits occurred on the same day. The second attack did not happen until an interval of three months had elapsed; she has only had three or four since, and none for fifteen months until the other day, when she fell into a fit, and on the following evening fancied she saw her father standing over her with a knife. In the course of the fifteen months, however, she has had attacks of a slight character, which she calls "tickings", often many times in the day. She starts much in her sleep.

CASE X. Edward, aged 11, who has dark eyes, has suffered from "jerkings" in his left arm, and from vertigo; he starts and talks in his sleep, and grates his teeth. The other day, in endeavouring to escape from a restive horse, he suddenly lost his sight, and became unable to move.

The mother cannot assign any cause for the epileptic fits; but the children live in a constant state of alarm, dreading their brother's unhappy fate.

Their eldest brother, aged 25, is quite healthy, but faints at the sight of the slightest wound. An elder sister, aged 20, is far advanced in strumous disease; she has opaque cornea, and enlarged cervical glands. A younger sister, aged 9, who has dark eyes, and resembles her mother, is nervous, and very readily frightened; she is subject to headache, and complains of seeing sparks flitting before her eyes. She is obliged to leave school, in consequence of a tendency to faint from the heat of the room. The youngest child, a boy aged 3, is very nervous, and "will start at a shadow". He is afraid to go to bed alone. The sleep of all the younger children is very disturbed.

[*To be continued.*]

UNIVERSITY COLLEGE HOSPITAL.

SIMPLE FRACTURE OF THE SKULL, WITH DEPRESSION: RECOVERY.

Under the care of J. E. Erichsen, Esq.

[*From the Hospital Case-Book.*]

James G., aged 3½, was admitted at half-past twelve at noon on September 21st, having a few minutes before had his head crushed between a mangle in motion and the wall. The bystanders asserted that they heard a crash from the bones giving way. When admitted, he was quite sensible, and conversed readily with his mother. The pulse was about 100, feeble, and not quite regular. He was quite warm. The breathing was regular. There was no bleeding from any cavity; no paralysis. On the right side of the head, immediately above the ear, was a swelling, of the size of half a small orange, soft, fluctuating, not tense, with well defined margins. On making firm pressure on this, the sharp edge of a fracture of the bone could be felt at the back, top, and front, enclosing an oval space three inches and three-quarters from before backwards, and an inch and a half from above downwards. The depressed portion could not be reached. The finger could be pressed in about a quarter of an inch below the prominent margin.

The hair was cut off, a bladder of ice applied, the head elevated, and a purge of calomel and scammony given.

In the afternoon (2 p.m.), the swelling had very much increased; and the two movements of the brain (one synchronous with the pulse, the other with the respiration) were plainly perceived in it, both by the eye and hand. Later on (7 p.m.), when the swelling had become more tense, the respiratory movements were no longer perceptible, though those of the pulse remained so. He was less sensible, taking no notice when handled; but recovered consciousness towards evening so far as to resist when a bladder of ice was applied.

September 22nd. He had a quiet night, and was quite conscious next morning. The right pupil was noticed to be larger than the left. He could move all his limbs naturally. The bowels were only opened by injection. The pulse was 76, regular in force, but intermitting.

It is hardly necessary to give detailed notes of the remainder of this case, as no symptoms followed. The fracture remained quite distinct on October 1st. A few days afterwards, he left the Hospital quite well.

II. COMPOUND FRACTURE OF THE SKULL, WITH SLIGHT DEPRESSION: RECOVERY.

Under the care of J. E. Erichsen, Esq.

[*From the Hospital Case-Book.*]

Charles W., aged 6, was admitted on Sept. 21st, at half-past 4 p.m., on account of an injury to the head, received about twenty minutes previously, from falling off the banisters down a staircase three stories high on to a stone floor. He was in a state of collapse on admission. There was a wound over the right eyebrow, extending about an inch backwards and upwards, in which a fracture of the skull was exposed. This was a linear fissure, the upper margin of which was about the eighth of an inch below the lower, and traceable for about half an inch downwards in the direction of the orbit. There was much swelling and contusion of the soft parts of the forehead and face; and the eyelids were so much swollen from ecchymosis, that it was impossible to expose the pupil on that side. The left pupil acted freely. There was pretty free epistaxis. Soon after admission, he vomited bloody fluid. He cried lustily, and resisted examination. There was no palsy or twitching, and no bleeding from the ears.

The wound was dilated, for the purpose of more thorough examination; but no indication was found for interference. The hair was cut off, ice applied to the head and warmth to the feet, and two grains of calomel with eight of scammony given. The bowels acted copiously in the evening, the motion being dark from the presence of blood. He lay during the greater part of the evening tranquilly asleep, and did not take notice of anything. In the middle of the night, however, he became restless, and was then observed to have quite recovered consciousness. He vomited occasionally during the night.

Next morning, the face was flushed; he was restless, and complained a good deal. The bowels had only been moved once. A scruple of compound jalap powder was given, and repeated in the afternoon, followed by castor oil; but it produced no effect. In the evening, the pulse was 96, irregularly intermitting. There was no prominent symptom. A drop of croton oil was placed on the back of the tongue.

Next morning (23rd), the bowels had been freely open. He was restless, and took little notice of the bystanders, but kept calling for his mother. He took milk when offered. The pulse was very feeble and irregular. The swelling on the forehead was increasing, and the edges of the scalp-wound were sloughy. An incision made through the swelling gave exit to a considerable quantity of sloughing cellular tissue and puriform matter; and serum continued to ooze through it in large quantity. The finger introduced into the wound did not detect the continuation of the fracture. There was a watery and bloody discharge from the nares, and pus from the eyelids; and so copious a discharge of serosity from the wound as to drench the bed around him. The breathing was easy; the pulse rapid, feeble, and intermitting. The scalp was found to be separated from the bone as high as the vertex; and a quantity of matter had collected beneath it, which was washed out. This operation was strongly resisted by the patient.

Next day, he was a little more sensible, and took some food; and, on the 26th, was quite conscious, but in constant pain, and very fretful.

He continued in the same way for several days, gradually improving in all respects, the pulse increasing in strength, and the discharge from the wounds gradually diminishing. The only unpleasant symptom was, that the bowels were very much constipated, requiring the occasional administration of croton oil. On October 7th, he was seized with headache, was restless, with heat of skin, and slight twitchings of the hands and arms. The constipation was still troublesome. This was followed by the formation of abscess in connexion with the wound, after which all the symptoms subsided, and he gradually recovered. He is now (November 25th), still in the Hospital; but the wounds are healed, and he is perfectly convalescent.

ST. GEORGE'S HOSPITAL.

I. COMPOUND FRACTURE OF THE SKULL, WITH SLIGHT DEPRESSION: RECOVERY.

Under the care of H. C. Johnson, Esq.

Wm. Nicholl, aged 15, stable-boy, was admitted on May 10th. He was run away with by a horse and cart, and thrown out of the cart, pitching against a wall upon the left side of his head. He was insensible just for a minute, but remembered that he was picked up directly and put into a carriage. On admission, there was some swelling of the left side of the face, and a wound, about two square inches in size, at the left frontal suture. The bone was exposed for about the size of a shilling, and there the bone was fissured in two places (one at each end of the exposed bone), and the intermediate portion slightly depressed. Mr. Johnson was sent for; but, as there was no symptom of compression of the brain, he did nothing. One piece of strapping was put across the centre of the wound, to keep it in apposition; and water-dressing was applied.

May 11th. During the night he did not sleep much, and was at times rather restless. He took some beef-tea. He has never been insensible. The pulse is 84, full; the tongue white and furred. The surface was warm and perspiring. He has some shooting pain in the head, at the seat of the injury. He feels very drowsy this morning. There is no numbness of any part of the body, or of any limb; he can move every part. He has passed urine.

May 12th. During the night he was very quiet, and has remained so ever since yesterday. He is still sleepy. Pulse 126, strong. The tongue is furred and white. The surface is perspiring. He has no pain whatever in the head. There is a little swelling and inflammation about both eyes. The wound looks glazy and rather dry.

From this time the boy had no bad symptom, and soon left the Hospital.

II. COMPOUND FRACTURE OF THE SKULL, WITH DEPRESSION: DEATH.

Under the care of H. C. Johnson, Esq.

George H., aged 50, was admitted on October 20th, under the care of Mr. Johnson. About one hour before admission, he was struck on the left side of his head by the shaft of a mill worked by horse-power, knocking the opposite side against a wall, which struck him on the right parietal bone. On admission, at 5.30 p.m., he was quite sensible, not having been insensible since the accident; he remembered perfectly every-

thing that occurred. There was a large wound, about four inches long, over the right side of the head, running across the middle of the right parietal bone. The bone was exposed for the space of a shilling piece. The wound was very ragged, and part of the scalp was torn downwards from the pericranium. There was a wound on the left side of the head, just behind the external angular process of the frontal bone, of about the size of a florin piece; the wound was very ragged, and led down to a comminuted fracture of the skull, which was driven somewhat into its cavity. Pulse 60, rather weak. The pupils were regular, and acted. Wet dressing was applied. At 9 P.M. Mr. Pollock saw him, and extracted all the loose portions of bone; they showed, on their internal surface, the ramifications of the meningeal artery, and appeared to belong, at least some of them, to the great wing of the sphenoid. There were about six pieces, and when put together, made a circumference of the size almost of a florin. There was no bleeding. The dura mater was seen exposed, but healthy. The brain appeared to be at some distance from the skull.

12 P.M. He is very quiet; has no great pain in the head; pulse 60, quiet.

October 21st. Pulse 72; rather full. He does not complain of his head, and is very quiet. He was ordered to have four grains of calomel immediately, and a senna draught in four hours.

October 22nd. The wound is very quiet. Pulse 80. The bowels were freely open after the purgatives.

October 23rd (1 A.M.) During the last hour he has been restless, getting out of bed twice; and complained much of his head. When seen, he was constantly moving his right arm to and fro, not convulsively; but when spoken to, he answered rationally. Pulse 84, and soft. The face has lately been flushed. The mouth is slightly drawn to the right side; but this seemed to be due to bruising of the face. He was ordered to have three grains of calomel every four hours.

At 5 A.M. A blister was applied to the neck.

11.30 A.M. He is delirious this morning, and does not answer when spoken to. He is constantly talking incoherently. He passes his urine under him. The wound on the right side is sloughy and œdematous; that on the left side dry and glazed. Pulse 104, weak. He has no paralysis. The face is flushed.

5 P.M. He is quite insensible. The breathing has become very laborious. The pupils are insensible; the left one is contracted; the right one a little more dilated. Pulse regular, 140, weak. He is sweating profusely. The right arm and hand are convulsively flexed.

8 P.M. There is stertorous breathing; he is sinking. The wound on the left side is discharging a quantity of serum.

11 P.M. He died, comatose.

Post Mortem Examination. The body was in good condition. There was a large scalp-wound exposing bone, just behind the right ear. Much lymph was contained in the subaponeurotic tissue around the wound. On scraping away the temporal muscle on the opposite (left) side, the hole in the skull, made by the removal of the bone during life, was found to be about the size of a halfcrown. A large part of the squamous portion of the temporal bone was found to have been driven in, and was depressed to the depth of nearly an inch on to the surface of the brain. The broken part, which was rather larger than the piece which had been removed, was split into two by another line of fracture. It was firmly locked in below the sound part, so that much force was required to elevate it. That being done, the dura mater was seen to be perfectly healthy, while that exposed by the wound was smeared with lymph. A considerable quantity of pus was found in the arachnoid sac on the left side. Some blood was effused in the muscles of the pia mater, over the left hemisphere of the cerebellum, the pons Varolii, and down the spinal cord. There was no laceration of any part of the brain, and, except for the compression, it seemed healthy. The fracture was traced through the middle fossa, which was somewhat comminuted, into the sphenoidal fissure.

Remarks. The four preceding cases illustrate several interesting points in the pathology and treatment of fracture of the skull. The first two are instances, common enough, but well marked, of the great violence and extensive injury which may be suffered in childhood without the fatal termination which, in more advanced periods of life, would be only too probable, and encourage us to hope for good results in such cases from expectant treatment. The first presents the interesting peculiarity of a swelling formed by effused fluid connected with a fracture of the skull, in which the two motions of the brain were perceptible beneath the scalp. This fact testifies to the free communication which must have existed with the interior of the skull, and renders the subsequent recovery the more interesting. In the second case, a very free discharge of serum will be noticed to have occurred from the scalp-wound in connexion with the fracture. The fortunate issue of the case prevents us from forming a conclusive opinion as to whether this discharge was of the same nature as that so often seen from the ear, where communication exists between a fracture in that part and the subarochnoid space, or whether it was merely the serum of the blood effused about the fracture. The occurrence of the former kind of serous discharge is known not to be limited to fractures of the base; and Mr. Prescott Hewett has collected in his *Lectures on Injuries of the Head*, a whole series of cases in which it took place from the vertex (*vide Medical Times*, vol. ii. 1858, pp. 183 and 199). The third case is connected with the other two, as showing that, at any rate in the young, a slight amount of depression is no infallible indication for trephining, but that such cases often do well when left alone. Lastly, the fourth case is a good instance of the great amount of compression which may be suffered by one part of the brain when a contiguous portion is relieved from pressure by the removal of the bone. In this case, it is quite clear that had the extent of the depression been discovered and the bone elevated (an operation, by the way, which would have been in no small degree bloody and formidable, as almost the whole temporal muscle would have been scraped away), the patient's condition would not have been thereby improved, inasmuch as he suffered not from the compression produced by the bone, since that was just as great at first, when he had no symptoms, as at last, when he was comatose, but from that produced by the effusion of pus in the inflamed arachnoid. Now, the inflammation of this membrane had evidently been propagated from the dura mater, of which the part exposed had become inflamed, while that covered by the depressed bone was healthy. To have removed the bone, therefore, and so exposed a larger surface of the dura mater would, as it appears, have only extended and hastened the fatal inflammation.

Original Communications.

OBSERVATIONS ON PARTIAL PARALYSIS.

By C. M. Durrant, M.D., Physician to the East Suffolk and Ipswich Hospital.

Case I. *Facial Paralysis.* A female, aged 35, after having travelled from Ipswich to the Crystal Palace and back again in the day, as one of an excursion party, was seized on the following morning with paralysis of the muscles of one side of the face.

She stated that she went to bed feeling greatly fatigued and perfectly well, but on the following morning she discovered that she was unable to close the left eye, and that her mouth was very much distorted. She was not sensible that she sat in a draught of air during the journey, or at the Palace.

On seeing her about a week after the attack, I found complete paralysis of the orbicularis muscle of the left eye. The ball of the eye was drawn upwards; but it remained perfectly uncovered when she attempted to close it. She possessed perfect control over the right eyelid. The mouth was considerably drawn towards the sound side; but the tongue was unaffected, and there was no local anæsthesia. The pulse was feeble, but not accelerated; tongue tolerably clean; bowels regular, catamenial function healthy; urine clear. Blisters were applied behind the ears, and were directed to be kept open. Ammonia internally, together with one-sixteenth of a grain of the bichloride of mercury, every night at bedtime, were the remedies prescribed. The diet was ordered to be unstimulating, but nutritious.

Remarks. In this case the superficial muscles of the left side of the face, and orbicularis of the same side, were those affected, indicating loss of function in the branches of the portio dura. The exciting cause of the palsy was probably two-fold: first, exposure to cold; from which, although not particularly noticed at the time, she could scarcely, when returning late at night, be exempted; and second, the excessive fatigue and excitement, necessarily attendant upon a holiday trip of this description. These causes, I imagine, acted partly by lowering nervous energy, and partly by producing some local but direct

pressure upon the nerve after its exit from the stylo-mastoid foramen.

Depletion, in any form, was not indicated; but a diffusible stimulant to restore tone, which had evidently suffered, and the bichloride of mercury as a precautionary measure to effect the absorption of any adventitious deposit around the nerve which might possibly cause pressure.

Case II. *Facial Paralysis.* A young, delicate female, aged 16, was suddenly seized in the evening, after a fatiguing day's work, with complete motor paralysis of the left side of the face.

She presented herself as an out-patient of the Ipswich Hospital about a fortnight after the attack. The face then assumed the characteristic disfigurement of this affection. When perfectly quiescent the two sides of the face appeared nearly symmetrical; but on the slightest attempt to speak or laugh the countenance became painfully distorted, by the inordinate action of the muscles on the sound side—the features of the affected half remaining passively motionless. The eye was uncovered by the lid, constituting well marked lagophthalmia. There was neither pain in the head nor giddiness. The tongue was clean, the bowels were open, and the catamenia regular.

Blisters were ordered to be kept open behind the ears, and ammonia, with the bichloride of mercury, were prescribed, as in the former case, and with similarly satisfactory results, the patient recovering the natural power, both of the orbicularis and facial muscles.

Remarks. The immediately exciting cause of the attack in this instance was by no means clear, as, beyond the exposure of the patient to considerable fatigue, we were unable to trace it to any more direct disturbance, although doubtless some local pressure obtained to interfere with the function of the facial nerve.

Case III. *Paralysis of the Tongue.* A tradesman, aged 45, of an excitable, nervous temperament, having recently undergone much anxiety and fatigue, consequent upon making considerable additions to his business premises, became suddenly seized with inability to articulate, excepting under the most painful amount of stuttering and muscular effort. It appears that on a former occasion a somewhat similar attack occurred, but this quickly subsided without medical treatment.

On the present occasion he had been relieved by remedies; but having been excited by the effort to tune a piano (an occupation he was in the habit of following), he had a relapse, which afforded the occasion of my seeing him in consultation. I found him nervously excited, complaining of occasional headache, but without nausea, scintillations or noises in the ears, and there was no drowsiness. Both pupils acted naturally. The tongue was fairly clean; the appetite was good; the bowels regular; the urine clear. The pulse was quick, and with diminished power. When, however, he attempted to speak, the most painful stuttering and loss of power over the organ was the immediate and distressing result; the attempt producing much additional excitement.

He had been blistered on the nape of the neck, and had taken antispasmodics, with alterative aperients. It was now agreed, in consultation, to give him the sesquicarbonate of ammonia, with tincture of calumba and camphor mixture, and at night the bichloride of mercury. The diet was directed to be generous, with bitter ale; to avoid smoking, to which he was addicted, and to refrain at present from business, as well as from all sources of excitement. Under this plan of regimen and treatment, the speech has been greatly benefited, and he is again able to resume his avocations.

Remarks. The lesion of function in this case was confined to the lingual nerve, and was caused, probably, by venous congestion, or slight serous effusion, at or near its origin. With this, there was diminished nervous power in the heart's action, to which, in some degree, the local disturbance may probably be attributed.

Case IV. *Paralysis of Three Fingers of the Left Hand.* An elderly lady, having retired to bed in her usual health, discovered, on rising in the morning, that she had lost the power of using the middle, ring, and little fingers of the left hand. This loss of power was accompanied by tingling and numbness, extending to the wrist, together with contraction of the fingers towards the palm, and difficulty in keeping them extended without the assistance of the other hand.

I saw her the next day. Her general health was good, excepting slight sluggishness of the bowels. There was neither headache, nor anything—beyond the local paralysis—indicative of cerebral disturbance. The pulse was natural in frequency, but weak in tone.

She was directed to live plainly, but generously; to take the sesquicarbonate of ammonia, with infusion of gentian; and to ensure the regular action of the bowels by taking (if necessary) daily, one or two drachms of castor oil. She was also ordered to use friction to the hand, and to keep the fingers extended upon a firm piece of gutta-percha.

I did not see this case regularly, but on her last visit to me she was somewhat improved, and had, to a certain extent, regained the power of extending the fingers.

Remarks. In this case the lesion was evidently of cerebral origin, and it indicates, I fear, with too much certainty, that which will sooner or later obtain in a graver form. Partial paralysis is a very interesting, and, at the same time, a very important affection to study. While, in the majority of young persons, when it is confined to loss of power in the facial muscles, there is little real danger to life; on the other hand, when it occurs to those of more advanced years, especially if there be numbness, drowsiness, and other symptoms pointing to the brain as their origin, a much less favourable opinion will be called for, indicating, as they do, that "beginning of the end," upon which a more general and, perhaps, fatal attack will very probably follow.

If one or more of the extremities be paralysed, as well as the muscles of the face, we must, of course, look to the brain as the exciting cause; and it is a question which will be pressed home by the friends of the patient suffering from facial palsy, as to how far the brain is implicated, and more especially as to the probability of ultimate recovery.

In the preceding cases the motor function of the muscles was alone implicated; but partial paralysis may give rise to disturbance of sensation also, existing per se, constituting local anæsthesia, or conjointly with derangement of muscular action.

That the function of the portio dura was alone affected in the two facial cases, was evidenced from the interesting fact that the power of mastication was retained, shewing that the temporal and masseter muscles (which derive their motor power from the anterior branch of the fifth) remained unaffected.

When, on the other hand, the function of the fifth nerve is alone involved, we have local anæsthesia from disturbance of its sensitive branch, and, at the same time, paralysis of the masseter and temporal muscles, from lesion of its motor branch. These physiological and pathological phenomena render the study of these affections deeply interesting.

The function of the portio dura may be interrupted, causing facial paralysis in any part of its course. Thus, a direct injury, as from a blow, a draught of cold air, or pressure from a contiguous tumour, may severally affect the nerve after it has emerged upon the face, or it may be equally produced by an injury to the portion of the nerve within the temporal bone, as by a sudden concussion, or fracture of the base of the bone, causing hæmorrhage, and thereby pressure; or lastly, as already stated, the lesion may be situated in the brain itself; but when this obtains we shall generally be able to detect some additional indications of cerebral disturbance. The most common cause of facial palsy is unquestionably exposure to cold, exciting inflammation or congestion of the surrounding tissues, and consequent pressure upon the nerve, either external to or within the bony canal.

There are other cases, as in the second above narrated, in which it is very difficult to define with any degree of certainty the precise cause upon which the paralysis depends.

Although the danger to life is very small to the majority of patients thus affected, the treatment should nevertheless be prompt, and for this reason, viz., that a very small amount of induration around the nerve, keeping up pressure, may render the case one of permanent deformity. If, then, we see the case early, and have reason to suspect an inflammatory or congestive origin, we should have recourse to local depletion in the neighbourhood of the nerve, either by leeches or cupping: fomentations to the side of the face, or the steam of hot water directed into or around the ear; purgatives: blisters kept open behind the ear of the affected side; and mercury steadily given to affect the gums, unless the paralysis give way prior to this result taking place, when its use should be suspended.

Affecting the system slightly by mercury is a safe and necessary measure, in order to ensure the absorption of any deposit or thickening of tissue around the nerve—in all cases in which this loss of power yields but slowly, or threatens to become persistent.

When there is no inflammatory action, the sesquicarbonate of ammonia, with or without a few minims of the tincture of cantharides, to sustain nervous power and to promote absorption, should be administered in addition. In all the above cases, this remedy, although not trusted to solely, had the best effect.

CONTRIBUTIONS TO CLINICAL SURGERY.

By Oliver Pemberton, Esq., Surgeon to the General Hospital, and Lecturer on Surgical Pathology at Sydenham College, Birmingham.

VI.—Excision of the Knee.

[*Continued from page* 961.]

I proceed, therefore, to the narration of further cases, exhibiting, some of them, the ordinary, and others, the least frequent complications, attending this operation.

Case ii. G. W., aged 7, a pale, fair-haired, delicate-looking child, was admitted into the General Hospital, Birmingham, on June 8th, 1857, under my care, with disease of the left knee-joint.

History. The knee has been diseased for the last two years; and on two occasions during that period he has been a hospital patient. The disorder commenced after a slight injury occasioned by a fall. His parents are living, and his brothers and sisters are in good health. He has not had glandular enlargements, nor have the lungs shown symptoms of disease.

Present State. The left knee is enlarged and rounded. There is an elastic elevation, corresponding to the synovial spaces by the sides of the patella. The inner condyle is much larger than natural, as is also the head of the tibia. The leg is semiflexed, and admits of very slight motion, which produces acute pain. The integuments are not ulcerated, and are free from pain, with the exception of the spaces by the sides of the patella above referred to. The muscles of the limb are much wasted, but the bones correspond in length to those of the opposite limb.

The treatment, continued for several months, consisted in the careful adaptation of gutta percha splints to the joint, whilst a splint was also applied to the whole length of the limb, and was furnished with a foot-piece and screw, so as gradually to straighten the extremity; at the same time, cod-liver oil and a nutritious diet were prescribed, with a view to the improvement of his general health. At this time the child suffered but little pain, though it was evident, no less from the increased size of the knee than from the wasting of the patient's frame, that the disease was making a gradual progress.

In September, there appeared a swelling above the patella, apparently outside the joint, and situated amongst the tendons of the quadriceps. There was an obscure sense of fluctuation about this, but it was entirely free from pain.

Soon after this time, I was desirous to excise this patient's knee, as I was satisfied of the presence of very extensive disorganisation of the joint, and was of opinion that further delay would not prove advantageous. In consultation, however, with my colleagues, the symptoms were not deemed sufficiently urgent to render immediate operative interference expedient; and consequently, the treatment by rest and general means was continued.

Finding that no improvement had manifested itself, either in the part affected or in the constitution, I resected the joint on December 16th.

Operation. The patient being placed under the influence of chloroform, the usual semicircular incision was carried from one condyle, across the ligamentum patellæ, to a corresponding point on the opposite side. The termination of the incision opened the abscess in the quadriceps, and gave exit to a large collection of pus; the soft parts were then cleared, and the ligamentous tissues divided. Before I was aware of it, the knee had been forcibly bent, and the remains of the crucial ligaments were torn through. This proceeding compelled me to saw off and remove the articular ends of the femur and tibia separately instead of in their connected state. The bones were sawn through with an ordinary amputation-saw, and no spatula was introduced. The patella was not removed. No vessel required a ligature at the time of the operation.

Two hours subsequently, the limb was accurately adjusted, and a modification of the Macintyre splint applied, which admitted of the wound being dressed without disturbance, and the boy being placed on a water-pillow, the extremity was lightly suspended in a swing-cradle. A small vessel proving troublesome during the dressing, it was tied, and the edges of the wound were closed by sutures.

Examination of the Resected Bones. About three quarters of an inch of the femur, and rather less than half an inch of the tibia, were removed. The synovial membrane was everywhere in a condition of scrofulous degeneration. The cartilages covering the prominent surfaces of the condyles were almost entirely destroyed, large pieces being separated or only loosely connected with the bone beneath. The head of the tibia on the inner side was in the same condition in regard to its coverings. The bones themselves were filled with scrofulous matter.

December 17th. He passed a restless night. This morning the pulse was 150.

Dec. 18th. He had a better night; but was restless since morning; and had disturbed the splint. There was a free discharge from the wound.

Dec. 19th. I was compelled to readjust the splint. The sutures were removed. The wound was looking healthy.

Dec. 20th. The child was low and feverish. The pulse was rapid; the countenance pinched; the position of limb was good. I could not learn that he had had a rigor.

Dec. 21st. Prostration was not so great. He had pain in the left elbow-joint, and was sick.

Dec. 22nd. Suppuration was copious from the wound. He had pain in the right knee as well as in the elbow.

Dec. 25th. He had a rigor whilst being dressed. The discharge from the wound was copious. From this date, he gradually sank, and died on January 4th, 1858, nineteen days after the operation.

Dissection twenty-four hours after death. The brain was healthy. The lungs were remarkably small in size. The apex of the left lung was studded with a few tubercular deposits in an unsoftened state. Small masses of purulent deposit were scattered throughout both lungs; their size varied from a millet-seed to that of a pea or bean. The heart was healthy. In the pericardium was a large quantity of clear serum. The liver was natural in size: its surface was sprinkled by numerous purulent deposits, of the size of split-peas; and deeply seated in the upper part of the right lobe was a deposit of the size of a hazel-nut, of a similar character. The remainder of the abdominal viscera were natural.

In the resected joint, the union of the flap in front was firm and satisfactory. The ends of the bones were in perfect apposition. On separating their surfaces, they were seen to be covered with imperfectly organised lymph. The textures adjacent were not infiltrated or in any way altered from the natural condition. The femoral vein was next traced carefully upwards from below the popliteal; it was healthy, until within a short distance from Poupart's ligament; at this point was located a plug of lymph, of two inches in extent. The plug imperfectly adhered to the coats of the vein, and was broken up in parts by bloody infiltration. The femoral and popliteal veins of the opposite limb were natural; so also were the iliacs and vena cava inferior.

The cavity of the left elbow-joint was filled up with a thin, dirty coloured pus. The left shoulder was healthy. The right shoulder had a quantity of pus within its cavity, whilst the right elbow was healthy. The right hip was filled with pus; the left was healthy. In the several joints occupied by pus, the cartilages and synovial membranes were unaffected.

Case iii. G. A., aged 8, a delicate strumous looking boy, presented himself to my notice in March 1858, suffering from a long standing disease of the left knee.

History. Six years since, after a fall, the joint first began to give pain, and after much suffering in the earlier stages of his complaint, the malady subsided to its present condition.

Present State. His knee is now semiflexed, partially moveable. The tibia is thrown backwards, and the patella rests firmly on the outer condyle. There is general enlargement of the articular extremities, and the entire aspect of the joint presents a globular appearance. He suffers no pain on movement or on pressure; but the limb is useless, is wasted, and he walks on crutches, and has done so for years.

It was evident in this case that all acute disorder had subsided; consequently, any treatment contemplated was with the view of, if possible, remedying the inutility of the limb.

At the urgent request of the boy's friends, and after consultation with my colleagues, I determined to excise the joint, in the hope of obtaining a limb more useful than the one just described. Accordingly, on March 24th, under chloroform, I operated in the ordinary way. Thin slices of the femur and tibia were removed, altogether, rather less two inches, and the patella was likewise taken away. There was smart hæmorrhage, and two small vessels required ligature. The child seemed more than usually depressed after the operation, before

removal from the theatre, but I attributed this more especially to the chloroform.

In the afternoon following, the limb was carefully adjusted in the ordinary apparatus. Sickness had, however, set in soon after his removal to the ward, and continued more or less severely until the next day. Then it somewhat abated under the influence of remedies, but towards evening it was renewed with increased severity. After this there was no amendment, but the symptoms of depression increased, so that, despite all that was attempted for his benefit, he sank on the 27th, three days after the operation.

No *post mortem* examination was permitted.

Examination of the Sawn Articular Extremities. The synovial membrane was everywhere pulpy and degenerated, but the cartilages were only thinned, appearing in other respects healthy. Where the patella rested on the outer condyle, the cartilage had almost entirely disappeared. The tibia was completely thrown backwards behind the internal condyle.

Case iv. E. H., aged 30, a housemaid, of strumous appearance, was admitted under my care in the General Hospital, May 7th, 1858.

History. Eighteen months since she first experienced pain in the right knee, near the inner margin of the patella. The joint became weak, and the pain increased slowly in intensity, accompanied by some enlargement of the part. Finding that the disease was advancing, and that she was no longer able to pursue her employment, she sought admission into the Hospital.

Present State. The joint is greatly enlarged, all the bony prominences having disappeared. The integuments are discoloured, and there is an obscure sense of fluctuation conveyed to the fingers on manipulation. There is pain on firm pressure, but this is principally confined to the region over the head of the tibia. With all this, the limb is in a good position, and in one very favourable for anchylosis.

With this view, during the next four months, everything was done in the hope of arresting the progress of the disease. Once or twice collections of pus were evacuated in the muscles above and below the knee, and her general health continued satisfactory for some time. It was at length, however, evident that something more must be done; and, accordingly, on October 6th, five months after her admission, at her own request, I excised the joint in preference to amputation. The operation was accomplished in the ordinary way. The first incision gave exit to a large collection of pus, situated in the muscles around the joint, and there was also a large quantity in the joint itself, and in the popliteal space. The amount of bone removed measured about one inch and a quarter. The patella was likewise taken away. The hæmorrhage was inconsiderable, and but one vessel required a ligature. There was some sickness soon after the operation, but by the time the limb was adjusted, the patient had very fairly rallied from its effects.

Examination of the Sawn Extremities. The slice removed from the femur is three parts of an inch in thickness. The inner condyle has its articulating surface entirely denuded of cartilage, a slight gelatinous coating existing in one or two spots. The outer condyle is also denuded, with the exception of about a quarter of an inch posteriorly, where the cartilage is much attenuated. The slice from the tibia measured rather less than half an inch. The semilunar cartilages are totally destroyed, with the exception of a small portion behind the spine. The cut surfaces presented the usual appearances of spongy bone. In the slice from the tibia, the saw just passed below a softened portion. The compact layer of bone beneath the cartilages was almost entirely destroyed, and a good deal of new bone had been thrown out around the articular extremities. The synovial membrane was utterly gone. The crucial ligaments were entire, but imbedded in a pultaceous purulent mass. The patella had its cartilage destroyed, and the bone beneath was in a softened state.

For some days after the operation the patient did well. The wound suppurated, and her strength returned.

October 11th. Had a shivering fit; and two days afterwards a severe attack of erysipelas around the wound and up the thigh manifested itself.

Having recovered from this, on the 30th, without any preliminary fever, she broke out with confluent small-pox, notwithstanding the knee looked well, and suppurated healthily. There was great depression following the subsidence of the eruption; and the wound discharged most profusely. At the beginning of December she had night-sweats and cough, with purulent expectoration; and on the 22nd of this month she died, under the wasting influences of diseased lungs.

In the examination of the excised joint, there was found to be not the least attempt at bony union. Pus had burrowed its way in all directions, and had separated the periosteum for some little distance beyond the sawn extremities. These at their opposed surfaces were covered by a sloughy purulent membrane. There were no evidences of purulent absorption. The apices of both lungs contained large cavities, and there was abundant tubercular deposit scattered throughout the other parts of these organs.

Case v. C. C., aged 17, a dark-eyed, sallow complexioned Irish girl, was admitted under my care in the General Hospital, on July 30th, 1858.

History. About four years since, in a fall, she injured the left knee, and suffered for some time afterwards from pain and lameness. She went about, however, and did not experience great inconvenience until about three months before her admission; then she had constant pain, the joint became swollen, and she was unable to use it in the least degree.

Present State. The joint is greatly enlarged, rounded, and even with the surface, shiny and reddened. The limb reposes on its outer side, and is semiflexed. The least movement occasions intense agony, and there is evident fluctuation in the articular cavity. The patient's general health, owing to long continued pain, is very much reduced. She entreats that something may be done for her relief, but refuses, both by herself, and by her friends, to submit to amputation. After waiting, in the hope that her general health might improve, and finding that hectic was rapidly setting in, on the 19th of August I excised the knee under chloroform. On opening the joint, a pint of pus poured out, whilst there was a second collection in the bursa above the patella. Very thin sections, half an inch of the femur, and the same amount of the tibia, were removed. The patella was left. The superior internal articular artery alone required ligature. For some hours afterwards the prostration was very great, but towards evening reaction was fully established.

Examination of the Sawn Articular Extremities. The synovial membrane was everywhere thickened, and converted into a reddish fungus-like material. The cartilages on the femur, on the tibia, and the semilunar cartilages, were almost entirely destroyed, but the bone was scarcely penetrated by disease in any part. The crucial ligaments were utterly disorganized.

There was no drawback to the steady improvement of the health of this patient, after the operation, for the first two months. The wound progressed favourably, though the suppuration, as might be expected, was of an extreme character.

In November, some abscesses formed in the cellular membrane of the thigh and leg, and required free incisions for their relief; in their presence, however, the wound closed in.

At the end of three months the splints were removed, and the limbs simply supported by a roller. There was now great consolidation about the articular extremities, but no bony union.

At Christmas, four months after the operation, she was permitted to get up and about on crutches. There was unwieldy enlargement about the joint, and decided thickening of the femur.

In February 1859, the enlargement of the thigh had become more decided, and it was accompanied by a good deal of pain. After a time, some abscesses broke of their own accord, and sinuses resulted. Through these a probe could be passed on to the enlarged bone, but I was unable to detect any necrosed portions. She can now walk about fairly with the aid of a leather case and her crutch.

From this time, to a period occupied by the next three months, her progress varied but little. Sometimes she would suffer from the formation of fresh gatherings about the thigh, and require rest and attention, but the general character and power of the limb improved in all respects.

On June 15th, ten months from the operation, the following note was recorded. There is no shortening whatever of the limb, she can walk with facility, and requires only the aid of a stick or single crutch. The soft parts are somewhat swollen and thickened over the upper part of the tibia, and along the inner margin of the seat of incision, where are situated the apertures of one or two sinuses. The thigh bone, as high as the trochanter, is greatly enlarged, and there are the apertures of three or four sinuses, but no necrosed bone can be detected. There is slight movement allowed between the sawn extremities.

A week after this she left the Hospital.

Case vi. A. H., a labourer, aged 27, was admitted under my care on May 1st, 1859, suffering from long standing scrofulous disease of the right knee. He was pale and thin, being wasted from much pain; but otherwise he was in good health.

History. Eight years back, the disease originated in a blow. He was under surgical treatment for various periods during this time; and, about two years since, was under my care in the hospital. At that time, the use of issues, and absolute rest to the limb, sufficed to control the disease; and he was enabled to leave at the end of two months, free from pain; and to get about by the aid of crutches and a support for the knee. He remained well, with the good prospect of a stiff knee, for eighteen months. It then again became painful, and increased in size, so that, his health beginning to suffer, he determined to submit to amputation, and accordingly sought the hospital once again with this view.

On examination, the joint was observed to be evenly enlarged, all the bony prominences having disappeared, and an uniform whitish pulpy appearance being presented. The limb was straight; but the least movement of the joint, or pressure of the patella, occasioned acute pain.

May 18th. I excised the joint, in preference to amputation. The operation was accomplished in the customary manner, half an inch of the femur, and the same amount of the tibia, being sawn off, and the patella being likewise removed. There was rather abundant hæmorrhage, a large superior external articular artery requiring a ligature.

Examination of the Resected Parts. The excised parts presented an appearance of profound destruction of cartilage. The faces of the condyles, and the corresponding surfaces of the tibia, were hollowed out by the extension of mischief, and the bony structure adjacent was rendered of a spongy character. The under surface of the patella was similarly affected. There was no trace of the synovial membrane remaining. There was no collection of pus within the joint, but there was a large gathering of matter freed in the course of the incision by the side of the tibia.

For the first few days following he suffered from severe constitutional disturbance, and from a threatening of erysipelas. These drawbacks having subsided, he was doing well, when, on the 24th—six days after the operation—he was seized with alarming arterial hæmorrhage from the situation of the ligature on the superior external articular vessel, which had been thrown off. Before assistance could be rendered, he had lost nearly two pints of blood, and, but for a timely fainting, would in all probability have died, as it was night, and the occurrence was for a few moments unobserved by the attendants. Pressure on the femoral, at the pubic arch, happily sufficed to check any renewal of the bleeding; and for a few days he was most closely watched. However, under the liberal use of stimulants and abundant nourishment, he gradually revived in strength, whilst the wound closed in with marked rapidity. Some suppuration occurred about the situation of the patella, and required relief by an incision; but otherwise the progress of the case, though slow, was satisfactory. The limb was perfectly straight, and the union between the sawn extremities of a fibrous character.

After getting about the ward for some time on crutches, the joint being supported by a splint, he left for fresh air in the country, on September 29th, four months and a half after the operation.

Case vii. S. E., aged 13, a delicate strumous-looking child, of marked intelligence, was admitted under my care on July 27th, 1859, with long standing scrofulous disease of the right knee.

History. Two years and a half since, a fall for the first time injured the joint, leading to pain and swelling, and inability to bear weight in standing or walking. Twelve months since, he came under my care in the hospital. At this time the limb was flexed, and of no use. It was straightened under chloroform, and, by the aid of rest and careful bandaging, became so free from pain that he left able to bear his weight, and to get about without the aid of a crutch. However, twelve months passed by, and the knee becoming painful, he was again admitted.

Present State. The joint is very large, globular in shape, acutely painful to the touch, or on the least attempt at movement. It is semiflexed, and the limb above and below is greatly wasted. The child has a hectic appearance, and is much reduced in strength from long continued pain.

August 17th. Under chloroform, I excised the joint in the ordinary way. The operation was quickly accomplished, and there was no hæmorrhage of the least moment. The amount of bone removed altogether from the femur and tibia amounted to about three-quarters of an inch, the epiphysal junction in either bone being untouched. The patella was removed.

Appearances of the Sawn Extremities. The cartilages covering the condyles presented, in places, various stages of destruction, in some being only thinned, and in others entirely removed. The semilunar cartilages of the tibia were entirely gone, and in parts also the cartilages immediately covering the bone. The crucial ligaments were not greatly affected, their external surfaces being only somewhat softened by contiguous mischief. The bones, where sawn through, presented a perfectly healthy section, though the articular extremities were much enlarged from the effects of former disease. In many places, the bone, from which the cartilaginous covering had been entirely removed, was roughened; but in no instance did it appear to be softened. There was no appearance of synovial membrane left. Suppuration was commencing within the joint, but there was none in the textures around.

For two days the boy suffered a little constitutional disturbance. After this subsided, his progress was uninterrupted by any drawback. The wound suppurated and contracted, and the joint presented a solidifying appearance.

September 28th—six weeks after the operation. The wound is almost healed. The joint is becoming firm. The boy's health is excellent.

At the end of eight weeks, he was permitted to get up, and to move about with the aid of a single crutch and a small leather case. The wound was completely closed, and the boy possessed the most perfect power of raising the entire extremity, the bones having become firmly anchylosed.

[*To be continued.*]

DEODORISATION IN CARCINOMA UTERI.

By Thomas Skinner, M.D., Liverpool.

[*Communicated to the Liverpool Medical Society, November 3rd, 1859.*]

In perusing the number of the Journal for October 29th, I notice a report of a discussion at the Medical Society of London, on the "Deodorisation of Ulcers." I also notice that one of the members present, Dr. Mackenzie, has to a certain extent forestalled me by communicating to the Society the result of his observations in the use of *tar water* in the treatment of *foul ulcers*. I am fully aware that priority belongs to neither of us, as Bishop Berkeley believed in it as a panacea for most diseases (Berkeley's Works by Rev. G. N. Wright, vol. ii, p. 308, *et seq.*) It has also been highly spoken of by Romberg, Wetherfield, Alibert, Emery, Todd, Bateman, and many other authorities, for internal and external use in cutaneous and pulmonary affections, as well as in the treatment of *foul* and indolent ulcers. In the treatment of the last mentioned lesions, it has been extolled chiefly, if not entirely, for its *stimulant* properties, until Dr. Mackenzie's late allusion to it.

With these few preparatory remarks, I beg to draw the attention of my fellow associates to the claims of certain substances as deodorants, particularly tar water, in carcinoma uteri. In the month of June last, a most intelligent and old established practitioner in this town met me in consultation about a lady who is the subject of far advanced scirrhous cancer of the uterus. The cancerous deposition had then extended to the bladder and rectum, rendering the uterus perfectly immobile. The ulcerative process was so far advanced, that the index and middle fingers could be introduced into the cavity, and could be moved freely about. The ulceration also easily admitted Simpson's vaginal speculum, No. 4, an inch and a half in diameter. (This instrument was used twice, simply to apply a solution of the perchloride of iron to abate a temporary hæmorrhage.) The offensiveness of a cancerous discharge from so extensive a surface, and pent up in such a locality, may be more easily imagined than described. So tenacious and so indestructible were the odorous particles, that soap and chloride of lime failed to deodorise my fingers for hours, and my washhand-stand retained the effluvia for more than forty-eight hours, until I made a free use of McDougall's disinfecting powder, so deservedly praised by Professor Simpson (*Medical Times and Gazette*, Jan. 22, 1859, p. 80.) The smell was so disgusting to the patient, that she told me she thought "her inside must be like that of a putrid corpse." In such a case, an effectual, speedy, and safe deodorant was a desideratum, if it was not a *sine quâ non*.

In order to save others the trouble of repeating my ex-

periments, I will briefly state the means I have tried, and their relative success.

1. *Condy's Disinfecting Fluid (purple).* This fluid, which is, I believe, a concentrated solution of the permanganate of potass, was used in the proportion of two drachms to a pint of water as a vaginal injection three times a day. The proportions were rapidly increased up to one fluid-ounce to a pint of water. The result was in every way satisfactory. The gentleman previously alluded to, digitally examined the patient with me a few days after it had been used, and the smell was very much lessened, as also the amount of the discharge. (At this period of my observations, a common pewter vaginal syringe was used, and I cannot but think that this accounts for the success being incomplete.) One great advantage in the use of the permanganate is, that it has no smell of its own, and that, being soluble, it may be used either in the form of a medicated pessary, or in that of an injection. Its lovely *mauve* colour renders it both fashionable and pleasing to our patients. From my experience of its use, I can confidently recommend it in the proportion of one fluid-ounce to a pint of water, as a deodorant in cancer of the uterus; a cupful to be used as an injection thrice daily, and the strength to be increased, if found necessary.

2. *Decoction of Daucus Carota or common carrot.* Being well aware from previous experience of the great value of a carrot poultice in deodorising cancerous and other bad smelling abrasions of the integumental surface, and, as the patient was complaining of lumbar and pelvic pain, with more or less irritation of the vagina, possibly produced by the permanganate, I ordered her to inject a warm and concentrated decoction of the common carrot. At the same time, the patient was ordered to the sea coast. Whether it was the change of air, or the carrot decoction, or both, I was informed by herself and friends, that the smell, pains, and irritation were very much lessened. Yet, *the* smell was not annihilated, and the patient began to tire of the heavy odour of the carrots, and the trouble of preparing the decoction; it was therefore discontinued. If hæmorrhage was to be feared, I would not recommend the *warm* decoction. I may as well mention that, while my patient was using the *decoctum carotæ*, she drank freely of new wort, a common domestic and excellent beverage for invalids who are the subjects of foul ulcers or ill-conditioned sores. (See *Medical Observations and Inquiries*, vol. iv, pp. 358-367.)

3. *Parisian Disinfecting Powder and Paste.* About this time, the powder and paste of MM. Corne and Demeaux were creating great excitement in Paris, so I determined to give them a fair trial. To the powder made with coal tar three parts, and sulphate of lime one hundred parts, was added enough of olive oil to form a paste of sufficient consistence for vaginal pessaries. The mass was divided into balls, which were dipped in the usual solution of wax, lard, and oil. They were made for me by Messrs. Clay and Abraham, of this town.

So far as deodorising and even lessening the amount of the discharge is concerned, the pessaries were certainly most effectual; but to the use of such means in the treatment of carcinoma uteri, there are insuperable objections; viz.:

a. The *coal* tar in itself is exceedingly disagreeable to the olfactory organs of females, however little it may affect those of M. Velpeau. This objection, however, may be waived by adopting *vegetable* instead of *coal* tar in forming the powder.

b. The discharge is absorbed by the sulphate of lime, which swells to some extent, sets hard, and becomes a source of considerable irritation.

c. As such medicated pessaries do *not* dissolve, they accumulate, until removed by a second party. On our first essay with the pessaries, I was called to my patient three days afterwards, and found to my amazement a nest of three of them, enlarged and hardened. To obviate this for the future, I ordered them to be threaded with a needle and thread in such a manner, that the patient might withdraw them herself every twenty-four hours. I found, however, that even with this plan they sometines split in two, and by doing so became a source of discomfort to the patient.

d. The surface of the ball comes first into contact with the discharge, and the plaster of Paris setting, prevents the interior of the ball from being of any use.

e. Applied as a powder, it is worse than useless, as it cakes or sets, and forms fragments which are very disagreeable to the patient, and exceedingly difficult of removal.

From my disappointment in the use of the *coal* tar disinfecting powder, I saw no reasonable hope of better success from the use of *vegetable* tar in its manufacture. I therefore concluded that the Parisian powder is impracticable, so far as the deodorisation of the discharge of carcinoma uteri is concerned.

4. *McDougall's Disinfecting Powder; Vegetable and Animal Charcoal, etc.* MM. Corne and Demeaux's powder having failed me in the treatment of carcinoma uteri, I have not tried the use of McDougall's disinfecting powder (Smith and McDougall's patent), nor of charcoal; nor of any other insoluble substance, however effectual they may be as deodorants; because I think that, if an effectual, speedy, and safe agent can be obtained, which is fluid or entirely soluble, it ought to be preferred.

5. *Chlorides of Zinc and Iron, etc.* The deodorant and useful properties of those substances are so familiar to all, that comment is unnecessary.

The same may be said of the

6. *Chlorates, Hypochlorites, and Hyposulphites;* none of which I have tried in this particular case, as I wished something superior to all of them. But let me add, that subsequent to the use of the Parisian powder, I did try the value of simple

7. *Metallic or Mineral and Vegetable Astringents;* such as the sulphates of alum and zinc, and the acetate of the latter metal, also solutions of tannin. Comparatively speaking, they were all more or less effectual in deodorising and lessening the discharge, but very much inferior as deodorants to the substances previously made use of. I may here just as well remark, that my patient was fortunately fond of variety; and, as may be seen, I gratified her taste, which gave me an excellent opportunity of making these and the following observations.

8. *Solution of Naphtha and Creasote.* This preparation is highly commended by Dr. Lionel Beale for preserving moist specimens for the microscope. As I had some of it made by myself, I gave it a trial upon a small scale; and it was so satisfactory, that I am induced to give the formula. The only objections to its general use are, the smell of creasote, and the length of time required to prepare it. It is as follows:—

"Creasote, three drachms; wood naphtha, six ounces; distilled water, sixty-four ounces; chalk, as much as may be necessary. Mix first the naphtha and creasote; then add as much prepared chalk as may be sufficient to form a smooth thick paste; afterwards, add very gradually the water, and mix well in a mortar. Add two or three small lumps of camphor, and allow the mixture to stand in a lightly covered vessel for a fortnight or three weeks, with occasional stirring. Pour off the almost clear supernatant fluid, and filter it if necessary. Preserve it in well-corked or stoppered bottles." (*The Microscope in Clinical Medicine*, 1st ed., p. 87.) This preparation, when carefully made, is highly *antiseptic*—a property which cannot be said to be possessed by the powders or pastes of MM. Corne and Demeaux, if Mr. May's experiment can be considered as decisive. (Journal, Oct. 15th, 1859, p. 832.) I feel certain that, in hospital practice, such a preparation, variously diluted, and tar-water, would be found of great service as addendæ to the water-dressing of wounds and ulcers, possessing, as they do in a very high degree, deodorant and antiseptic, along with stimulating, astringent, and consequently cleansing and healing properties. In point of cleanliness, they are every way superior to the preparations of MM. Corne and Demeaux. For reasons already given, the naphtha and creasote solution is not so available in general practice.

9. *Solution of Lead and Creasote.* The following was attended with very good effect:—

℞ Plumbi acetatis ʒj; acidi acetici ʒss; creasoti ℥x. Misce, et dein adde gradatim, misturæ camphoræ Oj. Solve.

Sig. A teacupful for injection twice or thrice daily.

The creasote may be increased to thirty minims, if thought necessary. Creasote dissolves the acetates, the acetate of silver excepted; and is itself freely soluble in acetic acid. The acetic acid and the camphor serve to mask the odour of the creasote; and a few drops of any essential oil may be added for the same purpose, with the best effect, as creasote is soluble in most of them.

10. *Iodine.* I have not yet had an opportunity of trying the effects of iodine, as recommended by M. Marchal (de Calvi) to the Academy of Medicine of Paris, on August 8th last. Its undeniably powerful antiseptic properties, as proved by M. Duroy, and its being easily soluble, either in the form of a lotion for injection, or in the form of an ointment as a pessary, are sufficient reasons, in my estimation, for giving it a fair trial as a deodorant in carcinoma uteri, and other affections attended with offensive discharges.

11. *Tar-Water. Aqua Picis Liquidæ, D.* While reading a report of the discussion on deodorisation between MM. Renault and Velpeau lately, I observed that it was merely a matter of economy and of olfactory preference, which made the difference between the use of coal and vegetable tar in the manufacture of the disinfecting powder; and, as I was much inclined to believe that the tar, or one or more of its active principles, is the essential ingredient, I determined to try the effect of the injection of tar-water. I was strengthened in this idea by having read the eulogiums passed upon it by Bishop Berkeley and others, and in the pages of the *Medical Commentaries*, alluded to by Dr. Mackenzie at the meeting of the Medical Society of London, on October 24th.

My patient has now used it undiluted for a month or more, and is likely to continue its use, as its beneficial effects have far surpassed my most sanguine expectations. The discharge has much decreased, and is for the present at a minimum. The foul smell entirely disappeared on the first day she used the tar-water as an injection; and, in its stead, the apartment, the bed, and the patient, have a mild and really refreshing aroma of a shipbuilder's yard in the distance. The patient and her friends have become so accustomed to this slight, and rather agreeable odour, that they are not now sensible of its existence; and they, as well as myself, can bear evidence that none of the many measures adopted for the purpose of deodorising the discharge, have been so eminently successful as the simple injection of tar-water.

Formula for Tar-Water. Tar-water was at one time officinal in the Dublin *Pharmacopœia;* but, in the last edition, the formula has been omitted:—"*Aqua Picis Liquidæ, D.* Tar, lb. j; water, cong. j; mix, stirring with a stick for a quarter of an hour; as soon as the tar has subsided, strain the liquor, and keep it in well closed jars." (Neligan's *Materia Medica*, 3rd ed., p. 374.) Pereira gives a different formula:—"Tar, Oij; water, cong. j (wine measure)"; otherwise the same as Neligan. My patient has always used the formula recommended by Neligan.

Properties. Tar-water ought to be perfectly clear, and of a pale sherry or amber colour. It has a bitter, resinous, and considerably acid taste; and a slightly creasotish, but rather agreeable empyreumatic odour. It reddens litmus-paper, and has a density of about 1·005. "The volatile oil in tar-water is partly held in solution by acetic acid, which, as is well known, dissolves creasote. It" (tar-water) "consists of water holding in solution acetic acid and pyrogenous oil and resin." (Pereira's *Materia Medica*, p. 1205.) The late Professor Royle says, that tar-water contains "creasote and other matters in solution". (*Manual of Materia Medica*, p. 647.)

Mode of Administration. By the aid of Higginson's invaluable syringe, a tepid solution of soap and water is first to be injected; and, immediately thereafter, a breakfast-cupful or more of undiluted tar-water. This should be done twice a day, if the patient's strength will admit: hitherto, a more frequent use of it has not been required. It is necessary that the tar-water should come into contact with the ulcerated surfaces: therefore, the recumbent posture is preferable, and a long vaginal nozzle to the syringe is of advantage. If there is an intelligent, handy nurse in attendance, and the ulcerated cavity is extensive, and its lips lobulated and lapping over each other, a piece of lint saturated in tar-water, with a piece of tape or thread attached to it, may be inserted within the cavity, or the point of the nozzle may be directed into the ulcerated cavity before injecting.

Lastly, as important in itself, and as bearing upon the action of many of the substances alluded to, I would briefly call to remembrance the well known properties of

12. *Creasote*, which literally signifies flesh-preserver (from κρέας, flesh, and σώζω, I preserve). It is the most important of the products obtained from wood-tar by Reichenbach, in 1830. It dissolves several salts, particularly the *acetates*, the acetate of silver excepted, which it reduces. It is itself completely soluble in acetic acid, wood naphtha, and alcohol, in most volatile oils, in the alkaline solutions, and in from eighty to one hundred parts of water. Like the chlorides of iron, mercury, zinc, and other caustics, it is a powerful coagulator of albumen; but, unlike these agents, the insoluble compound which it forms with the tissues *resists putrefaction.* In fact, it is the best known antiseptic; consequently, it is a powerful deodorant. Finlay Dun says: "It is believed to have been the essential agent used in embalming the Egyptian mummies. It is extensively employed in preparing various dried meats, and might be used for preparing subjects for dissection, by dissolving it in acetic acid, and injecting the solution into the veins. . . . Externally, it acts beneficially as a stimulant and astringent, an antiputrescent and deodoriser." (*Veterinary Materia Medica*, pp. 199, 200.) Of the use of creasote as a deodorant in carcinoma uteri, I believe that Dr. Copland was among the first who employed it. (*Cyclopædia of Practical Medicine*, vol. iii, p. 1283.)

In connexion with the deodorising property of creasote, it is interesting to observe that *carbolic acid*, which is undoubtedly the essential ingredient in Smith and McDougall's patent disinfecting powder, is supposed by M. Laurent to be really identical with *creasote.* (Royle's *Materia Medica*, p. 712.) The late Professor Gregory arrived at the same conclusion as M. Laurent, and about the same time. Professor Gregory stated to the Royal Society of Edinburgh: "If these two compounds be not identical, they are at least very closely connected, and in all probability contain the same radical. It is possible that creasote may be a definite compound of carbolic acid with some allied body. At all events, *it is very remarkable that these two compounds, described as different, should agree in density, taste, smell, antiseptic property, power of combining with bases, power of dissolving resins, indigo, etc., and finally, in composition*, although probably perfectly pure creasote has not yet been analysed." (*Edinburgh Monthly Journal*, 1845, page 811.) Cooley, speaking of commercial creasote, says:—"The fluid sold in the shops for creasote is a mixture of creasote, picamar, and the light oil of tar; in many cases, it is little else than impure carbolic acid, with scarcely a trace of creasote.' (*Cyclopædia of Practical Receipts*, 3rd ed., 1856, p. 665.)

It would appear from the above statements, that, to the best of our knowledge, the disinfecting agent in even Smith and McDougall's powder is none other than creasote, or its analogue carbolic acid; and, as carbolic acid is the acid portion of the volatile oil which is obtained by the distillation of *coal* tar (*Royle*, p. 712), I make no doubt that creasote or carbolic acid is the active ingredient in the powder and paste of MM. Corne and Demeaux, as prepared from *coal* tar. Creasote is doubtless the active ingredient in the powder and paste prepared from *wood* tar. There can also be no doubt that creasote is the active ingredient in woodsoot (*fuligo ligni*) and its preparations, which are so highly extolled by the Dublin and continental physicians. (*Neligan*, 3rd ed., p. 35; *Pereira*, 3rd ed., foot-note to page 2014. See also an interesting case of the successful external application of the *decoctum fuliginis*, in the case of a severe burn, by Dr. Ebers of Bourdeaux, in the *Edinburgh Monthly Journal* for 1841, p. 755.) I feel much inclined to try the *decoctum fuliginis* of the Dublin physicians as a deodorant in *carcinoma uteri*, or the *tinctura fuliginis*, sufficiently diluted with water. For the best account of creasote, I beg to refer to Dr. Cormack's Harveian prize essay for 1836.

The *modus operandi* of creasote, or any of the substances spoken of in this paper as antiseptics or deodorants, I have purposely avoided, as I consider the subject of too speculative a nature to serve any practical purpose.

Summary. From the foregoing experiments and observations, I am of opinion—

1. That creasote, or its analogue carbolic acid, or some such empyreumatic product, is the active ingredient in the disinfecting powders of MM. Corne and Demeaux, of Messrs. Smith and McDougall's patent, and of the majority of our best disinfectants which smell of or contain such ingredients.

2. That, as the powder of MM. Corne and Demeaux is something more than insoluble; that, as it sets and becomes hard, and is otherwise objectionable—its use, however effectual as a deodorant, is impracticable so far as carcinoma uteri is concerned.

3. That in the treatment of cancerous ulceration of the uterus, a fluid or soluble deodorant is much to be preferred.

4. That the order in which I rate the various liquid and soluble deodorants I have drawn attention to is as follows:—

a. Tar-water (*Aqua Picis Liquidæ, D.*)

b. Condy's disinfecting fluid (purple), one ounce to the pint; or the permanganate of potass as a vaginal pessary of two drachms, from ten grains to a scruple in each.

c. Solutions of creasote:—the lead and creasote (No. 9); the naphtha and creasote (No. 8); or vaginal pessaries of two drachms, from five to ten minims of creasote and ten grains of camphor in each.

d. Solutions of the chlorides, chlorates, hypochlorites, and hyposulphites.

e. Metallic or mineral and vegetable astringents.

f. Decoction of the *Daucus Carota*, or common carrot, particularly if any of the others should prove irritating, and an emollient requisite.

In conclusion, I am perfectly well aware that any number of observations, made in the conduct of a single case, cannot be regarded as sufficient data on which to establish the value of tar-water or any other substance as a deodorant in carcinoma uteri; but, in *such a case as the one I have given*, any means attended with success deserve consideration.

CHEMICAL, PHYSIOLOGICAL, AND PRACTICAL CONSIDERATIONS, IN THE TREATMENT OF PHTHISIS.

By Edward Smith, M.D., LL.B., M.R.C.P., Assistant-Physician to the Hospital for Consumption, Brompton; etc.

[*Read before the Western Medical Society.*]

A physiological inquiry of great extent, in which I have been for some years engaged, and which in part appears in the *Philosophical Transactions* for this year, has led me to closely examine the chemico-physiological hypotheses of Baron Liebig on the functions of respiration and nutrition, and the basis upon which, in his opinion, all correct practice must be based. The result has been profitable to myself, and has led me to believe that important guides to practice have been found, and may ultimately be multiplied, both in reference to phthisis and to general disease. As the blind administration of remedies is usually profitless, in reference to the advance of science, I venture to hope that the following paper may afford some matter for profitable reflection.

In every case of chronic phthisis, we have to regard the state of the lungs, with the effect of the interference with their functions; the special symptoms, and the state of the general system. In many cases, the intensity of all these so corresponds, that from one we may predict the other; and these are perhaps the purer forms of the disease; but in many there is no correspondence between any of them. Thus a person with all the evidences of a broken system, leading to the inference that it is due to phthisis, has no deposit of tubercle, and may not even have the earlier condition of lessened vesicular action, although that is unlikely; whilst, on the other hand, the system is to all appearance healthy, and, on examination, there is found extensive mischief, and even a cavity in one of the lungs. Again, it often happens that the irritable cough and frequent slight hæmoptysis, so common as symptoms in most cases of phthisis, are accompanied by very slight or even no lung-mischief; whilst, in cases of extensive disease of the lungs, there is scarcely any noticeable complaint of any kind. These various facts are daily exemplified at the hospital, and become so impressed upon the mind, that in no case presenting itself do I dare to form an opinion without first examining the chest; and constantly have I found phthisis where none was suspected, or not found it where I thought it was certainly present. The lesson which I wish to draw from this great want of uniformity in the relation between the disease of the lungs, the symptoms, and the system, is, that phthisis is not one, but, so to speak, many diseases, and requires not one, but many modes of treatment. A belief in this fact must, I think, lie at the foundation of all improvement of treatment.

In reference to the lungs, when tubercle is deposited, we can have no doubt but that some parts of those organs have lost their power of action; and in that earlier condition, in which the vesicular murmur is lessened, the same result is quite evident to my mind. What, then, are the evils which result from this state of things? In a state of health, I can inspire two hundred and eighty cubic inches of air beyond that large amount which remains in the lungs after the most complete expiration; but, in ordinary respiration, I only inspire about thirty cubic inches at an inspiration; and even with the most violent exercise, I cannot inspire more than one hundred cubic inches at each inspiration. Hence it may appear that the lungs are much more capacious than is really required for the due performance of their functions; and this inference seems to be supported by the fact that, in cases of acute pleurisy of one side, with hydrothorax, the other lung remaining sound, all the ordinary processes of nutrition and growth proceed with something like their accustomed order. Such, again, may be inferred from those numerous cases of tuberculosis of the lung in which there are circumscribed deposits even in both lungs, and which exist for years without injury to the individual. But, whilst admitting that Nature has given us a superabundance of lung-surface, in order to be prepared against the inroads of such diseases, we must not hastily come to this conclusion. The action of the oxygen in respiration probably does not, at least in great part, take place in the air-cells, or indeed in any part of the lungs; but it must be absorbed and conveyed by the blood to the tissues of the body; and in the tissues is doubtless the chief union of carbon and oxygen. Hence are required two circumstances: first, extent of absorbing surface; and second, duration of contact of air with the absorbing membrane. Whatever lessens one or both, must lessen the influence of the respiratory process. There can be no doubt, therefore, that whilst only so small a quantity of air is inspired at an ordinary inspiration as thirty cubic inches, or one-ninth of that which might be inspired, it is distributed to every part of the immense network of the lungs, and in every part the absorption and elimination of gases and vapours proceed. In the early condition of diminished vesicular action—a condition which is more or less general over one or both lung—there will be lessened absorption of oxygen, and lessened elimination of carbonic acid, vapour, and heat. When there is deposition of tubercle, there will also be a more or less complete exclusion of the blood from that part, and thereby an arrest of all the changes just mentioned? What, then, is the result?

It is a common saying, that deficient respiration leads to, or at least is connected with, deficient assimilation and nutrition; but much more precision of ideas is required than is commonly attained. We may perceive, on reflection, that the amount of chemical change proceeding in the body will vary with the amount of vital action, whether in the transformation of nutritive material, or in the destruction of tissue, or, in other words, with the wants of the system; and this chemical change is in great part dependent upon the respiratory function. In this sense, the respiratory function is subservient—that is, it obeys the call of the vital action; but there is another sense in which it must be regarded as exciting and controlling vital action by means of the oxygen which it furnishes, and which, being introduced, excites or increases vital action. In illustration of the former, we may cite the action of the cereals, milk, and sugar, which excite the respiratory function, and particularly that of exertion, which is the most powerful agent known; whilst, in reference to the latter, it may be stated that the respiration increases as the density and coldness of the air increase (apart from the influence of cold upon the body), and with increased voluntary depth or frequency of respiration, the body being at the same time at rest. The curious fact, that a given degree of exertion in two different temperatures or seasons is accompanied by different amounts of respiration, illustrates both, but chiefly the former.

On the latter theory we explain the lessened amount of vital action in phthisis, accompanying the lessened vesicular action and diminished amount of air inspired, quite as rationally as by that which assumes that the latter circumstances are due to the lessened wants of the system. But Liebig has carried this further, and has inferred, because there is wasting in the disease, that there is a hyperoxygenation of the blood, and, indeed, that the prime evil is this superoxygenation. The highly oxygenised products of secretion—as, for example, the acids passing from the system—are regarded by some as proofs of the truthfulness of this opinion. Rokitansky has made use of this in his doctrine of fibrine-crases of the blood in phthisis, stating that the fibrine of the blood is expended in the formation of the tubercle; but he has seen good cause to induce him to give up this doctrine of the crases. This doctrine of hyper- or hypo-oxygenation is of great moment in treatment, since, if there be hyperoxygenation, increase of respiration is contra-indicated; but if there be hypo-oxygenation, as is assumed by Dr. Churchill in his doctrine of the value of the hypophosphites, then we are justified in our directions as to the increase of exertion in the open air. Here, again, we are reminded of diversity in the nature of phthisis; and whilst we must admit that, in the majority of cases, there is hypo-oxygenation, in some, perhaps the more acute, and probably those in which the disease is more advanced than the system indicates, there may be hyper-oxygenation.

The importance of this question, at this stage of the inquiry, is as to the direct effect upon the functions of the blood. One great function is the elimination of carbonic acid. It is evident that, wherever the union of oxygen and carbon occurs, and the most so if it be in the intimate structure of the tissues, the removal of it by the blood must be by a temporary combination of it with a base, or absorption of it by the blood as a fluid, and its subsequent discharge at the right time and place. Both actions must be temporary and repeated, and be due to the aid of other agencies. It cannot be physically accounted for by the

faculty of absorption by a fluid alone, although it has been proved that with soda there is greater capacity to absorb carbonic acid than with any other; and, in reference to the other alternative, Liebig has stated that the base is soda; and that, when the carbonic acid joins the base, it discharges the phosphoric acid. The subsequent discharge of the carbonic acid in the lungs is due chiefly to the diffusion of gases, and its rapidity is believed to vary inversely as the quantity of carbonic acid existing in the air in the air-cells.

Hence it is evident that the process of oxygenation and depuration—and thereby, indeed, of all the vital changes—depends upon the due relation between the acid and the alkali in the blood, and their due interchanges; and, in order to show the paramount importance of this mode of studying phthisis, I need only to quote the remarks of Liebig; viz., "that the law which regulates the dependence of the quality and functions of the blood on the nature and amount of its incombustible elements, is the foundation-stone of medicine and physiology. This only can make medicine a rational science." This is a view to which I attach the utmost value; but, as it is impossible to discuss it largely on this occasion, I shall only mention two circumstances as bases for treatment. It is essential that there be free alkali in the blood, so that the general quality of that fluid shall be slightly alkaline, since otherwise the iron could not be held in solution, conversion of acids cannot occur, the albumen would tend to coagulation, and the blood would transude through the vessels. When we recollect the quantity of acid which we take directly, and the amount which is formed indirectly from food, and carried into the blood, we readily see how powerful must be the antagonism of these two agents in the blood, and that, at numerous parts of the mass, there will be temporarily (and particularly during digestion) an excess of free acid, rendering such parts unfit for the oxygenating process. Normally this acid, if uncombined, passes off quickly by the secretions; and if combined with a base, it is further oxidised, and is resolved into carbonic acid, and thereby the due balance is restored. But if there be deficient oxygen, or if the acid is produced in excess, or the secretive functions are disturbed, the blood remains deteriorated. In this way we account for excessive acidity of the blood. Again, whilst an alkali is essential to the process of combustion, an acid is equally essential to the formative process; and therefore the muscular fluid, as indeed the fluid in every tissue, has an acid reaction. If, therefore, there be a deficiency in this acid, whether by excessive excretion of the phosphoric acid, or deficient supply of the phosphoric or hydrochloric acids, the formative process is retarded, and waste will follow.

It is therefore true that excessive waste will occur from two different causes; viz., from excess of acid and excess of alkali in the system; and that each, perhaps, is equally injurious. Now, we know that acids and alkalies constitute the great part —indeed, on reflection, we might say almost all—of the remedies in phthisis, as, indeed, in most diseases; and by practice we attain to a sort of undefined notion as to the cases in which they are respectively applicable. The difficulty is to determine with accuracy these respective states. In reference to the acid state of the blood, I think we may always affirm that unusual acidity of the excretions (not due to local states of disease of the excreting organs) indicates an excess of free acid in the blood; and, in phthisis, I am disposed to consider the state of the skin-excretion as the best indication of this state of things. If, in such cases, I find that the perspiration has a sour odour (and the number of such cases is legion), the administration of a combination of the carbonates of soda and potass, say fifteen or twenty grains of each combined, or of the acetate of ammonia, thrice a day, is followed by the happiest results; and the measure of the effect is still the state of the perspiration. This immediately tends to increase the oxygenating process, but it does not of necessity remove that state of assimilation by which an undue amount of acid is thrown into the blood (assuming that, on inquiry, the excess of acid is owing to that circumstance); and hence a reduction in the starchy and saccharine food, and the invigoration of the system by change of air, etc., must be added. The amount of perspiration does not guide us in this matter; for in many cases, with excess of acid, there is profuse sweating; and with profuse sweating we are accustomed to associate acid in our treatment, yet, in such cases, the proper administration of the alkali tends to remove this excess of perspiration. I have recently had a case of early phthisis under my care, in which there was a constant excessive elimination of acid by the skin, and which, without other symptoms than excessive and general exhaustion and wasting, did not progress satisfactorily during three or four months. Under the influence of the combination of potass and soda, he had a very profuse sweating, accompanied by an exceedingly acid and acrid odour; and obtained immediate and almost marvellous relief. The following is a short account of this case:—

J. E., a young single man, aged 20, engaged in a grocer's shop in the country, had complained for three months of bad appetite, with brown tongue, foul breath, and slight emaciation. There was slight hæmoptysis occasionally, with slight dyspnœa. There was scarcely any cough, but the throat had been sore from the commencement of his disease. The general expression of the symptoms was nervous exhaustion and muscular debility. The chest presented no signs of disease, except the slightest shade of dulness on percussion, and lessened respiration on the left side.

On August 21st, he began to take iron, with a mineral acid and quina. Cod-liver oil was added on August 28th. In September, he continued in the same state, but with a little increase of cough and debility. In October, the cough continued, but he felt a little general improvement. There was also a little pain in the left breast. His state was becoming more anæmic; and the iron, being intermitted for a time, was renewed in November. During all this period he took out-of-door exercise, used salt and water ablutions; and was directed to take milk and other nutritive kinds of food at short intervals.

Thus three months passed away, without any visible improvement; and the progress of the lung-disease appeared imminent. At the end of November, however, he had a most profuse sweating during four nights, in frosty weather, accompanied by an exceedingly sour and acrid odour, which appeared to be the crisis of his condition; for, under the influence of bicarbonate of potass and gentian, he improved most rapidly, and the increase of perspiration, with its acid state, ceased in December. Throughout January he continued to improve, and became again cheerful, active, and strong; and the cod-liver oil being again prescribed at the beginning of February (it having disagreed with him in the early part of his attack), caused so much improvement in a fortnight, that he was led to look upon it as the principal means of his restoration to health. I cannot but think that, if the alkaline treatment had been begun earlier, we should have been spared some anxiety. The case shows well the peculiar condition of blood under discussion, the efficacy of the remedy, and the different action of the oil under the two conditions.

It is in this class of cases that I believe fats to be the most beneficial, if their administration is preceded and accompanied by the administration of these alkalies. There can be no doubt that the administration of starch tends largely to increase the acidity of the blood; and there is reason to believe that the action of fats (the other common hydrocarbonaceous material) tends in the contrary direction—a belief based upon the physiological action of fat upon the respiration, the influence of fat over oxygenation, its beneficial action in cold climates, and its influence under the conditions now being discussed. Hence I think that the state of the perspiration offers an important guide for us in the administration of alkalies and fats. A similar remark may also be made in reference to the action of numerous nitrogenous substances over the respiratory functions; for my experiments have proved that they have this action, and also that it is an indirect one by influencing the rapidity of the oxygenating process, and not a direct one by supplying carbon. As I have recently discussed these subjects elsewhere (*Philosophical Transactions*, 1859; *Philosophical Magazine*, December 1859; *Dublin Medical Quarterly Journal*, Feb. 1860), I shall not enter into them here, except in reference to one which, both from its power and its universal employment, should be better understood; viz., tea. We do not take tea without other food, except it be after the principal meal of the day, when the system is still replete with food; that is to say, we do not take it at the period when the blood is unusually alkaline, but when it abounds in free acids. Its action is rapid, and so powerful that a maximum increase of one-fourth or one-fifth of the whole quantity of carbonic acid exhaled is obtained is less than half an hour; and it has so accumulative an action, that twenty-five grains, taken every quarter of an hour, gave an excess of two hundred grains of carbonic acid within about one hour—a quantity of carbon much greater than it contained. Hence it has a most powerful indirect influence in promoting oxygenation, and is especially fitted for the condition in which there is a disposition to excess of free acid. I am desirous to press this upon your attention; for I believe that, in such cases, tea is our best and most certain medicine. I have also found it of great value in cases of night perspiration, when a large breakfast-

cup is taken cold in the night—of greater value far than any other remedy, except the removal of too much bedding, or warmth, or damp. The detection of the exudation of the blood, in which there is an excess of free alkali, is rather by negative than positive indications; but when there is wasting, languor, defective appetite and assimilation, soft and perspiring skin, and no excess of acid in the urine or perspiration, we have the indications of its existence. This is a condition which prevails in hot weather and climates, and one on which the daministration of phosphoric as well as the vegetable acids is of great avail. Fat is commonly less indicated, and such remedies as tea may be injurious by increasing the waste. Cold bathing with salt and water is of great value in both classes of cases, but especially the latter; and the preparations of iron in cases of anæmia are then also much more indicated, since the excess of alkali promotes their solution, and permits a larger amount to be collected and retained in the blood. Milk is a food which I advise to be taken at frequent intervals in the day, and especially in the early morning, and is in a degree applicable to both these states of the blood; since, whilst it has a free alkali and albumen on the one hand, it has fat and phosphates on the other. I believe, however, that skimmed milk, or milk made sour, is much more fitted than new milk for cases in which there is no excess of acid; and it will be found to be better borne by the patients. Milk has a direct action, by supplying plastic and heat-forming materials; and an indirect one by its casein, in promoting assimilation. I also take the opportunity of saying that we have been too much led away from the use of milk and cream in supplying fat to the system, by the habit of administering separated oils; and I think it is easily capable of proof that the combination of the oil in a molecular state with the other components of the milk renders it far more assimilable than any separated fat can be, and especially a fat administered alone; that is, apart from the nitrogenous substances which I have proved to be necessary for its assimilation.

It will, I fear, be thought that I have thus taken too chemical a view of the treatment of phthisis; but I believe that it is only in this way that we can rationally explain the results of our treatment, and be led to devise new plans upon sound principles. There can be no doubt that, whilst we have gained much practical knowledge in the treatment of this disease, it has been shown that almost all plans have their admirers, and are therefore in a degree beneficial. We have thus been groping in the dark; and it is only by dividing the cases into classes, with different pathological or physiological indications, and when we can distinguish those classes, that we may hope to show in what manner so much diversity of treatment has been equally beneficial. This view has also the merit of regarding phthisis as a disease to be treated upon the recognised principles of treatment of any disease with its constitutional indications; and the sooner we cease to regard it as a specific disease, or a disease *sui generis*, the sooner we shall be on the road to improvement in our art. If, in cases of general debility, there be a diminution in the respiratory process, by reason of the lessened amount of air inspired and the lessened interchanges of gases, they only differ from the constitutional conditions of phthisis in degree, and not in kind. In the former, the defect is general over the whole lung-surface; whilst, in the latter, there is added a local cause, which arrests the process altogether at those points. The prognosis differs; but the immediate cause of the defective nutrition is essentially the same, varying only in degree. The general and even the special treatment required in the two conditions in nowise differs, except in degree; for in both alike we must seek to increase the amount of respiration. We practically acknowledge this when we give the direction to do everything which is commonly known to improve the general health; and the diet, exercise, and medicines employed, are common to both conditions. From the point of view in which I have been accustomed to regard phthisis for some years, I have considered that voluntary deep inspirations were well fitted as adjuncts to treatment; and this, both because with greater amount of air inspired even voluntarily there is increase in the chemical changes which follow, and because with a lessened degree of distension and vital action proceeding in the air-cells there must be a progressive tendency to a degradation of their structure, and, as I believe, to the filling up of their cavities by epithelium, or the earliest state of tubercle in these organs. The advantage of this method has for advocates no less authority than Lehmann, who, on physiological grounds, commends it in cases of deficient respiration, in bronchitis; and Piorry, who has recently affirmed, as may be seen by an extract in the *Medical Times* of January 5th, 1859, that by this means he has been able to cause a large amount of expansion in cases where *deposits* even had heretofore prevented it. Dr. Mühry, a German writer, who has recently treated of climate, seasons, and elevation, over the degrees of expansion of the lungs, has supported the view that expansion of the air-cells is a desideratum of great importance. Hence, in addition to my own affirmation that in numerous cases of early phthisis I have been able to increase the existing diminished vital capacity of the lungs, I think there is evidence to convince the minds of those who regarded my plan with distrust, that there is good reason for its adoption, and that it is not too mechanical to be excluded from physiological and even pathological employment. The increase in the function of the lungs, and the prevention of that tendency to deficient expansion of the air-cells, both alike tend to prevent the further deposition of tubercle; and if, from various reasons, they should fail, the present unsatisfactory result of all kinds of treatment leaves us nothing to regret. I cannot but attach great importance to both of these objects; viz., the increase in the vital actions of the vesicles, and their due expansion and expansibility; and both, in fact, are accomplished in our ordinary directions for violent exercise for the maintenance of health.

I cannot avoid the expression of my conviction that in many cases, owing to the deficiency of vital action, whilst the appetite for food is not materially lessened, the system becomes overburdened with ill-digested material, tending to the accumulation of carbon in the blood, and materially impeding the respiratory process. In such cases, diminution of food, with increase in the action of the liver and bowels, do very much to relieve the oppression of the breathing, and to aid in the work of increasing the expansibility of the air-vesicles. In such cases, alcohols are directly contraindicated; and, indeed, in almost all cases of phthisis (excepting, perhaps, those in which the depressed action of the heart is a marked feature), the advantage of the employent of alcohols is apart from, and in spite of, the alcohol.

I do not propose to enter more at length into the inquiry, and shall conclude my observations with one or two remarks of less general application.

It is difficult, in cases of advanced phthisis, to maintain the proper temperature of the body; since, on the one hand, there being less vital action, there is less production of heat; and, on the other, the skin being commonly very active, there is greater waste of heat. Cold perspirations are very common; and I noticed, in some observations which I made hourly during the day and night, that in a very advanced case, the temperature of the breath was so reduced at about 5 A.M., during sleep, as to give a sensation of coldness to my hand. It is in this sense that profuse perspiration is apt to assume its importance. It is evident that, as the fluid perspiration becomes converted into vapour on its exposure to the air, it absorbs a large amount of heat, which then becomes latent, and which, being abstracted from the skin, reduces the temperature of the body. The larger the amount of the perspiration, and the drier and warmer the air, so much more active will be the process of evaporation, and by so much will be the tendency to lower the temperature of the body to that of the surrounding medium. This is a source of danger even in health, when the heat-forming function is in full activity; and is the most common cause of colds. In phthisis, it cannot be obviated by seeking to increase the production of heat, since we cannot greatly increase the chemical transformations; and hence our endeavour should be to lessen the waste of heat. No doubt this may be effected by clothing in a degree beyond our expectations, as is seen in the advantage in this respect which many of the Asiatic nations derive from the use of cloth in even the hottest weather, since the process of evaporation if too active must be thus retarded. It may also be obviated by any remedy which will lessen the activity of the skin-processes, as, for example, by the rapid application of cold salt water; but the most efficacious plan, probably, is inunction of oil. When the skin is covered with thick ointment, we know that parasites die; and when the spiracles of an insect are covered with a thin layer of oil, they cannot act; and there can be no doubt that the application of oil must lessen the process of evaporation, and in a great degree that of perspiration also. It is possible that the oil may in a very small degree be absorbed, and supply heat-forming materials; but its chief action is that of lessening waste of heat, and therefore the necessity for vital action. This is at least my explanation of the well known value of inunction, and I certainly recommend strongly its employment for this purpose. The disease becomes, so to speak, disease of the skin under these conditions; and that organ is a greater

source of immediate danger than the lungs. Indeed, this condition is very common, apart from phthisis, and produces or attends a state of languor, feebleness, defective appetite, mental depression, and general exhaustion.

It may seem out of place to offer a remark as to the best method of relieving the cough in cases of phthisis; but the great success which has attended the small and repeated doses of morphia encourages me to mention it. I believe no other substance is so certain and uniform in its action, and so deserving of confidence. Regarding the cough as sympathetic, when not directly induced by local mischief in the pharynx, I never administer expectorants, but give simply one-sixteenth of a grain of morphia in water, or in two ounces of acacia mixture, four to six times in the day and night. It is a dose which may be repeated in half an hour without injury. It seldom affects the head or the bowels; and, when repeated, I venture to say, will always allay cough, and give sleep. I use no other remedy for the cough, whether in phthisis or bronchitis, and could adduce some thousands of cases to prove the utility of the plan.

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Notes of Lettsomian Lectures

ON

CERTAIN POINTS CONNECTED WITH DIABETES.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

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Lecture I.

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In 1848, M. Claude Bernard stated that he had discovered that the liver had a function very different from that usually attributed to it—that, in short, it had a glucogenic power, or the property of forming sugar. This assertion startled physiologists; and now, after it has obtained almost universal credence, the theory of M. Bernard appears in danger of being completely overturned. But, considering the high scientific position of M. Bernard, and the undoubted exactitude with which his experiments were conducted, it is necessary for all who inquire into the same subject to take care that they are not deceived.

The object of the present lectures is first to give a general account of the physiology of the sugar-formation in the animal body.

Sugar exists in the animal body in the form of glucose or grape-sugar; and, fortunately, the chemical tests for it are not only numerous but trustworthy.

A very common method used for detecting sugar is Moore's or the liquor potassæ test. If a fluid containing glucose be boiled with liquor potassæ, the colour of the fluid is changed to sherry or darkish brown. Although this test is useful in the wards of a hospital, it is almost completely useless physiologically; for colour is not to be depended on in strict physiological experiments.

The fermentation-test is generally looked on as more trustworthy; but Berthollet has pointed out that there are several other substances than grape-sugar which undergo an alcoholic fermentation with yeast. This test is very readily applied. If a solution of grape-sugar be added to a little yeast in a test-tube, and exposed for a short time to moderate heat, carbonic acid will be evolved. Alcohol may also be detected. This test has been suggested for determining the quantity of sugar in solution. According to Christison, every cubic inch of carbonic acid denotes a grain of sugar. It is necessary to be careful that for this purpose the yeast is perfectly pure. The ordinary yeast, as obtained from brewers, always contains saccharine matter; which, however, may be easily removed by washing.

Barreswil's and Trommer's tests consist in the use of a cupro-potassic solution. There is an objection to Trommer's test, that the liquid is thick; while Barreswil's solution is transparent. Barreswil's liquid contains the following ingredients:—

Bitartrate of potass	960 grains.
Carbonate of soda	960 ,,
Caustic potash	640 ,,
Sulphate of copper	320 ,,
Distilled water	1 pint.

This forms a beautifully blue and transparent solution; being essentially a tartrate of copper dissolved in an alkali. It is very delicate, and will detect the presence of an extremely minute proportion of sugar. It may also be used in quantitative analysis with the greatest accuracy. A certain amount of sugar is required to throw down the oxide of copper; so that, the quantity of the solution used being known, the amount of sugar may be readily determined.

A modification of this test, used by the lecturer, is the following:—

Tartrate of potash	10 grains.
Sulphate of copper	5 ,,
Liquor potassæ	2 drachms.

The tartrate here used is the neutral tartrate. The potash and copper are mixed, and the liquor potassæ is added. The same kind of liquid is produced as in Barreswil's solution. There is an important source of fallacy attending this test: if the solution be kept long, it will of itself form a precipitate on boiling, though not so much as from a saccharine liquid. But the liquid is very easily rendered pure by the addition of a little potash.

It has long been known that in diabetes the urine contains saccharine matter. In the seventeenth century, Willis pointed out that diabetic urine was very sweet; and, a century afterwards Cowley isolated the saccharine matter. Later, Rollo thought that he had ascertained that the sugar in diabetes was formed by the action on the aliments of a depraved gastric juice, and that, so formed, it was taken into the circulation and eliminated by the kidneys. No doubt the blood of diabetic patients contains sugar; but its origin—the origin of the abnormal quantity—is not due to vitiated gastric juice. It was afterwards found by Magendie that sugar was formed normally in the intestinal canal during the digestion of certain materials, and that it was thence taken up and carried to the liver.

It is easily shown that, by the action of certain digestive fluids, starch is changed into sugar. If a solution of starch is agitated with Barreswil's solution, no change occurs; but if starch is mixed with a little *human* saliva, and exposed to a moderate heat, Barreswil's solution will show the presence of sugar. The pancreatic juice has the same effect, as may be proved by obtaining some of this fluid from the pancreatic duct of a dog. This is probably the especial agent in the animal system for changing starch into sugar. The saliva of man has this effect; but not that of the horse or dog; and besides, the materials remain but a short time in the mouth, and the further action of the saliva would be checked by the gastric acids as soon as the food arrives in the stomach. In the intestines, however, everything is favourable to the transformation: the gastric acid is neutralised; there is a sufficiently high temperature; and the alimentary mass and the pancreatic juice are kept for a length of time in contact. [The effect of pancreatic juice on a solution of starch was shown by an experiment.]

If pancreatic juice is mixed with oil, an emulsion is formed: the fat is minutely divided, and rendered fit to be taken up by the lacteals. If fatty matter or oil is mixed with saliva, the mixture is less perfect: in a little time, the oil floats to the top, while in the other case it remains blended with the pancreatic juice.

Sugar, when formed from the ingesta, is taken up by the portal system of veins, and conveyed to the liver. Bernard, who took up the matter where Magendie left it, says that the sugar is carried to the lungs, and there decomposed. It occurred to Bernard that there might be in the liver some material capable of forming sugar independently of the digestive process. To ascertain this, he fed a dog with strongly saccharine food, and traced sugar in the liver, the lower vena cava, the right side of the heart, and the pulmonary arteries as far as the lungs, but no farther. He then fed a dog with animal food alone. On killing the animal, he found a large quantity of sugar in the inferior cava, and in the right side of the heart; hence he inferred that there was somewhere a power of forming a saccharine principle. On examining the blood in the portal and abdominal veins, he found no sugar. He suddenly killed an animal fed without sugar or starch, and

placed a ligature on the portal vein. In a little time, he opened the chest, and found sugar in the blood of the vena cava and right side of the heart. This experiment has been confirmed; but sometimes there is a little sugar in the blood of the portal vein. This is supposed by Bernard to arise from a reflux of blood—an event which is liable to occur in death from pithing.

[Dr. Pavy performed some experiments with blood from the right side of the heart and from the liver of an animal. On adding Barreswil's solution to each, sugar was distinctly indicated in the former, while there was but a small trace in the latter.]

Finding, then, that blood which had passed through the liver contained much sugar, while some was found in the blood going to the liver, Bernard concluded that the liver had the property of forming sugar—that it had, as he expressed it, a *glucogenic* function. He went a step further, and discovered what he thought to be a material in the liver capable of conversion into sugar, to which he gave the name of glucogenic material, but which might be better termed amyloid substance. He took a liver, and, inserting a cannula, washed out the sugar by a stream of water. Next day, and for some days afterwards, he found that the liver yielded a large quantity of sugar. The inference from this experiment, which has been confirmed, is, that the sugar-forming property of the amyloid substance at least continues after death; and that the formation of sugar in the animal body is not a vital process.

According to Bernard, then, it appears that sugar is formed in the liver; that certain materials conveyed to the organ by the portal vein are changed into the amyloid or glucogenic substance; that this is changed into sugar, which is conveyed to the right side of the heart, and thence to the lungs, where it undergoes decomposition.

No doubt this tranformation of the amyloid matter takes place after death; but does it occur during life?

Some years ago, Dr. Pavy was making experiments to ascertain what became of the sugar during the passage of the blood through the lungs. In some of these experiments, he took blood, which he believed to contain sugar, from the right side of the heart of a dead animal, and injected it through the lungs of a dead animal supplied with air. Sometimes there seemed to be a disappearance of sugar. Meeting, however, with an impediment from the coagulation of the blood, he modified the experiment by removing blood from the heart of a living animal by catheterism through the jugular vein. On doing this, he found that there was scarcely any sugar in the blood; but even then (1854) he was so satisfied of the correctness of Bernard's views, that he attached no importance to the occurrence. Repeating the experiment two years later, with the same result, he determined to make a comparative examination of the blood of the right side of the heart during life and after death. In the former case, no sugar was detected in healthy animals; nor was it present in blood removed from the carotid artery.

The doctrine of Bernard, of the glucogenic function of the liver during life, is then open to grave doubt. The fact is, that the transformation of the amyloid substance into sugar commences so rapidly after death, that physiologists have been in error in supposing that it occurs during life.

There is no evidence of oxidation of sugar in the lungs. Liebig and his followers believed that sugar was oxidised to an acid in the development of animal heat. But, on examining this subject, it is found that sugar is very unsusceptible of oxidation, except under the influence of the strongest chemical reagents. Even oil, if its surface be greatly spread out, undergoes slow oxidation by exposure; but this does not occur with sugar.

Funeral of Professor George Wilson. The honours of a public funeral were, on Monday, paid to the remains of the late Dr. George Wilson, Professor of Technology in Edinburgh University. The obsequies were attended by the Lord Provost, magistrates and council in their robes, the professors of the University in their academic gowns, and by the directors and members of nearly all the learned and mercantile societies in the city. The long and mournful procession was witnessed by a large number of spectators, particularly in Princes Street and Waterloo Place, on the way to the Old Calton burying-ground. Almost all the societies in town, whether connected with science, literature, or trade, have had to inscribe on their minutes a sense of the loss individually sustained by them, and to express their gratitude for many services rendered to them by the deceased.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, DECEMBER 3rd, 1859.

THE SPREADING EPIDEMIC OF SMALL-POX.

The epidemic of small-pox, which rather more than twelve months ago commenced its ravages in this metropolis, has steadily continued its progress, widening the area of its influence, and increasing its tribute of sickness and of death. Beginning in the central and eastern districts, where it still continues, it was at first more slightly, though still decisively, fell in the southern districts, in which it has now established a stronghold; and though the north and west have as yet suffered but little in comparison, there is no doubt but that their time will soon come. The mortality from this disease in London, which, during the quarters ending March, June, and September respectively, was 201, 233, and 287, has, during the last seven weeks, been 198. It is evident, therefore, that the epidemic has not yet reached its culminating point.

Such a state of things has naturally given rise to widespread alarm. It has become a topic of discussion in the daily journals. How, if vaccination be the prophylactic it is vaunted to be, is such mortality possible? A variety of explanations and suggestions, of more or less value, have been offered, most of them inculpating vaccination as it is now performed. Almost every question that has ever been asked and discussed with regard to its practice, has been repeated. Is it no longer a protection? Has the lymph deteriorated by successive transmissions? Is it improperly and imperfectly applied? or do its effects wear out in the system by the lapse of years? Though we venture humbly to think that the consideration of these important questions is more appropriate to the pages of a medical journal than of a newspaper, we unfeignedly rejoice in anything which calls the attention of the public to the great subject of vaccination, and its prophylactic powers; for it is only by the action of public opinion that either the Government or individuals will ever be roused to the exertions necessary to secure the universal diffusion of that inestimable blessing. It is a subject to which we feel bound to call the special attention of our readers; and we propose to pass in brief review the circumstances of this and other epidemics of small-pox in London, with the view of drawing from them such practical conclusions as we think may fairly be deduced.

From the vast population of this metropolis, small-pox is never absent; but there is great difference as to the extent to which it prevails at different periods. The following table, which we have compiled from the Registrar-General's Reports, will show what these fluctuations have been for the last twenty-two years; from the time, indeed, when the causes of death were first properly registered:—

Year.	Deaths from small-pox.	Year.	Deaths from small-pox.
1838	3,817	1849	518
1839	634	1850	498
1840	1,235	1851	1,066
1841	1,053	1852	1,166
1842	360	1853	217
1843	438	1854	676
1844	1,804	1855	1,024
1845	909	1856	522
1846	257	1857	154
1847	955	1858	247
1848	1,617	1859 (46 weeks).	919

The mortality of the present year, when complete, will, no doubt, exceed that of either 1851 or 1855; it will in all probability be about that of 1852.

It will be seen by this table that, while there are many years in which the mortality has exceeded 1,000, there are four in which it was below 300; that in one of these it scarcely exceeded 200, and in another amounted only to 154. The fluctuations will be still more conspicuous if, instead of arranging the mortality by years, we arrange it in periods marked by the presence or absence of epidemic influence. We have not thought it necessary to do this for the whole table, but for the last few years only, commencing from the time when the epidemic of 1851-2 came to its termination in the third, or September quarter of 1852. Of the 1,166 deaths ascribed to that year, all but 74 occurred before the end of September; and from the first of October to the present time, the small-pox mortality in London may be thus presented :—

	Deaths from small-pox.
Oct. 1852—Dec. 1853 (one year and a quarter)	291
Jan. 1854—Sept. 1856 (two yrs. and three-qrs.)	2148
Oct. 1856—Sept. 1858 (two years)	357
Oct. 1858—Nov. 1859 (one year and 7 weeks)	1037

The whole period of seven years is thus divisible into two portions—one, of three years and three-quarters, when the epidemic influence was present, and the deaths amounted to 3185; and the other, of three years and a quarter, when epidemic influence was absent, and the deaths were but 648. In 1857, the mortality was far lower than had ever occurred in London before; and there were several (not consecutive) weeks in that year in which not a single death from small-pox was recorded.

In regard to its fluctuations, small-pox is like scarlatina, like measles, and other epidemic diseases. After a certain time, all the susceptible are exhausted, and a period ensues during which that accumulation of susceptible persons again takes place which is essential to the existence of any disease in an epidemic form.

But small-pox is totally unlike scarlatina, measles, or any similar disease, in this remarkable respect, that it depends upon the people themselves to what extent it shall find them amenable to its influence, or, indeed, whether it shall find any susceptible at all; for in efficient vaccination they possess a means whereby they may, if they like, ward off this fell destroyer. Does any one doubt it? Let him look to a country like Bohemia, where the practice is all but universally diffused, and where, in a population of four millions and a half, the highest small-pox mortality which we have been able to find recorded in any year for twenty-one years has been 465, the whole weight of which mortality (382) fell on the small unvaccinated remnant which is to be found even in that well vaccinated land. The average annual mortality *among the vaccinated* in these twenty-one years was 20; yet epidemic influence had not been absent, and there were two well marked periods in which its influence was very conspicuous. In the absence of this, the annual mortality among the vaccinated was sometimes 7, 2, 3, 0, 3, 7, 8, etc.

Our mortality table for London is illustrative of the point. It does not show epidemic influence merely, but epidemic influence and the progress of vaccination (for progress there has been, and is) combined. Where, since public vaccinators were first appointed, do we find anything similar to what occurred in 1838? Where, within the last ten years, such mortality as that of 1844 or 1848? Let the table be divided into periods of seven years each, and the progress will be very apparent. It is miserable, however, to contrast our slow and imperfect advance with what has been accomplished for years in the kingdom we have mentioned. For the neglect which we have tolerated, and are still tolerating, we are now paying the penalty; for to neglect it is—and we say it without hesitation—that the present mortality is *mainly* to be attributed.

At what age does the mortality from small-pox occur? About one-fourth under the age of one; and three-quarters under the age of ten. Now we hold with Dr. Gregory, and it is a statement which has been confirmed by large and extensive inquiries, that fatal small-pox in a child under ten years of age, who has received efficient vaccination, is an extremely rare event; and we venture to affirm, with regard to nearly every one of these victims—constituting, be it repeated, three-fourths of the whole mortality—either that they had never been vaccinated at all, or that they had not been taken to be vaccinated until after they had received the infection of small-pox, or that having had vaccine lymph inserted without effect, or with a spurious result, the operation had not been repeated until a satisfactory issue had been obtained. In either case, in our sense of the word, the child had *not* been VACCINATED.

On incomplete and imperfect vaccination, and the influence it has on small-pox mortality, we propose to offer some observations next week. At present, we would call special attention to that class of cases, just alluded to, in which vaccination is not performed until the small-pox infection has been received, and too late for it to produce its protective result. Of these, in every epidemic, there are a large number; and they figure often in local registrars' reports as deaths from small-pox after vaccination! We have seen many deaths so recorded in children not twelve months old! Thus, not only do the children suffer by this procrastination of their parents, but the most unmerited disrepute is brought on the practice of vaccination itself. Now, small-pox is an enemy with which one must always be beforehand; and there is no more important duty, in presence of a wide-spread epidemic, than to point out the frightful consequences of *delay*. The legislature has fixed the age of three or four months *as a maximum;* but when small-pox is at hand, it is never too early to seek the protection which vaccination affords. And this duty is the more imperative the less complete the means of isolating; that is to say, it is most imperative of all in the case of the children of the poor, for these must perforce bide the coming of the destroyer, in whatever condition they may be—vaccinated or non-vaccinated. Whether they shall escape or fall victims, is as simple a question of common sense as whether England, in the case of an invasion, should be found defenceless, or well guarded by her wooden walls and by her well-trained riflemen.

THE WEEK.

Several cases of death, apparently traceable to the use of a preparation of opium in mistake for a black draught, have recently occurred at Canterbury. A few days ago, an inquest was held on a young man named Cole, who died on November 20th, after taking a black draught obtained at the shop of a chemist named Reeve. Subsequently, it was learned that a man named Coppins, aged 82, had also died a few hours after taking a draught from the same shop; and an inquest was accordingly held—the body, which had been buried eight days, being exhumed for the purpose. The widow of the deceased stated that, in the evening previous to his death, she purchased a black draught and a blue pill at the shop of Mr. Reeve. On her return home, she administered the blue pill to her husband; and at about seven o'clock the following morning (Tuesday) she gave him the draught. About an hour after taking the draught, the deceased was unable to walk, and with assistance witness got him into bed. Shortly afterwards, the deceased became very pale, and afterwards drowsy, in which state he remained for about three hours, when he died. Witness took a bottle to Mr. Reeve's shop for the draught, and the shopman poured it out of a phial into the one witness took. Robert Tassell, surgeon, made a *post mortem* examination of the body. The vessels of the brain were considerably congested, and about an ounce and a half of serum effused into the ventricles. The stomach contained about two ounces of thick brown fluid. Opium was found in this; but, as it was not ascertained what quantity of opium was really in the stomach, Mr. Tassell could not say with certainty whether death had been caused by apoplexy or by opium. A verdict of "Natural Death" was returned.

Within a couple of months, we have had to record two terrible catastrophes committed by persons lately discharged from lunatic asylums. Not long since, Dr. Parnell, a physician but lately a proprietor of a private asylum, himself was discharged from an asylum in the west of England, to all appearances cured. At all events, the proprietor declared that he felt he should subject himself to an action at law if he detained him longer. He was therefore sent into the country, for the further establishment of his health, and placed under the care of a medical man. He had not been long, however, in his new abode, before he cut the throat of the unsuspecting maid servant who came to his door in the morning with water. Terrible as this occurrence was, it has this week been eclipsed in the metropolis by a tragedy enacted by an unfortunate man named James Moore, who only as lately as last Wednesday was discharged from the Hoxton Lunatic Asylum. This man, after murdering his wife, cut off her head with a table-knife, and placed it in a washhand basin, in which position it was found by his landlord. These two terrible occurrences have, by their very enormity, shocked the public mind; yet they are but two out of many similar instances which have occurred within the last few years. There is such an amount of prejudice existing in the public mind against private asylums and their proprietors, that it is scarcely safe to raise one's voice in their defence; nevertheless, we cannot help thinking that these frightful homicides should lead fair-dealing persons to consider more liberally the conduct of the alienist physician in respect to the caution he exhibits in discharging patients as thoroughly cured. In the two instances under notice, we should not be surprised to find that a knowledge of the public feeling against what it terms unnecessary detention may have led the physicians in charge to allow them to leave their asylums earlier than they perhaps would have done if acting entirely without pressure. If this should really prove to have been the case, public injustice has indeed brought about its own punishment only too swiftly. Be this as it may, we predict that these catastrophes will go on increasing if the popular voice still continues to denounce private asylums as merely prisons for the detention, in many cases, of sane individuals. We have been told, on the authority of the *Times*, that there are hundreds of perfectly sane individuals at present deprived of their liberty in madhouses: the *Times* now is obliged, in its news columns, to inform the public that homicidal madmen but too easily find their way out of them.

MEDICAL REGISTRATION.

NOTICE.

The Medical Registrar presents his compliments to the Editor of the British Medical Journal, and would be much obliged if attention could be drawn to an advertisement sent herewith, in order that qualified persons who are still unregistered, those especially who have obtained their qualifications in the course of the present year, may not lose their opportunity of appearing in the *General Register* for 1860.

Medical Registration Office, 32, Soho Square, London, W.,
November 21st, 1859.

Association Intelligence.

MEETING OF COMMITTEE OF COUNCIL.

The Committee will meet at the Queen's Hotel, Birmingham, on Tuesday, December 6th, at 1 o'clock.

The state of the Finances, particularly with reference to the publication of the Journal, will be considered; the Readers of the Addresses at the next Annual Meeting will be appointed; and other business will be transacted.

Philip H. Williams, M.D., *General Secretary.*

Worcester, November 22nd, 1859.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Birmingham and Midland Counties. [Ordinary Meeting.]	Hen and Chickens Hotel, Birmingham.	Thursday, Dec. 8th, 6 P.M.
Midland. [Quarterly Meeting.]	Board Room, Infirmary, Derby.	Thurs., Dec. 8th, 3 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

BATH AND BRISTOL BRANCH.

DIPHTHERIA.

At the last Quarterly Meeting of the Bath and Bristol Branch, it was resolved that an inquiry should be set on foot with reference to diphtheria. Dr. William Davies, of Bath, will be obliged by answers to the following queries: the replies being numbered according to the questions.

1. Number of cases, ; age, ; sex, ; and general condition of patients.—2. Condition of throat, especially as regards the presence of false membrane, etc.—3. Mode of treatment; local and general.—4. Number of deaths.—5. Cause of death in fatal cases.—6. *Post mortem* appearances.—7. General remarks.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, November 22nd, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

THREE CASES OF TETANUS, IN WHICH WOORARA WAS USED IN THE TREATMENT. BY T. SPENCER WELLS, ESQ.

The author commenced by stating that, of upwards of three hundred cases of ovariotomy recorded, he had only found one in which tetanic symptoms were observed; and said that tetanus appeared in two out of four cases in which he had performed this operation last month; and that, although he had not seen a case of tetanus for upwards of ten years, a third case had occurred in his own practice within a month, after a very trifling operation. The author alluded to recent cases of tetanus treated on the continent by Vella, Manec, and Chassaignac; and to the experiments of Bernard with the alkaloid *curarina*, the active principle of the poison. The experiments of Sir B. Brodie in 1811, the application of the results of these experiments by Professor Sewell at the Veterinary College, and the subsequent experiments of Mr. Morgan and of Dr. Harley, had anticipated all that had been done recently on the continent, with the exception of making the actual trial on the human subject. The cases now brought forward were the first similar trials made in this country.

The author detailed the particulars of a case of chronic, but severe trismus, going on to opisthotonos, appearing a fortnight after ovariotomy in a patient forty-one years of age. The exciting cause appeared to have been a draught of cold water. Woorara was used hypodermically and epidermically, six grains of the extract having been used in six days. The patient recovered. In a second case, acute tetanus appeared seven days after ovariotomy in a lady thirty-eight years of age, and proved fatal in three days. The treatment was commenced by assafœtida injections; and woorara was afterwards used, the softened extract having been inoculated into both arms. In the third case, tetanus appeared four days after a simplified perineal operation for the relief of prolapsus uteri in a patient fifty-one years of age. It progressed slowly; was treated first by opium and ether, afterwards by woorara, and latterly by chloroform, the influence of which was kept up at intervals for forty-eight hours. The patient died on the evening the paper was read.

The author thought that he had seen enough to establish the following propositions:—1. Our knowledge of the physiological action of woorara,—of its antagonistic effects to the artificial tetanus of strychnine,—of the results of its use in idiopathic tetanus of the horse and ass, and the facts that two cases of chronic tetanus in man on the continent, and one in this country, have recovered during its application, should encourage further experiments. 2. Although three cases of acute traumatic tetanus in man on the continent, and two in this country, have died, notwithstanding the use of woorara, this should not discourage us from further trials, when we consider the very fatal nature of this form of tetanus, and the fact that in only one of these cases was the woorara applied in a large quantity. 3. Looking to the probable difference in strength of the specimens of extract brought to this country, and to the well-founded belief that they are not all prepared from the same species of vegetable, it would be well, in future trials, to use a solution of the active principle of woorara, the alkaloid *curarina*. 4. It is desirable to ascertain as far as possible, by experiments on the lower animals, what dose of this alkaloid might be inoculated with safety in man; and whether the artificial tetanus of strychnine establishes a tolerance of curarina. This would afford some test as to the safety of using much larger doses in man when suffering from tetanus than when in a state of health. 5. Veterinary surgeons should be requested to aid us in our attempts to determine the value of woorara when treating tetanus in the lower animals by carrying on the dose of the poison until its full effects were shown by suspending animation, and then restoring the animal by artificial respiration. In conclusion, he suggested that more accurate observation is much needed of what may be called the *Natural History of Tetanus*. It was, he said, most interesting and important, therefore, to discover whether we may not have two very different conditions confounded under the single term tetanus; whether in some cases we have spasms dependent upon irritation of a peripheral nerve and increased reflex excitability; and in other cases a blood-disease caused by the absorption of a morbid animal poison, developed by perverted secretion of the wounded surface; which poison is analogous in its effects, and possibly in its composition, to urea, strychnine, and the poison of hydrophobia.

Editor's Letter Box.

MILITARY LUNATICS.

Letter from G. R. Dartnell, Esq.

Sir,—The leading columns of the British Medical Journal of the 19th instant, contain a justly indignant article on the practice which prevails at Chatham of turning lunatic soldiers loose on the streets, to be taken up by the civil authorities. The main circumstance to which you direct attention is no doubt true; but your information on some other minor points appears to be hardly correct.

1. The practice of thus discharging certain lunatics from the General Military Hospital at Chatham has existed, for a considerable length of time, and is not altogether, I believe, in violation of the law, although it is doubtless considered repugnant and offensive to the public, harsh and unfeeling towards the soldier, and apparently an imposition on the Rochester Union, which it is not surprising should at length be resisted.

2. The "asylum" to which you allude is nothing more nor less than a small hospital, which was erected about three years ago within the ramparts of Fort Pitt, and is merely intended for the reception of insane soldiers on their first arrival from abroad, and where they are kept only until decision can be come to as to their fitness or unfitness for further service; it must, therefore, be clear that this small and temporary establishment cannot be "clogged with incurable cases."

3. The order for the discharge of these soldiers does not originate with the military or medical authorities of the garrison, but with the War Department. The soldiers so discharged are usually men of short service, entitled only to a small temporary pension, and are handed over to the Rochester Union for the purpose of being forwarded on to their respective parishes, the trouble and expense of which constitute, I believe, the chief ground of complaint of the Union authorities.

4. With respect to "the military arm of the service not having its hospital for insane incurables, where the afflicted soldier might pass the remainder of his days in the same comfort as incurably insane seamen do at Haslar hospital," I beg to observe that such an institution did exist for upwards of thirty years, and was highly appreciated by officers, as well as soldiers and their wives, the number of patients of the three classes generally averaging about one hundred. The Military Asylum was first established at Fort Clarence, near Rochester, but that fortress being required for conversion into a military prison, and being very properly considered unfitted for the reception of lunatics, the patients were removed, in 1844, to the artillery barracks at Shorncliffe, and subsequently to the unoccupied naval hospital at Great Yarmouth, which, at considerable expense, was fitted up for the purpose. Here the lunatics were exceedingly comfortable, and a great advance was being latterly made in the amelioration of their condition (with the liberal sanction of the Secretary at War), by the establishment of workshops for the useful employment of the inmates, and the introduction of all the modern improvements in the non-restraint and conciliatory system.

On the breaking out of the late war with Russia (1854), the Admiralty demanded the restitution of this hospital from the military authorities, for the purpose of appropriating it to the reception of the sick and wounded of the Baltic fleet, when the poor lunatics were abruptly removed, to be "farmed out" to private asylums, and the whole establishment was permanently broken up. The officers were sent to Coton Hill, near Stafford, and the soldiers and women to a private asylum at Bow.

It is deeply to be regretted that this valuable and rapidly improving institution should thus suddenly have been abolished, which it was, I believe, solely on the plea of public economy. The Commissioners in Lunacy remonstrated loudly against the measure; and have repeatedly urged upon the military government the justice and necessity of re-establishing an asylum for the lunatic officers and soldiers of the British army,

which, from the increased spread of mental disease, and the late extensive augmentations to the army, seems to be more urgently called for than ever. I am, etc.,

Geo. R. Dartnell, *Inspect.-Gen. of Hosp. H. P.*

Arden House, Henley-in-Arden, 28th Nov. 1859.

PYÆMIA IN A CASE OF WOUND OF THE INTERNAL JUGULAR VEIN.

Sir,—I think a little healthy criticism now and then is not a bad thing; and the first case, in No. cli of your Journal, seems peculiarly adapted to display its utility. Here we have a case of suppurating wound of the neck, from which pus is evacuated by enlarging the wound; subsequently to this, rigor taking place, followed by cough, causing secondary bleeding, and death following in twelve days under symptoms of pyæmia. Mr. Birkett is stated to have said that the most interesting point in this case, was "the development of pyæmia as a consequence of direct and immediate communication between a large vein and a deep wound so situated, that, if suppuration took place, the pus would collect, and probably enter the wounded vein." If from this he means us to conclude that the pus did do so, and thus cause the so-called pyæmia, I am disposed to dispute the pathological inference for the following reasons:

1. If the pus could get in, the blood could get out; and hæmorrhage ought to have been one of the earliest warnings of the untoward state of matters. Yet we hear of no secondary bleeding until after the occurrence of pneumonia as one of the earliest symptoms of pyæmia; and then it was caused by the "violence of the cough," clearly showing that the only reliable symptoms of communication between the cavity (*lumen*) of the vein, and that of the abscess, was caused by what it was supposed to originate.

2. Supposing that the pus had got into the vein, why should it kill by producing pneumonia, and not by exhaustion alone, in the usual way of cases of leukæmia, between which and true purulent blood there is really no distinctive mark?

3. There seems to be a more rational way of accounting for the phenomena of this case, by supposing that the external sloughing, which preceded the formation of pus, was accompanied by more or less softening of the clot lying in the vein, by the washing off of particles of this clot, and their subsequent impaction in the lung causing inflammation and suppuration; in short, by all the usual phenomena which we know to occur in the train of what has been termed emboli. In his recent work on cellular pathology, Virchow utterly denies the existence of such a disease as pyæmia, and explains its apparent occurrence in connexion with phlebitis in the manner I have attempted to describe as being a reasonable method of accounting for the phenomena in this case.

I am, etc., Philalethes.

Edinburgh, November 21st, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

McShane, C., Esq., Surgeon R.N., at Blackheath, on Nov. 24.

Otway, W. C., Esq., Surgeon, at Newington, on Nov. 29.

*Sinclair, D., M.D., 17, Terrace, Camberwell, on Nov. 27.

Of daughters, the wives of—

Hamilton, E., M.D., 22, Grafton Street, W., on Nov. 25.

Hutchinson, R. F., M.D., Civil Surgeon at Arrah, Shahabad, Bengal, on October 16th.

Stephens, J. E., M.D., 17, St. James's Place, on Nov. 25.

Watkins, James, M.R.C.P., at West Dulwich, on Nov. 22.

MARRIAGES.

Coucher, Martin S., M.D., of Weymouth, to Mary Jane, eldest daughter of the late Rev. C. Clifton, of Tymacor, Brecon, at Abbotsbury, on November 23.

Ghinn, Henry, Esq., of Farnworth, to Sophia, widow of the late James Hyslop, Esq., Surgeon, at All Souls' Church, on November 23rd.

Heynes, John, Esq., Surgeon, to Emily, eldest daughter of the late John Mears, Esq., of Bagshot, at Eversley, on November 24th.

Sumpter, Walter, M.D., Surgeon, Clay-next-the-Sea, to Esther, second daughter of the late J. F. Johnson, Esq., of Salthouse, Norfolk, on November 23rd.

DEATHS.

*Bailey, James, Esq., of Wednesbury, at Worthing, on October 30th.

Broxholm. On November 24th, at Sunbury, aged 72, Sarah, widow of the late Robert Broxholm, Esq., Surgeon.

Lawrie, James A., M.D., Professor of Surgery in the University of Glasgow, aged 58, on November 23rd.

Pankhead, Charles, M.D., at Florence, aged 92, on Nov. 26.

*Sandford, Richard, Esq., Wolverhampton, aged 39, on November 17th.

Spackman. On November 27th, at Harpenden, Caroline Harriet, wife of F. R. Spackman, M.D.

Wilson, George, M.D., Professor of Technology in the University of Edinburgh, on November 22nd.

APPOINTMENTS.

Hughes, H. Hunter, Esq., Surgeon, elected Mayor of Pwllheli.

Mapother, E. D., M.D., elected Surgeon to St. Vincent's Hospital, Dublin.

*Mitchinson, George, L.R.C.P.I., elected Physician to the Lincoln County Hospital, in the room of Dr. Elmhirst, resigned.

PASS LISTS.

Royal College of Surgeons. The following members of the College, having undergone the necessary examinations, were admitted to the Fellowship at a meeting of the Council, on November 24th:—

Andrew, Edwyn, University College Hospital: diploma of membership dated November 30th, 1855

Croft, John, the *Dreadnought:* October 6th, 1854

Hill, M. Berkeley, Stapleton, near Bristol: July 26, 1858

Marriott, Charles Hayes, Kibworth: April 30th, 1858

Painter, Richard Budd, Brydges Street: April 9th, 1847

HEALTH OF LONDON—NOVEMBER 26th, 1859.

[From the Registrar-General's Report.]

		Births.	Deaths.
During week	Boys .. 904 / Girls .. 881	1785 ..	1307
Average of corresponding weeks 1849-58 ..		1548 ..	1331

Among the causes of death were—phthisis, 165; bronchitis, 198; pneumonia, 73; hooping-cough, 30; small-pox, 30; scarlatina, 84; diphtheria, 13. Of bricklayers, 2 died in the week, of bricklayers' wives, 1, of bricklayers' children, 4; of carpenters, 13 died in the week, of carpenters' wives, 5, of carpenters' children, 18; of masons, 1 died, of masons' children, 4; of painters, 8 died, of painters' wives, 2, of painters' children, 12; of plasterers, 2 died, of plasterers' wives, 1, of plasterers' children, 2.

Barometer:

Highest (Wed.) 29·905; lowest (Tues.) 29·835; mean 29·797 in.

Thermometer:

In sun—highest (Mon.) 63°; lowest (Fri.) 41·5°.

In shade—highest (Wed. & Sat.) 53°; lowest (Tues.) 28·8°.

Mean—41·1°; difference from mean of 43 yrs.—0.3°.

Range—during week, 24·2°; mean daily, 16·3°.

Mean humidity of air (*saturation*=100), 95.

Mean direction of wind, S.E.—Rain in inches, 0·08.

The Profession in Portugal. The *Gazette des Hôpitaux*, quoting from the *Gazeta Medica de Lisboa*, states that the number of students in medicine has been steadily diminishing in Portugal. From an official document, it appears that, from 1839 to 1859 inclusive, 1949 entries took place at the Medico-Chirurgical School in Lisbon, being an annual average of 100 divided over the five years of study; and that 339 theses were sustained. But, while there were 271 entries in the year 1838-39, there were only 62 in 1848-49, and 30 in 1858-59. In 1844-45, 54 theses were sustained; and the number was reduced to 8 in 1858-59.

LEEDS MEDICAL REGISTRATION ASSOCIATION.

At a large meeting of the medical practitioners of Leeds and its district, held in the Lecture Room of the Leeds School of Medicine, on November 25th—C. G. Wheelhouse, Esq., in the chair—it was finally determined that a Medical Registration Association should be formed under the above title; and the following resolutions were passed :—

1. Proposed by Mr. Settle, seconded by Mr. Pullan, and carried unanimously—

"That with a view to secure the efficient operation of the New Medical Act, and to afford assistance to the Registrar in the execution of his important duties, it is, in the opinion of this meeting, expedient that a Medical Registration Association be formed for Leeds and its neighbourhood; that such an Association be now formed; and that it be entitled the 'Leeds Medical Registration Association'."

2. Proposed by Mr. Garlick, seconded by Mr. Radcliffe, and carried :—

"That after this meeting, all persons wishing to join the Association be admitted by ballot, and that the votes of two-thirds of the members present at such meeting be required to obtain admission."

3. Proposed by Mr. Dobson, seconded by Mr. Scattergood, and carried :—

"That the objects of this Association shall be to prevent unqualified persons becoming registered; to obtain the removal of the name of any person who may have obtained registration by fraudulent means; and to prosecute unqualified practitioners."

4. Proposed by Mr. Carter, seconded by Mr. Garlick, and carried :—

"That this Association affiliate itself upon the 'London Medical Registration Association', and thereby avail itself of the advantage offered by it of a public prosecutor."

5. Proposed by Mr. Dobson, seconded by Mr. Holmes, and carried :—

"That the subscription to the Association be 10*s.* 6*d.* per annum, paid in advance."

6. Proposed by Mr. Price, seconded by Mr. Settle, and carried :—

"That a Committee be formed for the working of the Association ; and that the following gentlemen be requested to allow their names to be placed upon such Committee, with power to add to their number: *President*—Wm. Hey, Esq. *Vice-Presidents*—Samuel Smith, Esq.; J. P. Garlick, Esq. *Treasurer*—Wm. N. Price, Esq. *Secretary*—Jas. S. Loe, Esq. Wm. Clayton, Esq.; Thomas Dobson, Esq.; William Hall, Esq.; F. Holmes, Esq.; H. W. Price, Esq.; Thos. Scattergood, Esq. ; J. Seaton, Esq.; T. Pridgin Teale, jun., Esq.; C. G. Wheelhouse, Esq."

7. Proposed by Mr. Wheelhouse, seconded by Mr. W. N. Price :—

"That the following be the duties of the Committee: To secure a correct list of the legally qualified practitioners of the district; to obtain a correct list of those persons who are known to be practising medicine in the district without legal qualification; to consider the means most likely to be successful in detecting and exposing the illegal practice of such persons, and in preventing a recurrence of the same; to call a General Meeting to submit their report upon these points, and on any other matters in the New Medical Act worthy of notice, for sanction and approval."

8. "That the Secretary be empowered to provide the necessary books, and collect the subscriptions."

9. "That a printed copy of the proceedings of the day be forwarded by the Secretary to all persons to whom the former circulars have been sent."

The "Docteur Noir" in trouble. The celebrated cancer-charlatan, M. Vriès, who made so much noise a short time ago in Paris, under the name of the "Docteur Noir," has come to grief at the hands of his creditors. By judgments, dated August 19th, and October 15th, he was condemned to pay a sum amounting to £80 for lodgings, and another sum of £220 for interests and damages, due to MM. Paysant and Lanquet, horse-dealers, in whose house he had occupied apartments. The horses, carriages, and furniture of M. Vriès were seized by the creditors as security; and, as he resisted the payment of the debt, the creditors have, in accordance with the French law, obtained legal authority to offer them for public sale.

American Laws regarding the Sale of Poisons. The States of Maine and New Hampshire require arsenic, corrosive sublimate, nux vomica, strychnine, and prussic acid, to be sold (except upon prescription of a physician) only under the following restrictions: 1. The bottle or package must be furnished with a label bearing the name of the article, and the word "Poison" distinctly upon it. 2. The name of the purchaser, together with the quantity bought, must be entered upon a register kept for that purpose. 3. None of these articles may be placed on, or within 200 rods of, a highway, for the purpose of killing noxious animals. The penalty in the former State may be 50 dollars, in the latter 100 dollars. Michigan, Wisconsin, Oregon, Iowa, and Missouri, also require labels for substances usually called poisonous, and the last-named State provides that they shall not be sold to minors or slaves. The penalty in the three first States may be 100 dollars. The statutes of Massachusetts provide that any person selling arsenic, strychnine, corrosive sublimate, or prussic acid, except upon the written prescription of a physician, shall keep a record of the date, the article sold, its amount, and the name of the purchaser. The penalty is not more than 50 dollars. Any purchaser giving a fictitious name is liable to a fine not exceeding 50 dollars. The Ohio code provides that no person shall sell or give away any poisonous substance, save upon the prescription of a physician, except under the following restrictions: 1. He shall register, in a book kept for the purpose, the name, sex, and colour of the purchaser; the quantity purchased; the purpose to which the purchaser intends applying it; the day and date on which the purchase was made; the name and residence of the person for whom it is purchased. 2. The bottle or package shall be labelled "Poison." 3. Such articles shall not be sold to minors. 4. No quantity of arsenic, less than one pound, shall be sold, except upon prescription of a physician, until it shall have been mixed with soot or indigo, in the proportion of an ounce of soot or half an ounce of indigo to an ounce of arsenic. In the State of New York, the following prohibition alone exists: "Any person who sells or delivers any poisonous substance, without having the word 'Poison' written or printed upon a label attached to the phial, box, or parcel, in which the same is so sold or delivered; or who sells or delivers any tartar-emetic without having the true name thereof upon such a label, is guilty of a misdemeanour. Any person who violates this section, or whose partner, clerk, or servant, does so, is liable in damages to any party injured in consequence thereof." (Dr. B. Lee in *American Medical Monthly*, September, 1859.)

Vaccination. A recent correspondent of the *Times* makes the following remarks: "There is an establishment in Paris where there is maintained a constant succession of calves affected with the cow-pox, and on stated days, duly advertised by the institution, children are inoculated directly from the calf; and, for the benefit of those at a distance, fresh matter is sent as often as required in small tubes (5f. each), hermetically sealed, and which travel by post all over the world without the matter losing any of its virtue. I have myself twice sent such tubes to India, and upon each occasion with complete success; and I believe there is no instance on record where vaccination thus practised has failed to be an effectual preventative against small-pox. The cow-pox is a very frequent disease among cows, but were matter from the pustule of a common cow to be employed in inoculating a child, the disease communicated would be of so violent a nature as to cause, if not danger, a great deal of unnecessary suffering; and it has been found advisable to diminish the violence of the disease by, I think, eight transmissions from calf to calf before the matter becomes suitable for the child. Such being the case, no other result could be expected of all the transmissions which have been going on here since Jenner's time, 60 years ago, than that the original strength of the matter should be too much weakened for it any longer to be depended on as a sure preventative of small-pox. The institution in Paris is not a Government one, but supported by private subscription, and has existed ever since 1829. We are already, therefore, some thirty years behind France in this matter, and it may well be asked how many more we are to remain so? This society is called 'La Société Nationale de Vaccine de France,' and was established chiefly by the energy and exertions of the late Dr. James, a Frenchman, who was the life and soul of it as long as he remained alive, but he died some six or eight years back, and his immediate successor in the management was and probably is Dr. B. Mangeant, and for the use of those wishing to obtain any further information, or to send for some of the tubes, I will here add his address in

full, as it was three or four years ago. M. le Dr. B. Mangeant, Médecin Vaccinateur de la Société Nationale de Vaccine de France, 8, Faubourg St. Denis, Paris."

THE FACULTY OF MEDICINE IN PARIS. The Faculty of Medicine in Paris was opened on Friday, November 18th. M. Wurtz delivered an eulogistic address on the late M. Soubeiran, the eminent pharmacologist.

TO CORRESPONDENTS.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

ADMISSION OF MEMBERS AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of Associates to the Laws regarding the ADMISSION OF MEMBERS, and the PAYMENT of their SUBSCRIPTIONS.

"*Admission of Members.* Any qualified Medical Practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any THREE Members, shall be admitted a Member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The Subscription to the Association shall be One Guinea annually; and each Member, on paying his subscription, shall be entitled to receive the publications of the Association of the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

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2. Payment to the Secretary of the Branch to which the Member belongs
3. Members can also make their payments through the Publisher of the BRITISH MEDICAL JOURNAL, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

PHILIP H. WILLIAMS, General Secretary.

Worcester, December, 1859.

Communications have been received from:—DR. THOMAS SKINNER; DR. EDWARD SMITH; DR. HEN. HANCOX; MR. WM. COPNEY; MR. W. WEBBER; MR. OLIVER PEMBERTON; MR. D. DAVIES; MR. J. BAILEY; DR. J. D. HEATON; MR. G. R. DARTNELL; DR. GEORGE MITCHINSON; MR. FRANCIS WHITWELL; DR. C. HANDFIELD JONES; MR. T. HOLMES; DR. JAS. RUSSELL; DR. MORRIS; and MR. T. M. STONE.

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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CLIV.] LONDON: SATURDAY, DECEMBER 10, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

RECURRENT TUMOUR OF THE HAND: EXCISION OF A PART OF THE RADIUS AND OF THE THUMB: RECOVERY.

Under the care of W. COULSON, Esq.

At pp. 238, 901, vol. 1858, may be found the account of a case, originally under the care of Mr. Prescott Hewett, at St. George's Hospital, in which a tumour had been formed, as it appeared, in a ganglion lying in connexion with one of the extensor tendons of the thumb. This tumour was repeatedly operated upon, and was removed, as there was every reason to believe, completely, on more than one occasion; and, as it showed a disposition to recur in the wounds of the operation, the remains were destroyed with powerful caustics, and thus the wounds were brought to heal. Notwithstanding this, however, no long period arose before it recurred in or near the cicatrix. On each occasion it was repeatedly examined microscopically, and no trace of malignant structure could be perceived in the growth, which exhibited, on the contrary, a well marked fibro-plastic tissue. On the last occasion on which he operated, Mr. Prescott Hewett removed all the tissues down to the bone, which was freely scraped, and the radial artery divided and tied. As the disease, however, recurred, and grew rapidly, and as the man was losing health and flesh, a consultation was held on his next admission into St. George's, to determine what further operative proceeding should be adopted. The choice seemed to lie between a total and partial amputation of the forearm; and it was thought, on the whole, better to recommend the former, as offering a more secure prospect of immunity from recurrence of the disease. The man, however, was unwilling to lose his hand, and so left the hospital. He soon afterwards put himself under Mr. Coulson's care, and was admitted into St. Mary's. There the same question was entertained, and the same opinion was held by the majority of the surgeons; but, as the patient was decided in his refusal to submit to amputation, Mr. Coulson determined to remove the tumour with the end of the radius, including the thumb.

This was accordingly done last January. The tumour, on subsequent examination, was found to present the same structure as on the previous occasions. It passed down to the periosteum of the radius, but did not seem to grow from it, or from the bone, which was sound. The parts in the neighbourhood were in no way affected.

The man made a good recovery: the soft parts healed over the end of the radius; and the hand preserved some, though slight, motion at the wrist. The fingers could be flexed and extended to a limited degree, and he could hold a pen or other object between them. When last seen, about three months after the operation, the usefulness of the hand was increasing. It is now nearly a year since the operation, and nothing more has been heard of the case either by Mr. Coulson or Mr. Prescott Hewett; so there can be little doubt that he remains without return of the disease, as he would in the other case have been sure to have presented himself either at St. George's or St. Mary's. He was attending for a short time at the former hospital, three or four months after the operation, for cough. A surmise crossed the minds of some of those who saw him that this might possibly depend on the deposition of some morbid growth in the lungs; but nothing was observed during the progress of his case to favour this idea, and the cough seemed merely accidental. The cicatrix at that time was certainly quite sound; but the man was in a bad state of health, and organic disease of his lungs was feared.

REMARKS. This was one of a class of cases which have been frequently noticed of late, though perhaps they may not have attracted quite so much attention as they deserve, and which lie halfway, as it were, between malignant and innocent diseases, partaking of the nature of the former from their inveterate tendency to recur after removal, but belonging, in truth, to the latter class, since they have no effect on the constitution, and do not contaminate the blood or the lymphatic system. Such of these tumours as have fallen under our notice have been of the fibroid or fibro-plastic variety. A very interesting account of them will be found in Paget's *Lectures on Surgical Pathology*, 1853, vol. ii, p. 158, where histories are given of patients who, notwithstanding the recurrence of tumours of this nature many times, continue to enjoy good health. A similar case is, we are informed, at present under Mr. Coulson's care. Some of these tumours run a less favourable course; and the patient, exhausted by repeated operations or by the sloughing of the tumour, sinks and dies from asthenia. Two such cases have fallen under our notice. The patients were women, and the tumour had commenced as a common cystic tumour near the breast. This having been excised, recurred, assuming more and more the characters of fibro-plastic disease, mixed at first with cysts, and afterwards entirely solid, as the case progressed. In one case five, and in the other ten operations were performed. Both patients seemed to have a great reluctance to submit to treatment, and continued, in spite of experience, to cling to the hope that the tumour would go away of itself; not presenting themselves, therefore, for operation, until the new growth had attained considerable size. Thus it happened that a time came at length when the tumour had been allowed to grow to an immense size in the axilla, and its connexion with the great vessels and nerves there rendered it inaccessible to operation. It was, therefore, necessary to leave it to fungate and slough; and the patients died a lingering death, without any symptom of specific mischief. In these cases, as in Mr. Prescott Hewett's above reported, there was every reasonable ground for saying that the tumour had been completely removed more than once, as the incisions had been kept well away from the tumour, and the surface of the wound carefully examined afterwards, in order to be sure that no portion had been left behind. Still there is not the same mathematical certainty that the whole growth has been removed as there is where the limb has been amputated; yet, even after amputation, these tumours have been known to recur. A striking instance has been recorded by Mr. Birkett, in the *Guy's Hospital Reports* for 1858. In that case, a fibro-plastic tumour was removed three times from the leg; then, at the fourth recurrence, the thigh was amputated. Notwithstanding this radical measure, the tumour recurred in the stump a month after the operation, and the patient died of sloughing and hæmorrhage. No trace of a similar growth was found after death in any other part of the body.

We have thought it better to give the history of the above patient as far as it is known to us, being anxious not to appear to report a favourable conclusion to a case when the facts do not bear us out in so doing, and despairing, after this lapse of time, of learning anything more positive about the patient. It is certainly possible that the disease in his lungs may have made progress, and he may thus have been prevented from communicating with his surgeon. From what we have seen and read of such cases, it seems unlikely that the operation should have produced a permanent cure. Such recurrent tumours, when they have once entered upon their fatal course, though they may be retarded, are not often permanently arrested by operation; and there was nothing in the general condition of this patient which promised more favourably for his case than for the average of similar diseases.

ST. GEORGE'S HOSPITAL.

TWO CASES OF TEALE'S AMPUTATION.

Under the care of Prescott G. Hewett, Esq., and G. D. Pollock, Esq.

The method of amputation proposed by Mr. Teale has not yet been sufficiently tried in London to enable metropolitan surgeons to make up their minds as to its merits relatively to other modes. Perhaps, the largest number have been performed at St. George's Hospital; but, whether from accidental or other causes, they have not shown a very encouraging amount of success (*vide* p. 966). We proceed, however, to give short notes of two cases in which some such method was clearly indicated, and in one of which at least its success was very gratifying.

Case i. John C., aged 62, was admitted under the care of Mr. Cæsar Hawkins, on August 31st, and transferred to the care of Mr. Prescott Hewett. He had burnt his left arm and shoulder fifty years previously, very severely. It appeared that the burnt surface healed entirely; but whether from mismanagement or otherwise, the arm was allowed to unite so closely to the side that it was bound down to the thoracic parietes by a firm cicatrix, reaching down nearly as low as the elbow. The cicatrix on the lower part of the arm and forearm had broken out again twice after some accidents, and had been open and rather spreading for the past year, giving rise to intolerable pain and much distress from the fœtid nature of the discharge.

After he had been under treatment with no benefit for three weeks, Mr. Prescott Hewett determined to yield to his urgent request and remove the arm. It was rather difficult, however, to perform the operation. The adhesion between the arm and chest prevented the application of a tourniquet, and the extent of the cicatrix on the inner side of the arm forbade the formation of much of the stump from that part. Mr. Hewett accordingly decided on performing Teale's amputation, forming the long flap from the outer part of the arm, while the short flap containing the vessels would come from the inside of the arm after division of the cicatrix. This was done accordingly; compression was established on the subclavian, but could not be maintained effectually, on account of the rigid state of the parts about the shoulder. The brachial artery was therefore tied immediately on its division, before sawing the bone. The outer flap, being brought over, was found to fit perfectly. The wound healed kindly, and the man left nearly well in the early part of October.

Case ii. In this case the method of Mr. Teale was adopted on account of the pain which the man had experienced on two former occasions after amputation, from the pressure of the stump of the bone on that of some large nerve. The patient, George P., aged 20, was admitted originally under Mr. Pollock's care, on July 30th, 1858. He had had the foot removed by Syme's amputation two years previously at the Bristol Infirmary for injury. The stump healed kindly, and he was able to walk about well for half a year, when it became very painful, and he noticed that it was always cold. The pain had increased to such an extent that he begged it might be removed. This was done by the ordinary flap operation on September 9th. The nerves were traced, and the posterior was found enlarged in the way usual with nerves in stumps, and firmly adherent to the end of the tibia—as was also the anterior. The stump did not heal during his stay in the hospital; but he was discharged on December 22nd, able to wear a wooden leg which did not press on the stump, and capable of work. The stump, however, never healed, and in a few months became so painful, that on September 28th of this year he was again admitted, in order to have amputation performed higher up, and by a method which would secure the nerves from pressure.

Accordingly, on October 6th, the leg was removed below the tubercle of the tibia by rectangular flaps. The dissection showed the nerves, especially the posterior tibial, very large, and the posterior nerve as before terminating in a swelling tucked in below the stump of the tibia.

The stump was unfortunately attacked at night with rather severe secondary hæmorrhage, necessitating the laying open of the wound, the ligature of some small vessels, and the readjustment of the flaps.

The wound after this sloughed extensively, and up to the present time has not healed. He also complains of some pain in it; referred, however, now, not to the extremity of the stump, but to the inner side of the leg. There is no apparent disturbance of the general health. The surface looks languid and dark, but not otherwise unhealthy.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

CLINICAL OBSERVATIONS.

In the practice of Haynes Walton, Esq.

IV. USE OF THE OPHTHALMOSCOPE IN DISEASES OF THE EYE, AND IN THE DIAGNOSIS OF CATARACT.

In our number for August 13th, we alluded to the condition of the interior of the eye as seen by the ophthalmoscope, in cases of impaired vision after blows. We gave Mr. Walton's observations respecting these; viz., that in all the examples of defective sight from blows on the eyeball, or about the orbit, that had of late come under his notice, some manifest cause in the form of internal lesion, for the most part mechanical, was detected. This statement differed from the general received opinion, which referred the derangement of the sense to functional change only, or in some mysterious way through injury to the branches of the fifth pair of nerves. Additional cases go further to illustrate this point. In those formerly referred to, there was direct physical injury; in these, the interruption to sight was due entirely to inflammatory action excited by the injury.

Case i. A lad, aged 17, applied to the Hospital, because he saw imperfectly with his right eye. He could only count his fingers. He had visited several ophthalmic institutions, and had been submitted to divers kinds of treatment. Sixteen months before, he had been struck on the eye with a dead pigeon. Mr. Walton examined the patient, to determine whether there was any external sign of internal lesion, and whether also he could, by a concentrated light, get any indication of deep-seated alteration. Not the slightest change could be observed. Atropine was then used; and, on examination by the ophthalmoscope, minute black specks on the surface of the capsule of the lens shewed that during the inflammation which followed the injury, the posterior part of the iris, the urea, in consequence of the swelling of the iris, and the other changes in the eyeball, had been in contact with the capsule, and some of the pigment had been left. But a greater change was yet to be observed. In the turbid vitreous humour hung shreds, or threads, which, from their arrangement, appeared to be of an inflammatory origin. The optic disc could not be seen. The choroid coat had undergone much pathological change. No doubt there had been here what Dr. Jacob would call "eyeballitis". Redness and pain of the eyeball quickly followed the blow, which was a light one; and all useful vision was soon lost. A very slight blow on the eye may produce, as is well known, a much worse result. (There is now attending at the Hospital, a boy, who has lost his eye from acute inflammation terminating in suppuration, caused by a very trivial blow from the peak of his cap.) In all probability, the external evidence of inflammatory action was slight, and except so far as the loss of sight was a symptom—of course, a great one—there was nothing to arouse suspicion of the great mischief going on in the eyeball. It was the ophthalmoscope only, therefore, that revealed the true state of the case.

Case ii. A boy, aged 10, was struck on the eye with a stick, and brought to the Hospital a week afterwards, having in the meantime been bled and blistered, because of the pain that ensued. The eyelids were swollen from the enormous blister on the temple, causing much effusion around. The surface of the eyeball was natural. The pupil dilated quickly and fully under atropine,—no slight evidence of the absence of inflammatory action in it. The lens was clear, but the vitreous humour was turbid, and the choroid coat was spotted like a leopard, in consequence of the removal of the choroidal pigment in patches. The state of the retina could not be made out satisfactorily, because of the loss of the transparency of the vitreous humour. There was scarcely any vision, and as all evidence goes to show that the eye was perfect before the accident, the conclusion is that the changes which were seen, were the result of the injuries, and were all effected in a very short space of time, and that, without the least outward mark or sign of what was going on within. The little patient came no more to the Hospital. In all probability, his mother would not bring him, because she learned the true state of things, and the great likelihood of the eye not recovering its integrity.

Prior to the discovery and perfection of the ophthalmoscope, surgeons were puzzled as to the existence, or non-existence of incipient cataract. The rule used to be to give a guarded diagnosis when there was doubt, and to wait for results. The catoptric test is of no use except in in general opacity of the

lens, and is not applicable in the earliest stages of that. Happily we can now tell with as much certainty, when the lens is no longer transparent, in whole or in part, as we can, whether the cornea is, or is not invaded by opacity. More than this, Mr. Walton states that cataract may be discovered before a person is even aware, from defective sight, that it exists.

Almost always, cataract begins by invading some of the bundles of the lens-fibres, and, therefore, commences partially. The circumference of the lens is usually first attacked, and the opaque bundles are disposed in radii. So long as they are superficial, they may be detected very early with a well dilated pupil. When they are deep, and when the posterior part of the centre of the lens is slightly opaque, nothing but the ophthalmoscope may be able to detect the morbid change. But with this instrument well used, no dot of opacity, ever so small, can escape scrutiny. Certainly it is less easy to diagnose early general opacity, and one must be familiar with the ophthalmoscope to do it satisfactorily, but it can be done. Several times Mr. Walton has found the lens partly opaque, without the defect being known; and this is not to be wondered at, when we are aware that a person may be quite blind in one eye, and be ignorant of it. But it is a new fact in ophthalmology, that the ophthalmoscope can detect lenticular disease after a person has in vain endeavoured to discover any defective state of sight, and this has occurred twice to Mr. Walton. As the cases were very like, the narration of one of them will suffice.

Case III. A female, aged 48, applied with cataract in the right eye, at once apparent, from its advanced state. She inquired anxiously about the probable fate of the other; and when she said in answer to questions that the left was not impaired, Mr. Walton told her that in all probability it was not affected, but requested an examination with the ophthalmoscope before he could venture to speak positively. The examination was made without dilating the pupil. He quickly perceived on the surface of the centre of the lens, two minute streaks of opacity. Before telling what he discovered, he tested the state of vision in reading, etc., and he could not perceive any defective sight; in the other person alluded to, the opacity was rather more advanced, but it was only when delicate tests were used that he was aware of the eye being defective. Previously to Mr. Walton's examination, he was ignorant of the existence of the fact.

BIRMINGHAM GENERAL HOSPITAL.

CASES OF EPILEPSY; WITH REMARKS.

By J. Russell, M.D.

[*Clinical Clerks*—Messrs. Walls and May.]

[*Continued from page* 973.]

The modified forms which epilepsy not infrequently presents, are represented in the history of certain of the patients.

Case XI. A man, aged 20, is subject to sudden attacks of peculiar sensations, seldom continuing so long as two minutes. He is seized with an indescribable sensation in his bowels; he feels as though he were about to faint, and sometimes falls and struggles, or "his body is drawn down"; consciousness is suspended for a moment, but he immediately recovers, and returns to his work. He can sometimes arrest the fit by walking about and rubbing himself. He had convulsions during dentition, and has suffered from the fits described ever since, sometimes at the rate of seven or eight in the day. During the last three or four years, he has been liable to regular epileptic fits; he may have had a dozen during that interval.

Case XII. In another patient, a man, aged 28, the abnormal sensations are more marked. He is "taken with the wind"; the sight of the left eye becomes dim, and if he close that eye, the dimness affects the opposite eye; the two inner fingers of the right hand are numbed, and the sense of numbness passes up the arm. He has then a sensation of a string tied round his lips, and his tongue feels swollen. Intelligence is never impaired, but he cannot express himself; he repeats the same words. The attacks last from three quarters of an hour to an hour, and are followed by drowsiness; for some time he cannot stand. He has much headache for the two following days. He has been subject to these attacks for eight years: they have been infrequent in their occurrence; of late, they have happened about once in six weeks. He has never suffered from a true epileptic fit.

In the following cases, the attacks presented aberrations of intellect.

In Case I, the epileptic fits were preceded for three years by sudden attacks of alarm: he cried out that "something was coming over him," and saw a variety of objects flitting before his eyes in rapid succession, which he could not describe. The expression of his face was "wild and staring," and he became dark under the eyes.

Case XIII. S. M., a girl, aged 11, suddenly runs to some one to hold her, becomes pale, and her lips livid; she trembles violently, and shed tears. She becomes, for the time, "quite deranged, and calls for all kinds of people." In the last six months, she has slept after the attack. She never starts in her sleep, but she dreams. She is anæmic, and has suffered from poverty.

Case XIV. J. B., aged 13, a delicate looking girl, three months ago, being in good health at the time, whilst assisting her mother, suddenly fell down, and lost her senses and her sight; her lips became purple, and her nose pinched, and she bit her tongue. The fits returned several times during the day and night, with a state of violent mania; on the following day, she had a similar succession of attacks, and the intervals then increased. She laughs, cries, and sings, in the fits; and after they have passed off, "seems quite mad," and talks wildly. As they subside, she complains of her head, and laughs or cries. No cause can be discovered; she is perfectly healthy.

Case XV. J. S., aged 25, a well made man, but intemperate, has been subject to epilepsy nine years. He has besides, what he calls "bewildering spells." He may be taken whilst at work, and on recovering finds himself at a distance, without having any idea how he came there; or if he be walking to any place, he discovers, on the subsidence of the attack, that he has been moving in a totally different direction. In one attack in the Hospital, he talked in a foolish manner, like a person intoxicated, stood up, and wanted to walk about, but was easily controlled: it passed off in a few minutes. In consequence of these attacks, he is unable to go to work, unless in company with some friend.

This man has also fits of "jerks", as he terms them, sudden startings of his limbs, which cause him to drop anything he is holding at the time, and not infrequently to fall down: "they come on like a gun"; they sometimes continue to recur for half a day, so as entirely to disable him.

These startings of the muscles also presented themselves in the different members of the family mentioned before. Thomas (VII) is affected with them in all parts of his body; they throw him down, or cause him to drop anything which may be in his hand; they compelled him to leave work; he is never free from them for more than two days. In William (VIII), they affect the left side of his body only, and are sometimes attended with a momentary loss of consciousness. Sarah (IX) is affected by them in all parts of her body; and Edward, who has not yet suffered from fits, is affected with these "jerks" in his arm.

[*To be continued.*]

LIVERPOOL NORTHERN HOSPITAL.

NOTES OF TWO CASES OF LITHOTOMY.

Under the care of G. M. Millett-Davis, Esq.

[*Communicated by* H. G. Earnshaw, Esq., *Senior House-Surgeon.*]

Case I. Peter S., aged 4, was sent up from the workhouse at W——, to be operated on for stone in the bladder, on May 11th. He came under the care of Mr. Millett-Davis, who in a few days performed the operation, and extracted an uric acid calculus, which weighed six drachms. For several days the boy progressed remarkably well, the wound healing nicely, and urine ceasing to pass through at about the tenth day. He then experienced a relapse, from some unknown cause. The wound began to gape, ceased to heal any further, and a dirty grey tenacious slough overspread its surface. The abdomen became very tender to the touch; mucus, and then pus-globules, as observed under the microscope, passed with the urine through the urethra in profuse quantities; his appetite and strength forsook him; and at length he became excessively hectic. As long as his stomach would endure food, he was liberally supplied with wine and light nourishment; but soon it rejected all that was given, except wine and milk-whey; he took of wine eight ounces in the twenty-four hours, and of whey from half a pint to a pint. Besides this, twice a day

friction of his body with cod-liver oil was employed; and he lay constantly in a flannel dress, kept saturated with the oil. In a few days after the adoption of this treatment, he began to revive, and convalesced rapidly. He was kept in the hospital three or four weeks longer than was at all necessary for the cure, and was at last discharged, in a plump healthy condition of body, on August 9th.

Case II. John J., aged 16, was sent up from the same place on September 29th, to undergo a similar operation, and fell under the care of the same surgeon. He had suffered from symptoms of stone for twelve years, and was extremely emaciated. It was at first determined to allow a week or two to elapse before the proceeding, in order that the boy might become habituated to the air and system of the hospital; but it was shortly found expedient to operate at once, the boy's sufferings at each movement in bed and effort to pass urine rendering life miserable to him. A large mulberry calculus, weighing six drachms and twenty grains, was accordingly extracted, through a remarkably narrow subpubic arch, on October 3rd. The boy got well quickly, and went out of the hospital of his own accord, cured, on the 28th of the same month.

Original Communications.

THE PATHOLOGY, DIAGNOSIS, AND TREATMENT OF CARDIAC DISEASES.

By W. O. Markham, M.D., F.R.C.P., Physician to St. Mary's Hospital, London.

VI.—Treatment of Pericarditis. General Remarks; Bleeding; Mercury; Opium; General and Local Treatment; Paracentesis of the Pericardium; Pericardial Adhesions.

[*Continued from page* 891.]

Salts of Potash. Extended observation has proved that in the treatment of acute rheumatism there is no remedy which has such a powerfully beneficial influence over the disease as the salts of potash, when administered in sufficiently large doses. The proof of this assertion is to be found in the results of our daily practice; and in the concurrent—I may say, universal—testimony of competent observers in different countries.* The remedy, indeed, is entitled to be considered as something of a specific in this disease, so constantly are the expected results found to follow its proper use. From one to two scruples, according to the age of the patient, of the bicarbonate of potass are to be given for the purpose every second hour, as prescribed by Dr. Garrod. A marked amelioration of the symptoms is generally—though, I admit, not invariably—observed to follow its administration in the course of about twenty-four or thirty-six hours; in fact, whenever the urine becomes alkaline.

Now, inasmuch as we are bound, in all reason, to believe, that the *materies morbi* which produces the rheumatic arthritis is identical with the *materies morbi* which produces the rheumatic pericarditis, we should, to follow out a rational treatment, anticipate that this remedy would be also efficacious in preventing, or arresting the progress of, the pericardial inflammation. The fact is not, for obvious reasons, easy of demonstration, but observation most certainly tends to show the correctness of the conclusion. The authority of many competent observers might be cited in support of the opinion thus expressed by Dr. Garrod: "Besides the influence on the duration of the articular affection which has been alluded to, I cannot help thinking that an effect is likewise produced on the cardiac disease, to a very considerable and important extent. In no case did the affection of the heart ensue after the patient had been more than forty-eight hours under the influence of the medicine; and it has appeared to me, that even when present on admission into the Hospital, or coming on within a short period, its progress was powerfully checked by the treatment, and prevented from producing the terrible mischief which, when uncontrolled, it so frequently induces; this I should be inclined to ascribe to the altered condition of the blood, and especially of that portion giving rise to fibrinous deposits on the peri- or endocardium." (*loc. cit.*)

My own observation fully bears out Dr. Garrod's statement; and, necessarily, therefore, leads me to the conclusion that we possess no remedy more efficacious than this, in the treatment of acute rheumatic pericarditis, *quoad* the diathetic character of the disease. Its action is, we must suppose (from its manifest influence over the arthritis), the neutralising of that poisonous element, whatever it be, which occasions the local inflammations—the arthritis and pericarditis; arresting the progress of the inflammations, when they have already seized upon parts, or anticipating and preventing the seizure.

Opium. I have already mentioned, that the pain and sufferings which afflict the patient during the progress of acute rheumatism are sometimes very grievous to bear; they are especially so, when severe arthritic affections coexist with the pericarditis. In cases of this kind, it is absolutely necessary to tranquillize the nervous system. We must remember, that the shock of violent and sudden pain will occasionally destroy life; and that a lesser degree of it, unceasing and severe, will likewise kill, by wearing out and exhausting the vital powers of the patient. Now I have warned the student, in speaking of bleeding, that the vital powers of the heart are apt to fail suddenly in pericarditis, through paralysis of its muscular structure. For a double reason, therefore, should he strive to remove or subdue the effects of this other exhausting influence—the pain.

In this, as in so many other diseases, long restlessness and sleeplessness, the results of pain and suffering, are unfavourable symptoms. Sleep, then, must be procured; and, administered to this end, opium will act with all its magic charms. Indeed, it has been thought that opium has an effect which reaches beyond the immediate object sought for,—beyond the procuring of rest and the alleviation of pain. Judging from the manifest signs of improvement in the inflammation, which occasionally follows its administration, some observers have ascribed to the drug a direct influence in arresting the inflammation.* The quantity of opium administered, must be measured by the degree of pain suffered; and the large doses of it which even young children will take with impunity, in these cases, is surprising. I have seen this remedy very extensively used, for this purpose, in St. Mary's Hospital, by my colleague, Dr. Sibson. The opium he gives to an adult, in doses of one grain, mixed with half a grain of compound colocynth pill, every two, three, or four hours, sometimes every hour, for many hours together, until the main object of its administration—relief to the patient's sufferings—is obtained. It is very rarely, that any of what are considered the ill-effects of opium are observed to follow this use of it. It is not found to "lock-up" the secretions, or to contract the pupil. It acts favourably on the skin, as an "eliminator"; it takes the patient pleasantly—"jucundè"—through his disease; and is often followed by a rapid convalescence.

Whether the opium has any directly beneficial influence over the local inflammation has yet to be proved. The solution of such a question is manifestly one of exceeding difficulty. In the cases of Dr. Sibson above referred to, the drug was never exhibited alone; and probably few physicians would consider themselves justified in so using it. Whenever I have seen it given, or have used it myself to produce, and keep up, a quiescent and soporific state, the potash treatment has been always simultaneously followed out. Besides this, we have yet to learn, how the pericarditis would eventuate, if left entirely to itself; and we must remember, that acute rheumatic pericarditis very rarely ends fatally, *in a first attack*, under any kind of treatment. But, if it be difficult to determine, whether the good effects of the opium result altogether from the allaying of the pain and nervous excitement, which, in young, weakly-constitutioned individuals, are especially severe in this disorder; or, if they result in part, also, from the direct influence of the drug over the inflammation—however this

* The following are a few of the authorities who may be referred to on this point:—Dr. Basham gives from one to three ounces of nitrate of potash in four pints of water during the twenty-four hours. (Med. Chir. Soc. Trans., 1848.) Gendrin also gives nitrate of potash. (Med. Gaz., 1848.) Dr. Golding Bird used the acetate of potash in doses of half an ounce in the twenty-four hours much diluted. Dr. Swett administers one drachm of the tartrate of soda and potash every two or three hours, until the urine becomes alkaline. (New York Med. Times, 1854.) Dr. Garrod's method is to give two scruples of the bicarbonate of potash every second hour, night and day, in a wineglassful of water, "until the joint-affection has ceased for three or four days." (Med. Chir. Trans., 1855.) To this excellent paper, I would especially call the attention of those desiring particulars in this matter.

* Dr. Graves, in speaking of a case of acute pericarditis, says: "The treatment consisted of opium in large doses, one grain every three hours; it succeeded admirably, and seemed to expend itself solely on the disease, not producing the ordinary symptoms, headache, hot skin, furred tongue, or constipation." (Lect., ii, 161.)

may be—of the good effects themselves, thus produced by the drug, I cannot doubt for a moment.

During the whole treatment of pericarditis, the secretions should be duly attended to. The bowels should be regularly relieved, and the action of the skin and kidneys maintained. Frequent purging, however, must be avoided; for the partial exposure to cold, which is its necessary consequence, and the extreme pain and suffering which movement is apt to occasion in these cases (especially when the coexisting inflammation of the joints is severe), sometimes more than counterbalance, by the nervous excitement and general disturbance they produce, the good which the purging might be supposed otherwise to bring about, as a process of elimination.

The *general* treatment, then, of rheumatic pericarditis is in the main—at least, during its first periods—the treatment of acute rheumatism. But the local inflammation demands especial consideration. In the commencement of the inflammation, the local abstraction of blood, proportioned to the degree of local pain, the strength of the patient, and the period of the disease, is generally of service. Should there be signs of severe pulmonary and cardiac congestions, then small venesections will be required for their relief. Warm fomentations or poultices should be constantly applied over the præcordial region. This method of bringing warmth to the inflamed part is of very great service; it gives much relief to the patient; and is worthy of more attention than is generally given to it in this country. The beneficial effects of blisters have been doubted by some observers; but I have so often seen them followed by mitigation of the local pain, and apparently also by diminution also of the pericardial effusion, that I do not hesitate to use them, when the first acute periods of the inflammation have passed away. They do not prevent the application of poultices or fomentations.

At this period of the disease, another most important object, arising out of relation of the inflammation to the heart, presents itself to our consideration.

In every case of pericarditis, indeed, whether rheumatic or non-rheumatic, and at all periods of the inflammation, we should carefully watch for signs of the heart's failing powers. Weakness, in this disease, is apt to manifest itself suddenly. This warns us to be cautious, in the first instance, that we do not injure the patient by depletion; and it also warns us not to delay too long the use of stimuli. There are cases, especially of the non-rheumatic class, in which stimuli are requisite from the very beginning of the attack; the condition of the system, under which the pericarditis has arisen, demanding their use.

This attention to the condition of the heart in pericarditis is a point upon which Dr. Stokes has especially insisted; and, there can be no doubt, most wisely. He is "convinced that patients are often lost from want of stimulation at the proper time." The following are the particular signs, which he has given, as indicative of a weakened condition of the organ: a feeble, intermittent, and irregular pulse, especially when it has not had these characters from the first; turgescence of the jugular veins; change in the heart's sounds, particularly feebleness of the first sound; pallor, coldness of skin, œdema, and faintings.

Here I would again impress upon the student the facts: that, inflammation is a sign of weakness not of strength; that in every inflammation where exudation has taken place, there is a process of absorption and reparation to be gone through, if the parts affected are to regain their integrity; and that for the proper furtherance of this process, vital force is absolutely necessary. Sinking or weakness of the vital powers should, therefore, be carefully anticipated in all inflammations; but especially so in pericarditis, because, here the paralysing effects of the inflammation fall directly upon the central organ of the circulation. Light and easily digestible nourishment—milk and weak broths—should therefore be assiduously administered during the earliest periods of the inflammation; and stimuli, when the acute period has ceased, and the process of absorption has commenced, or whenever the signs of enfeebled circulation begin to show themselves.

Observation, indeed, certainly seems to prove, that rheumatic pericarditis is an inflammation which rather attacks those of weak than of strong constitutions; that it is more common in the delicate and young, than in vigorous persons at the prime or middle periods of life; and that the degree of inflammation—that is, the general febrile re-action and the local exudation—is also greater in them than in the strong. The disease is sometimes especially severe in young females, and in such cases, the violence of the inflammation is shown by the abundance and rapidity of the pericardial exudation.

From all which considerations, this corollary necessarily results, viz., that in the treatment of pericarditis, the administration of our remedies must be measured by the general condition and the idiosyncrasy of the individual attacked, rather than by the intensity or other peculiarity of the local inflammation. And herein—in seizing upon the special points of the individual case, and in modifying the remedies to meet their requirements—lies that peculiar practical tact which distinguishes the skilful physician.

[*To be continued.*]

CONTRIBUTIONS TO CLINICAL SURGERY.

By Oliver Pemberton, Esq., Surgeon to the General Hospital, and Lecturer on Surgical Pathology at Sydenham College, Birmingham.

VI.—Excision of the Knee.

[*Concluded from p. 979.*]

The foregoing cases illustrate most of the complications which are likely to be encountered in undertaking the operation of excision of the knee. They afford an example of death from pyæmia, from shock, and from prolonged suppuration. They also show that inflammation of the shaft of the femur and secondary hæmorrhage are events liable to take place as sequences of the proceeding, whereby the recovery of the patient, and the utility of the limb to be preserved, are perilled in the gravest degree.

Of 160 cases of excision of the knee performed up to December 1858, of which particulars have been gathered by Mr. Price (*Med. Times and Gazette*, April 1859), there were 32 fatal cases. Of these, 8 died of pyæmia. This places pyæmia at the head of the list of the causes of death after the operation. It is, however, not a rate of mortality from this one special cause comparable with what occurs in amputation of the thigh for chronic disease, from a similar one. (*Upon the Causes of Death after Amputation.* T. Bryant. Med.-Chir. Soc., Feb. 1859.) Hence we have no cause to fear that there is anything in the operation of excision of the knee specially favourable to the development of pyæmia.

Case II was well suited to the operation, so far as could be ascertained during life. The disease was evidently of a scrofulous character, having its earliest origin in the cancellous structure of the articulating extremities. The boy's general health was also satisfactory, considering his strumous diathesis and long residence in the hospital. Moreover, the condition of the knee, exhibited at the *post mortem* examination, was everything that could be expected or desired, considering the short period which had elapsed since the operation; promising, indeed, in all respects, the most favourable result.

It should here also be remarked as singular, that, although there was effusion of pus into so many joints, yet there was none to be detected either between or around the sawn extremities of that one which had been the seat of operation.

In Case III, the operation was undertaken in the hope that an useful limb might be obtained in the place of a deformed one. The child, however, died of shock, three days afterwards. I believe that the chloroform had quite as much, if not more, to do with this result than the so-called shock of the operation. All observers concur in noticing the small amount of shock following this proceeding, as a general rule—a circumstance that entirely accords with my own experience, as, with this exception, out of twelve instances in which the operation has been performed in the General Hospital, no other case exhibited its occurrence. Of the 160 cases above referred to, but four succumbed to shock or the immediate effects of the operation—a proportion so small as at once to remove all doubts on the subject.

Deformity of a limb, as in this case, may call for the excision of the articular extremities, even where all active disease has subsided; and in adults—for, in the face of our present experience, we cannot speak with confidence as to children—where rectangular anchylosis or dislocation of the leg-bones backwards is the result of the cure of the earlier disorder, there can be no question that we have a large class of cases that

promise the best results, as to strong and useful limbs, in the selection of this method of treatment.

The death in Case IV comes under the head of exhaustion—prolonged suppuration. The long time—five months—that this patient resided in the wards of the hospital, in the hope of obtaining a stiff knee, formed a bad preparation for any operative proceeding; still worse, perhaps, for one of the kind we are illustrating. Erysipelas and confluent small-pox, however, were complications too grave and unusual to leave much prospect of repair in a constitution already so weakened, even if the state of the excised joint had promised a more favourable issue. But the suppuration was profuse and continued, so much so that amputation, had the patient's health permitted, must have been proposed. She died with large cavities in her lungs, the results of tubercular softening, twelve weeks after the operation. I do not hesitate to say, on a review of the features of this case, that it was not well suited to excision. We must ever bear in mind, when we recommend its adoption, that, in the majority of instances, we shall have to encounter lengthened suppuration. With this conviction before us, therefore, and a doubt as to the constitutional vigour of our patient, it will be better for the safety of the individual, as well as for the credit of this particular measure, that we enforce, in such an instance, the removal of the disease by amputation of the limb, despite the solicitations we may receive to the contrary.

Acute destruction of the cartilages and synovial membranes has not been considered a class of cases suited to excision. The more chronic the state of the disease in these parts, the better the prospect of the issue.

Case V illustrates, I believe, an exceptional success, though Mr. Hancock, in the Charing Cross Hospital, also met with good fortune in a boy, aged 7, in whom he excised the knee for acute suppuration. (*Lancet*, June 20th, 1857.)

In the case I have narrated, the disease evidently arose in the synovial membrane, and, after a time, suddenly and rapidly went on to suppuration and destruction of the soft textures within the joint. The immediate effect of the operation in arresting the hectic and other alarming symptoms, was as marked and as satisfactory as possible. Amputation could not have removed them more completely. But what followed? The shaft of the femur, as high up as the trochanter, became the seat of active inflammation. Ten months after the operation, this had resulted in the thigh-bone being so greatly enlarged as to be two or three times greater than its fellow; whilst numerous sinuses became established along its length at intervals, as well as about the seat of the wound and the upper part of the tibia.

I am not aware of inflammation of the tissue of the shaft of the femur, accompanied by expansion of its structure and by fresh osseous deposit, having been observed as a consequence of excision of the knee. The operation may give rise to it, nevertheless; and the circumstance of its contingency should not be lost sight of. I saw it myself follow excision of the head of the femur, in a case submitted to operation by Mr. Crompton. Mr. Arnott, also, in a remarkable instance in which he excised the elbow, lost his patient in consequence of the severe constitutional disturbance set up by inflammation having ensued in the remaining portion of the humerus. (Stanley's *Treatise on Diseases of the Bones*, p. 19.) Where so serious a complication does take place, not only is the patient's life endangered, but the part becomes for years a source of pain and misery, in consequence of the vast necrosis which is almost certain to arise.

This condition of extensive inflammation of the shaft of the femur must be separated altogether from the not infrequent occurrence of necrosis of the sawn extremities—perhaps one of the untoward results of the operation most likely to necessitate amputation. The latter is absolutely a bar to all repair; whilst, in the presence of the former, satisfactory consolidation of the parts may be obtained. Necrosis, where it occurs, arises most frequently from an undue separation of the periosteum during the operation, from a bad adjustment of the ends of the bones subsequently, or from the case having been unsuited to the proceeding. The inflammation of the bone I have described in Case V arose independent of these circumstances. Here the periosteum was not separated; the perfect adaptation of the articular extremities was in noways disturbed; the union, though not osseous, was so firmly fibrous and consolidated as to permit of the least possible motion; and the case, so far as the bone was concerned, offered no obstacle to a favourable result. Notwithstanding, bit by bit the entire shaft of the femur, either through the mischief aroused in the periosteum or in the cancellous tissue, became painful and enlarged, and, affecting the soft parts, at the end of twelve months was only then quietening down in the prospect of interminable necrosis.

The amount of hæmorrhage attendant on the operation of excision of the knee, considering the length of the incision of the soft parts, is remarkably small, less considerably than what occurs in an amputation of the thigh. But, satisfactory as this is, and admitted as it is on all sides, we must not lose sight of the fact that secondary hæmorrhage has taken place in several instances. Case VI, after having required, at the operation, the placing of a ligature on an enlarged superior external articular artery, was the subject of alarming secondary hæmorrhage from the situation of this vessel six days subsequently. Pressure on the main artery at the pubic arch happily sufficed to arrest it; but the patient's life trembled for many weeks in the balance, in consequence of the mishap.

Case VII exhibits very strongly the most favourable aspect of this operation—complete removal of disease, and rapid recovery. From the circumstances of this case, I anticipate, in the future, the confirmation or removal of my present doubts in reference to the subsequent growth of the limb. We have in it all the features believed most calculated to ensure corresponding development. These are—

The removal of as small a quantity of bone as possible;
The leaving the epiphyses untouched;
The bony union of the sawn extremities.

Adding to these circumstances the healthy condition and vigorous constitution of the boy, we may consider that, if the limb can grow after the operation, it possesses every chance of doing so in this instance.



View of the sawn articular extremities removed in their connected state. A, Remains of external, and B, of internal lateral ligaments. C, Section of head of tibia, showing remains of crucial ligament in centre and on either side the bone, deprived of cartilage. D, Section of condyles of femur.

The accompanying woodcut of the sawn articular surfaces in this case illustrates very clearly the description I have previously given of their removal, with such remains of the ligamentous structures as may have escaped destruction by disease still connecting them together.

Important as are the points illustrated in the foregoing cases, their importance is of little moment in comparison with the necessity that exists in regard to a correct appreciation being formed of the class of cases best suited to excision in preference to amputation; for, although the circumstances which necessitate amputation are also those which indicate excision, yet the particular operation cannot be chosen indiscriminately in all cases.

Limiting our remarks on this question, in the face of our present experience of the operation and its consequences in children, to cases occurring in adults, we must admit that each of these operations possesses certain advantages over the other, and it only remains for us to determine what are the special circumstances which should induce us to have recourse to the one in preference to the other.

In chronic cases of diseased articulations requiring an operation, the state of the bones and the soft parts must be attentively considered.

Those cases will be found most eligible for excision where the mischief in the bone is limited to the articular extremity, and where the soft parts have not become adherent to the

parts beneath, from the presence of sinuses, or from the general effects of long continued disease.

Where the disease in the bone cannot be removed without the sacrifice of too great an amount, or where the soft parts around the joint have assumed an unhealthy character, amputation should be preferred; a vigorous condition of the latter structures being quite as essential to subsequent repair and well-doing as is a section through sound bone for the attainment of satisfactory osseous or fibrous union. Cases in which there has occurred the most complete alteration of the synovial membranes, accompanied by destruction of the cartilages, together with the ligamentous tissues, so long as the bones and soft parts are affected within the limits laid down, will be equally suitable to excision.

In forming our judgment, the constitutional power of the patient must not be disregarded. There are many instances of knee-diseases, requiring an operation, in which the pulmonary tubercular tendency is also manifest. The disposition to mischief in the lungs in these cases renders them, in my mind, ineligible for excision—in fact, unable to bear prolonged suppuration; whilst the removal of the disease by amputation, followed by the rapid recovery usual in such persons after such an operation, is well known to be attended by the happiest results.

In acute cases of diseased articulations, with suppuration, the selection of excision must be attended with great hazard. The occasions on which this has been done are very few, and I have already alluded to the subject when relating Case v. Free incisions into the cavity of the joint should be made, in the hope of thus relieving the disorder and obtaining anchylosis, in preference. The constitutional powers not admitting of this treatment, it will be better, then, to recommend amputation rather than resort to excision.

For deformity, and for accident, we may be also called on to recommend excision.

In the first class of cases there are many well suited to the proceeding. Among these are rectangular anchyloses, or where dislocation of the tibia backwards has occurred as the result of former disease. Such cases afford every prospect of an useful limb being obtained in the place of one not only a deformity, but an incumbrance.

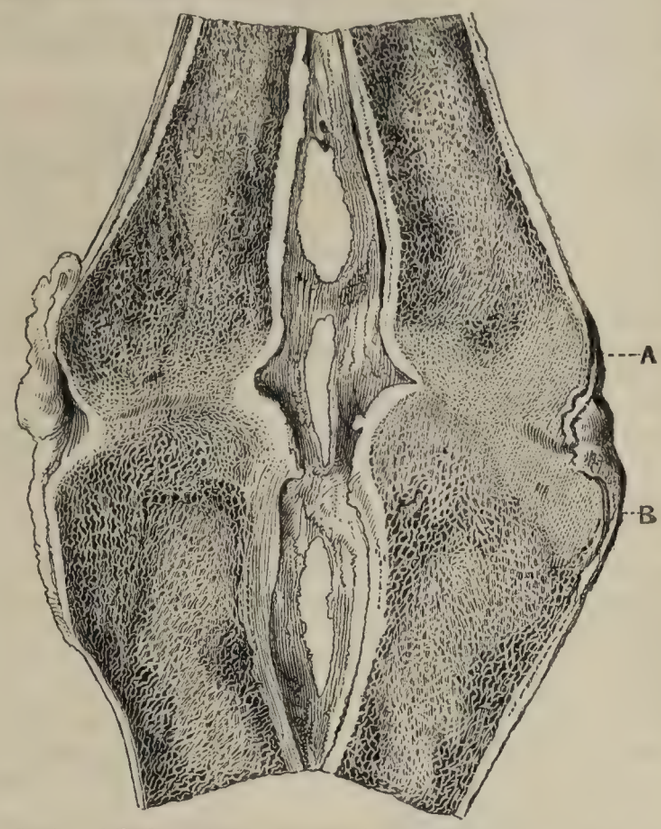
In the second, at present, our experience is very limited. Mr. Canton, in the Charing Cross Hospital, performed the operation (*Lancet*, August 1858) in a boy aged 8, who had received an injury to the lower end of the femur, whereby the epiphysis had been separated from the shaft. The case did well. My friend Mr. Lakin (*Midl. Quart. Jour.*, Jan. 1858, p. 37), late assistant-surgeon to the General Hospital in Camp before Sebastopol, also resorted to the proceeding in the case of a private of the 77th Regiment, who was wounded by a musket-ball which had penetrated the inner condyle. The case did well for twenty-six days, and then sank from diarrhœa and exhaustion. This was the only case that occurred in the Crimea.

The advantages of this proceeding in cases of accident must be, therefore, at present ranked as conjectural; but there would appear to be no valid reason why a primary operation of this character should not succeed in removing the impending danger of a compound fracture or laceration of the knee-joint as thoroughly as an amputation through the thigh.

The character of the medium binding the sawn articular extremities together, in the most favourable cases, will be found to vary very much. In some cases, bony union does not seem attainable by any amount of care and quietude; in others, it is as rapid as unexpected.

Whilst, therefore, we may devote all our attention to the securing anchylosis, if possible, as promising, under all circumstances, the most serviceable limb, we need not be disappointed at there being a limited movement allowed between the bones when the cure is complete, as, in many instances where such a condition has been observed, the limbs have been, in their utility and power of endurance of fatigue, everything that could be desired; the only precaution to be kept in view being the necessity there is for wearing, under such circumstances, a splinted knee-case.

Where bony union is complete, and the apposition of the bones satisfactory, it is impossible to imagine a consolidation more calculated to bear the wear and tear of the labourer's or mechanic's life. The accompanying woodcut of the appearances presented by the anchylosis of bones of the knee-joint, after resection, will bear out the truthfulness of these remarks. The operation in this case was performed by my friend and colleague Mr. Crompton, who has permitted me to record here by a drawing a most accurate description of so rare and valuable a specimen.



Section of the bones in Mr. Crompton's case of excision; showing at A and B, the bony union of femur and tibia.

The patient in this case, a delicate looking man, aged 28, had suffered from strumous disease of the knee for some thirteen years, and had been, at its first onset, an inmate of the hospital. Anchylosis had to a certain extent taken place, and for a long time the mischief had been quiet. Latterly, the disease in the bones increasing, sinuses formed, and the limb becoming useless and painful, he was compelled to seek once more for relief. The knee was excised in June 1858, about an inch of bone being taken away. He died of phthisis, fifteen months after the operation. The line of union will be observed to be slightly curved. This did not interfere in the least degree with the strength or value of the limb. The broader bearing surface of the tibia is marked, in comparison with that afforded by the femur. This was owing to the necessity of a larger portion of bone having to be removed from the condyles than ordinary; but the appearance displayed at the line of junction of the sawn surfaces in this specimen shows the importance of the section through the condyles being made so as to leave as wide a surface as possible to correspond to the one at the tibia.

It will be noticed, also, that the patella was removed; and it was so on account of its being extensively diseased. It is difficult, however, to see in what way this bone, had it been in a state to have been left, could have added to the material strength of the union. I prefer, for my own part, in all cases, now, to take away the patella. When left, it is always unsightly, frequently the seat of subsequent mischief, and very rarely of any advantage to the power of the limb.

PATHOLOGICAL AND THERAPEUTICAL CONSIDERATIONS RELATIVE TO INFLAMMATION AND FEVER.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

[*Continued from page* 958.]

11. *Fever.* The relation which the febrile state bears to disorder of the nervous system is a subject of high interest and importance. It did not escape the notice of Hippocrates, as shown by his aphorism, πυρετος λυει σπασμους. It does not seem necessary to discuss very curiously what is to be considered fever. Increased temperature is doubtless the capital phenomenon, and next to that may be reckoned accelerated

and excited action of the heart, a sense of prostration and unease, delirium, dry skin, loss of appetite, thirst, diminished and disordered secretions. In the asthenic forms of fever, the excitement phenomena are much more feebly marked, and almost merged in those of general depression; the secretions are no longer scanty, it may be increased, and the heat of the surface much less noticeable.

Debility of the cerebro-spinal system alone does not seem to have any direct effect in producing fever. We see patients repeatedly who are extremely weak, with a small and languid pulse, yet quite without fever. On the other hand, exhaustion does seem, *per se*, to be capable of inducing fever. Overexertion in walking will certainly cause pyrexia in certain persons. Again, all the phenomena of the earlier periods of fever are indicative of depression, and in the prevailing fevers of our day the stamp of debility is apparent throughout. The experiments of Bernard are very suggestive of the view that weakening, or paralysis of the sympathetic system generally is an essential condition in fevers. If we suppose the effects produced by dividing the sympathetic in the neck to be general, *i.e.*, to occur all over the body, there would ensue general pyrexia. In making this statement I do not overlook that Bernard (*Op. cit.*, vol. ii, p. 526) finds that certain parts of the sympathetic may be divided without the supervention of any apparent phenomena of calorification, or vascularisation, in the organs to which they are distributed. He instances especially the splanchnic nerves. But of these very nerves, Cruveilhier has written that they are white nerves, "n'ayant nullement l'aspect des nerfs ganglionnaires," and further, in tracing their origin, he remarks that, "l'anatomie de texture démontre de la manière la plus évidente la continuité du nerf splanchnique avec les paires rachidiennes." If, then, the splanchnic nerves are rather commissural cords of the cerebro-spinal system to the sympathetic centres than actual nerves proceeding from their ganglia, we should not expect that their section would have any effect on temperature, etc.

12. Let us now consider how far the phenomena in various forms of fever may be explained or elucidated, by assuming that the sympathetic system is in a state of more or less complete paralysis. In asthenic fevers, such as our typhoid, or typhus, we may conceive a poison to have entered the blood, and to have enfeebled, primarily, the sympathetic system, and subsequently the others. All the phenomena well accord with this hypothesis. The various complications, enteric, pneumonic, or cerebral of our low fevers, may be accounted for by supposing the poison to affect more especially the vaso-motor nerves of that region in particular. The hyperæmia, for instance, of the intestinal mucous membrane in typhoid, is just of that kind which would be produced by a paralysis of the vaso-motor nerves of the nutrient arteries, it is evidently not an inflammation originated in the tissue. The hypertrophy of the *glandulæ solitariæ* and *agminatæ* is also a consequence of the same nervous disorder, and is quite analogous to the enlarged spleen of ague, or the goitre of Swiss malaria. To regard it as an act of attempted elimination seems to me quite a mistake. It is no more to be considered in that light than the enlargement of the correlated mesenteric glands is, which takes place at the same time. Both are similar structures, and both hypertrophy under the same influences, viz., hyperæmia and loss of nerve influence. The most successful treatment of these fevers is quite in accordance with the above view. The frequent administration of muriatic acid, or of moderate doses of quinine, of wine, and of easily assimilated nourishment, manifestly avails by supporting and raising the failing nervous power.

I cannot withhold here an expression of dissent from a practice which I often witnessed in my pupil days, and which is still, to some extent, in vogue; viz., that of administering hydrargyrum cum cretâ and Dover's powder, twice daily, in most, if not all cases of low fever. I cannot but think that the tendency to ulceration and perforation of blood-vessels, or of the intestinal parietes is materially promoted thereby.

It is quite evident, and quite in harmony with the above view to observe that the other systems in low fever are stricken by the same enfeebling influence as the sympathetic. The quiet, muttering delirium, or unconsciousness, or half-consciousness, testifies how the brain is enfeebled; and the weak pulse during life, and the softened texture after death, tell how the heart is weakened. Nay, in certain cases, or certain periods of fever, it may be that the sympathetic system is but little affected, and that the stress of the disease falls on the cerebro-spinal. This seems to have been the case in the instances noticed by Graves (*Clin. Med.*, p. 157), where he says, "thus it was very curious to see a patient with a skin of a natural temperature, a perfectly natural pulse, tranquil respiration, clear eyes, no headache, a soft and fallen abdomen, incoherent, or with a low muttering delirium, excessive subsultus, extreme debility." I may remark here on the expression used by the same author (*Op. cit.*, p. 190-191), "pure nervous fever," in describing cases where thirst, hot skin, quick weak pulse, occasional delirium, and watchfulness were the main symptoms, without any trace of local inflammation being detected during life, or at the *post mortem* inspection. The observation of the practical physician, that in the purest form of fever the nerve-system is the only one implicated, is of great interest in reference to the subject of our present consideration. In such fevers the poison must be supposed to affect the vaso-motor nerves in a less degree.

13. Let us now turn to the opposite type of fever, the *sthenic*, marked by strong, frequent, full or hard pulse, dry, hot skin, laboured respiration, diminished or suppressed secretions, flushed face, etc.; in which blood-letting is not only tolerated, but is essential to the preservation of life. It is evident that in such cases the greater part of the organs must be in a very different vital state to that which exists in low fever. Let it be assumed that the poison acts primarily upon the sympathetic system, limiting its action to it, as woorari does to the motor nerves: increased heat will be developed, and a tendency to local congestion, varying in situation, according to the part where the paralysis is greatest. The increased temperature will act as a stimulus to the heart, whose tissue is vigorous (not debilitated, as in asthenic fever), and capable of responding energetically. The circulation will thus be excited, and thus the character of the pulse is explained, except as relates to its hardness, a point which we shall subsequently notice. The very interesting experiments of M. Calliburcès, mentioned in Bernard's *Leçons* (vol. ii, pp. 395-403), corroborate the opinion advanced above, that the increased temperature is the cause of increased cardiac action. He found that when the leg of a frog was dipped into warm water, the heart constantly contracted more frequently. Thus, the number of pulsations in three separate trials being 52, 32, 42, at the commencement, a temperature of 51°, 50°, 55°, raised (respectively) the number of beats to 90, 64, 100. Similar results were obtained when the heat was applied directly to the heart. Ligature of the vessels, and section of the crural nerve did not prevent the increase of cardiac action from the application of heat to the leg. He concludes that the acceleration of the heart's action by heat, is owing to the direct action of the stimulus upon the circulatory centre.

At the same time, the cardiac muscular tissue, like all others, has, temporarily, its vital energy increased by the dilatation of the coronary arteries, and the freer circulation of the blood through its substance, as well as by the increased local heat. Thus, the contraction of the heart will not only be more frequent, but more energetic. The same will occur also in sthenic pyrexial fever.

It might have been expected that, as on this view the prime motor of the fever is the palsying action of a poison on the sympathetic system, the administration of tonics would have proved beneficial by resuscitating the failing power. It is not yet fully shown what might be the effect if the remedy (say quinine) was given before the reactionary phenomena set in; but it is quite intelligible that it would only be injurious when the febrile state was fully established, and most of the bodily organs were in a state of irritation. Thus, quinine is of no advantage during the hot stage of an ague; it is when the temporary reaction has passed by that its opportunity comes.

14. *Inflammatory Fever*, intending thereby the fever of inflammation, may next be considered. This, in the cases we are speaking of, is dependent on the local disease. It is probably excited by a morbid impression being conveyed from the inflamed part to the sympathetic centres, in consequence of which, by a reflex inhibitory action, the vaso-motor nerves are generally enfeebled, and so, as in other cases, fever results, with increased cardiac movement.

The production of pyrexia is the ordinary case, the exceptional is that already mentioned (*vide* p. 957), where inflammation of some organ, the kidneys, for instance, occasions paralysis of musculo-motor nerves. On the view just proposed, it is intelligible why the administration of tonic and nervine medicines is injurious in the pyrexia of sthenic inflammation. The inflamed tissue becomes further irritated by the tonic remedy, and so the morbid impression conveyed to the centres, and reflected on the vaso-motor nerves, becomes intensified. By the

employment, on the other hand, of tissue-sedatives, the morbid stimulus is annulled, and the fever movement subsides. Should, however, the paralysis of the sympathetic system have been considerable, it may persist to some extent after the cessation of the inhibitory influence, and may then require the arousing action of such remedies as quinine, and the like.

It is possible that the increased cardiac action in inflammatory fever may also, in part, be occasioned by the local irritation in the inflamed part being reflected directly upon the heart, through the sympathetic ganglia and nerves. The innervation of the organ is thus enfeebled, and, as a consequence, its action accelerated. At the same time the increased heat of the blood stimulates its muscular tissue.

15. The hardness of the pulse in certain sthenic fevers and inflammations implies a contracted state of the arterial coats. This, if general, is an opposite condition to that which is produced by section of the sympathetic, and therefore demands explanation in an hypothesis which is based on a presumed palsy of the system. Now, in sthenic fevers, the primary paresis of the sympathetic gives rise to an abnormal stimulus in the increased heat of the blood, which is by no means inseparably connected with arterial dilatation (*vide* p. 939). The arterial coats, like the heart, retain for a while their irritability, and contract under the direct stimulus of the fevered blood which traverses them. The pulse is therefore hard. In low fever, on the contrary, the pulse is weak and soft, because the poison impairs the vital power of the arterial coats, as well as that of the sympathetic.

So in certain inflammations—*e. g.*, of serous membranes—the hard pulse, as well as the increased cardiac action, result from the circumstance that the contractile tissue of the heart and arteries is at first unimpaired in its energy, and responds actively to the stimulus of the heated blood. In asthenic inflammation, on the other hand, the vital energy of the heart and arteries is impaired by the exciting cause, and their contractile power is enfeebled. Hence the pulse is soft and weak. In the former case, bleeding is borne well; in the latter, badly.

The causes of *increased action* of the heart require some notice. The action of the organ may be increased as to *frequency*, or as to *energy*, or, as often happens, as to both simultaneously. There is, however, no necessary or close connexion between the increase in these two respects. Increased frequency is very commonly conjoined with debility. Acceleration of the heart's action seems chiefly to proceed from partial exhaustion of nerve-force;* *e. g.*, it takes place readily in the feeble and those of weak innervation, whose hearts palpitate violently on the least exertion. It can be prevented by exercise and training which increase the nerve-force, as when a man trains himself for feats of running or swimming; it is diminished, when present, by a stimulant, viz., digitalis, which tones, steadies, and strengthens a weak flabby heart, just as it does a relaxed uterus. On the other hand, increased energy of contraction in the heart depends chiefly on a vigorous, lively, well nourished condition of its muscular fibre, which responds actively to the stimulus of the circulating blood. It is therefore impaired by all influences of an enfeebling or lowering kind, as the poison of influenza or of low fever. In states of sthenic inflammation, on the contrary, the contractile energy of the heart remains for some while unimpaired, or even is actually increased; venesection is borne well, the heart still responding actively to the diminished amount of its normal stimulant. In asthenic inflammation, the reverse is the case. In many instances of increased cardiac action, where the heart is acting quickly and sharply, though, as the feeble pulse shows, with little propulsive power, it seems tolerably certain that the endocardium must be abnormally impressionable, the blood traversing the cavities producing too great a stimulating effect. The condition in this case is analogous to that of gastric hyperæsthesia, where the mucous lining of the stomach is unduly sensitive, and the contact of ingesta provokes abnormal contractions, viz., those of vomiting. Such hyperæsthesia is a common attendant upon states of debility.

[*To be continued.*]

* This view is, of course, based on the well-known experiments which show that galvanic stimulation of the vagi slows and stops the action of the heart, while section of the same nerves accelerates it. In one experiment I performed, after the left vagus had been divided, the heart's beats were 110 in the minute; after both had been divided, 190. The respiratory movements in the last case were about ten per minute.

Notes of Lettsomian Lectures
ON
CERTAIN POINTS CONNECTED WITH DIABETES.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

By FREDERICK WM. PAVY, M.D., F.R.C.P., Lecturer on Physiology at Guy's Hospital.

Lecture II.

[*Delivered November 30th*, 1859.]

Having found that the blood in the right cavities of the heart did not contain sugar, but still believing that sugar was formed in the liver, Dr. Pavy had sought to ascertain the cause of its absence. In investigating the nature of the substance called by Bernard "glucogenic", with regard to its relations; and this investigation led to ascertaining an important fact.

The glucogenic substance is very easily obtained by making a decoction of liver and evaporating: the substance appears as a scum on the surface, which is removed as it is formed. To purify it, it is mixed with distilled water, and precipitated by alcohol. The substance is not acted on by potash, even at a boiling temperature. If a liver is boiled with a strong solution of potash, the glucogenic substance is dissolved; it is then precipitated by spirit, and freed by washing from a small quantity of potash which adheres to it.

In composition, it is allied to starch and dextrine; its chemical formula is $C^{12} H^{12} O^{12}$. Like dextrine, it presents a wine-red colour on the addition of iodine.

Its most important property is its ready convertibility into sugar, when in contact with albuminous materials at a somewhat elevated temperature. Saliva acts most energetically on it: if a portion be mixed with human saliva, and tested with Barreswil's solution, the red suboxide of copper is thrown down. It is the albumen contained in the liver which converts the glucogenic substance into sugar after death. Blood has the same effect.

If a little alkali be added to the glucogenic substance, its transformation into sugar is prevented: and the observation of this fact gave Dr. Pavy the hint for obtaining the liver as it existed during life, before *post-mortem* changes had appeared. Observing that alkalies prevent the transformation, he thought that, if the sugar were formed after death, no sugar ought to be found in the liver if the organ were injected during life with a solution of potash. This experiment he performed on a dog, and found the result he anticipated. To obviate the objection that the absence of sugar might depend on the state of health of the animal, he repeated the experiment, causing a part of the liver to be firmly held by an assistant, so that the injected fluid could not enter it. On testing the two portions, that into which the liquor potassæ had been injected yielded no sugar: while the other part gave abundant evidence of its presence. Acids, as citric acid, also prevent the formation of sugar.

But there is a still better method of performing the experiment. The glucogenic substance requires a certain temperature for its transformation into sugar; and, therefore, to remove any objections which might be raised on the ground of the chemical action of the substance employed, a portion of liver, removed instantly after death, was placed in a freezing mixture. This part gave no indication of sugar: while the other portion, which had not been frozen, yielded it as usual. The experiment was repeated on a rabbit which had been fed on oats, with the same result. When the frozen liver is thawed, it yields sugar after a time—three days for instance—shewing that the effect of the cold has merely been to arrest the change.

As a substitute for the term glucogenic subtsance, which had been objected to, the name "hepatine" has been suggested. This, however, would imply that the substance was peculiar to the liver; whereas it, or at least a material closely allied to it, is formed in the muscles, lungs, and placenta. The term "amyloid," or starch-like substance, implies no theory, and is perhaps the best term to be used at present.

In some of the invertebrata also, this amyloid substance is formed. In the common mussel, for instance, the mantle is strongly charged with it: and in this part also the microscope

discovers fat particles and albumen. The mantle, however, does not yield sugar so readily as the liver of the animal; perhaps because the ferment, through which the change is brought about, is less active. The gasteropods, as the oyster and mussel, afford a very convenient means of observing the condition of the liver during life. Articulated animals, as crabs and crayfish, also yield sugar.

In making experiments on the liver of the frog, Bernard noticed that when the body was cold (*i.e.*, at the natural temperature of the animal), the liver was free from sugar; but that if the animal had been exposed to an elevated temperature, sugar was formed. He thought that the formation of sugar was merely increased by an increase of temperature. Dr. Pavy at first thought this explanation correct, and that the elevation of temperature would induce a diabetic state in frogs: but, on allowing some frogs to cool which had been kept in a warm place, he found that their livers yielded no sugar. The explanation was now easy. When the frog is in its natural cold state, the change does not set in early, and it is possible for some time after death to obtain the liver as it existed during life: but when the frog is raised to a temperature of about 95°, it is placed in the state of a warm-blooded animal, and the change occurs rapidly.

Bernard divided the spinal cord just below the phrenic nerves, and placed the animal in a cold place. No sugar was formed at first: but in a few hours, it was detected. He explained this by supposing that the division of the cord had deprived the liver of some power, which it only slowly regained. But, if the spinal cord be divided, and the animal be placed in a warm room, and not on the cold floor of the laboratory, sugar will be at once found, as in warm-blooded animals.

It is clear, then, that the liver does not during life perform the function of forming sugar, because—1, the blood which passes from the liver to the heart is not saccharine during life; and 2, the tissue of the liver during life does not contain sugar.

The amyloid substance appears to be formed from sugar. If an animal be fed on a diet abounding in starch or sugar, the liver increases in weight, and the proportion of the amyloid substance is greatly augmented. The livers of some dogs fed on tripe bore the proportion of half an ounce to each pound in weight of the animal. In other dogs, fed exclusively on bread and barley-meal, the liver was in the proportion of rather more than an ounce to the pound. Other dogs were fed on tripe and cane-sugar; and in these the liver weighed nearly an ounce to each pound of the animal's weight. In both the latter cases, the quantity of amyloid substance was remarkably increased. The results are shown in the following table:—

	Weight of liver in proportion to lb. of animal.	Amyloid substance. Per cent.
Dog fed on animal food . .	½ oz.	6.97
„ on vegetable food, above	1 oz.	17.23
„ on tripe and sugar, nearly	1 oz.	14.50

Of two rabbits, apparently from the same litter, and as nearly as possible in the same condition, one was kept without food; while into the stomach of the other an ounce of starch and an ounce of cane-sugar was injected on each of three days. The liver of the rabbit which had fasted weighed an ounce, and yielded 1.4 per cent. of amyloid substance; the liver of the animal which had been fed with starch and sugar weighed two ounces and three-eighths, and yielded 16.9 per cent. of amyloid substance.

Other two rabbits, apparently of the same litter, were fed with starch and grape-sugar; and during three days they were treated in the manner just described. The liver of the animal which had fasted weighed one ounce and two-fifths, and yielded 1.3 per cent. of amyloid substance; the liver of the other weighed two ounces and four-fifths, and contained 15.4 per cent of amyloid material.

The effect of feeding a rabbit with starchy food is to render the liver much lighter in colour, and more pulpy and easily broken up, than in the normal state.

[At the end of the lecture, Dr. Pavy killed a rabbit by dividing the upper part of the spinal cord. He then immediately removed a portion of the liver, and threw it into a mixture of ice and salt. When it was frozen, he pounded a portion, and boiled it a few minutes in distilled water. On applying Barreswil's solution to the decoction, not the slightest trace of sugar could be detected. A portion of the liver which had not been frozen was treated in the same way; the test gave abundant evidence of the presence of sugar.]

Inventions and Appliances
IN
MEDICINE AND SURGERY.

UTERINE TRUSS: A NEW INSTRUMENT FOR TREATING PROLAPSUS UTERI.

At the quarterly meeting of the Midland Branch of the Provincial Medical Association, held at Derby, on December 4th, 1851, Mr. John Jones of Derby read a paper on prolapsus uteri, and exhibited, for the inspection of the meeting, a new instrument for its treatment. Since that period, the instrument has been greatly improved; and in its present state he finds that it very completely fulfils the purposes for which it is intended, as expressed in the following quotation from the paper referred to:—

"The uterine truss supplies a most important desideratum, by entirely superseding the use of the pessary—an instrument which has hitherto been considered by the profession generally, indispensably necessary in the treatment of prolapsus uteri. It fulfils the following most important indications; viz.: To strengthen those parts which, by their relaxation, have allowed the descent of the uterus; and to remove the pressure on the uterus produced by the superincumbent weight of the abdominal viscera."

As the uterine truss unites strength and lightness with elasticity, it is easy to wear, and efficient in its application. It is highly beneficial under the following circumstances:—1. Delicate females, either married or single, are subject, when walking or standing, to uterine pains, accompanied with a variety of nervous or hysterical symptoms. These are greatly relieved by the truss, which is an admirable auxiliary to medical treatment. 2. When the descent of the womb is considerable, but not amounting to protrusion externally, the inconvenience and pain are proportionably great. In such cases, the truss relieves the pain, and renders walking or standing, which previously were attended with much inconvenience, easy and comfortable. 3. When the disease is so far advanced as to constitute complete prolapsus, the uterus protruding externally, the truss is of inestimable value, as in such cases the pessary often cannot be applied efficiently; whereas the support given by the truss affords great and permanent relief.

In many instances, the truss has apparently produced a permanent cure; as in several very bad cases, and others less severe, Mr. Jones has found that after wearing it for some time, it has been discontinued without inconvenience or recurrence of the disease.

Description. It consists of two parts: an abdominal belt with two spring pads, and a perinæal bandage with movable pad.

Abdominal Belt. This is made of strong holland or jean. Two pads are placed in front, each pad formed of two circular tin plates; the outer rather larger than the inner one. They are made to act on each other by an interposed spiral spring, padded with horse-hair, and covered with wash-leather. They are united to each other by interposed elastic web, an inch and a half broad; on each side of the pads is let in an elastic web, about four inches broad. When worn, the belt is fastened with two straps and buckles: on its upper edge are loops, placed at short distances, for the passage of a strap, which buckles round the waist.

Perinæal Bandage. This consists of an anterior and posterior portion, united to each other by interposed elastic web, three inches long and two broad. The anterior portion, about four inches broad, has two rows of metallic holes, corresponding with hoops on the abdominal belt; on the inner side is placed a sort of pocket, made of gutta percha tissue, which contains a movable pad, to which is attached a strap with two button-holes, one above the other, corresponding with a button, so as to admit of lengthening or shortening of the pad.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, DECEMBER 10th, 1859.

IMPERFECT VACCINATION A CAUSE OF MORTALITY FROM SMALL-POX.

We endeavoured last week to show that the burthen of mortality in the present, as in every epidemic of small-pox in this country, has fallen upon children under puberty, who were none of them, or scarcely any of them, vaccinated in our sense of that term; that is to say, who were not protected by having passed through the genuine vaccine disease. The great majority of these, without doubt, had never even been presented for vaccination at all; but some had been submitted to the operation after the fatal infection had been received into the system; and, in others, the insertion of lymph had taken no effect, or been followed by a spurious result. This last class of cases is spoken of by the law as "unsuccessfully vaccinated". Many, no doubt, of the adults who perish by small-pox belong likewise to this class, and some also to a class in which the vesicles produced, though they might have had the vaccine character and course, were yet poorly developed, and insufficient in number to yield the fullest amount of protection which vaccination is capable of affording. These cases, in the eye of the law, are "successfully vaccinated"; but, in the eye of the experienced practitioner of vaccination, they are "insufficiently vaccinated".

In the hands of the most expert operator, vaccination will sometimes fail to produce results; but the more expert the operator, and the more careful he is in the selection of lymph, the less frequently will this occur. Mr. Marson says that, with good lymph and the observance of all proper precautions, an expert vaccinator should not fail oftener than once in one hundred and fifty times. Other experienced vaccinators state that failure is comparatively rare; and all agree that there is no method so certain of success as that in which the lymph is transferred immediately, in its liquid state, from arm to arm. Now, it is of the utmost importance that the operation should fail as seldom as possible; for oftentimes a child in whom it has once failed is never brought back, the mother being careless or indifferent, or ignorantly supposing that all has been done that is required for the child's safety, or being unwilling to have it cut again, or content with having complied with the law. The consequence is, that the child remains unprotected. From the communication of the able medical officer of the City of London in the *Times* of November 19th, it appears that in ninety-three cases of small-pox, into the particulars of which he had inquired, there were eight in whom the operation of vaccination had been performed without effect. It is, therefore, of the utmost consequence that the law, which now compels the vaccination of all, should take the most ample security for the skill of the vaccinators employed, and for the sufficiency of the 'vaccination' arrangements to provide the people with the best vaccination—that is to say, the vaccination from arm to arm. But so far is this from being the case, that we may state, on the best authority, that many vaccinators think they do well if they only fail once in five or six times; and we have heard it alleged as very fair vaccination for four out of six to take effect; while, even in a large city like London, an enormous quantity of vaccination is carried on with dried lymph. If the insertion of lymph, instead of producing no effect, have given rise to a spurious vesicle, there is greater risk than in the former case that the child may not be taken to the vaccinator again; for the parent, satisfied with the local inflammation developed, is very apt to feel assured of the protection of the child. This default of parents in not uniformly taking their children for inspection leads to the greatest mischief, and the law in this respect ought to be very stringently enforced. But it is also of the highest consequence that everything that can possibly give rise to such results should be avoided, and that every requisite precaution against them should be taken, both in regard to the lymph employed and the state of health of the child to be vaccinated; and that the vaccinators should be most intimately acquainted with the characters of the genuine and of the spurious vesicle. Yet we are bound to state that there are either some vaccinators who understand very little of this difference, or that they must have been very lax in their way of granting certificates; for we are acquainted with the existence of cases in which certificates of success had been given, but in which the vesicles, submitted to persons well practised in vaccination, were pronounced spurious; and with other cases, in which death occurred in young children whose successful vaccination had been medically certified, but in whom it was clearly made out, on subsequent inquiry, that only a spurious result had ensued on the operation.

In that class of cases to which we have referred as insufficiently vaccinated, the vesicles may have had the genuine character, and gone through a course more or less regular, but have been small and poorly developed, or not exceeded one or two in number. The different degree of immunity enjoyed by persons so vaccinated, from those in whom the vesicles had been more perfect, or the number more considerable, is shown in the records of the Small-Pox Hospital, so admirably presented by Mr. Marson; from which it appears that, while persons so vaccinated as to have good marks, if they were subsequently attacked by small-pox, died at the rate of 3 per cent., those who had but indifferent marks died at the rate of nearly 10 (9.77) per cent: and again, as regards number of marks, that while there died with one or two cicatrices 6.21 per cent., the deaths in those who had three, four, or more cicatrices were but 1.30 per cent. Indeed, of 620 patients who had four cicatrices, admitted to the Small-Pox Hospital in the course of twenty-one years, there have died of small-pox only three, or less than the half of one per cent.

With such facts before us, we do not feel called upon to enter on the question of a decline in the protective powers of vaccination. Let this be but rightly and properly administered to all, and such mortality as we are now deploring will be matter of history. In the course of sixteen years recorded in Mr. Marson's paper, including the great epidemic years 1838, 1840, 1841, 1844, 1848, and 1851, there died altogether in the

Small-Pox Hospital only thirteen persons, who had been vaccinated in the best way, that is to say, who had more than two vaccine cicatrices, and six out of these thirteen died, not from the severity of the small-pox itself, but from superadded disease. We are appalled, therefore, at the statement, lately made by Dr. Letheby, that of thirty-four fatal cases investigated by him, twenty-one had been vaccinated. Allowing that some at least of the eight cases above referred to, in which it was said that the vaccination had been unsuccessful, and that others, in which vaccination had not been attempted till after the small-pox infection had been received into the system, are included in this number, it is yet alarming to think that so many should have been relying on a false security, and calls on us seriously to consider what it is that is amiss in our vaccination system, and how we may best and more speedily put our house in order.

We have carried these observations to such length, that we must state in very brief terms what appear to us some of the most prominent defects of the present system.

First, there is no authorised and systematic teaching of vaccination; no public vaccinating stations appointed at which pupils may attend and be instructed in the characters of the genuine vesicle and the best mode of vaccinating; no requirements on the part of the state, or of any of the medical examining bodies, that they have been so instructed. Heavily are we paying now for our neglect of the warning of Jenner, delivered upwards of fifty years ago. "I expect,"—such are his memorable words in 1804—"that cases of this sort (failure of protection) will flow in upon me in no inconsiderable numbers; and for this plain reason, a great number, perhaps the majority, of those who inoculate are not sufficiently acquainted with the nature of the disease, to enable them to discriminate with due accuracy between the perfect and imperfect pustule. This is a lesson not very difficult to learn, but unless it is learnt, to inoculate the cow-pox is folly and presumption!"

Secondly, the important work of vaccination—all-important in its consequences—is often delegated to unqualified assistants, pupil-assistants, sometimes mere boys: nay, even that druggists are employed in some instances systematically by vaccinators to act as their deputies, receiving a certain portion of the fee for their remuneration, the certificate of success being granted upon their representation,—a fact for which we can vouch.

Thirdly, the arrangements for public vaccination are in many instances very defective. The great desideratum is vaccination continuously from arm to arm, with an ample number of cases from which to select lymph on each vaccinating day. A vaccinator who has five hundred vaccinations a year, operating on one day in each week, will have no difficulty in keeping up his supply in this way. Of course, in country districts and small towns, this is not attainable; and here, we are aware, special arrangements are required. But in all large towns, and above all in this metropolis, nothing could be easier of accomplishment. Yet such is the absurd subdivision, that there are very few indeed of the public vaccinators of London in this position. In some parishes, with populations of near a hundred thousand each, the vaccination is parcelled out among such a number of vaccinators, that there is scarcely a single one who can maintain his correct arm vaccinations: and in other parishes where this extreme subdivision does not prevail, but where each vaccinator has a district which supplies him with the number of cases requisite to accomplish this if he confined his vaccinations to one day in the week, all this advantage is thrown away by the absurd plan of offering daily vaccination. Thus vaccinators with five and six hundred cases a year are vaccinating constantly with dry lymph!

To some of these crying evils we rejoice to find that a remedy is about to be applied. Since the above was written, the Regulations issued by the Privy Council under the Public Health Act, which we print at page 1009, as well as a memorandum of arrangements for the public teaching of vaccination, the insertion of which we are obliged to defer to next number, have been communicated to us. We earnestly request our readers' attention to them. They appear to us to deal very comprehensively with some of the defects which we have pointed out, and we trust they are but a prelude to other steps in which not only the remaining evils we have spoken of, but others to which space has not permitted us to allude, will be effectually and uncompromisingly dealt with.

THE WEEK.

It is not our province to discuss the political advantages which must arise to this country from the deliberate and unanimous manner in which the population are arming. It certainly is an extraordinary thing to find our old municipal halls all over the country ringing at night to the heels of manœuvring companies of riflemen, and to find the youth of the country regaling themselves, after the fatigues of the day, in learning, *by gaslight*, soldiers' drill; and we trust our neighbours across the Channel will understand the hint. Our purpose, however, is not to meddle with the uniform and martial spirit of the country, but to regard it in a sanitary point of view. There can be no doubt that a large proportion of the adult male population of our towns live, on the whole, a sedentary life. The shop, the office, and the chamber, are the scene of action of the majority of townsmen. Their occupations are sedentary, and their diseases are those of men who are deprived of a due amount of fresh air, and of a systematic exercise of their limbs. Can it be doubted that this exercise will be found in the rifleman's drill? A march to Wormwood Scrubs and back, or a skirmishing on Hampstead Heath, will be an excellent diversion for the law student or the shopman, and an antidote to dyspepsia such as few medicines could equal. As there is every sign that these rifle corps will become fixed institutions of the country, we cannot help thinking that our troublesome neighbour across the Channel has done the public health good service, inasmuch as his restlessness will result in giving just that amount of physical education which townsmen need, and which we do not believe they would have submitted to under any other stimulus. If we notice in future a marked improvement in the Registrar's report of the health of London and our other large towns, we shall, without doubt, have to thank our "fair enemy France" for it.

A brief but highly interesting course of lectures has just been given at the Medical Society of London. Some years ago, the doctrine was promulgated by the celebrated Parisian physiologist, M. Claude Bernard, that, in the healthy state, one of the functions of the liver is to form sugar, which is then

sent to the lungs and consumed in the respiratory process: and, according to M. Bernard, the occurrence of diabetes was to be explained rather by supposing an excessive formation of sugar in the liver, or by a defect in the eliminative power of the lungs. His deductions, however, were founded on examinations of the liver and blood of animals after death; and thus, it seems, he has been led into physiological error of the greatest importance. Dr. Pavy of Guy's Hospital, who has just delivered the Lettsomian lectures at the Medical Society, has, in investigating the subject, met with facts which have led him to the conclusion that the occurrence of sugar in the healthy liver is entirely the result of the *post mortem* transformation of an amyloid substance which exists in the organ; while the presence of sugar in diabetes results from the liver being in some way deprived of its power of resisting the saccharine transformation. The arguments adduced by Dr. Pavy, and his experiments, which bear the mark of great care, seem thoroughly to establish his point. We are now evidently much more advanced on the right road towards understanding the pathology of diabetes than we were a few years ago: nevertheless, much remains to be done, and it is to be hoped that Dr. Pavy and other physiologists—especially those who have also the opportunities afforded by hospital appointments—will continue to work at the subject as its importance deserves and as its difficulty requires.

At a recent meeting of the Branch Medical Council for Scotland, a correspondence was read which had taken place between the Branch Registrar, Dr. Robertson, and the Registrar of Births, Deaths, and Marriages in Scotland, and his Secretary. On August 11th, Dr. Robertson called the attention of the Registrar of Births, etc., to a certificate which had been filled up by a person styling himself a "medical botanist", but who was not registered as a qualified practitioner; and he argued that such certificate was rendered invalid by Clause xxxvii of the Medical Act. To this the reply was, that the Registrar of Births and Deaths was of opinion that he was bound to receive all certificates in the form of the one referred to, that might be transmitted to him by persons professing to be engaged in the practice of medicine. This interpretation was persisted in; and, on September 22nd, Drs. Alexander and Andrew Wood, by direction of the Branch Council, addressed a letter in which they refuted the objections raised against the enforcement of the provisions of the Medical Act. The reply to this was an offer to submit the matter to the Home Secretary; and we hear that his decision is to the effect that certificates of death cannot properly be received unless they are signed by a person duly registered under the Medical Act.

An action was tried a few days ago, at the Brompton County Court, which afforded an instance of the obstacles often placed in the way of medical men in obtaining the settlement of disputed accounts. The plaintiff, Dr. Ogier Ward, formerly residing at Kensington, but now near Windsor, had to leave his patients, and travel to Brompton to recover a bill of £7:19 from a wealthy tradesman residing at Kensington, named Cooper, who adopted the usual defence to medical men's claims, "overcharge, and medicines charged for not supplied". Dr. Ward stated that, in January of this year, five children belonging to the defendant were attacked with scarlet fever, and from that time up to March he paid unremitting attention to the patients. In the interim, three of his patients died, and two recovered. He had no hesitation in rejecting an offer of of defendant to pay five pounds; firstly, upon principle, and a duty he owed to the profession at large; and secondly, the charges were so moderate, under the circumstances, that if he made a deduction, he should be a positive loser for drugs. The defendant said, that part of the medicine supplied was charged for the three children after they had died; and he considered the bill a most unreasonable one, and that five pounds would be ample payment. Dr. Ward contended that the medicine alluded to was not intended for the three dead children, but for the two that survived. The defendant might as easily have urged that his attendance was for the deceased after they were buried. The judge thought the defendant had so recently met with a calamity, that Dr. Ward should make some allowance; and directed a short adjournment, which ended in the plaintiff's positive refusal to come to any other arrangement than give two months time to pay the bill. Ordinary costs only were allowed.

Association Intelligence.

NOTE FROM THE TREASURER.

The Treasurer acknowledges the receipt of fifteen pounds from the Bath and Bristol Branch of the Association, towards the liquidation of the debt due to the Treasurer; also the sum of one pound from Dr. Birch of Piccadilly; ten shillings in payment of the call made in 1856, and ten shillings for the call agreed to at the Liverpool meeting.

Worcester, December 8th, 1859.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The ordinary meeting was held at the White Lion Hotel, on Thursday, December 1st, at 6½ P.M. J. G. Davey, M.D., President, in the chair. Members present:—C. S. Barter, Esq. (Bath); J. S. Bartrum, Esq. (Bath); John Beddoe, M.D. (Clifton); William Budd, M.D. (Clifton); S. Bryant, Esq. (Bristol); C. E. Bernard, M.D. (Weston-super-Mare); W. T. Church, Esq. (Bath); Henry Clark, Esq. (Bristol); W. M. Clarke, Esq. (Clifton); G. C. Corbould, Esq. (Bristol); Edw. Crossman, Esq. (Hambrook); Charles Collins, Esq. (Chew Magna); Wm. Davies, M.D. (Bath); E. L. Fox, M.D. (Bristol); R. S. Fowler, Esq. (Bath); H. E. Fripp, M.D. (Clifton); J. Godfrey, Esq. (Bristol); Wm. Granville, Esq. (Bristol); W. B. Herapath, M.D. (Bristol); Wm. Henderson, M.D. (Clifton); H. A. Hore, Esq. (Bristol); W. Hutchins, Esq. (Keynsham); J. Lawrence, Esq. (Bath); C. Leonard, Esq. (Bristol); E. S. Mayor, Esq. (Bristol); J. S. Melford, Esq. (Clifton); E. Norman, Esq. (Bath); A. Prichard, Esq. (Clifton); J. N. Spender, Esq. (Bath); R. M. Stone, Esq. (Bath); J. G. Swayne, M.D. (Clifton); S. H. Swayne, Esq. (Clifton); George Terry, Esq. (Wells); G. Vicary, Esq. (Warminster); M. Willett, Esq. (Bristol); and as visitors, Dr. Whytehead, of York, and Messrs. Talbot, Wilson, jun., and Quarrell.

The minutes of the last meeting were read and confirmed.

NEW MEMBERS.

David Michael, Esq., of Bath, and Dr. Bernard, of Weston super Mare, were elected members of the Branch.

COMMUNICATIONS.

1. Case of Salivary Calculus. By W. Budd, M.D.

Dr. Budd also exhibited a series of Photographs, illustrating the effects of Typhoid Fever upon the Intestines.

2. *Diphtheria.* Dr. Davies detailed the communications he had received on the subject of diphtheria, with remarks upon them.

3. Case of Injury of the Head, attended with rupture of the Membrana Tympani. By W. M. Clarke, Esq.

The papers will be published in the Journal.

MEDICAL REGISTRATION.

NOTICE.

The Medical Registrar presents his compliments to the Editor of the British Medical Journal, and would be much obliged if attention could be drawn to an advertisement sent herewith, in order that qualified persons who are still unregistered, those especially who have obtained their qualifications in the course of the present year, may not lose their opportunity of appearing in the *General Register* for 1860.

Medical Registration Office, 32, Soho Square, London, W.,
November 21st, 1859.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, November 28th, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

ON VESICO-VAGINAL FISTULA; ILLUSTRATING A NEW MODE OF OPERATION. BY I. BAKER BROWN, ESQ.

Mr. Brown commenced his paper by stating that he had already recorded twenty cases of perfect cure, and then gave the particulars of seven more cases. Case xxi was of two years duration; two operations were performed, and a cure was effected. Case xxii was of six months duration; four operations were followed by cure. Case xxiii was of thirteen years duration; three operations were performed, with a successful result. In Case xxiv, of three years duration, an operation was followed by cure. Case xxv was of six years duration; the operation was followed by cure. In Case xxvi, of twenty years duration, death followed the operation. Case xxvii was of three years duration; one operation was followed by cure.

Mr. Brown then proceeded to make some remarks.

1. *Position of the Patient during the Operation.* Three positions had been recommended; viz., on the hands and knees, by Dr. Bozeman; the semiprone position, by Dr. Simms; and the lithotomy position, by Mr. Brown himself. He (Mr. Brown) still considered this last position as the best, both for the patient whilst under the influence of chloroform, and for the surgeon, who can sit down before the patient in an easy position. Occasionally, however, cases occur where, from peculiarity in the position of the lesion or of the female organs themselves, it may be advisable not to administer chloroform; and where the opening can be better seen and reached on the hands and knees than in the lithotomy position.

2. *Modes of Operating.* Mr. Brown mentioned four modes: simple suture, as recommended by Hayward; metallic sutures, as practised by Gossett in 1834, and more fully placed before the profession by Simms of New York; metallic sutures, guarded by clamp, as practised by Simms, or by button, as recommended and practised by Bozeman; and the plan recommended by Mr. Brown himself, viz, metallic sutures, with a separate bar-clamp to each. The sutures might be either silver wire, or galvanised iron wire as prepared by Cocker Brothers of Sheffield. In this plan, the patient being placed in the lithotomy position, the edges of the fistula are pared with three knives of different shapes. [These knives were designed and publicly used by Mr. Brown himself many years before Dr. Bozeman came to England, at which time it appeared that Dr. Bozeman, feeling the necessity for such instruments, had also designed them.] The edges being pared, a needle is passed, as practised by Dr. Simpson; and through it either a silver or galvanised iron wire suture. As many sutures as may be necessary having been passed, the two ends of the first suture are passed through the eyelet-hole of the simple bar-clamp, which is slightly curved, and has a perforated nipple projecting from its back. The ends of the wire are then held with the left hand; and, the nipple of the clamp being seized with a pair of long forceps, it is pressed back until the edges of the fistula are seen to be in perfect contact. The nipple is then firmly squeezed. This has the effect of partially straightening the clamp, and of securing the wires. Each suture is treated in the same way until all are closed. The advantages of this plan are—*a.* Its celerity, as compared with others; *b.* The certainty that the edges are in contact all along the fistula; *c.* However irregular the opening may be, its tortuosity can be followed without the slightest difficulty; *d.* Should the opening be very large, the edges are kept perfectly together, whilst the vagina is not stretched out as it would be under a large button. Each suture is also well guarded by the clamp; and there is no trouble in removing them. The anterior side of each suture is cut under the clamp; and, this being seized with a pair of forceps, and slight traction made upon it, the wire is easily withdrawn. By this mode, the duration of the operation is reduced to a quarter of an hour in the slight cases, and to three-quarters of an hour in the worst cases, instead of two or three hours, or even a much longer time.

3. *Causes of the Lesion.* In nearly every case, it arises from long protracted labour. The head pressing upon the bladder and soft parts generally, produces that state of parts which leads to the fistulous opening being established.

4. *Causes of Failure after the Operation.* Failure may arise from not carefully denuding the edges; from not introducing the needle deeply enough through the tissues; from want of care in bringing together the edges of the fistula; from neglect of position of the patient after operation (this should always be upon the side); from neglecting to keep the bladder empty, either by the catheter being left in, or by its frequent introduction. Occasionally, the general health may be so much impaired as to predispose the patient to pyæmia, or to prevent healthy plastic matter from being thrown out sufficiently early to ensure union. The general health should therefore be attended to before operation. Another not unfrequent cause of failure arises from the condition of the parts induced by frequent operations, especially cauterisation: the parts become almost cartilaginous, and unable to throw out plastic matter.

5. *After Treatment.* Mr. Brown considers that on the free use of opium and generous diet, with strict attention to the bladder, depends the success of the operation, however well performed in the first instance.

Dr. Hall Davis had been much gratified at the introduction of the operation for vesico-vaginal fistula, and at the success which had attended it. The objection to Bozeman's operation, notwithstanding its simplicity and success, was the time which it occupied. He had seen an operation of this kind requiring upwards of one hour. Shortening of the time occupied was desirable, especially as it diminished risk. He had been surprised at the extreme facility with which the clamps could be applied in Mr. Brown's operation. As to the position, he had seen the operation done both on the hands and knees and in the lithotomy position; and he thought that preference was obviously to be given to the latter; but the position on the hands and knees was required in some rare cases. He believed that the lesion was in most cases caused by the long continued pressure of the head of the child in cases of impaction.

Mr. Maunder inquired as to the success attending the operation in cases where the anterior lip of the cervix uteri had been implicated in the operation. Was any impediment produced in subsequent labours? If so, should premature labour be induced, to obviate the risk of bringing on the fistula again?

Dr. Rogers was in favour of the button; but if the clamp were proved better, it would be a benefit. He knew two cases of pregnancy after successful operation for vesico-vaginal fistula. In one case, the os uteri appeared obliterated; but the whole parts opened out, and the labour proceeded successfully. In the other case, also, there was no injury from labour.

Mr. Bryant said that, in a case on which he had operated some months ago, he found that, though the lithotomy position was most convenient for the patient, it was impossible to get a view of the fistula. He therefore placed the patient in the semireclined position. The fistula was quite in the upper part of the vagina. He attempted to operate with a needle formed on the plan described by Mr. Brown. But there was difficulty in using it; it could be passed through the lower lip, but not the upper; and he found the common curved needle on a handle to answer every purpose. The parts were readily held together with twisted wire sutures, without clamps. The patient was a poor emaciated woman, with a fistula an inch and a half long: two-thirds of it had united, and another operation would probably be performed. He thought well of the clamps exhibited by Mr. Brown, and would probably employ them in his next operation. Was there any means of bringing a fistula in the upper part of the vagina into view during the operation?

Dr. Routh said that, in cases where there was a large opening and the edges were not close together, union would not occur. In these cases, there was a plan of operation by which wires were passed on each side of the opening, and incisions were made in the vagina, which was dilated with tents. It was found then that the edges would be brought together with the greatest ease.

Dr. Gibb said, that some cases were better operated on on the hands and knees—a position which was often distressing to the patient. He suggested that some kind of chair or support might be contrived to hold up the body of the patient. The contrast of the operation in the present day and ten or twelve years ago, as to success, was very remarkable. He had lately seen a recent case of vesico-vaginal fistula treated in St. Bartholomew's Hospital. A catheter was kept constantly in the bladder; and the edges of the fistula were touched with ammonia; and the fistula completely closed.

Mr. Brown was aware of five or six cases in which labour had occurred after successful operation for vesico-vaginal fistula; nor would the return of the lesion be expected in a normal pelvis, unless the head were allowed to press too long. In one case, where there was a deformed pelvis, he had advised the induction of premature labour, which was performed with success at seven months and a half. It was easy, by means of forceps held by an assistant, to bring the parts completely into view during the operation.

HARVEIAN SOCIETY OF LONDON.

December 1st, 1859.

Edward Hart Vinen, M.D., President, in the Chair.

THE PATHOLOGY AND TREATMENT OF IDIOPATHIC PERIPHERAL NEURALGIA. BY H. LOBB, ESQ.

Mr. Lobb commenced by dividing neuralgia into central, peripheral, and reflected. Of the central, arising from disease of the brain or spinal cord, he did not speak. The second class was divided into idiopathic, traumatic, and neuromatous: the third, or reflected, he proposed considering in a future paper. Idiopathic peripheral neuralgia was described as a stabbing darting pain, referred to the course of a nerve, shooting down the nerve like lightning, taking place suddenly, lasting but a moment, and repeated at intervals; the pain is so acute as to be unendurable if it were continuous. The part or limb affected by this form of neuralgia is colder, and the skin supplied by the neuralgic nerve is more or less numb, not tender to the touch, the patient liking to be rubbed, frequently grasping the part with the hands, and pressing it. If the neuralgia has lasted any time, there is more or less paralysis in the muscles, supplied by the accompanying motor nerve. The author then gave his views upon the generation and distribution of nerve-force, from the capillary circulation. He described a sentient nerve as a conductor to the brain of sensations, taking place at the periphery. Neuralgia is not therefore a hyperæsthesia of its healthy function. During health, a nerve has no sensation proper to itself: if it is shrunk, or torn, or cut, the sensation is referred to the parts to which it is distributed; but in this form of neuralgia it is the nerve itself to which the pain is referred as darting up and down its course. Mr. Lobb likened a sentient nerve to an iron conducting wire of a galvanic battery; which, if of a certain uniform diameter, conducts a given quantity of galvanism without being perceptibly affected by its passage; but if a portion of the wire be much finer than the rest, it becomes red hot, being unable to conduct the whole of the galvanism, the remaining portion correlating into heat. So in a nerve, if by malnutrition it is unable to conduct normal sensations to the brain, the nerve-current, by affecting the polarity of the nerve itself, gives the idea of pain in that portion of the trunk of the nerve, its peripheric terminations at the same time being numbed. The author considered the indications for treatment, therefore, to be increased, and healthy circulation, arterial and nervous. After enumerating the usual methods of treatment, he considered the only agent capable of carrying out these indications, to be the continuous galvanic current; and he recommended as the only apparatus that can be worn upon the surface, and capable of generating a sustained current, the Pulvermacher chain, producing a continuous current of galvanic electricity in one uniform direction, mild, yet sufficiently energetic for medical purposes. Mr. Lobb then described the method of applying the chain, and exhibited some experiments with its aid, as the decomposition of water, contractions of muscles, etc. In the treatment of idiopathic peripheral neuralgia, he looked upon the Pulvermacher chain as a specific. Immediately upon adapting the excited chain to the part, a genial and peculiar glow is felt, not mere warmth, but a sense of vitality in the part, the patient is aware of a life-giving agent, and immediately says that he is relieved, the neuralgia disappears, and sensitiveness of the surface returns. The paper concluded with several cases in which the continuous galvanic current afforded rapid and permanent relief.

Editor's Letter Box.

PUBLIC VACCINATION.

Letter from Thomas Walker, M.D.

Sir,—Regarding vaccination as at present on its trial, and before a most incompetent tribunal, one which is capable of being very easily misled, as well by falsification of evidence as by false reasoning, imperfect observation, and by interested or party motives on the part of those who have brought the subject before the public, which forms the incompetent tribunal to which I refer,—I think it may be well to discuss the subject in our own special journals, rather than to seek the general notoriety of a letter to any non-professional periodical. Medical correspondents of the *Times* have excited in the public mind some misgivings on the subject of the spread of small-pox, and as to the protection from that dangerous and loathsome malady afforded by vaccination. If this misgiving is founded upon the proved extension of small-pox among persons previously and properly vaccinated, and not merely upon the report of an increased number of deaths from small-pox by the registrars, then, and only then, is there cause for the doubts and fears which these gentlemen have endeavoured to excite. My doubt is, I own, as to the soundness of their views, the correctness of their observation, and the good taste of their proceedings in addressing the public through the columns of a newspaper.

I have no doubt, and I never have had any doubt, that occasionally the protection given by vaccination is incomplete; but that there is any evidence of a diminution in the proportional number of protected cases, is by no means proved; and, as far as my own observation goes, any such suspicion rests upon very imperfect evidence.

I do not find cases of small-pox occurring more frequently during the last five years, within the sphere of my own observation, than during any similar period of time during the last forty years.

I do not find any perceptible deterioration in the virus used, as indicated by any difficulty in its producing the genuine vaccine vesicle, going through its regular stages, regular as to the period of its progress, and perfectly similar to that which nearly forty years ago I amused myself by sketching, taking a fresh sketch for each of six days after the third day, of the same arm, as a representation of the progress of a genuine vaccine vesicle; and, as I have already said, I have no reason to regard the later vaccinations as less protective than those performed many years since.

On the other hand, having very often performed revaccination in previously vaccinated subjects, as well as having frequently vaccinated persons who had previously had small-pox either by inoculation or by infection, I have only in one instance, that I can recollect, seen the operation followed by anything that could or ought to be by any means mistaken for a genuine vaccine vesicle. In the one case to which I allude, I believe that the influence or the previous vaccination was lost, or possibly, from some circumstance, had never existed. The case was one out of a family of seven children, of whom I vaccinated six, in consequence of the eldest son, who was then at Eton, having been attacked by small-pox. He, like the rest, had been vaccinated when an infant, and, I may add, soon recovered from his attack of small-pox, modified as it was by his previous vaccination.

Those who are so anxious to bring vaccination into disrepute with the public, must forget, or would make it generally forgotten, that, imperfect as the protection afforded by vaccination may be, still it far surpasses any protection we have it in our power to give, against any other in the whole list of diseases, and that the malady against which that protection is given, is one of the most loathsome in its aspect, most fatal in its effects, most permanent in its personal disfigurement, and most contagious in its nature of all diseases, in the case of those to whom

is denied the protection afforded by vaccination. Disinterested as has been the course pursued by the great body of the medical profession, in giving all the assistance they could towards the eradication of a disease, which, as I suspect to have been the case with small-pox, brought more gain into the pockets of medical practitioners, in days when all were unprotected from its attacks, than any other disease requiring medical care, I cannot but regret the opposite line of conduct which some medical men think it right to adopt.

I am, etc., Thomas Walker, M.D.

Peterborough, November 26th, 1859.

OUGHT NOT THE COLLEGE OF SURGEONS OF ENGLAND TO BE CAREFUL IN THE ADMISSION OF MEMBERS?

Sir,—Will you permit me, through the medium of the Journal, respectfully to point out what I and many others regard as a most degrading and mischievous line of proceeding pursued by the College of Surgeons of London towards the educated and enlightened members of its body?

To my utter disgust and sorrow, the painful reality of this state of things has been recently forced upon us in this neighbourhood, of having to be associated (through the medium of the College) in professional brotherhood with men hoary in the service of the humblest and meanest callings of necessitous existence, utterly devoid of everything that appertains to education of mind or dignity of character, practising the most unblushing quackery even up to the very moment when the College of Surgeons was embracing them as brothers.

When, therefore, sir, I behold a distinguished corporation, like the Royal College of Surgeons, thus giving the sanction of its high name to characters such as I have but imperfectly portrayed, by enrolling them as fellow members with some of the most distinguished names that ever adorned the temple of science, I should be doing violence to my feelings as a surgeon and a gentleman, were I to refrain raising my humble voice in deprecation of such a course of proceeding.

The College, moreover, by giving to these people its diploma, furnishes them with that spurious *locus standi*, and halo of false importance, which deceives other scientific bodies into admitting them into their ranks; as, *horresco referens*, I observe to have been done by the British Medical Association.

Now, feeling, as I do most keenly, the vital importance to the dignity and character of the Colleges generally, and the profession at large, that early and vigilant steps should be taken to stop the admission of any candidate who cannot produce satisfactory testimony of his fitness both by general education and high moral character, I will, by your permission, venture to suggest what, to my humble judgment, may stay this gangrenous mischief.

First, I would require, in addition to professional acquirements, a high standard of classical and general attainments, from every candidate, whether for medical or surgical degrees.

Secondly, I would insist upon testimonials of moral character being furnished from either two members of the medical profession, or the clergy of the place where the candidate resided.

If such were adopted, the examining bodies would then place themselves in a safe position of judging of the general fitness of the applicant. I am, etc., Aliquis.

Leigh, November 28th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Bulleid, G., Esq., Surgeon, Connaught Terrace, on Dec. 1.
Cooper, George, Esq., Surgeon, Croydon, on Nov. 30.
Guy, William, M.D., Biddenden, on Dec. 3.
*Harrison, J. Bower, M.D., Manchester, on Dec. 4.
Roden, William, M.D., Kidderminster, on Dec. 2.

MARRIAGES.

*Brown, Frederick James, M.D., of St. Margaret's Banks, Rochester, to Harriet Landels, youngest daughter of John Shepherd, Esq., Deputy Storekeeper, Military Store Department, Upnor Castle, near Rochester, on Dec. 1st.
Carroll, John G., Esq., barrister, of Woodstock, Canada West to Mary L., second daughter of Francis Badgley, M.D., of 43 Albion Street, W., at Quebec, on November 2nd.
Engleheart, S. P., Esq., surgeon, Springfield, Reigate, to Lydia Jane, youngest daughter of Henry Thompson, Esq., of Tunbridge Wells, on December 3rd.
Jarratt, George, Esq., of Elmfield House, Yorkshire, to Alice, second daughter of George Dunn, M.D., Doncaster, on November 20th.
Kelly, J. H., M.D., Queenstown, Cork, to Susan, eldest daughter of Josiah Jones, Esq., of Wavertree, on Dec. 1st.

DEATHS.

Andrew, James, M.D., in Edinburgh, on December 1st.
Black. On December 3rd, in Southgate Road, aged 2, Eliza M., youngest child of R. J. Black, M.D.
Davis. On November 30th, in London, aged 52, the Rev. H. Hall Davis, eldest son of the late David D. Davis, M.D.
England. On November 30th, at Ipswich, aged 44, Margaret E., wife of William England, M.D.
*Fletcher, John William, Esq., late Bengal Army, aged 41, on December 2nd.
Peskett, H., M.D., at Yarmouth, Isle of Wight, on Dec. 2.
Roots, William, M.D., at Kingston-on-Thames, aged 83, on December 2nd.
Such, Edward J., Esq., Surgeon, 19, Euston Road, aged 43, on November 29th.
Trench, John P., Esq., Staff-Surgeon, aged 40, on Dec. 1.

APPOINTMENTS.

*Warden, Charles, M.D., elected Surgeon to the Birmingham Ear Infirmary, in place of W. Dufton, Esq., deceased.

PASS LISTS.

Royal College of Physicians of London. Fellows elected at the meeting of the Comitia Majora, held on Nov. 21st:—

Maclachlan, Daniel, Royal Hospital, Chelsea
Shapter, Thomas, Exeter
Smith, W. Tyler, Upper Grosvenor Street, London

University of London. M.B. Examination for Honours.

Physiology and Comparative Anatomy.

Crowfoot, W. M. (Scholarship and Gold Medal), St. Bartholomew's Hospital
Gasquet, Joseph R. (Gold Medal), University College
Thompson, Edmund Symes, King's College
Moxon, Walter, Guy's Hospital
Robbs, William Edward, King's College

Surgery.

Crowfoot, W. M. (Scholarship and Gold Medal), St. Bartholomew's Hospital
Hill, Matthew B. (Gold Medal), University Colllege
Thompson, Edmund Symes, King's College
Moxon, Walter, Guy's Hospital
Marriott, Charles Hayes, University College
Jones, Philip Sydney, University College } Equal.
Liddon, William, King's College }

Medicine.

Thompson, E. S. (Scholarship and Gold Medal), King's College
Robbs, William E. (Gold Medal), King's College
Gasquet, J. Raymond, University College } Equal.
Marriott, C. Hayes, University College }
Moxon, Walter, Guy's Hospital
Jones, Philip Sydney, University College
Hill, Matthew Berkeley, University College
Crowfoot, William Miller, St. Bartholomew's Hospital

Midwifery.

Crowfoot, Wm. M. (Gold Medal), St. Bartholomew's Hospital
Jones, Philip Sydney, University College
Thompson, Edmund Symes, King's College
Moxon, Walter, Guy's Hospital
Robbs, William Edward, King's College

M.D. Examination, 1859.

First Division.

Carpenter, Alfred, St. Thomas's Hospital
Cousins, John Ward, St. Thomas's Hospital
Down, John Langdon Haydon, London Hospital
Foster, Michael, B.A., University College
Giles, Samuel, B.A., Guy's Hospital
Hardwick, Robert G., Leeds School of Medicine
Lawrence, George William, King's College
Lewis, Thomas, University College
Meeres, Edward Evan, King's College
Newman, William, St. Bartholomew's Hospital
Wilkinson, Richard, King's College

Royal College of Surgeons. Members admitted at a meeting of the Court of Examiners, on December 2nd:—

Anderson, A., Manchester
Blackburn, J., Barnsley
Drury, J. T. C., Doncaster
Edye, Stonard, Exeter
Fox, Allan N., Dublin
Godwin, C. H. Y., Bishopstoke
Heslop, A., Kirkby Stephen
Knight, Thomas, Brill
Lane, W. B., Kinsale
Mitchell, Thos. C., Bedford
Morgan, Cosby W., Australia
Smyth, Brice, Dublin
Thompson, H., Westerham
Winkfield, A., Bedford

Monday, December 5th:—

Addison, Wm. J., Wigton
Attwell, G. H., Kensington
Bennett, Geo. J., Gateshead
Bernard, John C., Trinidad
Bowen, David, Haverfordwest
Cook, John, Kentish Town
Copp, H. B. P., Bedford
Dawson, G., Bishop Auckland
Dickins, Fred. V., Manchester
Franks, John, Sevenoaks
Freeman, William, Maldon
Greenwood, Newton, Truro
Horniblow, Wm. R., Shipston-on-Stour
Horton, H. J., Fulham
Hunt, Thos. junr., Alfred Place
Kitchener, T., Trinity Square
Mawley, Aug., Gower Street
Mayou, George, Monmouth
Sheldon, Thos., Stratford-on-Avon
Simmons, Benj., Hatfield, Yorks
Smith, William, Aberdeen
Terry, Joseph G., Wittersham
Wilson, Jacob A., Sydney
Williams, Robert, Liverpool
Woodhead, Wm. C., York

At the same meeting of the Court—

Ryan, Edward Tenison, H.M. ship *Pembroke*
Eustace, Richard, Haslar Hospital

Passed their examinations for Naval Surgeons. These gentlemen had previously been admitted members of the College: their diplomas bearing date respectively August 9th, 1852, and Oct. 28th, 1853.

Tuesday, December 6th:—

Board, Edmund C., Bristol
Booth, Samuel, Huddersfield
Broster, John, Chester
Foster, T. S., Carnarvon
Horsley, Henry, Croydon
Hutchean, H. S., Aberdeen
Irvine, George R. Portsmouth
Kearney, Daniel, Madras
Lee, Leonard J., London
Lloyd, Albert, Bristol
Michell, Thomas, Redmouth
Miller, Thomas, Boyton
Mewniece, James, Belfast
Murray, William, Durham
Moore, Thomas, Hales Owen
Neesam, Joseph, Bradford
Pell, Walton N., Northampton
Pout, Frank, Yalding
Rickard, Henry, Plymouth
Thomas, John R., Dublin
Trotter, Charles J., Holmfirth
Wallis, R. S., Birmingham
Wither, Fras. O. B. Madras

HEALTH OF LONDON—DECEMBER 3rd, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... Boys .. 915 / Girls .. 912	1827 ..	1304
Average of corresponding weeks 1849-58 ..	1609 ..	1356

Among the causes of death were—bronchitis, 167; small-pox, 39; scarlatina, 87; diphtheria, 13.

Barometer:
Highest (Sat.) 30·014; lowest (Wed.) 29·410'; mean 29·741 in.

Thermometer:
In sun—highest (Sat.) 49·8°; lowest (Sat.) 36·0°.
In shade—highest (Sun.) 48·0°; lowest (Sat.) 29·0°.
Mean—37·3°; difference from mean of 43 yrs.—4.3°.
Range—during week, 19·0°; mean daily, 8·1°.

Mean humidity of air (*saturation*=100), 89.
Mean direction of wind, variable.—Rain in inches, 1·18.

PUBLIC VACCINATION.

The following order was issued by the Privy Council on December 1st.

To the Guardians of the Poor of all Unions and Parishes, to the Churchwardens and Overseers of all Parishes, Townships, and places in which the Relief to the Poor is not administered by Guardians, in England and Wales, and to all Medical Practitioners.

Whereas by the Public Health Act, 1858, and by an Act since passed to perpetuate the same, it is enacted that the Privy Council may from time to time issue such regulations as they think fit, for securing the due qualification of persons to be thereafter contracted with by guardians and overseers of unions and parishes in England for the vaccination of persons resident in such unions and parishes, and for securing the efficient performance of vaccination by the persons already or thereafter to be contracted with as aforesaid;—

Now, therefore, it is hereby ordered, by the Lords and others of Her Majesty's Most Honourable Privy Council (of whom the Vice-President of the Committee of the said Privy Council on Education is one) that on and after the first day of January, 1860, the following Regulations shall be in force; viz.:—

1. Except where the Privy Council, for reasons brought to their notice, see fit in particular cases otherwise to allow, no person shall in future be admitted as a contractor for vaccination, unless he possess the same qualifications as are required by the orders of the Poor-law Commissioners as qualifications for a district medical officer, and produce a special certificate, given, under such conditions as the Privy Council from time to time fix, by some public vaccinator whom the Privy Council authorise to act for the purpose, and by whom he has been duly instructed or examined in the practice of vaccination, and all that relates thereto:—but the production of this special certificate on occasion of the contract being made may be dispensed with, if the certificate, or some other which the Privy Council judge to be of like effect, have been among the certificates or testimonials necessary for obtaining any diploma, licence or degree, which the candidate possesses;—and also, in respect of persons legally admitted to practise before this regulation comes into effect, the special certificate may be dispensed with, on condition that the contract, during one year from its making, continue subject to the approval of the Poor-law Board;—and all persons now contracted with shall be deemed to be qualified to be again contracted with.

2. Under the same conditions as are appointed for the admission of a contractor, any person qualified to be a contractor may, on the contractor's application, be admitted by the guardians or overseers to act as his occasional deputy;—but, if this admission be not part of the original contract, it must be notified by indorsement upon the contract; and at least fifteen days before it is intended to take effect, a copy of the proposed indorsement, together with all requisite evidence of the qualification of the person whom it is proposed to admit, must be transmitted to the Poor Law Board.

3. All vaccinations and inspections under contract shall be performed by the contractor in person, or by some other contractor of the same union or parish acting for him, or by a deputy, duly admitted as above;—but at any station where the contractor is authorised (as above) to grant certificates, pupils and other candidates, aged not less than eighteen years, may, in his presence and under his direction, take part in vaccinating. All vaccinations and inspections under contract shall be performed in accordance with the annexed "Instructions for Vaccinators under contract."

4. Until some new form of vaccination-register be duly prescribed, the person who performs any vaccination under contract shall, on the day when he performs it, legibly write in his register (as now provided) the letter R (for revaccination) against the name of every person, adult or adolescent, who, having in early life been successfully vaccinated, is revaccinated: and shall also enter in some column, or in the margin of the register, the source whence the lymph used in the vaccination was obtained;—thus: the name, or number, (if any) in the register, of the subject from whom the lymph was taken; or "N.V.E.", if the lymph was sent by the National Vaccine Establishment; or the name or description of any other source;—and where the vaccination or the inspection is done by a person acting as deputy for the contractor the deputy shall write the initials of his name in the register side by side with the entry of the case, viz., in the left margin of the

page, if it be the vaccination which he performs, or in the right margin of the page, if it be an inspection which he performs.

5. Guardians and overseers, in their respective unions and parishes, shall forthwith take measures to bring the performance of public vaccination into conformity with these regulations.

BRISTOL AND BATH MEDICAL REGISTRATION ASSOCIATION.

A General Meeting of the members of this Association was held on Thursday, Dec. 1st, in the Lecture Hall of the Bristol Institution, Park Street; Dr. Symonds, of Bristol, President of the Association, was in the Chair; and, in opening the business of the meeting, said that the objects of the Association, as he apprehended then, were to protect both the public and the profession: or rather, perhaps, it might be said, to maintain a due relation between the public, the profession, and the law: to see that the law protects, as it is intended to do, both the public and the profession. It would seem that, unless there be a cooperation with the legislature by such bodies at these, there is a strong probability that the law, like so many others still on our statute-books, will become inefficient, and at last obsolete. He would trust that by the efforts of bodies like this, the public will in time become informed about the sort of persons to whom they confide their health. If, after this system of legislature has been carried out, the public still selects persons for the charge of their health who have on their foreheads the brand of incompetency and ignorant pretensions, such as will be signified by the term "unregistered," the responsibility will rest with them, and they must stand the consequences. He had no doubt that many useful suggestions would be thrown out by the members of the Association; and he trusted they would agree in carrying out its objects in a liberal spirit; that while they maintained an aspect of stern justice towards the profession, they should not incur the reproach of carrying out the law in anything like a persecuting spirit. They had a right to appear before the public and say—"The legislature has made certain requirements of us: we have endeavoured to comply with them, at the cost of much toil, much anxiety, and much pecuniary outlay; and we therefore expect that in reciprocation of our duty, you will draw a distinction between those who have complied with the wishes of the legislature and those who have not."

Mr. R. S. Fowler then read the minutes of the last meeting. The names of about fifty gentlemen who had signified their wish to become Members of the Association were submitted to the meeting, and the whole were unanimously elected by ballot.

Drs. Tunstall, Henderson, and Parsons, and Mr. J. J. Evans, were appointed scrutineers of the voting lists of officers of the Association.

The following were adopted as the rules of the Association:—

1. This Society shall be called the "Bristol and Bath Medical Registration Association."

2. The objects of this Association shall be to watch the workings of the Medical Act, to suppress illegal practice, and to assist the Registrar under the Medical Act to secure a correct Registration, and such other matters as may be deemed advisable by the Council.

3. All practitioners who are to be registered under the Medical Act, shall be eligible to become Members of this Association. Admission shall be by ballot in any meeting of the general Council, and the affirmation of two-thirds of the members voting shall be necessary to secure the election: but any candidate rejected by the Council may have the right of appeal to the next General Meeting of the Association.

4. Each member shall pay five shillings annually, in advance, on the first day of January.

5. The same division of districts shall hold in the Registration Association as now exists in the Bath and Bristol branch of the British Medical Association.

6. The affairs of the Association shall be conducted by a President, two Vice-Presidents, two Treasurers, two Secretaries, and a Committee or Council of twenty members. The President shall be elected annually, alternately from the Bath and Bristol districts. The Vice-Presidents and officers shall be elected annually, by ballot, one from each district. The President, Vice-Presidents, Treasurers and Secretaries shall be *ex officio* members of Council: five to form a quorum. The members of Council to be chosen by ballot, ten from each district, five of whom are to retire annually, eligible to re-election. The first retiring five in each district to be chosen by lot.

7. There shall be an annual meeting of the Association, and at least one quarterly meeting of the Council; the latter of which shall correspond, both as to day and place, with the meeting of the Bath and Bristol branch of the British Medical Association.

8. A special general meeting of the Association may be convened by a written requisition, signed by ten members, and presented to the President, or to one of the Secretaries, who shall summon such meeting within fourteen days from the receipt of the requisition.

9. The officers and council elected by each district separately, shall be called the local Council, and shall meet for the transaction of the business of that district as often as may be necessary in the intervals of the quarterly meetings of the general Council, forty-eight hours notice being given to each member. Three members to form a quorum.

10. Any four members of the Council shall have the power of convening a special meeting of that body, by presenting a written requisition of their wish to the President, or one of the Secretaries, who shall summon such meeting; to be held eight days after the receipt of such notice.

11. No prosecution involving expense to this Association shall be undertaken without the sanction of the general council.

12. The rules and bye-laws of this Association shall be entered in a book to be kept for that purpose; and the signatures of members, in that book, shall be deemed to imply consent thereto.

13. At special or adjourned meetings, no subjects shall be discussed but those for which such meetings shall have been convened.

14. All prosecutions shall be undertaken in the name of the Secretary of the district.

15. No new rule and that no alteration of rule be made except at an annual meeting of the Association; notice of such alteration of rule having been given in the summons convening the meeting at least one fortnight before such meeting.

The Secretaries then reported that the following members had been elected officers of the Society:—

Bristol District. *Vice-President:* H. Clark, Esq. *Treasurer:* J. J. Evans, Esq. *Secretary:* J. P. McDonald, L.R.C.P.E. *Council:* F. Brittan, M.D.; W. Budd, M.D.; Jas. Godfrey, Esq.; T. Green, Esq.; W. B. Herapath, M.D.; H. A. Hore, Esq.; C. Leonard, Esq.; W. F. Morgan, Esq.; A. Prichard, Esq.: J. G. Swayne, M.D.

Bath District. *Vice-President:* G. Norman, Esq. *Treasurer:* J. S. Bartrum, Esq. *Secretary:* R. S. Fowler, Esq. *Council:* E. L. Bagshawe, Esq.; W. J. Church, Esq.; W. Davies, M.D.; Farnham Flower, Esq. (Chilcompton); E. Hodges, M.D.; F. Mason, L.R.C.P.E.; J. Soden, Esq.; R. N. Stone, L.R.C.P.E.; J. Tunstall, M.D.; G. Vicary, Esq. (Warminster).

Dr. J. P. McDonald read the report of the Bristol Registration Association, which, on the motion of Dr. Tunstall, was ordered to be entered on the minutes of the meeting.

The proceedings terminated with a vote of thanks to the Sub-Committee and Secretaries of the Bath and Bristol branch of the British Medical Association, for the labour which the construction of the Association had entailed upon them; to Dr. Symonds for his kindness in presiding; and to the Committee of the Institution, for the use of the Lecture Hall, for the uses of the meeting.

PORTSMOUTH, PORTSEA, AND GOSPORT MEDICAL REGISTRATION ASSOCIATION.

At a large meeting of the medical profession of Portsmouth and its neighbourhood, held November 17th, it was determined to form a society called "The Portsmouth, Portsea, and Gosport Medical Registration Association." The following officers were elected for the ensuing year:—*President*—The Worshipful the Mayor of Portsmouth, W. H. Garrington, Esq. *Vice-Presidents*—Richard White, Esq., and Samuel Irvine, M.D. *Hon. Treasurer*—George I. Scale, Esq. *Hon. Secretary*—James Greetham, Esq.

The meeting then adjourned until December 1st, when rules and bye-laws were adopted similar to those of the London Association, with which this society intends affiliating itself. Above fifty members have already joined the society.

Improvement in the Voltaic Pile. It is well known that Bunsen's pile, which is but a modification of Grove's, consists of a glazed vessel, containing a cylindrical element of zinc, which surrounds a porous vessel filled with strong nitric acid, into which a charcoal cylinder has been introduced, the liquid in the outermost vessel consisting of water acidulated with about ten parts of sulphuric acid. Now, although this is a most powerful combination, and in general use, it has two great inconveniences: first, the quantity of nitrous vapour it evolves is highly unpleasant, and may become dangerous; and, secondly, the current produced is not of constant intensity. M. Thomas has just communicated to the Academy of Sciences a modification which he has effected in this kind of pile, and which would seem to be quite free from the inconvenience alluded to. M. Thomas, in fact, shows that the development of nitrous vapour is one of the chief causes which interfere with the constancy of the current, inasmuch as they attack the copper ribands forming the electrodes, and effect certain chemical combinations, which give rise to counter-currents, and thus impair the principal one. He therefore causes these gases, as they are evolved, to pass into a porous vessel, where they are decomposed. In this process, a secondary current is produced, which, by the peculiar construction of the apparatus, is turned to account, and tends to correct the inequalities of the principal current. This arrangement also prevents the pile from becoming dirty, as is the case with Bunsen's pile.

Action for Breach of Contract. In the Vice-Chancellor's Court, on Dec. 2nd, an action was tried before Vice-Chancellor Sir J. Stuart, in which the plaintiff, Mr. Giles, surgeon, of Great Coggeshall, in Essex, sought an injunction to restrain Mr. Hart, the defendant, from practising as a surgeon and apothecary, or surgeon, or from acting as a physician, in the said town, or within five miles thereof, during the plaintiff's life. In April 1854, the plaintiff, then and now a general practitioner at Great Coggeshall, engaged the defendant as his assistant, at a salary of £80 per annum; and, by an indenture which was then entered into, the defendant covenanted that he would during such time as the plaintiff should carry on his business, or until the indenture should be determined by notice, act as the plaintiff's assistant; and that he (the defendant) would not, "whether such indenture should be in other respects determined or not", act as the assistant of any other medical practitioner, or either by himself or in partnership practise medicine or surgery in Great Coggeshall, or within five miles. The deed contained a power for the plaintiff or defendant to determine the indenture by giving one calendar month's notice in writing. The defendant had acted as the plaintiff's assistant up to the 11th of November, when he left, a month's notice having been given; since which time he had, as alleged by the plaintiff, set up on his own account in Great Coggeshall. The Vice-Chancellor granted an injunction until further order.

The Prosecutron of the Bennett Gang. At the Lambeth Police Court on Saturday, Mr. Samuel Smith, surgeon, of Langham Place West, waited on the Honourable Mr. Norton regarding the case of Mr. Jones, who had been the prosecutor against the notorious quack impostors, Watters, Edwards, and Allen, a portion of the Bennett gang, and who had been put to an expense of upwards of £60, an amount which placed him in the most straitened circumstances. Mr. Smith handed a list of subscriptions, amounting altogether to £22 5s., which was headed with a subscription of £5 5s., from the London Medical Registration Association, and the second item was one of £5 5s. from Mr. Smith himself. Mr. Norton, on looking over the list, expressed much regret that the sum received by the poor man was so small, not more than a third of the amount which he was actually out of pocket. The Medical Registration Association, he understood, had at its disposal a very large sum of money; and, as Mr. Smith had already taken so kind an interest in the poor man's case, he (Mr. Norton) thought it would be desirable that he should wait on the Medical Association, and say it was his (Mr. Norton's) opinion that the case was one in which they should extend their liberality, and not leave Jones a loser.

Edinburgh University. The number of students at the university is considerably larger than it was last year. On the 23rd November, 1356 students had been enrolled; last year the total number who matriculated was 1296. The increase is chiefly in the literary faculty; but the number of medical students (486) shows an increase of 10.

TO CORRESPONDENTS.

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Anonymous Correspondents should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's Journal should not arrive later than Wednesday.

An Associate. Yes.

Communications have been received from:—Aliquis; Mr. Robt. Jones; Mr. Rd. Faircloth; Dr. F. J. Brown; An Associate; Dr. Sedgwick; Dr. Walker; Mr. C. B. Garratt; Dr. W. O. Markham; Dr. Seaton; Mr. R. S. Fowler; Mr. F. J. Sandford; The Secretary of the Harveian Society; Dr. William Camps; Mr. H. Granger Earnshaw; Mr. Frederick Fry; Dr. John Armstrong; Dr. Jas. Russell; Mr. Crosby Leonard; Mr. Haynes Walton; The Secretary of the Portsmouth, Portsea, and Gosport Medical Registration Association; Mr. T. Holmes; Mr. Oliver Pemberton; Dr. C. H. Jones; and Mr. W. M. Clarke.

BOOKS RECEIVED.

[* *An Asterisk is prefixed to the names of Members of the Association.*]

1. Descriptive Catalogue of the Preparations in the Museum of St. Thomas's Hospital. Printed by Order of the Governors. Volumes II and III. Pathological Anatomy. Compiled and Edited by Sydney Jones, F.R.C.S., M.B. London: H. Renshaw. 1859.

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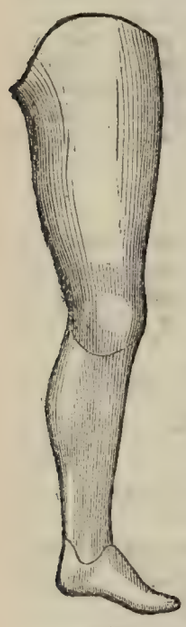
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EDITED BY ANDREW WYNTER, M.D.

No. CLV.] LONDON: SATURDAY, DECEMBER 17, 1859. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

CASES OF EPILEPSY; WITH REMARKS.

By J. RUSSELL, M.D.

[*Clinical Clerks*—Messrs. WALLS and MAY.]

[*Concluded from page* 995.]

THE consequences which this disease so surely entails are manifested, in some degree, in most of these patients, though not to a great extent in more than one or two. They concern mainly the *mental functions*.

It occasionally happens that a single fit of unusual intensity will at once induce results which are ordinarily the work of a long succession. In Case III, the third fit, which was of extreme severity, as mentioned above, left the patient entirely deprived of the power of remembering a single recent event, although what had happened long ago was perfectly fresh in his recollection; seven months afterwards, he could not say whether he had eaten his dinner on that day; and the fire, the cause of his attacks, was perfectly obliterated from his recollection. In a young girl, whom I attended, in a first epileptic fit of great severity, it was found, on her recovery, that she had perfectly lost the power of reading and writing, and she went again through the entire process ordinarily necessary to acquire these arts. In neither of these cases has the fit returned.

Most of the patients mentioned above complain principally that the power of recalling recent events is much impaired; in one (II), weakened state of his memory prevents his giving a full report of his history; he is slow in replying, and is apt to sit and cry. In some of the patients, there is more or less dulness, and want of mental energy.

The members of the unfortunate family exhibit different degrees of failure in the functions of their brain. Sarah (IX) hesitates in replying to questions, but recollects clearly; her temper has become very violent. William (VIII) is losing his power of recollecting, is very timid and nervous, and cannot calculate or think intently without falling into a fit. Thomas (VII) has advanced much further; his memory is too much impaired to allow of his giving any connected history of himself; he is exceedingly violent if provoked; he sits in the ward not noticing anything; his face without expression, his head depressed, his back bowed, and his whole muscular system effortless; he thus spends most of the day, never opening a conversation, and hardly sufficiently alert to go for his meals. His pupils are large and sluggish.

CASE XVI. In striking contrast with the case first narrated, is that of a girl, aged 19, who has been subject to epileptic fits ever since she suffered from fits of convulsions during her first dentition, sometimes at the rate of five or six in the day; yet her expression is intelligent, her faculties active, although she is described by her mother as being dull; her memory, however, is impaired; she quite forgets what she has been told on the preceding day; she is also very passionate. Her menstrual functions are irregular, but her nutrition is good.

REMARKS. The history of a case of epilepsy too often fails in presenting any intelligible cause for the disease; or, if a cause be assigned, it too frequently happens that it is of such a nature as to preclude the possibility of neutralising its operation. Such is the case with those patients who have been exposed to the operation of some intense emotion, especially of fright; the interval between the cause and the effect is generally too short, and the impression made is too deep, to leave much hope of preventing its injurious consequences.

But there is one class of cases, probably not a small one, to which this remark does not apply: cases in which the epileptic fit results from the prolonged operation of depressing influences upon the mind. Cases of this class are given above, and their history leaves little doubt, that if we are unable to break the connection which binds the attacks to each other, when once such connection has been established, we have yet the means of averting the evil. Among hospital patients, it too often happens that the cause is inextricably interwoven with the daily life of the sufferer; yet even here much may be done by judicious management, and especially by the employment of opium, for the purpose of securing at least the refreshment of a short season of rest and of insensibility to trouble. The disturbed and interrupted condition of their sleep is a prominent symptom in the patients whose cases have been detailed: watchful nights, frightful dreams, crying out in sleep, or starting up in alarm, and not infrequently the presence of spectral illusions, at once afford powerful testimony to the disturbed state of the cerebral functions, and aggravate the evil by depriving the nervous system of the rest and refreshment of which it is doubly in need. The description given by the sufferer leaves no room for surprise, that a condition of so much mental disturbance should finally issue in permanent disease. The beneficial influence exerted by opium in many such instances, both upon the mental functions and upon bodily nutrition, are often very evident and striking: it may fail to quiet at first, but perseverance will often be attended with success.

A further indication for treatment is afforded by the intimate connection which has been proved to subsist between epilepsy and a state of impaired nutrition of the nervous centres. The causes, to which allusion has just been made, have a direct tendency, by their depressing operation, to lower the nutrition of the brain; the occasional production of epileptic fits by injuries to the brain, and their occurrence during the process of recovery from concussion, lead to the same conclusion; which is further strengthened by the effects of hæmorrhage, and by the experiments of Sir Astley Cooper, who produced a condition closely resembling epilepsy, in rabbits, by compressing the vertebral arteries, after having tied the carotids. (*Guy's Hospital Reports*, I.)

The special liability of young children to convulsive disease, having all the characters of epilepsy, is a striking illustration of the accuracy of the views now alluded to. From the Report by the Registrar General of the mortality for ten years, it appears that 95 per cent. of the deaths from "convulsions" occur under five years of age, and 83 per cent. under one year. Now, when we remember how sensitive the nervous system in the child is to any variation in the conditions of its nutrition, and how numerous are the influences in operation which tend to depress the nutrition of young children, we can easily assign a very satisfactory cause for the frequency with which convulsions occur. In the second report of the Manchester Hospital for Children, it is stated that of infants not fed upon breast-milk, only 10 per cent. were fully developed. On the other hand, in the Foundling and in the Wanstead Asylums, convulsions are of rare occurrence.

We notice the same relation between impoverished nutrition of the brain and epilepsy in adults; in diseases which are associated with a poisoned state of the blood. In renal disease, and in lead-poisoning, epileptiform convulsions do not usually occur until the advanced stages of the disease, when the nutrition of the whole body has suffered to a very considerable extent; and, after death, a notable increase in the quantity of cerebro-spinal fluid is often noticed, indicating corresponding atrophy of the brain.

A careful inquiry into the previous history of many epileptic patients will afford indications of *natural* infirmity of nervous power. The various members of the family whose cases have been detailed above exhibit such infirmity in a very striking manner; and when we add to this element the constant state of apprehension in which they are living, it is difficult to con-

ceive any circumstances which could tend more directly to develope the disease.

The phenomena of the later periods of epilepsy bear similar testimony. Gradual loss of mental energy, and impairment of the intellectual faculties, and especially of the memory, are the leading changes.

In the absence, then, of any special indications, a tonic and supporting treatment seems called for in established epilepsy, if not to cure the disease, at least in the hope of deferring its most distressing consequences. In one case which I watched with much interest, the phosphate of iron, with cod-liver oil, was followed by very remarkable amendment. It occurred in a young lady whose sister had died of epilepsy, with which she had been affected, in a modified form, from childhood. This patient had been subject to epileptic fits for six years, occurring about every two months, generally three or four in a day. She had been very nervous for some time, often sitting fidgetting, and muttering to herself, or counting with great rapidity; but as her disease had advanced, her memory had become enfeebled. She disliked all company, even that of near friends. She would become pallid and faint, if asked to play, even to an intimate acquaintance; and the presence of others than her own family inevitably deprived her of sleep at night, and disturbed her by causing irregular muscular action. She could not bear the operation of even a slight purgative. She often felt faint, and her vision became dim. The action of her heart was very feeble. After taking the medicine for three months with phosphate of soda at her meals, her nervous symptoms experienced a most marked improvement. She became active and alert, and took an interest in what was passing around. Threatenings of fits have been averted by rousing her. The intervals between the fits have very much lengthened; but, as the interval which preceded the commencement of the remedy was longer than usual, I am afraid of attributing this circumstance to the medicine.

It is worthy of remark, that this young lady exactly resembled her mother, whilst her sister as closely resembled her father. In the family mentioned above, all the patients resembled the mother, with a single exception.

It may be added that, of the seventeen patients whose cases have been narrated, in fourteen the first attack happened before the fourteenth year of their age; in three, the disease had been present from early childhood; and to these three may be added a fourth case, not included in this report.

ST. GEORGE'S HOSPITAL.

I. ACUTE RHEUMATISM.

Under the care of H. Bence Jones, M.D.

The following case, which occurred in St. George's Hospital, under the care of Dr. Bence Jones, is interesting, not only as affording a fatal example of acute rheumatism, but also on account of the rather deceptive character of the cardiac symptoms.

A robust man, aged 28, was admitted on November 7th, with the symptoms of rheumatic fever. He had been of drunken habits; he was a painter, and had been employed by one of the large brewing houses in painting the sign-boards of the public houses about London. It appeared that, seven days before admission, he had suffered severely from exposure to cold while at work. This was shortly followed by shivering, and then by the pain and swelling of acute rheumatism. He was brought to the Hospital on the evening of the 7th. When he was seen by the physician, on the following day, he had general heat, swelling, and redness of the large joints, especially of the knees and wrists. There was profuse sweating, with a strong rancid smell; and the front of the chest was sprinkled with sudamina. The urine was scanty, and high coloured. Besides these characteristic symptoms, his manner was tremulous and hurried; and it appeared on inquiry that he had not slept for some nights. The pulse was full, throbbing, and strong, 116; the tongue coated, dry, inclined to crack, and rather harsh to the finger. He was ordered to take an ammoniated saline draught, with ten grains of nitrate of potass, every four hours, and to have half a grain of morphia at night.

Nov. 9th. This day he was more tremulous. He had been delirious at night; and now he passed his evacuations into the bed. He now began to complain of præcordial pain. At noon the sounds of the heart were carefully listened to, and found perfectly natural; two hours afterwards a systolic murmur was heard at the apex. The only alteration made in the treatment was the addition of ten drops of laudanum to the draught.

Nov. 11th. The delirium and restlessness were greater. He was generally quiet during the day, but violent and noisy at night. He lay on his back, in the prostrate attitude of a fever patient. The skin was now hot and dry; the tongue brown; the pulse rapid and feeble. A very harsh murmur was now heard over the base of the heart, which some observers confidently regarded as exocardial. A careful examination, however, proved that it exactly accompanied the first sound; it was, moreover, perfectly single and unbroken, and was heard in the carotid arteries as well as over the upper regions of the heart; it was not now audible at the apex. These facts led to the conviction that the sound proceeded from the interior of the heart. It was by this time necessary not only to double the quantity of laudanum in each draught, but to give wine liberally.

Nov. 12th. He was much in the same state, sleepless, and at times raving. The hands were very tremulous; as also were the lips and cheeks. The pulse was very full, and without power, 132. The wine and the opiate were still further increased, but without avail. He remained delirious until a little after midnight, when he died.

The examination of the body was awaited with more than ordinary interest. The pericardium was found to be perfectly healthy; there was no trace of effused lymph, or even of increased vascularity. The substance of the heart was rather flaccid, and its cavities were blood-stained. All the valves appeared quite natural. There were no coagula in the heart or elsewhere.

Remarks. This case affords many points worthy of observation. A fatal case of uncomplicated acute rheumatism is almost unknown. This can scarcely be regarded as an instance; for the drunken habits of the patient, and the character of his delirium, were sufficient indications of a tendency to delirium tremens. The murmur which was heard towards the close of the disease, was in some respects peculiar. It was so rough and so loud that by tone alone it could not have been distinguished from a friction-sound. Many listeners, who relied too much upon this character, were misled. The mere tone of a cardiac murmur appears to be of little value as a help in doubtful cases. True pericardial friction is often so soft and so distant as to resemble a valvular murmur; while, as in this case, the harshest sounds may be generated within the heart. The determination of the time of the abnormal sound was here of great assistance. The exact coincidence of the murmur with the systole was held as proving, almost beyond doubt, that it was endocardial. This is a test, probably, almost without fail. An exocardial murmur is never exactly synchronous with either sound of the heart; it rather occupies the interval: an endocardial sound invariably accompanies either the systole or diastole. The fact that the sound was here heard in the carotid arteries furnished, of course, additional evidence, though not of a very trustworthy kind. It is so easy to produce a murmur in the carotid by a little pressure with the stethoscope, that it is very difficult to be assured that any murmur there is not artificial.

In this case, the sound no doubt was owing to the state of the blood. The precise mechanism of its production cannot be explained by our present knowledge. Similar murmurs are occasionally heard in severe cases of typhus fever. They are not owing to coagula within the heart, for in this case the blood was universally fluid.

II. STRICTURE OF THE URETHRA: PERINÆAL SECTION.

Under the care of E. Cutler, Esq.

We witnessed an operation here a few days ago, which strikingly illustrated the difficulties sometimes met with in obstinate cases of stricture. The patient was a young man who had been a sailor, and had suffered often from ague and from syphilis. The stricture was peculiarly obstinate, as it was hardly possible to get anything through it, and any attempt was always followed by severe, and often alarming, rigors. At one time (before his admission) a No. 3 catheter was passed; but this could not be repeated. Foiled in all his attempts to pass the stricture, and fearing that the man would sink from the irritation, Mr. Cutler was driven, as a last resort, to the old operation for perinæal section (without a staff). This difficult operation was speedily and satisfactorily managed; but the patient unfortunately sank under subperitoneal inflammation, followed by pyæmia.

Original Communications.

EVOLUTION OF THE FŒTUS *IN UTERO*.

By F. W. Mackenzie, M.D., M.R.C.P., Physician Accoucheur to the Paddington Maternity, etc.

[*Read before the Medical Society of London, December 12th*, 1859.]

The particulars of the following case are submitted to the society for the purpose of showing that *spontaneous evolution* of the fœtus, as described by Denman, does occasionally occur, and consequently that the doctrine of *spontaneous expulsion*, as maintained by Douglas and generally accepted by the profession, must be received with some degree of qualification.

Case. A lady, about five months advanced in her third pregnancy, was taken ill on the evening of the 11th of November with symptoms of uterine uneasiness, but not such as to lead her to suspect that any danger of a miscarriage was imminent. On visiting her I found that she had experienced little or no pain, and had sustained little or no hæmorrhage; but on a vaginal examination I found the membranes engaged in the os uteri, which was dilated to about the size of a shilling, and protruding into the vagina. Within half an hour the bag of membranes presented externally, and shortly afterwards broke. The liquor amnii, however, alone escaped, and nothing could be felt within the vagina, the fœtus being as yet wholly *in utero*. After giving a few doses of ergot with cinnamon and bark, and waiting a short time, a spongy mass presented at the os uteri, which, after a few pains, was expelled, and found to be the placenta. No hæmorrhage followed upon its expulsion, and shortly afterwards, one of the superior extremities descended into the vagina, which, upon slight traction, broke away at the shoulder-joint. Convinced that manual assistance could be of little avail in the present state of the case, I left the patient for about two hours, and on then making an examination, found what proved to be the breech engaged in the os uteri. I followed it digitally downwards, and in due course the lower extremities descended; the case having assumed all the characters of an original breech-presentation. With a little manipulation the head was brought through the os uteri, and the entire birth completed without any difficulty. The patient made a good recovery, and throughout had scarcely any hæmorrhage.

Remarks. A brief reference to the views of Denman and Douglas respectively on the subject of "spontaneous evolution", will best indicate the relations of the present case to the main question at issue between them. By Denman it was maintained that "spontaneous evolution" consisted in a complete change in the position or evolution of the child *in utero*, whereby some other part was substituted for that originally presenting; as for instance, the breech for the arm and shoulder. By Douglas, on the other hand, it was contended, that no such evolution or change in the position of the child could or did take place, and consequently that there could be no such substitution of one part of the child for another. He maintained that, in all the presumed cases of "evolution", in which the arm and shoulder originally presented and had descended into the pelvis, they remained unchanged in that position, whilst the body of the child was simultaneously doubled upon itself, and so forced by them through the pelvis. Now, there can be no doubt that this view is correct in regard to the greater number of instances which come under the designation of spontaneous evolution; but there are yet cases alleged to have occurred in which the evolution of the child, as described by Denman, has veritably taken place, and although perhaps rarely met with, are not on that account to be ignored. Dr. Murphy has met with such, and the present is one strictly to the point. Evolution of the fœtus, in the most rigid acceptation of the word, occurred; the breech was substituted for the arm, and from being originally an arm, it became eventually a breech-presentation. Undoubtedly, the early period of pregnancy modifies very much the importance of the case in relation to the question at issue; but it has, nevertheless, appeared to me worthy of record, as showing how, under certain circumstances, spontaneous evolution may take place as described by Denman, and that his views, therefore, upon the subject, are not so wholly unsound as has been generally supposed. It is at least important, as showing that an argument which has been alleged against them is fallacious; viz., that it is inconsistent with the nature of uterine contraction that such substitution of the presentation of one part of the child for another should take place.

ON THE TREATMENT OF CONTRACTION OF THE KNEE FOLLOWING STRUMOUS AND RHEUMATIC DISEASES.

By Holmes Coote, Esq., F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital, and to the Royal Orthopædic Hospital.

Some cases of disease of the knee-joint, illustrating the different methods of treatment necessary to extend a contracted limb, after the subsidence of all the acuter symptoms, have been lately under my care in St. Bartholomew's Hospital. Before mentioning the particulars, I would remark that, if cases the result of accident, or those proceeding from malignant disease, be omitted, the greater number of the remainder may be referred to one of those two conditions of constitution termed respectively "rheumatic" and "scrofulous".

In speaking, on a former occasion, of the rapid destruction of a joint by acute rheumatic inflammation, I was greatly surprised at finding the very existence of such a disease questioned by respectable authority. It may be useful, therefore, to repeat that such cases are unfortunately of too frequent occurrence. I can recall at the present moment the particulars of two, in which rapid disorganisation of the hip-joint occurred in sailors, both strong and active men; and, in the Museum of St. Bartholomew's Hospital, there is a preparation showing the usual morbid changes, of which case the following account is given. The patient was a sailor, forty years old. He awoke one night with intense pain in the hip, which lasted some hours, and then in a less degree continued till, in a fall, he bruised his hip. After this, the pain again became exceedingly severe; and this continued without remission till he died. Upon examination, it was found that the cartilage had been completely separated from the head of the femur, and from the acetabulum; and some shreds and ulcerated remnants of it were loose in the cavity of the joint. The ligamentum teres was destroyed. The exposed bones were superficially but smoothly ulcerated; the cavity of the acetabulum was enlarged by the ulceration of its walls. The capsule was thickened; the synovial surface swollen, soft, and thinly coated with lymph. (Ser. II, Prep. 14.)

The contrast between a joint disorganised by rheumatic inflammation and that by scrofulous inflammation is well marked. In the former, the bones are of their normal weight and firmness, although the surface may be deeply ulcerated; in the latter, the bones are light, and give every indication of want of power. Hence it is that osseous anchylosis may be expected as a termination of rheumatic inflammation, but not of scrofulous disease; the only apparent exception to the above being those instances in which, after many years, a loose and spongy osseous tissue has been thrown out, the patient having *outlived the strumous diathesis*.

Preparations of osseous anchylosis of the knee are uncommon; they occur more frequently in the hip-joint. In the Museum of St. Bartholomew's Hospital there are but five preparations of the former. The first (Ser. II, Prep. 29) shows only bony union of the patella to the outer condyle of the femur. The second (Ser. II, Prep. 55) is in this respect precisely similar. The third (Subseries B, Prep. 22) exhibits more general osseous union. The fourth (Subseries B, Prep. 24) is a case of osseous union of the inner border of the femur to the corresponding surface of the tibia. The fifth (Subseries B, Prep. 26) is general osseous union, the bones being light and spongy. Similar cases are related by Bonnet (*Malad. des Articul.*, t. ii, p. 201); by Löbl (*Zeitschrift der k. k. Gesell. d. Aertze zu Wien*, 1844); by Führer (*Deutsche Klinik*, 1850. Bd. 2, s. 429); by Astley Cooper, and by Sandefort and others. There are also some preparations in the College of Surgeons of England. But this list, so far from showing that similar preparations "hang about in dozens", proves directly the reverse. It is evidence that all such specimens are valuable from their rarity.

It is scarcely possible to attach too much importance to this fact respecting osseous anchylosis of the knee, for it serves us as a guide in most important points of treatment. In incipient cases of strumous disease, we may safely predicate that

the contraction is chiefly due to muscular action; and we should, therefore, repudiate any such proceeding as that of "*the forcible extension of the limb, the patient being under the influence of chloroform*"; well knowing that, after the full action of the anæsthetic, the muscles relax of their own accord, and the limb becomes straight without the necessity of any force.

In some cases, there may be fibrous bands, which had, however, better be stretched than torn; or tendons may be so tight as to need subcutaneous division. The bones of the leg may be drawn backwards into the popliteal space, or the knee may be turned inwards, as in genu valgum; but there is still movement in the joint, except in cases where there has been an extraordinary amount of destructive disease; and it will be found that infinitely more good can be effected by steady, slow mechanical extension, than by any amount of sudden violence, however skilfully employed. But in cases where the joint has been destroyed by an attack of acute rheumatic inflammation, the opposed surfaces of the tibia and femur may become united by bone, the patella adhering to the outer condyle; and here mechanical extension often fails to act upon the limb. The resistance offered at the knee is such that the necessary counter pressure bruises and excoriates the limb; and here we may with advantage forcibly break through the bony adhesions, which are rarely very strong; and then gradually extend by mechanical apparatus, as in the former case.

The question may be asked, Why not extend the limb at once, when the bony adhesions have been broken? The reply is, You wish to extend the limb without pain; without injury to the flexor muscles of the ham; without chance of stretching, tearing, or otherwise injuring the popliteal vessels and nerve. Some months ago, I amputated the limb of a young man, at his urgent request, in whom the knee-joint had long been contracted, and various methods of treatment had been adopted without success. He declined any further trials in this hospital, saying that he could not follow his avocation with a diseased knee. Extension had been tried on several occasions. On examining the limb after its removal, ecchymoses were found extending along the hamstring tendons; the muscular fibres had been torn and bruised; the popliteal vessels were so thickened and changed in structure that violent and sudden extension might have been followed by injury to their walls.

The patient needs the support of the muscles and tendons surrounding a joint; it is they which contribute so much to the strength of the limb. If they are torn and injured, the patient loses the necessary command over the bones.

And here it may not be out of place to state why it is that, in cases of disease of the knee, the leg becomes flexed on the thigh. When the leg is fully extended, the ligaments of the knee, especially the two lateral and the crucial ligaments, become extremely tight, and hold the bones firmly pressed against one another. The lower extremity moves in extension as one piece. Under circumstances of disease, this pressure cannot be borne; hence the muscles flex the leg, and, by so doing, relax the ligaments and set the bones free. This is another reason why forcible extension is unscientific and wrong in cases of progressive disease of the knee-joint. We should always wait until active disease has subsided.

It is not difficult to ascertain the nature of the contraction, whether muscular, fibrous, or osseous. In the first instance, the tendons of the hamstring muscles are at once felt quivering in spasm on the least attempt being made to extend the leg. In the second, the patient complains of pain about the ligamentum patellæ when the leg is drawn forward; the hamstring muscles also contract, though not to the same extent as in the former state. When the union is osseous, the parts are flexed and immoveable; extension seems to exert no influence on the muscles, and the patient complains but slightly of pain. There are, of course, other points which in each case will occupy attention; but these constitute the broad rule.

We may in very many cases promise to the patient, with safety, the advantage of an extended limb, which will be useful in progression; but we must not speak of "restored motion". When the tissues which are proper to a joint—namely, synovial membrane and articular cartilage, with the necessary ligaments—have been destroyed, free motion never can be regained. In order to effect such a phenomenon, we must supply our patient with a new joint. Let any one look around the different museums, and examine the specimens illustrating these diseases, and ask how free motion could have existed under the varied circumstances there presented for examination and reflection. But a moderate amount of movement may be very useful; and a stiff and extended limb is infinitely preferable to any artificial contrivance.

George Clark, aged 13, was sent to the hospital with contraction of the left leg at right angles to the thigh. The boy, whose general aspect was not unhealthy, stated that he had lost his mother when he was an infant, and that his father had always been very poor. At the age of two years, he suffered from strumous disease of the joint. Abscesses formed, leaving marks of fistulous passages, which are still obvious. The bones of the leg were drawn a little backwards and outwards. There was still some motion in the limb, at the knee. No expectation of benefit resulting from treatment was anticipated by those who had had charge of him; and the patient himself expected, and was willing, to submit to amputation.

October 5th. An apparatus for the gradual extension of the leg, worked by a cogwheel, was applied to the limb.

November 17th. The leg is straight, and the patient walks about without difficulty. He is still obliged to wear the apparatus, and there is no motion at the knee; but he is able to occupy himself usefully in various ways.

A young woman, suffering from the effects of similar disease in the right knee, was sent to me by Dr. Kidd. In this, as in other cases of strumous disease, there was still some amount of movement at the joint; but the leg was twisted in such a way that she suffered from knockknee, as well as rectangular contraction of the leg. The treatment in this case differed from the preceding—first, in the subcutaneous division of the biceps flexor cruris tendon; secondly, in the necessity of rectifying the state of knockknee before proceeding to the extension of the limb. The result of the case is satisfactory, and the patient has discarded the use of her crutch.

In striking contrast to these two cases is that of a young girl aged 18, in Treasurer Ward, under the care of Mr. Lloyd. She is well grown and healthy looking, and states that, when in the country at her home, two years ago, she had a severe attack of rheumatism in the left knee. We know not much of the particulars of this part of her complaint; but she came to the hospital, with the knee immoveably bent, May 19th, 1859. So firm were the adhesions, that the muscles scarcely acted at all when the limb was dragged in examination. The patella was united to the outer condyle. Both Mr. Lloyd and I were convinced that the union was osseous; but, bearing in mind the yielding nature of such bony effusions, he determined at first to try gradual extension. After a fair trial, it was found that no impression was made on the limb; and then it was determined to break the bony union forcibly, and to apply the same extension afterwards. I performed the operation, at Mr. Lloyd's request, October 26th, as he was at the time indisposed. By first firmly and yet carefully flexing the leg, the patella was dragged from the outer condyle. Then a very limited amount of extension separated the tibia and femur. But the limb was *not put immediately straight*. Had I done so, I should have torn and otherwise injured the soft parts in the popliteal space. The leg was kept in its bent position for four days, so as to allow the parts to regain their usual quiet state. Then the extending apparatus was applied, and worked gently with the cogwheel. At the present time, six weeks after the operation, the girl, who has never had any pain during the treatment, is enabled to walk about, with the leg quite straight, supported by the usual apparatus; she having also quite discarded the use of crutches.

I have mentioned these cases because they are now in the hospital, and any one may judge how far what I have stated is according to fact. They illustrate well the differences between strumous and rheumatic diseases of joints, and point out the different plans of treatment to rectify contraction of the limb. The forcible rupture of bony adhesions is no new practice, and is useful when properly managed. But the practice of dragging the limb straight *at once* is certainly not safe, and, in my opinion, unscientific. Finally, let me repeat that, when disease has once destroyed the proper tissues of a joint, both surgeon and patient may dismiss from their minds the expectation of restoration of motion. Such a result is simply an impossibility; and the latter must rest content with the advantages accruing from an extended, though, it may be, a stiffened limb.

I may state, in conclusion, that the two first cases were received into the wards of Mr. Lawrence, who kindly gave his permission, and also his advice during the course of treatment.

PATHOLOGICAL AND THERAPEUTICAL CONSIDERATIONS RELATIVE TO INFLAMMATION AND FEVER.

By C. Handfield Jones, M.B., F.R.S., Physician to St. Mary's Hospital.

[*Concluded from p.* 1001.]

16. *Remedies for Inflammation and Fever.* Of these, we may first consider *blood-letting*, local and general. Respecting the efficacy of the former in local inflammation, there seems no sort of question. Inflamed joints, and other parts having direct vascular connexion with the skin, are unquestionably greatly relieved by the application of leeches. But not only of parts thus circumstanced is this true; it is equally of deep-seated organs, which are separated by a serous cavity from the containing parietes. An inflamed gastric mucous membrane or pericardium, or a congested brain, are certainly greatly benefited by free leeching of the adjacent cutaneous surface. Now, the question occurs to the mind contemplating these facts—Is the relief obtained the result solely of removal of blood from the part? or is it probably owing to an action of a different kind? When we think of the active circulation going on in an inflamed part, how the blood is pouring in rapidly through the arteries on every side, it seems very difficult to believe that the abstraction of a few drachms of blood slowly should have any marked effect in obviating the hyperæmia. What would it avail to take some cupfuls of water out of a basin that was in danger of overflowing, if a constant stream was pouring into it? It is clear, the only effectual means would be to check or diminish the afflux. Now this, it seems to me, local blood-letting must do, when it acts beneficially. In other words, its action cannot be mainly on the blood-vessels, but rather on the irritated tissue between them, whose morbid attraction produces and maintains the hyperæmia.

In the case of deep-seated parts, with serous cavities intervening between them and the superficial, this tissue-modification must, it seems to me, absolutely be admitted. How, by any possibility, can an hyperæmic excited brain be relieved by leeches to the temples, on the supposition of any direct extraction of blood from the woof of pia-mater vessels? Let any one acquainted with the anatomy of the parts consider if the temporal arteries would not furnish amply blood enough to satisfy a few leeches applied on the skin of the temples, before a particle could be derived from the superior longitudinal sinus, the lateral, or the cavernous. From the superior longitudinal some communication may take place with the cutaneous veins by means of the diploic and parietal, though certainly there is but very little vascular connexion between the periosteal vessels and those on the outer surface of the occipito-frontalis tendon. The lateral sinus communicates externally pretty freely by the mastoid vein, and the cavernous with the ophthalmic vein. But do we use to plant our blood-suckers over the course of the superior longitudinal sinus, over the mastoid vein, or the frontal, where it receives the ophthalmic? Medical instinct teaches us to prefer the temporal region, probably on account of the greater proximity of the brain; and no evidence exists to show that better results would be obtained if we acted more in conformity with anatomical data. It must be remembered that blood, in leeching, can only be taken directly from the cutaneous capillary plexus; and surely it is more reasonable to suppose the adjacent arteries to supply the quantity withdrawn, than distant vessels having a very roundabout communication by veins. Take again the case of the pericardium. Would not the anterior branches of the internal mammary, of the superior and inferior thoracic, supply blood abundantly to the small skin-wounds, without even a drop being withdrawn from the outer layer of the pericardium? But, even could we deplete ever so much the latter, how would that avail to empty the vessels of the visceral pericardium, which certainly seem, in pericarditis, to furnish the main amount of the exudation? The case of the inflamed gastric mucous membrane is the strongest; here it is manifestly impossible that leeches to the epigastrium can withdraw one atom of blood from the hyperæmiated surface; yet the utility of the practice remains unquestioned, though we have not a shadow of a rational explanation, on the view against which I am arguing. Similar observations apply to cupping the back of the chest to relieve pulmonary hyperæmia, or the loins to relieve congested kidneys. In all these cases, it appears that modifying the nutritive actions of the adjacent cutaneous surface avails to modify those of a subjacent part, without any notable primary change in the circulation of the latter.

General blood-letting, after having held sway for ages as the chief of antiphlogistic remedies, is now rudely assailed, and its beneficial effect questioned or denied. Dr. H. Bennett considers that the principles on which blood-letting and antiphlogistic remedies have hitherto been practised are opposed to a sound pathology, and refers to the results of his hospital experience to show that treatment shaped to favour the natural processes of exudation and suppuration produces results far more favourable than that which attempts to cut short the disease; the mortality by the latter being 1 in 3, by the former 1 in 21⅞. He thinks that an inflammation, once established, can never be cut short; and that the only rational object of practice is to conduct it to a favourable termination. Dr. Alison, on the other hand, is strongly of opinion that blood-letting is a remedy of great power, capable, when employed timely, of preventing the extension of inflammation, and of modifying beneficially the diseased action. Dr. Christison's statements are to the same effect, and coincide fully with Dr. Alison's as to the change that has taken place in fevers and inflammations during the last twenty or thirty years, from a sthenic to an asthenic type. Dr. Watson's testimony is entirely corroborant of that of these authorities. Dr. H. Kennedy powerfully combats Dr. Bennett's propositions, showing, by reference to admitted facts, that inflammation is not a constant unvarying process; that it can be terminated by treatment when without it would go on indefinitely; and that statistics are quite incapable of guiding us in the treatment of disease. Dr. Markham believes blood-letting only to be of service indirectly, as relieving congestion and oppression of the heart, and enabling the circulation to go on more freely. Dr. Barclay does not think that blood-letting can influence the course of inflammation as a local disorder, but only the excess of the reparatory process in the accompanying fever.

Without attempting to argue the question at length, I will only state the points relating to it which seem to me established. 1. Dr. Markham's view—that blood-letting is of use in various diseases, by relieving the overloaded right side of the heart—may be admitted as certainly true, but not the whole truth. For this purpose, a *small* bleeding only is requisite. 2. Dr. Barclay's view is doubtless also true—that blood-letting acts favourably in cases of unduly violent reaction. If we of this country and day doubt of this, let us refer to Indian experience (Ranald Martin's work, pp. 158, 188, 234, 236; Robert Jackson, quoted by Martin, pp. 181, 182, 158; and Copland, article "Fever", p. 980). 3. The character of the inflammation, whether sthenic or asthenic, is of the utmost importance; if asthenic, blood-letting will only increase prostration; if sthenic, it will be beneficial, and may be essential. Can any one believe that such cases of pneumonia as Drs. Corrigan and Gordon describe (Braithwaite's *Retrospect*, pp. 24-32), where quinine was of the utmost benefit, are to be ranked as similar to the case that Dr. Alison cites from Dr. Gregory's practice, p. 979 (*Edin. Med. Journal*, May 1857)? Are they not as unlike as any two morbid states can possibly be in their essential characters? It would be as reasonable to consider inflammatory croup and diphtheritis as the same disease, because in both false membrane was formed in the air-passages, as to rank together all morbid states in which the occurrence of fibrinous exudation takes place. The state of the invisible vital powers, which determine the reaction of the system towards remedies, is in every morbid state the most essential circumstance, very far more important than any external and visible similarity of symptoms or pathological products. It seems certain that these differences in the type of inflammatory disease do not depend merely on the original strength or debility of the patient's constitution. A healthy man may contract asthenic disease, and a weakly may have sthenic. 4. The nature of the influence of blood-letting over the local inflammatory process, supposing it sthenic, is a matter more open to question. It is admitted by Dr. Alison and others that pneumonia may extend after bleeding; by Tyrrell, that purulent ophthalmia cannot be arrested by the freest depletion; and by Watson, that pericarditis (after friction-sound has been heard) is not to be jugulated by the lancet. Indeed, very few if any practitioners of any authority have ever recommended blood-letting as the sole means of cure in inflammatory diseases. The general opinion and practice of the profession has been to use blood-letting, according to the deliberate opinion expressed by the scientific Virchow (*Handbuch der Speciellen Pathol. und Therap.* Band 1, p. 91.) "It must never be forgotten that general blood-letting *possesses only a temporary influence of this kind* (viz., revulsive); *that thus it can only be admitted as part of a varied antiphlogistic treatment; and that it must*

be employed either as a symptomatic means under specially threatening danger, or as a revulsive means which prepares the system for other modes of restoring its equilibrium. It is in the latter way that it has most value in sthenic and hypersthenic inflammations; and this view of its utility especially deserves the attention of the careful practitioner. He has in blood-letting a valuable means at his disposal *to place the patient in a favourable condition for the regulation of inflammatory disturbances*, especially so to manage the circulation that both the crises of the nervous system, as well as of the blood and nutrition, may take place duly and regularly." He then adds a warning to be sparing in shedding of blood, that cannot easily be replaced. It is always against the early period of inflammation, before hyperæmia has fully issued in exudation, that blood-letting has been considered to possess most power; and in this stage it is by no means impossible that, properly executed, it may be adequate to arresting the morbid process. To do this, the blood must be let rapidly from a large orifice *pleno rivo*, until syncope is imminent. A shock is thus given to the system, which of and by itself may very materially modify, if not arrest, the inflammation. Such blood-letting often produces nausea and vomiting; and it is known that some well marked inflammations, such as tonsillitis and orchitis, in their early stage, may be arrested by the administration of a full vomit. The principle seems to be that of giving a shock to the system, which modifies, through the nerves, the deranged nutrition of the part. It is, however, clear that it is much better to operate locally, if we can, on the diseased part, either by local bleeding, or such drugs as are found to exert a special influence on the region affected. Thus chlorate of potash is especially appropriate to buccal inflammation; antimony to pulmonary and renal; mercury to those of serous membranes, and to ocular. These and the like remedies may be termed *tissue-sedatives*, as calming and reducing the excessive reactional movement of the several parts on which they peculiarly act.

It is very certain that the state of the nervous system is of the most material influence on the capability of the individual for supporting blood-letting. If the nerve-power be weak and low, blood-letting even to a small extent will be ill borne, although there may be no anæmia, or other apparent contra-indication. In one case of my own, blood-letting to six ounces prostrated a female for some weeks, though she was robust, and seemed to have rather an excess of blood. Her only disease, besides exceeding hyperæsthesia, was slight frequently recurring eczema, for which she was unable to take arsenic. With this may be contrasted another case under my care, of recurring eczematous eruption, in which also arsenic was not well borne, where blood-letting to five ounces, together with a calomel purge, gave great relief to the general and local disorder. How great the difference between the first case and many who have borne large blood-letting well! The highly important fact, that certain maladies render the system less susceptible of the effects of loss of blood, while others have an opposite influence, has been ably insisted on by Dr. M. Hall. This seems to me to furnish a weighty argument in favour of the propriety of blood-letting in appropriate cases; for if the disease manifestly alters the condition of the system, as respects its supply of circulating fluid, it seems highly probable that the reduction of that supply may modify the abnormal state of the system, or at least be less injurious to it than the continuance of the original quantity.

There are a few drugs (would that they were more numerous) which a large experience justifies us in regarding as endued with the power of arresting *sthenic* inflammation, when set up in certain tissues. Thus *antimony* arrests pulmonic and renal inflammation; *mercury*, iritis and peritonitis; *chlorate of potass*, buccal inflammation; *iodide of potassium*, periosteal; *colchicum*, synovial. Such remedies I have proposed to term tissue-sedatives, believing that, whatever physiological action they may have, their peculiar efficacy in disease is quite independent and apart from it. Our best knowledge respecting colchicum (Garrod), respecting antimony (Ackerman, *Brit. and For. Med. Review*, April 1859), and respecting iodide of potassium or chlorate of potass, does not explain to us in any measure the cause of their acting on certain parts and not on others, or how they produce a cessation of the inflammatory process.

Alkalies, including their vegetable salts, it seems probable to me, belong also to this class. They are efficacious in some cutaneous inflammations, as psoriasis; in some inflammations of the urinary passages, some bronchial and laryngeal inflammations, and in acute rheumatism. In the latter disease, it has been presumed that their beneficial effect depends on their neutralising the excessive acidity of the system. This, however, seems very questionable—(1) because it is not at all proved that there is any excessive acidity or diminished alkalinity of the blood; (2) because the alkalies fail to benefit in cases of rheumatism of asthenic and apyretic character; (3) because other remedies, of a totally different kind, as colchicum and aconite, occasionally cure acute rheumatism; (4) because alkalies are of no avail in the visceral inflammations of rheumatism; (5) because neutral salts, as the nitrate and acetate of potash, are curative of rheumatism, the former of which can exert no alkaline effect, while the decomposition which ensues of the acid of the latter proves that the system in acute rheumatism still retains its power of assimilating or digesting acid, and, therefore, that it is reasonable to suppose that it would also digest lactic acid, the presumed *materies morbi*.

Lead, in the form of a strong Goulard lotion, has so marked a sedative effect on an inflamed cutaneous surface, that it seems to me to belong to the class of tissue-sedatives as much as to that of astringents. It is certainly a more sedative application than tannin, but, like it, it exerts also an astringent action on the capillaries, which renders it efficacious in hæmorrhages not depending on actual ulceration, and in serous profluvia.

Another class of medicines may be distinguished of an opposite kind to the preceding. These are the nerve-tonics. Among them I include quinine, arsenic, strychnine, digitalis, and to some extent, iron. Their action, so far as we trace it, is not eliminant in any degree, nor depressing, but invigorating. We conclude, that the nervous system is mainly influenced by these remedies, because they seem to operate much in the same way as exciting and invigorating mental influences, which can only act through the nervous system; because, while there is an evident resemblance of therapeutic effect in all, two of them (quinine and strychnine) do operate most undeniably on the nervous system, and because they are all found beneficial in disorders whose chief character is depression of nervous power. If we consider the above mentioned drugs separately, we shall, however, see that they do not all act alike.

Quinine seems to exert its influence both on the cerebro-spinal, and visceral sympathetic nerves, it slows the heart's movement, and prevents the hyperæmic affluxes that take place in malarious disease from vaso-motor nerve paralysis. In this latter case, as well as in the case of neuralgia, the beneficial effect probably depends on the nervous tissue being rendered more vigorous and strong, more able to resist injurious influences. On the same principle we must explain the protection conferred upon the system by the use of quinine in respect of malarious miasms. The protected system resists a poison it would otherwise succumb to. Such facts as these show positively that quinine is not an antiperiodic merely, as some are in the habit of calling it.

Arsenic, in many respects, has a similar action to quinine. Its efficacy in malarious disease has long been known, and has lately been especially tested by M. Boudin, in Algeria. In various neuralgiæ, it renders good service, particularly in obstinate sciatica, I have much reason to be satisfied with it. It exercises a very marked influence over the vaso-motor nerves of the skin in the cure of eczema and other vesicular eruptions, over the intestinal in some cases of chronic diarrhœa, and over the uterine in menorrhagia. It acts as a tonic to the musculo-motor nerves in chorea, and to the bronchial in some cases of asthma, rendering them less liable to be thrown into spasmodic action. It is a remedy of much slower operation than quinine, and much more liable to cause tissue irritation. It is therefore especially important if we employ it in inflammations, to be sure that the morbid action has lost its sthenic character.

Strychnine is notorious for its especial action upon the musculo-motor apparatus, affecting particularly the spinal cord. Professor Kölliker asserts it has no action upon the brain, but I am strongly disposed to question this statement from observation of its therapeutical effects. Trousseau and Bardsley both speak positively of its curative influence in cases of hemiplegia, and I have recently had myself a well-marked instance of recovery from facial paralysis under its use. In some cases of amaurosis, there seems no reason to doubt that strychnia has proved curative. In many cases where it has failed, it is very probable that the condition was incorrectly diagnosed, and that there existed grave structural lesions. From some personal experience of it, I should say that it acted certainly as a cerebral tonic, invigorating the hemispherical ganglia. In chorea, it has often a very beneficial effect, steadying and invigorating the motor nerve apparatus. Its action on the sympathetic is demonstrated by its effect in

arresting some forms of vomiting and chronic diarrhœa, as well as passive menorrhagia, and (as discovered by Dr. Vernon) in exciting the gravid uterus when inert to vigorous contraction. Its beneficial effect in ague and neuralgia has been observed by Mr. Wilkinson, and is quite in consonance with the view of its acting as a general tonic of nerve-centres, not only of the spinal.

Iron, in some of the various forms in which we administer it, has manifestly a nerve-toning and steadying action. Carbonate of iron is an approved remedy in neuralgia. Tincture of muriate of iron positively controls some asthenic hyperæmias and inflammations, in fact, such states as we may fairly suppose to involve a paralysed condition of the vaso-motor nerves, with languid tissue power. I can confirm, from my own experience, at least to some extent, the favourable reports given by Mr. Bell, of the excellent effects produced by tincture of sesquichloride of iron in erysipelas and desquamative nephritis. The analogous pernitrate salt has a similar effect, according to Graves, in some cases of chronic diarrhœa. The efficacy of tincture of sesquichloride of iron in spasmodic stricture of the urethra is a remarkable fact, illustrating the special affinity of particular remedies for particular systems of organs, and the control of a state of spasmodic contraction by an agent which is neither contra-stimulant nor sedative. Recently, I have observed a remarkable instance of most severe nocturnal spasm of the muscles of the back and loins, which was markedly controled by the free administration of quinine and stimulants. Such instances show that in many cases it is quite possible for muscular spasm, as well as neuralgic pain, to depend *au fond* on a feeble and consequently over excitable state of the nerve or nerves involved.

The knowledge we possess of the action of *digitalis* seems to justify us in ranking it as a nervine tonic. It slows the action of a weak heart, and at the same time strengthens its contractions, so that the pulse increases in force. It acts in the like manner with the uterine blood-vessels in passive menorrhagia. It stimulates the renal tissue to increased activity. In all these therapeutic actions, it appears as a stimulant or tonic. But it may be used also to diminish the excessive action of the heart in inflammatory fever and hypertrophy. In this case, at the same time that it slows the action of the heart, it renders the pulse feeble, and often irregular, and syncope is imminent. It is probable that in this case the arrest of action depends upon an inhibitory effect, the excessive stimulus producing an opposite effect to that occasioned by a moderate one. The result of Mr. Lister's experience is to the effect "that in a healthy state of the nervous system very gentle irritation of the vagus increases the heart's action, while a slightly stronger application diminishes the frequency and force of its contractions." The following quotation, from the same highly interesting paper, bears precisely upon this point. "When partial exhaustion has occurred, a much stronger galvanic stimulus is required to produce the same effect upon the heart, than at the commencement of an experiment; and thus an action of the battery which, when first applied, causes marked diminution in the number of beats, may after a while come to have the opposite effect, and increase the heart's action as decidedly as it had previously lowered it; while at an intermediate period it may seem to have no influence at all." Just in the same way digitalis tones and strengthens the action of a feeble heart, but lowers that of a vigorous one.

The only narcotic remedy that it seems necessary to consider, with regard to the therapeutics of fever and inflammation, is *opium*. One remarkable circumstance is the extraordinary tolerance evinced by the system under such disease of large doses of this drug. Patients, in rheumatic fever, will take as much as twenty-four grains in the twenty-four hours, without any notable result. In puerperal peritonitis, the same quantity has been administered by Dr. Churchill, with the best effects. Its action on the cerebro-spinal nervous system is evident in the calmer and quieter condition of the sufferers, it renders the sensorium less impressionable, and the system less liable to be exhausted by the disease. Its action on the sympathetic and vaso-motor nerves is probably similar, it will relax contracted arteries, and admit a freer transit of the blood. This is probably the *rationale* of its beneficial effects in the cold stage of ague, and in similar conditions; it does away with the contraction of the superficial vessels and skin. In many choleraic attacks which have much resemblance at first to an attack of ague, a dose of opium and chloric ether is of the greatest efficacy. So, in exposure to severe cold and in gangræna senilis, the beneficial effect of opium probably depends on its preventing the arrest of the circulation in the limbs and superficial parts, by keeping the arteries, especially the smaller vessels, relaxed and patent. At the same time it protects the heart from the depressing inhibitory influence of the cold, and so enables the circulation to be well sustained. The latter remark will also apply to the case of peritonitis, and of the shock from burns. The sudorific effect of opium probably depends also on its relaxing the cutaneous arteries. In sthenic inflammation, we have no evidence to show that opium, *per se*, is of any avail. But in asthenic, it certainly seems to exert power in controling exudation. What else can be said of the action of this drug in diarrhœa, but that it arrests the outflow of watery fluid through the mucous membrane? In common nasal catarrh, it has in some persons the same effect. Its "locking up" the secretions of the liver and other glands is an action of the same kind. In all such cases we may presume that the drug affects the tissue of the part in a sedative manner, analogous, if not identical, with its action on the nervous tissue or the arterial contractile. It is therefore a tissue sedative. If the action of the heart be in danger of failing from asthenia, the administration of opium in my opinion is unsafe from this very sedative effect. Yet where the depression is the result of violent irritation in another part, as for instance, in peritonitis, the action of the heart may greatly improve under the use of opium. The narcotic, by rendering the cardiac ganglia less impressionable, takes off the inhibitory effect of the peritoneal irritation.

With respect to the *astringents*, alum, tannin in its various forms, and iron alum, their special action seems to be on the capillaries, rendering their membrane more firm and resistant, and therefore less distensible by the blood, and permeable by exudation. They find their opportunity in the asthenic forms of inflammation, reducing hyperæmia by contracting the vessels, and so also warding off its recurrence. I have at present under my care an inveterate case of corneitis, which has repeatedly relapsed from vicissitudes of the weather, but which is now improving decidedly, under the use of large doses of tannin, twenty-five grains three times a day. The abnormal vessels shrinking, the opaque exudation disappearing, and the tissue becoming clear. Like the tonics, the astringents may prove irritants if the tissue approximate to the excitable condition of sthenic inflammation. It seems not unlikely that the astringents may also contract the smaller arteries by acting on their organic muscular fibre; but in this respect they are inferior to the nerve-toners above mentioned.

The *mineral acids* are a great enigma as regards their *modus operandi*. They certainly do not act merely as local applications; and yet they must lose their acid quality the moment they enter the blood. They act therapeutically, as is well known, in the way of mild tonics, or astringent, diminishing exudation from bronchial, intestinal, or cutaneous surfaces. That one at least of them, nitric acid, has an especial action on the nerves, seems probable from its remarkable efficacy in the spasmodic period of hooping-cough.

ON STRUMOUS DISEASE OF THE RECTUM.

By J. Rouse, Esq., Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital.

[*Read before the St. George's Hospital Medical Society.*]

Tuberculosis (or scrofulous disease) of the rectum, is a malady which the surgeon is constantly called upon to treat; yet, strange to say, it is not spoken of by any of the authors on diseases of the rectum. It is hoped that this slight account of a complaint so common, and at the same time so little understood, may prove acceptable to the members of this society.

In order more clearly to understand the progress and symptoms of the disease, we will consider, first, the morbid changes which usually take place; secondly, the symptoms which accompany such changes; thirdly, the treatment both general and local to be adopted.

1. *Morbid Changes.* We find the follicles of the mucous membrane and submucous areolar tissue to be the seat of the tubercular deposit. This deposit may remain passive for weeks or months, but at length one of two things happens, viz., ulceration of the neighbouring tissues, or the tuberculous matter softens, breaks down, and is cast out, as it were, leaving behind it (if the disease commenced in the follicle) an ulcer, small in size, deeply excavated, and having raised indurated edges. This ulcer may, and frequently does heal, without causing any further mischief than leaving a permanent hard patch corresponding to the size of the ulcer.

If, on the other hand, the disease progresses, the ulcer very often rapidly spreads, generally in a circular direction. Occasionally several ulcers coalesce, and may even encircle the whole intestine; slight ridges of hard, thickened, mucous membrane projecting here and there into the ulcerated surface. These ulcers may lead to perforation of the gut, in this wise; new tuberculous matter may be deposited in the base of the ulcer, which softens, and is thrown off in the same way as the original formation, until the thickness of the bowel is destroyed. If this takes place in the upper portion of the rectum, peritonitis is set up; if below, abscesses are formed from escape of fæcal matter into the neighbouring areolar tissue, which may either point at the anus, or discharge themselves into the bowel. This termination of the disease is by no means a common one, as the whole of the tunics of the bowel become greatly thickened, often to the extent of half an inch.

The ulceration having encircled the intestine, begins to heal; a cicatrix forms on the inferior margin of the ulcer, which, as it increases, forms a circular stricture, considerably diminishing the calibre of the bowel. This stricture may vary from a mere thin band, to a hard thickened mass, more than an inch in depth. If the disease be neglected in this stage, the cicatrix goes on contracting, the fæces are retained in the bowel above the stricture, which gives rise to a new complication; the bowel ulcerates above the stricture, fæcal matter escapes into the submucous areolar tissue, inflammation is set up, which rapidly passes on to suppuration. The abscesses generally point external to the sphincter ani; these are opened, or allowed to burst; fistulous openings are formed, which communicate with the bowel above the stricture. In some cases, and more especially in those in which the patients have a languid circulation, condylomata are not unfrequently found to exist at the lower margin of the ulcer; these often acquire considerable size, and give rise to an obstruction of the bowel, even more serious than the contracted cicatrix before described. If these condylomatous growths be neglected, they generally spread in a downward direction, involving the lining of the sphincter, and even encircling the anus. When the disease has progressed thus far, the sphincter partially loses its power, from some of these growths projecting into the anal orifice, and incontinence of the liquid portion of the fæces takes place; after a time these condylomata ulcerate, and give rise to constant and severe pain. Sometimes, however, instead of new condylomatous growths below the original formation, simple infiltration of lymph into the areolar tissue takes place, reaching from the growths to the margin of the anus. When this is the case, the anus becomes less easily dilated for the passage of the fæces, and ulceration of the mucous membrane lining the sphincter occurs. The following case is a good example of this form of the disease:—

Case I. Ellen O., aged 23, was admitted into St. George's Hospital on Aug. 5th, with the following history:—Two years ago, after long constipation, she began to suffer much pain in the rectum, and passed a good deal of blood. She thought the bleeding proceeded from piles, and so did not apply to any surgeon for advice. From that time until her admission, she had been in the habit of constantly passing blood and mucus with her motions, and had had constant pain and gradually increasing difficulty in going to stool. On her admission, there were numerous *soft* condylomatous growths about the anus. On introducing the finger into the bowel, at about two inches above the external sphincter, ulceration encircling the bowel could be felt; the margins were raised and everted, but not hard. At the inferior margin of the ulceration, several soft condylomatous masses could be felt, one of the size of a small walnut. They were ulcerated on their surface; the bowel between these growths and the anus was much thickened; and the mucous membrane lining the sphincter was much ulcerated and thickened.

When the tubercular matter is deposited in the submucous areolar tissue, it is usually found in large masses; these masses, like all others of the same character, suppurate, forming numerous small abscesses, their walls being formed in front by thickened mucous membrane, and behind by the muscular coat of the bowel and thickened areolar tissue. They usually project into the bowel, the most prominent point of the mucous membrane ulcerates, and the matter escapes into the rectum, forming what are sometimes called blind internal fistulæ. It often happens that several of these abscesses communicate with each other as well as with the bowel, so that when a section of the diseased structure is made, it presents the appearance of a gigantic honeycomb. There is a preparation in the museum of St. George's Hospital which illustrates this morbid change: it is the lower portion of the rectum removed from a patient who died of phthisis, and presents for examination several large ulcerated openings, communicating with an abscess as large as a walnut. This cavity communicates with several smaller ones, situated in the surrounding areolar tissue. This form of disease rarely leads to the formation of external fistulæ. It must not, however, be supposed that tubercular deposit in the submucous areolar tissue never leads to the formation of external fistulæ. The following case shews that external fistulæ of a strumous character may exist without any internal opening:—

Case II. Mary S., aged 30, was admitted into St. George's Hospital, on April 27th, 1859, with two fistulous openings, situated on the left side of and about an inch from the anus. She stated that three weeks before her admission, she had been seized with violent pain about the anus, which was speedily followed by swelling; and that five days before her admission, a surgeon had lanced her in two places, and let out a large amount of foul pus. She had suffered from cough, sweating, and other symptoms of phthisis, for some months. On her admission, her urine was so intensely acid, that she dreaded passing it on account of the scalding. On examining the rectum, a small strumous ulcer of the mucous membrane was felt, but neither of the fistulæ communicated with the bowel. On passing a probe through the fistulæ, they were both found to communicate with a large irregular cavity, running up by the side of the rectum to the extent of two inches.

2. *Symptoms* do not shew themselves in this disease until great progress has taken place. The mere deposit of tubercle does not appear to give rise to any constitutional symptoms, and usually, the attention of the patient is first aroused by noticing blood in his stools. During the early stages of the disease, when only a few scattered ulcers exist, a very small amount of blood is passed: but, as the ulceration increases, thick tenacious mucus and blood are voided, and the patient begins to complain of pain, which is usually referred to the sacrum. After a time, tenesmus and diarrhœa are more or less constant, and a sensation of burning in the bowel, and weight in the perinæum are complained of; frequently the bladder becomes very irritable, probably from the very acid state of the urine, which always exists in tubercular diseases. If at this time the rectum be examined by the finger, the mucous membrane feels rough from deposit of tubercle, and ulcers are found deep, excavated, with hard and everted edges, varying in size from a pea to a shilling. If the disease be not arrested, and the ulcers spread, hæmorrhage to a large amount commonly occurs, often to the extent of many ounces at each relief of the bowels. If phthisis or mesenteric diseases exist, death ensues. On the other hand, if the health of the patient improve, and the ulcers heal, the symptoms are changed; the patient thinks that he is well; at first he complains of costiveness, but, notwithstanding the use of purgatives, the bowels act with increasing difficulty; the motions passed are flattened and worm-like in appearance. If the case be neglected, the stricture may become so contracted as to cause total obstruction of the bowel, and death by peritonitis is the consequence. This does not usually happen; the retained fæces causing fresh ulceration, pus and blood are again passed with the motions. As this ulceration increases, the patient is constantly going to stool, passing each time only a small amount of fæcal matter mixed with much pus and blood. If no relief be obtained when the disease has progressed thus far, rigors occur, caused by the formation of abscesses, the pain becomes constant, hectic sets in, and death from exhaustion ensues.

3. *Treatment.* It must be remembered that the exudation of tubercular matter is essentially a blood disease, and that we have to treat the exudation locally whilst we improve the general health. Now, as the blood is nourished and enriched as it were by a proper assimilation of the food taken into the stomach, we must, in the first place, attend to the state of the digestion. It will be found almost invariably in strumous diseases that dyspepsia is more or less constant, and that this constant malassimilation of food causes a morbid state of blood, which gives rise to local exudations of tubercular matter. In any attempt, therefore, to cure or relieve this disease, we must endeavour to restore, in the first place, the powers of the digestive organs; secondly, to allay the local mischief. We know, pathologically and chemically, that in this disease we always have an excess of acid in the alimentary canal; this excess of acid renders the albuminous part of the food very soluble, while the alkaline secretions being more than neutralised, are rendered incapable of converting the carbonaceous constitutents of food into oil. The result is, that an

increased amount of albumen enters the blood, and the amount of fat required for the purposes of vital action is derived from the store already laid up, and rapid emaciation takes place.

In order to restore the digestion, and at the same time prevent the rapid emaciation which occurs in these cases, the diet must be nutritious, and consist of a judicious mixture of animal food and bread. Now, as acidity of the alimentary canal is the great cause of malassimilation, great care must be taken to avoid such articles of food as we know to produce acidity, and in the vast majority of cases, sugar, vegetables and pastry, and such like food, must be strictly prohibited.

In form of medicine, cod liver oil is the best remedy, and if the stomach should not reject it, marked benefit is observed from its use; for the oil is digested and assimilated even when the stomach is too weak to digest ordinary articles of food. Acids both mineral and vegetable are to be avoided, and the best tonic to give when the appetite fails is infusion of gentian, calumba, or hops, combined with ammonia.

In a paper like the present, it would be out of place to dwell longer on the subject of general treatment, or to insist on the importance of light and ventilation; attention to these points is quite as important in local tuberculosis as in phthisis pulmonalis.

The local treatment varies according to the progress the disease has made. In the early stages when diarrhœa is the one symptom which causes discomfort, small starch injections, with from five to ten drops of tincture of opium, afford much relief, and if there be no great amount of exudation, a few grains of bicarbonate of potash combined with aromatic confection, will control the purging. When the ulcers have once commenced to heal, and the cicatrix begins to contract, a bougie sufficiently large to slightly dilate it should be passed through the stricture every day, and allowed to remain for half an hour, gradually increasing the time as the patient can bear it.

If the ulcers remain indolent, and the healing process stops, great benefit is often derived from the use of balsam of copaiba, twenty drops to be injected once or twice a day in an ounce or two of starch. When the cicatrix is very thin, it may be divided in two or three places by means of a bistourie, and kept dilated by means of bougies.

Case iii. W. B., a strumous looking man, aged 58, was admitted into St. George's Hospital, under the care of Mr. Tatum, in the latter part of 1857. He had suffered for years from difficulty in passing his motions. The disease commenced ten years before his admission, with diarrhœa and pain over the sacrum; from time to time he had passed blood in his stools. On his admission his bowels had not been relieved for many days, and on an examination being made of the rectum, a large hard mass, feeling almost like scirrhus, was felt about two inches above the anus. Injections were administered which brought away small scybala. A second examination was made, and it was then discovered that there existed a circular stricture, the result of a cicatrix following ulceration. The opening in the cicatrix was not larger in diameter than a goose-quill, and it was evident that the hardness was caused by the bowel above the stricture being loaded with hardened fæces pushing down the cicatrix, which was only a few lines in depth. Mr. Tatum made three incisions into the stricture by means of a bistourie. Bougies were ultimately passed to keep the stricture dilated, and in a few weeks the man was discharged, the bowels acting naturally and with his health considerably improved.

Cases like the one just related are exceedingly rare; generally speaking, the cicatrix is much too thick and deep for any operation to be attempted.

We must next consider the treatment to be adopted in cases of strumous fistulæ, with or without the complication of stricture.

In cases of simple strumous fistulæ, considerable difference of opinion exists as to the propriety of operating. Is the surgeon to divide the fistula, or to be satisfied with merely improving the general health? With regard to the state of the chest, if there be any sign of softened tubercle in the lungs, no operation is justifiable. If there be no evidence of active disease of the lungs, the surgeon is placed in a difficult position; the patient presses for the operation, and, if it be performed, one of three things usually happens, viz.:—

1. The disease of the lungs, before passive, becomes active.
2. The wound never heals; or,
3. A second fistula forms.

An important fact to bear in mind is, that these strumous fistulæ (especially in children) often close up under constitutional treatment, and remain for months or years passive; in rare cases, they even permanently close.

There is in the museum of St. George's Hospital, a preparation of the lower portion of a rectum, removed from a patient who died of phthisis, in which two sinuses, opening externally, are seen close to the anus. Neither of these sinuses communicates with the bowel; one of them never appears to have had any internal opening, but the second leads to a small hard patch, which is evidently the cicatrix of the internal opening.

In cases of fistulæ complicated with stricture, no operation is admissible; the only treatment is that of gradual dilatation, which, by preventing the accumulation of fæces above the stricture, enables the process of cicatrisation to proceed, which in rare instances closes the internal opening of the fistula. The bowels should, in these cases, be kept open by means of injections, or castor oil. If these sinuses be laid open into the bowel, the patient loses power over the sphincter, and even total incontinence of fæces ensues. The following case well illustrates the danger of using the knife in these cases:—

Case iv. C. F., aged 30, a thin, strumous looking woman, was admitted into St. George's Hospital, on July 21st, 1858, with the following history:—Ten years before her admission she was attacked with pain in the rectum and over the sacrum. These symptoms were shortly followed by blood and pus in the motions, and, about a year and a half subsequently, a large abscess formed, which burst on the left side of the anus. In 1851 she became a patient at St. George's Hospital; she then had several fistulous openings situated on the left side of and anterior to the anus, and on an examination being made, a hard thick circular stricture was felt about two inches above the sphincter, and above this there was extensive ulceration: the fistula communicated with the bowel above the stricture. She remained in the Hospital for some weeks, and was discharged much relieved from the use of bougies.

In 1857, she went to another hospital, where the sinuses were laid open into the bowel above the stricture; the wounds healed, but the stricture and pain remained, and unless the bowels were very costive, there was incontinence of fæces.

On her readmission into St. George's in 1858, she complained of pain at the lower part of the back, over the sacrum, about the hips, and down the thighs. The chief pain was, however, in the rectum, and when she passed her motions, the passage of the fæces gave extreme pain. On an examination being made, there was found, about an inch and a half up the rectum, a circular fold of mucous membrane, through which the finger could be passed with difficulty, and immediately above this was a hard circular stricture, through the opening of which catheter No. 9 could only be passed; there was almost constant incontinence of fæces. She remained in a short time, and was discharged incurable.

When condylomatous growths exist below the ulceration, mere passing of bougies does not effect much. Very great benefit is often derived from the use of mercurial ointment, which may be applied by merely smearing the bougie and allowing it to be retained in the bowel for a few minutes. If the condylomata are ulcerated, a solution of nitrate of silver, five grains to an ounce of water, is useful; but if, in spite of these remedies, the growths increase, the best remedy to apply is strong nitric acid, or the acid nitrate of mercury. Great care must be taken in using these powerful escharotics. The anus must be well dilated by means of a speculum and a glass rod, made use of to apply the remedy; and chalk must be at hand to neutralise the acid, should any of it run over healthy mucous membrane.

In these cases the internal use of iodine often affords marked relief, and the best form of the remedy is the syrup of the iodide of iron, which may be combined with cod liver oil; thus forming a combination which is beneficial to the general health, as well as to the local disease.

When sinuses exist which do not communicate with the bowel, they may often be cured by the use of stimulating injections, such as a solution of sulphate of zinc, copper, or nitrate of silver. When the sinus is of recent formation, gentle and continued pressure by means of a sponge will often cause it to heal.

TUBAL PREGNANCY.

By Henry Hancox, M.D., Wolverhampton.

The subject of the following case was Mrs. D., the wife of a miner, residing at Bilston. She was the mother of one child, which survived its birth only a few hours; the catamenia had been regular up to the period of her becoming pregnant with the present child. She is 23 years of age, and has always enjoyed good health. On September 24th, she began to complain of pain on the right side of the abdomen, accompanied with a sinking sensation and faintness, which she attributed to an injury she had received on September 4th, in defending herself against a man who attempted to commit a rape upon her. A dose of opium was administered, which gave her relief: and she continued to go about and discharge her domestic duties, until November 17th, when the pain in the right side of the abdomen again returned, and was again relieved by the same medicine.

November 21st. She became much worse, the pain being of a more violent character, accompanied with great nervous depression. On examination *per vaginam*, the parts were found very dry; the os uteri was very high up; tilted forward under the pubis; no signs of labour could be detected. She continued to get worse; the symptoms becoming more alarming; the pulse was feeble and quick; colliquative sweats bedewed the body; the eyes were sunken, and the countenance was pallid, and presented an anxious expression; she lingered in this state till the 23rd, when death ended her sufferings.

On the 25th, a *post mortem* examination was made by my brother, Mr. W. M. Hancox, in the presence of Dr. Fraser, Mr. Gutteridge, Mr. Larkin, and myself, when the following appearances were observed:—On laying open the cavity of the abdomen, a female child, together with the placenta, was found in the cavity of the abdomen; the child was supposed by all present to be at least eight months and a half. It had been well nourished; and, judging from appearance, it must have been alive at the time of the poor woman's death. The placenta was well formed, and did not differ in any respects from an uterine placenta, but presented a natural and healthy appearance. The cavity of the abdomen contained at least four or five quarts of effused and coagulated blood. On examining the uterus minutely, to find the place where rupture had taken place, we found a large opening three or four inches in length, in what afterwards proved to be the right Fallopian tube, the cavity of which was dilated to the size of a naturally impregnated womb at the ninth month, and presented all the appearances of the gravid uterus at the same period of gestation. The walls of the cavity were very thin, and attenuated to the breadth of three fingers at its superior edge, the place where rupture had taken place; while below this spot, the walls were very much thickened, like the substance of the heart. The communication between the Fallopian tube and the uterus was perfectly occluded. The body of the uterus was found in its natural state; it was not enlarged. On laying it open, the internal surface was in a perfectly healthy condition, and an opening into the Fallopian tube of the left side was quite apparent, but no trace of a similar communication into the right tube was discovered. The ovaria presented no unusual appearances; the Graafian vesicles were distinctly visible, especially in the right ovaria.

Remarks. In recording the above interesting case, I am convinced in my own mind, that it will not fail to be interesting to many readers of the Journal, not only from the circumstance attending the death of the poor woman, but from the length of time she carried the child in the Fallopian tube without experiencing any pain or inconvenience till within a few weeks of her death; the Fallopian tube admitting of so much dilatation as to be able to contain so well nourished and large a child (eight months and a half) and a placenta, in every way as large and as thick as an uterine placenta, renders it one of the most remarkable cases I am acquainted with on record. Dr. Burns (*Principles of Midwifery*, tenth edition) mentions a case occurring in the practice of a Mr. Moore, in which the woman carried the fœtus to the sixth month, the uterus being enlarged to the size of a fist. The uterus in this instance was no larger than an unimpregnated womb. This circumstance does not accord with the experience of Dr. Burns, who states, "it generally enlarges considerably". Dr. Hunter, he says, "had a preparation of tubal pregnancy in which the uterus was found enlarged to double its natural size." It is a matter of surprise that rupture did not take place immediately, or soon after the injuries she received six or seven weeks previous to her death; but she seems to have completely recovered from the injury and shock which the system must necessarily have received, as to be able to go about and discharge her duties.

Notes of Lettsomian Lectures

ON

CERTAIN POINTS CONNECTED WITH DIABETES.

DELIVERED BEFORE THE MEDICAL SOCIETY OF LONDON.

By FREDERICK WM. PAVY, M.D., F.R.C.P., Lecturer on Physiology at Guy's Hospital.

Lecture III.

[*Delivered December 7th*, 1859.]

The views promulgated by M. Bernard, as to the functions of the liver, have met with some amount of opposition on the Continent. M. Figuier admits the presence of sugar in the animal body; he believes, however, that it has not been formed there, but that it has been derived from the vegetable kingdom and stored up. To explain the absence of sugar in the blood of the portal vein, he supposes that there is something in that fluid which masks its presence. In 1850, M. Schmidt published some views which referred sugar to a change taking place in the circulatory system, not in the liver. Again, M. Sanson has promulgated a theory in which he follows M. Figuier to some extent; but he says that a material closely allied to the glucogenic matter is found in all the tissues as well as in the liver. These objections, however, to M. Bernard's theory are quite destitute of validity, being entirely hypothetical.

In the experiment recorded at the end of the second lecture, there was sufficient evidence to show that the liver has not a sugar-forming function during life. Since, then, the liver does not possess such a function, and since the blood from this organ, examined during life, gives no trace of sugar, it was necessary to modify the opinion which we have been led by M. Bernard to entertain; and we have now to ask, What becomes of the amyloid substance? And here there is a difficulty: for it is often more easy to overturn a theory than to substitute a satisfactory one for it. Dr. Pavy, however, was engaged in the investigation of the question; and he believed he had some landmarks in the inquiry which seemed likely to lead him to the determination of a close relation between the amyloid substance and fat. The amyloid substance, as was shown in some experiments referred to in the second lecture, is notably increased in quantity by the use of food containing sugar; we know also that fat may be formed from saccharine matter. If an animal be fed with material containing starch or sugar, it becomes fat; and in the West India islands, it is a matter of common observation that the natives become fat during the sugar season, from their habit of sucking the canes. The amyloid substance seems to hold an intermediate position between sugar and fat. Further observations on this subject, however, Dr. Pavy would defer until his investigations were more complete.

An unnatural conversion of the amyloid substance into sugar leads to diabetes. This disease depends on the presence of sugar in the blood: if this substance be accumulated in the blood in sufficient quantity, it will appear in the urine. This is true also of grape-sugar, if injected into a vein; cane-sugar, introduced into the system in this way, appears in the urine as cane-sugar; but if introduced by the alimentary canal in sufficient quantity to cause diabetes, it is transformed into grape-sugar. Dr. Pavy had observed this in experiments on dogs. Starting from this point, it might now be asked, How does the sugar enter the blood?

According to the former doctrine, there were two ways in which sugar might enter the circulatory system. M. Bernard taught that sugar was formed in the liver, and conveyed thence to the lungs. If more was formed than could be eliminated by the lungs, it would be accumulated in the blood; and the same result would arise if the power of the lungs to destroy the ordinary amount of sugar were defective.

But the hypothesis that sugar undergoes combustion in the lungs, is negatived by the fact that, whenever it is found in the right side of the heart, it is also found in the arterial system,

having been carried through the lungs without change. Some experiments made by Dr. Pavy established this point: in all, he had found as much sugar in the blood of the arterial system as in that of the veins.

It is very probable that, in diabetes, the liver is the seat of the formation of sugar. Under what circumstances may this occur? Dr. Pavy thought that, if from any cause the amyloid substance in the liver escaped into the blood, it was at once transformed into sugar; and again, that a transformation analogous to that which occurs after death might take place in the liver during life. He had ascertained by experiment that the introduction of the amyloid substance into the circulation would produce diabetes. He had injected some into the venous system of a rabbit; and had found sugar in the urine withdrawn an hour afterwards, none having been present in the urine passed at the time of the experiment. Blood, indeed, acts as an exceedingly energetic ferment on the amyloid substance, whether within or out of the body. Dr. Pavy thought that the presence of saccharine urine in coma, hooping-cough, pneumonia, and other disorders attended by great and sudden congestion, was to be explained by the pressure on the cells containing the amyloid substance causing them to discharge their contents into the circulatory system. Some time ago, he muffled a dog's nose, so as to produce a comatose state; in an hour, the animal's urine was highly saccharine. He had also covered the head of an animal with a bladder, fitted with a tube and plug, by which the supply of air could be regulated, so as to produce an interference with the circulation short of death. The urine passed immediately before the experiment gave no indication of sugar; but that withdrawn afterwards contained this substance. The occurrence of sugar in the urine in congestive states is a well known fact.

If it is possible for the amyloid substance under certain circumstances to enter the circulation, why does it not *always* escape from the liver-cells into the blood? Dr. Pavy observed, that this was to be explained on physical principles. The amyloid substance is incapable, under ordinary circumstances, of passing by endosmose through animal membranes; and in this respect it resembles albumen, but differs greatly from sugar, the diffusive power of which is considerable. It has long been known that sugar or urea passes rapidly through membranes; and that albumen does not readily pass by endosmose. If albumen were as diffusible as urea, it would be constantly eliminated, and a vast portion of the material intended for the nutrition of the body would be lost. But if the renal veins be obstructed so as to produce congestion, albumen appears in the urine, because of the distension of the blood-vessels, and of the pressure consequently exerted. The passage of albumen through a membrane may also be artificially produced by experiment out of the body. If a piece of animal membrane be tied across the mouth of a tube, and an albuminous liquid be placed in it, and the tube immersed in water, the albumen will not pass through; and the same is the case with amyloid substance. But if a long tube is filled with albuminous liquid to the height of about three feet, then the pressure is sufficient to cause the transudation of the albumen. For the amyloid substance, a pressure of six feet is required to cause it to appear in the outer vessel at the end of forty-eight hours. This is an interesting fact. When the circulation in the liver is not congested, and the cells containing the amyloid substance are not unduly pressed on, then the blood does not carry away any of the substance.

We have now to examine the circumstances under which sugar appears unnaturally in the liver, and is removed by the blood. And here M. Bernard's observations on the effects of division of the spinal cord and on the influence of cold, overturn his own theory. The condition of the bile also affords an important contradiction to the theory of the Parisian physiologist. If sugar really were formed in the liver, it would be found in the bile: but no traces of sugar can be detected in this secretion obtained from the animal during life or immediately after death. Bernard, indeed, says that, if an animal be killed and placed aside for a day, the bile in the gall-bladder will be found to contain an abundance of sugar: this, however, arises from a change occurring after death.

It occurred to Dr. Pavy, that by keeping up the circulation by means of artificial respiration in an animal killed by pithing, diabetes would be established; and in this experiment he has succeeded. It is necessary, however, that the life of the animal be completely destroyed: and it is further observed, that the medulla oblongata appears more intimately connected with the formation of sugar than any other part of the nervous system. If the spinal cord is divided immediately below the medulla, respiration is of course arrested, but saccharine urine is not produced; but if the medulla oblongata is divided, then sugar appears. Again, if the cerebral peduncles be divided, there is no production of sugar. The medulla oblongata, therefore, seems to preside over the life of the liver.

Irritation, or rather puncture, of the floor of the fourth ventricle has been found to produce diabetes. Bernard explains this by supposing that the liver has been thereby stimulated to the production of an excessive quantity of sugar. But it is more likely that some power is taken from the liver by the injury; that it is thereby placed in the same condition as after death.

The channel of communication between the medulla and the liver had been sought to be ascertained by Dr. Pavy. It is not the pneumogastric nerves, nor the spinal cord; for both these have been repeatedly divided, both singly and together, without producing diabetes. The only remaining source, then, is the sympathetic: and the experiments by which Dr. Pavy has sought to determine the function of this part of the nervous system as a communication between the medulla and the liver, are contained in the recently published volume of *Guy's Hospital Reports*.

After observing the results of dividing the spinal cord, medulla, cerebral peduncles, and pneumogastric nerve, Dr. Pavy decapitated an animal, and kept up artificial respiration, care having been taken to prevent much loss of blood. In three-quarters of an hour, the urine in the bladder was found to be strongly saccharine. It being thus sufficiently plain that the sympathetic was the medium of communication, Dr. Pavy proceeded to examine as to what part of the nerve had this function. There are some large filaments of this nerve lying close beside the vertebral artery; these were accordingly divided on each side. In the first experiment of this kind, Dr. Pavy found the urine saccharine in twenty minutes. But he also found that, if these filaments were divided higher up, no diabetes was produced, unless the carotids were also tied. Saccharine urine is produced in a marked degree in cases where the superior cervical ganglion is punctured or removed. In one such experiment, the urine at the end of an hour yielded 20·5 grains of sugar in the ounce; an hour afterwards, the amount had fallen to 11·4 grains; and next day there was no appearance of sugar. As the result of several experiments, Dr. Pavy found that division of the splanchnic nerves causes diabetes, but not uniformly; the reason of this irregularity, however, he could not ascertain.

It is important to observe, that the effects of lesion of the sympathetic in producing saccharine urine may be prevented by injecting an alkali, as carbonate of soda, into the circulation. The injection of two hundred grains of carbonate of soda is sufficient for this purpose; one hundred grains fail to produce the effect. Dr. Pavy had tried to make practical application of this fact in the hospital wards, by administering citrate of potash to diabetic patients. But he found that, although under ordinary circumstances the injection of such salts renders the urine alkaline, it has no such effect in diabetic urine, which remains strongly acid. In one case in which citrate of potash was given, the quantity of urine and the proportion of sugar were both reduced; but in other cases this did not occur.

To explain the action of alkalies in preventing transformation of the amyloid substance into sugar, Dr. Pavy supposed that this substance may be normally combined with an alkali, which prevents transformation; while, if the alkali be removed by something for which it has a more powerful affinity, the amyloid substance is left at liberty to undergo transformation.

Having advanced this far in our knowledge of the physiology of the formation of sugar in the body, it is an important object to discover what will prevent the transformation of the amyloid substance during life; and it is to be hoped that it will not be long before our positive knowledge on this matter will be greater than it is at present.

Uniform of Army Medical Officers. The Queen has been pleased to approve a new code of regulations for the dress of the officers of the Army Medical Department. The tunic in future to be worn is scarlet, single-breasted, with black facings edged with white cloth, the distinctions of rank to be regulated by the badges and lace, according to the relative ranks in the army.

Inventions and Appliances
IN
MEDICINE AND SURGERY.

WRIGHT'S PATENT NURSING APPARATUS.

Our attention has been called to an apparatus invented by Mr. Charles Wright, for the purpose of carrying infants up to the seventh or eighth month. It consists, as represented in the accompanying wood-cut, of a light bassinet, slung by a strap round the neck of the nurse, and further held steady by another strap passing round the back.



The apparatus at first reminds one of the gipsy plan of carrying the child in a hood at the back of the mother; and both the methods have the merit in common that they leave the hands of the mother or nurse free to lead other children, or perform various duties. But the invention of Mr. Wright possesses, we think, a marked advantage over both the gipsy plan, and the ordinary method of carrying the child, in permitting the infant to lie on its back as in its cradle, while at the same time the free motion of the limbs is not interfered with. Thus the mischief arising from placing the infant in a sitting posture is prevented. The straps meeting across the centre of the basket prevent any danger of falling out. The apparatus can be carried in front or under either arm; and may be placed in a perambulator. Other advantages of the invention are, that the child is relieved of much of the evil consequences arising from the weight of clothing which is often put on it when carried out; and that, if the infant fall asleep, it can, when brought into the house, be at once laid down in the basket without being disturbed. The apparatus is provided with a hood for shading the eyes of the child, and with all necessary appliances for comfort. We understand that the invention has received the approval of several of the leading London obstetricians. It can be seen at the Kensington Museum, or at the Polytechnic Institution.

Faculty of Medicine in Paris. From November 2nd to 21st, there were 988 entries of students; 922 for the degree of doctor of medicine, and 66 for the grade of *officier de santé*. Out of this, 277 were new entries. In 1858, there were 1065 entries, of which 257 were new. The number of new entries has varied much in late years, having diminished from 429 in 1850 to 126 in 1856.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, DECEMBER 17th, 1859.

THE LEMOINE INFANTICIDE.

Among the *causes célèbres* of France, the trials of Madame and Mademoiselle Lemoine will in future occupy a conspicuous place. There is something in French crime which appears to us to distinguish it from the crime of any other nation; and certainly the crime of which Madame Lemoine has just been convicted is entirely characteristic of her nation. This lady, who resides at Chinon, in the department of Indre et Loire, was a person of fortune, living with her only child, a daughter, who, at the time the tragedy we are about to relate took place, was only fifteen years of age. The morals of the daughter appear to have been entirely neglected, inasmuch as she was allowed to frequent the workshops of artisans alone, to read pestiferous French novels, and to exercise extreme familiarity with the servants of the household, especially with the groom, and the consequence was that she became *enceinte* by him. At this point of this domestic drama, the mother was made cognizant of the fact; and a third actor came upon the stage with a determined will and a cool forethought which allies her to some of the bad heroines that have acquired notoriety in the past. All the evidence given at the trial goes to prove that, in order to save her daughter's honour, she determined to get rid of the consequences of the *liaison*.

There are some women in whom a violent fit of sneezing will produce a miscarriage; others that cannot be carried to their full term, with every precaution. This infant Mademoiselle Lemoine had not one of these morbidly disposed constitutions: indeed, the trials to which she was subjected by her mother only serve to prove what power a healthy frame has to resist any attacks upon the proper progress of gestation. In order to produce abortion, the diabolical mother of this child forced her to take hot baths, to roll down a steep hill, to gallop on donkeys, and even proposed that she should tumble down stairs; but this last proposition was resisted. Nevertheless, nature was too strong for these attempts at violating her; and in due time the womb brought forth its fruit. But the moment of the entry of this child of shame into the world was only waited for by its unnatural grandmother, that it might be put out of it. She had made secret preparations in an unfrequented part of the house for the accouchement; and, among other things, *a large fire of wood* was provided. Here, on the night of the 29th of July, without noise of any kind, and without the presence of any medical man, the daughter was delivered by the mother.

Whether the child was born alive, or not, is most certainly a very important part of the question. With respect to this,

there was very great prevarication on the part of the daughter. On her first examination, she stated that it was. On the trial, however, she said she was not certain that it was born alive, as it did not cry. The mother totally denied that it was alive, for the same reason; but the evidence of a woman that had predetermined that it would be still-born, and who had determined to make away with it, counts for nothing. The balance of evidence is, however, wholly in favour of the child's having been alive. In order to save the "honour" of her daughter, this terrible Frenchwoman now put in practice her long premeditated crime—to burn the evidences of this illicit love. This was done with a terrible calmness, such as some people believe to exist on paper only in the character of a Lady Macbeth. When the body was consumed, she scattered the ashes. "Yes," said this extraordinary woman, when interrogated on the subject. "Yes, I had the courage to do that. Why should I not have had the courage to carry to the end what I had commenced?"

Infanticide is but too common in this country. We have heard a coroner give it as his deliberate opinion that in scores of cases, where he had held inquests on children alleged to have been still-born, they had been dropped, at the moment of birth, into water, in order to destroy any evidence of the lungs having been inflated. Be that as it may, the crime of infanticide is too common among us to allow us to point the finger of scorn at our neighbours. But with the taking of life in this painless manner our native crime ends. We do not believe that any Englishwoman, however depraved her mode of life, *could* have committed the horrible crime of putting a living child into the fire, calmly watching until it was consumed, and then sweeping up the remains, in the presence of its mother; and that mother her only daughter. Yet this crime, monstrous as it was, would appear scarcely to have been looked upon as a crime by her advocate; for said he, "Even if, placing the honour of her daughter above every other consideration, she had committed a crime, she would merit profound pity; he had almost said, *respect.*" Had an advocate in England attempted to gild the most diabolical crime with mock sentiment of this kind, he never would have been able to show his face at the bar again; but, in France, the statement passed without comment; and the whole community seems to acquiesce in the advocate's statement of the length a mother might go, even with "respect", to save her daughter's honour. Even the jury appeared to share in some degree the advocate's "respect" for his client's conduct; for they found her guilty, with *extenuating circumstances;* and sentenced her, for a crime for which she would have been torn limb from limb by any mob of women in the world, to twenty years hard labour only! acquitting the daughter altogether.

THE WEEK.

In another page of this day's number will be found a letter addressed by Dr. Alexander Fleming of Birmingham to the President of the Birmingham and Midland Counties Branch, and ordered by the members present at a meeting held last week to be published in the Journal. The letter contains the important announcement, that several of the friends of the Association and the Journal, residing in Birmingham and the neighbourhood, have agreed together to furnish regular literary aid to the Editor of their weekly periodical. For the nature of the assistance which it is proposed to give, we refer to Dr. Fleming's letter: and it will be seen at once that the co-operation of our Birmingham friends promises to be most important and valuable. To Dr. Fleming and his coadjutors we offer our hearty thanks. Feeling, as we do, that the Journal is capable of taking, and ought to take, a high position, second to none in our medical literature, we are at all times delighted to meet with those who will cordially help us by real work in the carrying out the important duty with which the Association has entrusted us.

Our Health-Officers, in the course of their labours, sometimes chance upon strange scenes,—dark blots in the very centres of our civilisation. Dr. Ellison, of the Poplar district, in prosecuting a summons against a man named George Russell, at the Thames Police Court, gives a picture of the appearance of the rooms in No. 4, White Hart Place, termed an "Irish freehold," from the fact that its tenant, an Irish labourer, had lived there during forty years without paying the landlord any rent.

"In the whole course of his experience he never witnessed a more filthy and disgraceful nuisance. He was surprised how human beings could exist in such a place. The walls and ceilings of the tenements were blackened with smoke and dirt, which had been accumulating for many years, and were like the interior of a large chimney shaft. There were no grates in the fireplaces, but a few bricks were a substitute."

The inhabitants of this and the adjoining houses were, many of them, half naked; and the whole place was soddened with human ordure. It seems hardly credible that such sad scenes could exist in the metropolitan city; but our own experience tells us, that some of our finest streets are but splendid masks to hide the festering corruption that is to be found in the courts and alleys behind. We could point out places in the Strand where the whole back slums present a mass of putrescent squalor, the existence of which would scarcely be believed by the parishioners. As it is, our large cities present a series of blocks of buildings,—hollow squares, in fact,—in the centre of which society permits all the wretchedness and crime of civilisation to hide itself. The habits and manners of the inhabitants of these hiding holes are as different from those of the people living in the fine streets that wall them in, as are the habits of savages from those of civilised men.

Some discussion has of late taken place on the advisability of substituting, in our eastern possessions, the Roman alphabet for the variety of strange looking symbols used in writing by the natives of the different regions. The matter, it seems, is not without medical importance. Some of our countrymen have, at vast pains, translated English medical works into Oordoo and other dialects for the instruction of the natives: how much easier, we think, their task would have been if the natives had learned to read and write their own language in the European characters. A correspondent in the *Indian Lancet* of November 1, proposes that all first class "native doctors" should be required to be able to read and write the Roman character. This would, he says, be productive of great convenience, and be of much advantage to the native practitioner.

MEDICAL REGISTRATION.

NOTICE.

The Medical Registrar presents his compliments to the Editor of the British Medical Journal, and would be much obliged if attention could be drawn to an advertisement sent herewith, in order that qualified persons who are still unregistered, those especially who have obtained their qualifications in the course of the present year, may not lose their opportunity of appearing in the *General Register* for 1860.

Medical Registration Office, 32, Soho Square, London, W.,
November 21st, 1859.

Association Intelligence.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Birmingham, on Tuesday, the 6th instant.

Present:—Sir C. Hastings (in the Chair); Mr. Bartleet; Dr. Henry; Mr. P. Martin; Mr. G. May; Dr. B. W. Richardson; Mr. Solomon; Mr. R. S. Stedman; Dr. A. T. H. Waters; Dr. J. H. Webster; Mr. Watkin Williams; and Dr. P. H. Williams.

The following resolutions were adopted:—

1. That Dr. Barham, of Truro, be requested to deliver the Address in Medicine at the next Annual Meeting at Torquay.
2. That Mr. De la Garde, of Exeter, be requested to deliver the Address in Surgery.
3. That Mr. Square, of Plymouth, be requested to read an Address on Ophthalmic Surgery.
4. That the following Statement of Accounts be adopted by this Committee, and published in the Journal:—

The Committee of Council find that the whole annual income of the Association for each of the three years 1856-57-58, has averaged - - -	£2450
And that the expenditure in the same time has averaged	2324
Leaving for each year an average surplus of - -	126

The Committee of Council further find that there has been an average annual failure of payment of subscriptions by members of the Association in the same three years, of £442; so that, if the subscriptions had been paid up punctually, the annual balance in favour of the Association would have been £568 instead of £126.

At the beginning of 1856, the debt due to the Treasurer was £1312. This debt has been reduced by the call of ten shillings made in 1856 to £674; and by the application of the surplus income from the three years 1856-57-58, the debt due to the Treasurer has been further reduced to £294.

On 1st January 1859, the actual financial position of the Association was as follows:—

Liabilities.	
Debt due to Treasurer - - - - - -	£ 294
Bills owing - - - - - - - -	624
	918
Assets.	
Subscriptions in arrear - - - -	600
Advertisements - - - - - -	350
	£ 950

5. That the instructions which are or may be given by the Committee to the General Secretary, relating to the collection of the subscriptions, the dealing with arrears, and the monthly publication of the names of members who have paid their subscriptions, be strictly and promptly carried out.
6. That in carrying out Law 15, with respect to unpaid subscriptions, the Secretary be instructed to give one month's notice to any member in default, before stopping the transmission of the Journal.
7. That, in the opinion of the Committee, a more prompt and regular payment of subscriptions on the part of members, would, by placing at disposal greater funds, enable the Committee to take steps which, combined with a vigorous editorship, must tend materially to improve the condition of the Journal; and that it is not desirable to diminish its size, nor lessen the frequency of its publication. [The resolution of the East York and North Lincoln Branch, recommending the discontinuance of a *weekly* publication, and alteration in form, of the Journal, was previously read.]

A deputation of members from Shrewsbury (Dr. H. Johnson, Dr. Watts, and Mr. S. Wood) attended to request the opinion of the Committee on the following question; viz., whether the spririt of the Laws of the Association was not violated at a meeting of the Shropshire Ethical Branch, by the refusal to admit on the Local Council members of the original Shropshire Branch, who declined to become members of the Ethical Society, with which an amalgamation had been recently effected? It was considered by the Committee that the fact of membership in the Parent Society is a full qualification for any official appointment in any Branch to which such member may belong. It was resolved—

8. That in future no Branch, or amalgamated Branch, of the Association be recognised, until such Branch shall have submitted to the Committee of Council the Laws by which it is to be governed; and
9. That the General Secretary be instructed to apply to the Secretary of the Shropshire Ethical Branch, requesting him to furnish, on or before the 1st of March 1860, a copy of the Rules of the Branch, for the information and approval of the Committee.
10. That this Committee meet again not later than the second Tuesday in March.

Charles Hastings.
Philip H. Williams, M.D., *General Secretary.*

Worcester, December 1859.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A general meeting of this Branch was held at the Hen and Chickens Hotel, Birmingham, on Thursday, December 8th, 1859; J. B. Melson, M.D., President, in the Chair. There were also present: A. Alcock, Esq. (Smethwick); E. Bartleet, Esq. (Birmingham); T. Boisragon, M.D. (Birmingham); F. T. Bond, M.D. (Birmingham); G. J. Brown, Esq. (Birmingham); J. Clay, Esq. (Birmingham); H. Duncalfe, Esq. (West Bromwich); A. Fleming, M.D. (Birmingham); J. J. Hadley, Esq. (Birmingham); W. Hinds, M.D. (Birmingham); W. Hopkins, Esq. (Handsworth); J. H. Houghton, Esq. (Dudley); T. Howkins, Esq. (Birmingham); G. Jones, Esq. (Birmingham); F. Jordan, Esq. (Birmingham); J. H. Keyworth, M.D. (Birmingham); W. Lines, M.D. (Wednesbury); G. H. Marshall, M.D. (Birmingham); J. R. Nicholson, M.D. (Redditch); O. Pemberton, Esq. (Birmingham); J. Russell, M.D. (Birmingham); J. V. Solomon, Esq. (Birmingham); T. W. Williams, Esq. (Birmingham); G. Yates, Esq. (Birmingham).

NEW MEMBER.

Mr. G. Bodington, of Kenilworth, a member of the Association, was unanimously admitted a member of the Branch.

GENERAL BUSINESS.

A letter was read from Mr. Alfred Baker, withdrawing his notice of motion regarding the mode of electing the Council of the Branch and the Council of the Association.

Mr. Hadley proposed, Mr. T. W. Williams seconded, and it was carried unanimously—

"That the Medical Reform Committee be summoned for the despatch of business."

Mr. Solomon's motion in reference to the call of five shillings per annum, and the non-carrying out of the resolutions of the Committee of Council, having been discussed at considerable length, it was resolved unanimously—

"That the consideration of this question be adjourned until the general meeting of the Branch in April, so that time may be allowed for the recent resolution of the Committee of Council to take effect."

It was proposed by Mr. Jones, and seconded by Mr. Yates—

"That the Secretaries be authorised to make inquiries whether some other room than the present one is not available for the purpose of these meetings."

A letter from Dr. Fleming, on the subject of the Journal, addressed to the Council, having been read, it was resolved—

"That the same be published in the Journal, and entered on the minutes."

The following notices of papers, owing to the prolonged discussions on the previous resolutions, were adjourned until the next meeting.

Some Remarks on Lead-Poisoning. By W. F. Wade, M.D.

Clinical Notes on Cancer of the Eye and Lids: Stereoscopic Pictures. By J. V. Solomon, Esq.

Observations on Syphilitic Diseases of the Cranium. By J. Russell, M.D.

Remarks on Virchow's Theory of Inflammation. By F. T. Bond, M.D.

THE JOURNAL: LETTER FROM A. FLEMING, M.D.

At an adjourned meeting of the Council of the Birmingham and Midland Counties Branch, the following letter having been read, it was unanimously resolved that the same be adopted by the Council, and presented at the next general meeting of the Branch.

To the President of the Council of the Birmingham and Midland Counties Branch of the British Medical Association,

20, Temple Row, December 5th, 1859.

Dear Sir,—I have much pleasure in complying with the request of the Council to bring forward the subject of the Journal at our meeting this evening.

All who feel an interest in the welfare of our Association must desire to see the Journal raised from its present position, and placed, if possible, in the first rank of medical periodicals—to see an organ which shall meet fully the wants of the busy practitioner, and, at the same time, represent us honourably in medical science both at home and abroad.

With the view of increasing its efficiency, I have a few suggestions to offer.

In the "Illustrations of Hospital Practice", the reporting in detail of ordinary cases has been overdone. Much is printed under this head that is not read—that serves no useful purpose, and only encumbers the literature of medicine. Let us have *good* cases by all means, but they must be carefully recorded; and, by *good* cases, I mean such as present something really new, and of living interest in diagnosis or treatment, or illustrate strongly some practical rule already established. Well recorded, these are of great value, and form a rich mine of materials for future memoirs. I am always glad to see reports from the London Hospitals; but I would like the institutions in the provinces to be more fully represented than is now the case; and, to promote this object, I am happy to be able to state that several hospital physicians and surgeons, members of this Branch, have promised to furnish one or more cases from their Hospital Records, for the Journal in 1860.

The value of the department of "Original Communications" depends mainly on ourselves, and I have much pleasure in stating that several members of this Branch (whose names will be forwarded privately to the editor) have undertaken each to supply one or more contributions under this head for 1860. I trust that our example may be followed in other towns, and be the means of securing numerous valuable papers. To enhance the value of the Journal, as a medium for original articles, I would recommend the exchange list to be widened to the utmost limits, and that a place for our Journal should be secured, if possible, on the tables of all foreign libraries.

There is room for improvement in the "Reviews"; and, as the editor will doubtless be glad to receive aid in this department, I suggest that the names of the several members of this Branch, who have volunteered to assist in the writing of reviews, be transmitted privately to him by this council. It is of course left entirely to his discretion to avail himself or not of their offer.

The "Medical News" department is of universal and primary interest, and no effort should be spared to render it perfect. If money be needful, let it be forthcoming; and I would further suggest that it be an instruction to the secretaries of branches to supply from their respective districts all intelligence likely to interest the medical reader. The memoirs of the more eminent physicians and surgeons who have lived *and died* amongst us are a most interesting feature of this department. The contemplation of the progress of those who have reached the higher honours and rewards of the profession, of their early struggles, of the means they used to surmount obstacles, of their zeal and industry, is invaluable as an incentive and encouragement to those they leave behind them.

As the Journal is the only one in medicine seen by many of our members, it is desirable to introduce a new department, or monthly summaries of the more important of the new facts and opinions bearing on actual practice, which appear in other writings. It is obviously a great boon to the busy practitioner to have correctly epitomised for him in such summaries all the noteworthy improvements in his art, appearing daily in papers to which he has no access. But to be thoroughly useful, these must be written by men competent to sift the wheat from the chaff, and to offer such comments as will command the respect of, and guide safely the practitioner. Each number might contain one such summary, for which less than two pages would be ample space.

I should be sorry to think that the success of our Journal would interfere with the other weeklies, and which are now so ably conducted. There is abundance of room for all of them; and our Journal, when more efficient, will create its own field of usefulness, sow its own seed, and reap its own harvest. The number of medical Journals in England is exceedingly small, compared with the immense fertility in this respect of Germany, Italy, France, and America. Scarcely a town of any size, and certainly no medical school of any note in these states, but has its independent organ, many of which are edited by men of much learning, and enjoy a repute and influence quite irrespective of the geographical position, or the population of the towns in which they are published.

Our Journal has been of late very unjustly depreciated, and that in its own pages,—a severe trial to any periodical. I find, on the contrary, much to commend in style, tone, and general editorial management. Let us give the editor heartily the co-operation he has a right to expect, and he will have no difficulty in ensuring for the Journal a high measure of usefulness, and an honourable place in medical literature.

I am, etc. Alexander Fleming.

MIDLAND BRANCH: ORDINARY MEETING.

The Ordinary Meeting of this Branch was held at Derby, in the Board Room of the Infirmary, on December 8th; Whitaker Johnson, Esq., President of the Branch, in the Chair. There were also present: J. W. Baker, Esq.; A. H. Dolman, Esq.; S. W. Fearn, Esq.; H. Goode, M.B.; J. Heygate, M.D.; J. Jones, Esq.; and H. W. Watson, M.D. (all of Derby). Several non-members were also present.

THE ASSOCIATION.

A conversation took place respecting the financial position of the Association, and the arrears which were permitted to exist among members in the payment of subscriptions; but no resolutions were carried on the matter.

COMMUNICATIONS.

Malformation of the Bladder. Mr. Jones exhibited two cases of malformation of the bladder, in which the anterior wall was absent, and the ureters opened externally, constituting extroversion of the bladder. Both of these cases had been supplied with Mr. Earle's apparatus, constructed by Messrs. Fergusson of Giltspur Street, and found much relief from the distressing symptoms inseparable from their complaint, in the protection of the tender exposed parts, and collecting of the urine.

Uterine Truss. Mr. Jones also exhibited a modification of the elastic uterine truss, and read a description of the apparatus. [This has been published in the Journal.]

MEDICAL REGISTRATION.

A desultory conversation then took place respecting the Local Registration Association; and it was agreed that a meeting of that Association should be convened at an early period, in order to remodel some of its provisions.

Votes of thanks having been passed to Mr. Jones for his paper, and to the President for his conduct in the chair, the meeting separated.

BATH AND BRISTOL BRANCH.

DIPHTHERIA.

At the last Quarterly Meeting of the Bath and Bristol Branch, it was resolved that an inquiry should be set on foot with reference to diphtheria. Dr. William Davies, of Bath, will be obliged by answers to the following queries: the replies being numbered according to the questions.

1. Number of cases, ; age, ; sex, ; and general condition of patients.—2. Condition of throat, especially as regards the presence of false membrane, etc.—3. Mode of treatment; local and general.—4. Number of deaths.—5. Cause of death in fatal cases.—6. *Post mortem* appearances.—7. General remarks.

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

Monday, December 5th, 1859.

B. G. Babington, M.D., F.R.S., President, in the Chair.

REPORT OF THE DIPHTHERIA SUB-COMMITTEE.

BY J. N. RADCLIFFE, ESQ.

Although in February last, upwards of two hundred circulars, asking for information and containing suggestions for observation, had been distributed among the members of the Society and others in various parts of the kingdom; and, notwithstanding that the aid of the profession generally, in the inquiry, had been sought through the medical journals, the Committee had received, during a period of ten months, only thirteen specific reports, and twenty-eight general replies. Hence the results of the inquiry were entirely insufficient to form a basis for a general history of the rise and progress of diphtheria in the kingdom. Nevertheless, the information which had been received respecting the disease, was not without value: (1), from the additional light thrown, in several respects, upon the development of the epidemic; and (2), as showing the highly important knowledge which might be obtained respecting epidemic diseases from an inquiry such as that conducted by the Committee, if it were generally supported by the members (particularly the non-resident members) of the Society.

The facts of chief importance which had been ascertained by this inquiry, might be summed up thus:—

1. The probable occurrence of sporadic diphtheria in the counties of Kent and Essex in the years 1853 and 1854; also, in different parts of the kingdom at intervals within the last twenty years.

2. The unusual prevalence of throat-affections of all kinds, and not unfrequently of a peculiar kind, which might be described as of a quasi diphtheric character, prior to or contemporaneously with the present epidemic of diphtheria.

3. The concurrent or intercurrent prevalence, in the same locality, of epidemic diphtheria with epidemic scarlet fever, and the occasional occurrence of a diphtheric affection of the fauces in scarlet fever.

The whole of these facts had an important bearing upon the history of the development of the present epidemic of diphtheria, in reference to—1. The introduction of the disease into the kingdom from without. 2. The causes which had led to the development of the epidemic. 3. The relations of the disease to cognate affections, and to scarlet fever. Upon all these points the foregoing facts were valuable, as suggestive of further inquiry, and as indicating the direction in which that inquiry should tend, as well in those districts in which the epidemic had prevailed as in those in which it continued to prevail. 4. The doubtful contagiousness of the disease in some districts; its undoubted contagiousness in others. 5. The unsanitary state of the majority of the localities in which the disease occurred. 6. The greater liability to the disease being in the first decennium; or, to narrow the question, the second quinquennium of life. 7. The proportion of *males* in one hundred cases being 42·3; of *females*, 58·2. 8. The nature of the treatment indicated;—viz., (*a*) The application of more or less stimulating or caustic applications to the diseased parts; (*b*) The regulation of the excretions; (*c*) The sustentation of the powers of the system.

In concluding their Report, the Committee remarked that, although the information obtained by them in the present inquiry was exceedingly imperfect, yet it was sufficient to show that, if the inquiry had been supported by the members of the Society to the extent that the Committee had hoped that it would have been, a large amount of most valuable information respecting diphtheria would have been obtained—information of a character that could be obtained in no other manner than by the systematic co-operation of many and widely separated observers to one and the same end. The Committee suggested that the Society should take into consideration the propriety of adopting other and additional means (if such could be devised) for promoting or insuring the more satisfactory co-operation of its members in such inquiries as the Society may set on foot; for the Committee felt assured that the present inquiry had proved in a great measure abortive, not so much from indisposition of the members to aid, as from an erroneous estimate of the value of the information which they possessed relative to the subject of inquiry. Thus it was stated that, in the majority of letters with which the Committee had been favoured in answer to their circular, the writers had contented themselves simply with stating that diphtheria had not appeared in their neighbourhood, or that they had seen but one or two cases of the disease; and consequently that their experience would be of no value to the Committee. Yet the Committee had specifically asked for particular information respecting the prevailing character of throat-affections where the disease had not manifested itself, and for many items of information where it had, even if it were but in a solitary instance.

The Committee further suggested in respect to the present inquiry, that additional information should be specially sought concerning—

(*α*) The date of the first case or cases of diphtheria which occurred in any district.

(*β*) The occurrence of diphtheria in a sporadic or epidemic form prior to the present outbreak.

(*γ*) The character of the throat-affections which occurred contemporary with diphtheria, or that disease being absent, the character of the throat-affections which had been observed immediately prior to its appearance in 1857, and subsequently.

(*δ*) The relationship existing between diphtheria and scarlet fever.

If the suggestions of the Committee respecting further inquiry were adopted by them, the Committee expressed a willingness to continue their duties some time longer, notwithstanding the disheartening result which had attended them hitherto.

A discussion followed, in which Dr. Milroy, Dr. Camps, Dr. McWilliam, Dr. Sanderson, Dr. Greenhow, and Dr. Babington, took part.

MEDICAL SOCIETY OF LONDON.

Monday, December 5th, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

ON CERTAIN POINTS OF PHYSICAL DIAGNOSIS IN MITRAL VALVE DISEASE. BY JOHN COCKLE, M.D., F.L.S.

The following observations were based, in part, upon 178 cases of cardiac disease occurring at the City Dispensary during the past four years. Of these, there were 90 males and 88 females, affected as follows:—Mitral, 90; aortic 71; mixed, 17. In 58 of the total cases, rheumatic fever was the assigned cause, and affected the different valves in the following proportion: mitral valve, 35; aortic valve, 16; both mitral and aortic, 7. These 178 cases occurred in an aggregate of 7566 patients, and would thus furnish a per centage of about 2.38. Several other cases occurred, but were omitted from the table in consequence of the imperfect notes connected with them. Tubercular phthisis was often associated with disease of the aortic valves.

With regard to two of the physical signs common to disease of the heart—cardiac fremitus and musical murmur—it was observed that mitral fremitus occurred in a considerable proportion of cases, but invariably as a systolic phenomenon; no instance of diastolic fremitus limited to the apex was observed. At the aortic mouth, on the contrary, fremitus was met with, both systolic and diastolic, but limited to one or other of these acts. Diastolic fremitus was in a few cases very intense. Systolic musical murmur was most rare at the mitral orifice; but, as a diastolic phenomenon, it might be said, practically, to have no existence. With regard to murmurs generally, although conducted along, they were by no means walled in, as it were, by the vessels originating them, but radiated over the chest in all directions; and when intense, or, *à fortiori*, musical, masked the closure-sounds of valves in their proximity. Dr. Cockle proceeded to discuss some points connected with the physiology of the heart's rhythmic action; and, while admitting the controlling power of the nerves, he thought the phenomena were best explained by the action of the blood in the chambers, on the one hand, and the chemico-vital changes between the blood of the coronary arteries and the cardiac wall tissue, on the other. These two acts being simultaneous, contraction ensued as a necessary consequence. It was also considered that an additional element in the causation of the first sound of the heart arose from the reaction between the blood in the ventricle and the layer that would necessarily form on the auricular surface of the valves by the time they were brought to their plane of closure. This upper layer acted as a damper to the valve-vibration, just in the same manner that the leathered key of the piano-forte damped the vibration of the note struck.

With regard to the diseases of the mitral valve, the author laid much stress upon the fact that slight regurgitation might exist for years without seriously engaging the general health, or inducing more than a very slight degree either of dilatation or hypertrophy of the heart. Permanent systolic murmur at the apex was the only sign to reveal the change; and here the physical sign was at its *minimum* of value. Indeed, frequently, the more marked and intense the murmur, the less the actual amount of mischief entailed. It was in such cases only where causes physical or moral had concurred to impair the general tone, that irritative excitement of the organ occurred, and the signs of impaired contractility of the chambers became manifest; and then it was that such signal benefit resulted from the combination of iron and digitalis. The reasons for such combination, and the special dose and influence of digitalis, were here pointed out; the great object being to secure efficient emptying of the ventricular cavities. In other more exaggerated cases, the great question arose as to the physical signs revealing the actual change in the mitral valve permitting regurgitation. Murmur at the apex might not alone have sufficient precision. Hence Skoda had affirmed that intensified accent of the pulmonic synovial valves was the most important accessory physical sign. Admitting the occasional value of this phenomenon, it was shown not to be always present. We must, therefore, seek other aids. The author believed that, at times, the reduplication of the second sound at the base, when taken in combination with permanent murmur at the apex, was of much value. The regurgitation being considerable into the auricle, the aorta received but a small stream comparatively: hence, under such inefficient stimulus, this vessel lagged behind the pulmonary artery, and caused reduplication of sound at the base. And conditioned upon the above, another phenomenon might now and then be observed. The irritable and enlarged heart, in such cases, forcibly injecting the vessels with a small stream, caused the phenomena of collapsing vessels in the subclavian and carotid arteries. But the sound of the aortic valves at the base showed their integrity; while the small and weak pulse excluded the existence of mere hypertrophy of the left ventricles.

The President asked whether there was any difference in the supply of the blood through the coronary arteries, according to their opening above or below the free edges of the semilunar valves? He thought that, when they opened above the edges, the supply was less likely to be interfered with by an atheromatous state of the aorta, than when they opened behind the valves.

Dr. Edward Smith regarded diuretics as of much value in obstructive disease. The best diuretic he had found to be elaterium in pill, with acetate of potash in mixture. He had seen cases in which great relief had been produced, and had lasted long. He had observed a sound in the left side, most intense about midway between the sternum and the shoulder. It was a murmur rhythmic with the heart, but it evidently did not imply heart-disease. He had observed it in several cases, but did not know the explanation of it. It did not depend on conduction, nor on disease of the pulmonary semilunar valves.

Dr. Hare would enforce the observation of Dr. Cockle as to the apparent amount of regurgitant mitral disease without subjective symptoms. He had lately heard very loud regurgitant mitral murmur in a clergyman, who had felt no symptoms whatever of heart-disease. Anæmic diseases also give rise to murmurs both at the apex and base, which disappear without disease. In many cases of non-anæmic disease, also, there is murmur at the apex, even in the cases which are independent of rheumatism. These regurgitant murmurs he believed to be from imperfection of the columnæ carneæ. As to the cause of the first sound, he thought Dr. Halford's experiments conclusive. He thought that one layer of blood striking another would scarcely produce the sound; and that this would not account for the difference of the sound in dilatation, where there is a sound corresponding to the greater extent of membrane. He would be inclined to attribute the sound, with Dr. Halford, to the tension of the valves; but the cause assigned by Dr. Cockle might also be taken into consideration. He agreed with Dr. Cockle as to the value of small doses of digitalis, combined with iron in many cases. He would ask Dr. Cockle his explanation of reduplication of the first sound of the heart. He (Dr. Hare) did not look on it as of much value as a sign of organic disease, as it was often temporary, and unconnected with any special diseased state.

Dr. E. Smith asked whether Dr. Hare attached more importance to the reduplication of the *second* sound which sometimes occurs?

Dr. G. Johnson had had a case in hospital some months ago, in which reduplication of the second sound was heard. Symptoms of general dropsy had come on about three weeks before admission. There was also effusion into the right pleura. This was found after death. There was engorgement of the lungs, and great narrowing of the orifice of the mitral valve. In another case, soon afterwards, there was reduplication of the second sound; the patient had bronchitis. The sound ceased, and the patient recovered. He thought Dr. Cockle's statement, that the auriculo-ventricular valves are more frequently affected in rheumatic disease, to be important. He would scarcely rely on the presence or absence of dyspnœa to distinguish between functional and organic palpitation. He agreed with Dr. Smith as to the great value of elaterium in dropsy from heart-disease. He had had a patient, a woman, in whom a single powerful dose of elaterium removed the dropsy and also the bellows-sound. These, however, returned; and, after death, there was found great dilatation of the heart. Iron is also a remedy of great value in obstructive disease; for it is our object to strengthen the ventricle.

Dr. Cockle said, that the mode of entrance of the coronary arteries had been disputed since the time of Haller; and the question seemed scarcely settled. He concurred with Dr. Smith as to elaterium. He thought that, in many cases, the mere pressure of the fluid in abdominal dropsy hindered the action of the kidneys. He could not explain the murmur alluded to by Dr. Smith. He believed that iron acted both by improving the tone of the cardiac fibre, and also the condition of the blood. In anæmia, he had found murmurs at the apex as well as at the base of the heart, but not so frequently: no doubt explainable by irregular contraction of the muscles. He was not disposed to affirm that reduplication of the sounds was indicative of disease; but when it occurs with other signs of permanent regurgitant disease, then great importance is to be attached to it, if the sound be permanent. As to reduplication of the first sound, he supposed it merely a division of a rasp-murmur. If the heart's action is arrested, the reduplication is arrested. Sometimes the second sound of the heart is even doubled or quadrupled.

Monday, December 12th, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

CLINICAL OBSERVATIONS.

Spontaneous Evolution of the Fœtus in Utero. Dr. Mackenzie related a case, which is published as an original article at p. 1013.

Dr. Murphy said the case brought forward by Dr. Mackenzie was important, because spontaneous evolution is so rare an occurrence, that it was difficult to lay down a law regarding it. He had had a case where an arm presented when the head was above the brim; but afterwards the breech presented. In reflecting on this case, he was led to conclude that Dr. Denman's theory of spontaneous evolution was correct. Dr. Douglas, of Dublin, did not find what Dr. Denman did; but held, from his experience, that the cross-birth was forced down until the shoulder became fixed under the arch of the pubes. This accorded with what was observed afterwards; but it did not altogether negative Dr. Denman's theory. There were now at least three cases—Dr. Denman's, Dr. Mackenzie's, and his own (Dr. Murphy's)—to prove that spontaneous evolution may take place in the uterus.

Dr. Routh thought the same case interesting from its rarity. In the three cases referred to, the shoulder was raised and the buttock presented; and this pointed to the practical suggestion that if, on being called in, the obstetrician found a shoulder presenting, he should push it up, and effect that which nature does in the cases of evolution.

Dr. Greenhalgh related a case in which he and two other practitioners found a foot presenting, and some time afterwards a head.

Mr. Streeter had met with spontaneous evolution in a twin born prior to the full time, in a primapara. An arm presented; and evolution took place within three or four pains. He made some observations in reference to the connection between roomy pelves and the occurrence of spontaneous evolution.

Case of Tracheotomy in Croup; Treatment by Senega and Ammonia; Death. Mr. Price, on November 25th, was requested to see an infant with marked symptoms of croup. Blisters and antimony had been used; and Mr. Price was called in on the second day, when tracheotomy was performed, the effusion not having appeared to have progressed far down.

The breathing was relieved. At the suggestion of Dr. Gibb, decoction of senega and sesquicarbonate of ammonia were given, first by the mouth; and then, in consequence of vomiting, by the rectum. Brandy and beef-tea were also given. The child went on apparently well at first; but died, without any apparent reason, forty-six hours after the operation. On *post mortem* examination, the lungs were found congested, and the inflammation had extended down the trachea.

Dr. Richardson asked whether there was not a clot in the right side of the heart? He had several years ago pointed out the importance of observing in tracheotomy whether there is any embarrassment of the heart, indicating the formation of clots.

Mr. Price said that the *post mortem* examination had not been made by him; but he believed that the heart had not been examined.

Use of India Rubber for obtaining Extension in Dislocations. Mr. Maunder said that, since the introduction of chloroform, it had become less necessary to use mechanism for reducing dislocation; but mechanical means were still sometimes necessary. Instead of pulleys, he proposed to use pieces of vulcanised India rubber, which, when stretched enough, acted with a power of 30 lbs. These could be added one after the other, as required. The action of the apparatus was more gradual than that of pulleys.

Mr. Price had used India rubber in the stretching of stiff joints, and also as a false biceps in excision of the elbow-joint. It had also been used in cases of excision of the knee-joint, as an extensor.

Mr. Hart had used similar means in treating popliteal aneurism by flexion.

Artificial Production of Endocarditis. Dr. Richardson exhibited a dog which had been the subject of subacute endocarditis, and in which there was still heard the physical signs of chronic valvular disease; viz., local regurgitant systolic murmur. Dr. Richardson referred to the fact that, in the course of last session, he had placed before the Fellows specimens of diseased hearts, removed from animals in which the various phases of endocarditis, synthetically produced, were well delineated. In those experiments the endocardial mischief had been brought about by the introduction of lactic acid into the system by the injection of it into the peritoneal cavity. In the present case, the acid had not been injected, but an attempt had been made to produce the same result by generating the acid by a special diet. In the beginning of October the dog now presented, being then quite well and the sounds of the heart perfectly healthy, was put on food consisting of sugar mixed with decomposing caseine, with water. The dog ate freely of this, and for the first few days seemed to undergo no change. Then the action of the heart became irregular; and ultimately there was developed a loud systolic murmur. The animal had subsisted on the diet above named for eight weeks; but for the last several days he had been allowed to return to his ordinary food. There had been no signs of articular rheumatism. In commenting on the experiment, the author said that the only question of doubt, pathologically speaking, was, whether the murmur was anæmic or valvular? He believed himself that the murmur was not anæmic, but the valvular murmur, identical with similar murmurs produced by the injection of the acid. In this, the first experiment of the special kind, he had simply used in the dietary the constituents required to produce the lactic acid out of the body in the laboratory. Granting that this acid had been produced in excess in the animal under the dietary named, the excess of the acid would not be great; inasmuch as its production would be slow, and the elimination of the substance by the excretions rapid. However, it might be produced in sufficient quantity to excite the chronic diseased condition under which the animal was suffering. On another occasion, he would place the heart of the dog before the members for their inspection. He did not, at that time, offer any theory to explain the experiment; he merely brought forward a fact. All the members present examined the dog: the opinion generally expressed was that the murmur was mitral regurgitant, and due to valvular disease.

Retention of the Fœtus in Utero. Dr. Greenhalgh related the case of Mrs. ——, aged 42, who was seized, in the eighth month of pregnancy, with acute pain in the right iliac fossa, followed by sickness. The motions of the child now ceased. Subsequently she had typhoid symptoms, with obstinate vomiting; in consequence of which, premature labour was induced, and a putrid fœtus was expelled. After this, the symptoms abated, and the patient recovered. Quinine and wine were used in the treatment.

Mr. Gay related a case in which a fœtus was retained four months beyond the ordinary term, in a case that had come under his notice about nine years ago. The labour pains had set in at the ninth month, and had then ceased. Four months afterwards, Mr. Gay was called on to assist in extracting a child from the peritoneal cavity, it being supposed that the uterus had been ruptured. The uterus, however, was found to be whole; and an incision was made in it, and the child was removed. It was dead, and floated in a large quantity of very fœtid fluid. The placenta was closely attached over the os uteri, and was removed. The patient completely recovered, and was now alive.

Dr. Mackenzie had met with a case in which the fœtus had been retained for twelve months, when the fœtus was expelled by the natural process. It was not in any way decomposed.

Use of the Castor Oil Plant as a Galactagogue. Dr. Routh exhibited three preparations of castor oil leaves, a tincture and a liquor (dose of each, one drachm), and an extract (dose, five grains). The leaves were obtained from Australia; and the drugs had been prepared by Mr. Greenish, of New Street, Dorset Square, where they could be procured. Dr. Routh had read a paper on the subject of the galactagogue effects of this plant, the leaves of which, applied to the breasts as poultices, and as fomentations to the vulva, for three days at intervals, were used in Boa Vista, to induce milk in the breasts of any woman within catamenial ages, but particularly if these women had borne children, to produce milk. The milk, once produced, could be perpetuated by the simple irritation produced at the nipple by the suction of a child. These facts, related by Dr. WcWilliam, had been confirmed in part by Dr. Tyler Smith. Dr. Routh had published his experience on the subject in a series of papers in the *Medical Times and Gazette* of this year. To lying-in women with a deficiency of milk, he had given the infusion, in combination with conger-eel soup; and the effect in determining a copious flow of milk had been remarkable. He had administered the extract to unmarried women within catamenial ages, and the effect had been to produce intense pain in the breasts; but, as he could not find anybody, in that case, who would try the effect of a child, he had not yet induced milk in the breasts of such; but, after three or four days, the symptoms were relieved by a copious leucorrhœa. As it was possible that a larger experience of this remedy might enable us to convert some married women (within catamenial ages) into wet nurses, and as it undoubtedly acted as a powerful lactagogue in suckling women, he was anxious that others also should experiment, and therefore to direct them where it could be procured.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Andrews, C. G., Esq., Surgeon Indian Army, on Dec. 11.
Atkinson, W. B., Esq., Surgeon, on December 5.
Denny, John, Esq., Surgeon, Brompton, on December 6.
Greatrex, A., Esq., Surgeon, Holborn Hill, on December 7th. (Stillborn.)
Holberton, V., Esq., Surgeon, Hampton, on Dec. 7.
*Ross, F. D., Esq., Guildford, on December 10.
Ross, J. T. C., Esq., Surgeon Bengal Army, at Simla, on Oct. 31.
*Sieveking, E. H., M.D., Manchester Square, on Dec. 7.
Stedman, A., Esq., Surgeon, Cookham, Berks, on Dec. 6.
Tatham, R. G., Esq., Surgeon, Poplar, on December 7.

Of daughters, the wives of—

Foaker, F., Esq., Staff-Surgeon, at Malta, on Dec. 2.
Miles, C., Esq., Surgeon, Conduit Street West, on Dec. 12.
*Roper, Alfred G., Esq., Croydon, on December 10.

MARRIAGES.

Bright, Joseph, Esq., to Frances, only daughter of H. J. Canty, Esq., Surgeon, at Liverpool, on Dec. 8th.
Dickson, Robert, Esq., Surgeon, Carnoustie, to Cecilia G., youngest daughter of the late James Anderson, Esq., merchant, Arbroath, on December 9th.

Row, Captain Wm. S., Bengal Army, to Frederica E. E., second daughter of *Joseph Amesbury, Esq., of Brighton, on November 30th.

DEATHS.

Black. On September 29th, at Melbourne, aged 33, James, third son of *James Black, M.D., of Edinburgh.

Ilott. On December 10th, at Bromley, aged 64, Mary, widow of the late W. Ilott, Esq., Surgeon.

Lowe. On December 11th, at Balgreen, near Edinburgh, Maud Murray, infant daughter of W. H. Lowe, M.D.

Meikleham. On December 7th, at Aberdeen, aged 70, Helen, wife of George C. Meikleham, M.D., Surgeon 70th Regiment.

Norton. On December 10th, aged 5, at 4, Westbourne Grove West, Julia Maude, daughter of Robert Norton, M.D.

PASS LISTS.

Royal College of Surgeons. The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on Dec. 8th:—

Beckingsale, John Edgar, Newport, Isle of Wight: diploma of membership dated Nov. 1, 1833
Blakeney, E. Hugh, Brunswick Square: Jan. 20, 1832
Camps, William, Park St., Grosvenor Square: May 8, 1840
Cartwright, Samuel, Burlington Street: March 9, 1838
Clarke, Benjamin, Hackney: July 29, 1842
Clarkson, William Nicholson, Whitby: April 18, 1842
Cowen, Henry Lionel, Ceylon Rifles: August 30, 1839
Harston, Alfred Dew, Islington: July 19, 1839
King, Osmer, Greenwich: May 31, 1839
Michell, Slyman, Truro, Cornwall: April 15, 1842
Moseley, George, Gower Street: April 7, 1843
Nugent, Richard, Wolverhampton: February 17, 1843
Oxley, Robert, Pontefract: August 11, 1843
Smart, James, Cambridge Heath: May 15, 1843
Smith, T. Heckstall, St. Mary Cray, Kent: March 31, 1843
Stewart, John, Wolverhampton: March 6, 1818
Wilkinson, Charles Nelson, Wandsworth: July 15, 1842
Williams, John, Bengal Army: February 5th, 1841

Members admitted at a meeting of the Court of Examiners on Friday, December 9th, 1859:—

Barnes, Thomas B., Thaxted
Battye, Richard F., Pimlico
Buller, W. B., Sutton, Ely
Bunch, J. J., Wolverhampton
Cocker, J., Blackpool, Preston
Cooper, Thomas R., Oldbury, Birmingham
Culham, James, Drummond Street, Euston Square
Hampton, Edward, Southwark
Johnson, Walter, Colchester
Jones, John, Ilfracombe
Large, Joseph, Oswestry
Ling, J. M., Saxmundham
Parsons, Charles H., Shelton, Coventry
Phillips, E. B., Hales Owen
Sadler, P. L., Warrington
Sedgwick, C., Hollingbourne
Storrow, John, Newbottle, Durham
Winterbotham, J., Castleton

[The preceding gentlemen had previously been in practice as Licentiates of the Society of Apothecaries.]

Hicks, Charles, Smethwick, Birmingham
Meredith, R., Netherton
Sanders, Thomas, Cheshunt

Licentiates in Midwifery admitted at a meeting of the Board, on December 14th:—

Andrew, Augustus L., Munster: diploma of membership dated July 19, 1859
Bringloe, John, Camberwell: July 29, 1859
Cox, Henry, Gray's Inn Lane: March 11, 1859
Garrington, Arthur M., Portsmouth: August 2, 1858
Glasier, George W., Lincoln: July 15, 1859
Hayward, Henry, London: July 23, 1858
Henchley, T. C. W., Pont Cottyn, Glamorgan: July 9, 1855
Lane, William B., Arlonstown, Kinsale: Dec. 2, 1859
Mason, John B., Richmond: November 5, 1858
Morris, Henry, Royal Berkshire Militia: Feb. 23, 1859
Starke, Anthony G. H., Honiton: October 28, 1859
Trotter, Charles J., Holmfirth: December 6, 1859
Watson, William S., Bloomsbury: July 3, 1857
Wyndowe, Samuel J., Indian Army: January 27, 1854

Apothecaries' Hall. Licentiates admitted on *Thursday, December 8th*, 1859:—

Curtis, William, jun., Alton
Duke, Stephen, Chichester
Jameson, George W., Caister
May, John H. S., Plymouth
Travers, William, Poole

HEALTH OF LONDON—DECEMBER 10TH, 1859.

[*From the Registrar-General's Report.*]

	Births.	Deaths.
During week ..... {Boys .. 920 / Girls .. 918}	1838	.. 1289
Average of corresponding weeks 1849-58 ..	1585	.. 1343

Among the causes of death were—small-pox, 40; measles, 31; scarlatina, 82; diphtheria, 15; bronchitis, 181. Of bricklayers, 3 died in the week, of bricklayers' wives, 2, of bricklayers' children, 5; of carpenters, 8 died, of carpenters' wives, 2, of carpenters' children, 28; of masons, 1 died, of masons' wives, 1, of masons' children, 2; of painters, 9 died, of painters' wives, 3, of painters' children, 11; of plasterers, 1 died, of plasterers' children, 4.

Barometer:

Highest (Sat.) 30·578; lowest (Mon.) 29·319; mean 29·923 in.

Thermometer:

In sun—highest (Mon.) 55·5°; lowest (Sun.) 43·4°.
In shade—highest (Mon.) 55·5°; lowest (Sun.) 26·9°.
Mean—41·3°; difference from mean of 43 yrs. +0.4°.
Range—during week, 28·6°; mean daily, 12·1°.

Mean humidity of air (*saturation*=100), 92.

Mean direction of wind, variable.—Rain in inches, 0·41.

The Royal Society of Edinburgh. At the opening meeting, on the 5th instant, for the session 1859-60, of the Royal Society of Edinburgh, the Neill medal and prize were presented, through Professor Balfour, to W. Lauder Lindsay, M.D., F.L.S., for his *Memoir on the Spermogones and Pycnides of Filamentous, Fruiticulose, and Foliaceous Lichens*, read to the Society during the last session. The Neill prize was, by the late Dr. Patrick Neill of Canonmills, the eminent botanist, placed in the hands of the Royal Society to be awarded for distinction in Natural History; and this year it was offered for "a paper of distinguished merit on a subject of Natural History, by a Scottish naturalist, presented to the Society during three years preceding 1st February, 1859; and, failing such paper, for a work or publication by a distinguished Scottish naturalist, bearing date within five years of the time of award." The paper is in the course of being printed at length in the *Transactions*, and of being illustrated by numerous plates, beautifully executed by Mr. Tuffen West, of London. The Macdougall-Brisbane medal and prize of the same Society—the only other one awarded during the past year—was conferred on the distinguished geologist Sir Roderick Murchison, at the meeting of the British Association at Aberdeen, in September last, "in consideration of his original, persevering, and successful exertions to throw light upon the superposition and real age of vast geological formations of extreme antiquity in the north-western Highlands."

Medical Politics in Sardinia. In the *Gazetta Medica Italiana*, M. G. Battista Borelli has published the project of a law for the creation of a sanitary magistracy in the Sardinian states. He proposes that the public health should be superintended, under the authority of the Minister of the Interior, by a director chosen from the medical profession, and assisted by a Council. In that province, there would be assistant inspectors. In this organisation would be established all the branches of the sanitary service, and to it would be attributed all that concerns the interests of the medical profession, especially the suppression of illegal practice.

Pathological Society of Dublin. The first meeting of this Society for the session 1859-60, was held on Saturday, November 27th. The following officers were elected for the ensuing session: *President*—Thomas Beatty. *Vice-Presidents*—Cathcart Lees, Robert Mayne, Joseph O'Ferrall, Benjamin G. M'Dowel, Fleetwood Churchill, Samuel Gordon. *Council*—Robert Adams, John Banks, Dominick J. Corrigan, Christopher Fleming, John Hamilton, James S. Hughes, Edward Hutton, Robert Law, Sir Henry Marsh, Bart., Alfred H. M'Clintock, Josias Smyly, Jolliffe Tufnell. *Honorary Secretary*—William Stokes. *Secretary and Treasurer*—Robert W. Smith. *Secretary for Foreign Correspondence*—Robert D. Lyons. The subject for the Gold Medal was announced to be "The Diagnosis and Pathology of the Diseases of the Brain and its Membranes."

University of St. Andrews. Dr. James Forbes, late Professor of Natural Philosophy in the University of Edinburgh, has been appointed, by the Crown, principal of the United College of St. Salvador and St. Leonard, in the University of St. Andrews, in the room of Sir David Brewster, who has been appointed Principal of the University of Edinburgh.

QUALIFICATION OF PUBLIC VACCINATORS.

The following notification has been issued by Her Majesty's Privy Council:—

Whereas, under the provisions of the Public Health Act, 1858, and of an Act since passed to perpetuate the same, the Privy Council have this day issued regulations "for securing the due qualification of persons to be hereafter contracted with by guardians and overseers of unions and parishes in England, for the vaccination of persons resident in such unions and parishes, and for securing the efficient performance of vaccination by the persons already or hereafter to be contracted with, as aforesaid"; and whereas in these regulations it is, among other things, required, that, on and after the first day of January, 1860, persons to be contracted with for vaccination, and persons to be allowed to act in their stead, shall, except in certain cases, produce evidence of being duly qualified in all that relates to the practice of vaccination; which evidence must consist in a certificate given, after due instruction or examination, by some public vaccinator whom the Privy Council authorise to act for the purpose:—

Notice is hereby given—(1.) That, subject to orders of the Privy Council, the public vaccinators named in the following list are authorised by the Privy Council to give the required certificates of proficiency in vaccination to persons whom they have instructed therein, and those whose names in the following list are printed in italic letters, are also authorised to give such certificates after examination to persons whom they have not themselves instructed;

(2). That, from and after the first day of January, 1860, the vaccinating-stations, at which these vaccinators officiate, will be open, under conditions set forth in the annexed memorandum, for the purposes of teaching and examination; and

(3). That from time to time, as additions are made by the Privy Council to the list of persons whom they now authorise to give certificates of proficiency in vaccination, the names of the other persons thus authorised will be published in the *London Gazette*.

Cities and Towns having Educational Vaccinating Stations.	Public Vaccinators authorised to give Certificates of Proficiency in Vaccination.	Places used as Educational Vaccinating Stations.
London	*Mr. Jas. Furness Marson*	(*Principal Station*) Surrey Chapel, Blackfriars Road
	Mr. Wm. Prue Jorden	(*West Station*) 14, Lower Belgrave Street
	Mr. Wm. Jones Lewis	(*East Station*) 1, Well Street, Wellclose Sq.
	Mr. George Simpson	(*North Station*) Tottenham Court Chapel, Tottenham Court Road
Birmingm.	*Mr. Samuel Spratly*	The General Dispensary
Bristol....	*Mr. William Yeoman Sheppard*	7, St. Augustine's Place
Hull	*Mr. John Hare Gibson*	29, Nile Street
Liverpool	*Mr. A. Browne Steele, Mr. John Henry Wilson, Mr. John Fenton,* and *Mr. James Gilmour,* acting conjointly, or at least two of them together	The Ladies' Charity, Parr Street
Manchester	*Mr. Evan Thomas*	159, Rochdale Road
Newcastle	*Dr. Thomas Fothergill McNay*	Bricklayers' Hall, Castlegarth
Oxford....	*Mr. Edwd. Law Hussey*	104, St. Aldate's
Sheffield ..	*Mr. George Atkin*	Park Chapel, South Street

Memorandum of Arrangements made in England for the Public Teaching of Vaccination, and for the granting of such Certificates of Proficiency in Vaccination as will qualify the bearers (if otherwise eligible) to be contracted with by Guardians and Overseers for the performance of Public Vaccination.

The stations at present established for educational purposes are all in places where there are recognised medical schools. They are stations where the appointed public vaccinator uniformly attends in person, and where the annual number of vaccinations, as compared with the number of vaccinating days, is sufficiently large to promise that the student, during his period of attendance, will, as a rule, always find many cases together for observation. They are stations from which vaccine lymph is furnished for the public service; the vaccinators in charge of them having, for this purpose, been selected by the National Vaccine Board to be members of the National Vaccine Establishment.

The vaccinator of an educational vaccinating station, during his attendance thereat, will exhibit and explain the course and characters of the vaccine vesicle; will practically teach the best method or methods of performing vaccination, and of taking lymph for present or future use; will inculcate all precautions which are necessary with regard to the health of subjects proposed for vaccination, and with regard to the selection and preservation of lymph; and will give all such other instruction as is requisite for the scientific and successful performance of vaccination and re-vaccination. During his course of instruction, he will make provision to ensure that always some cases come for inspection on the tenth, as well as on the eighth day; and, for the purpose of shewing these cases to his pupils, he will give, on the day appointed for their coming, a second weekly attendance at his station. He will further enable and direct each pupil to see at least six cases of vaccination on at least two other days of their progress; viz., both before the eighth and after the tenth day. In the teacher's presence, and under his direction, any pupil, aged not less than eighteen years, may take part in vaccinating; but not till he have attended the station on at least two vaccinating days.

Any person desirous of being admitted as pupil at an educational vaccinating station, shall pay a fee not exceeding one guinea, and thereupon receive a ticket entitling him to attend the public vaccinations of the teacher. When the pupil has attended at the station, during the times of vaccinating and teaching, for at least six weeks, the teacher, if satisfied of his proficiency, shall, on receiving back his ticket, but without further payment, give him a certificate in the appointed form.

At stations where the teacher is also authorised to give certificate of proficiency in vaccination to persons whom he has not himself instructed therein, such persons will, on appointed occasions, be examined by the teacher, on payment of a fee not exceeding one guinea, and if he find them competent, receive certificates accordingly. In case of failure to pass this examination, the candidate may be admitted to a second examination on payment of a fee not exceeding half a guinea.

The certificate of proficiency will be understood to imply—and therefore the teacher who signs it will have taken care to ascertain—that the person to whom it is given can skilfully vaccinate, both with liquid lymph (including such as is preserved in capillary tubes) and also from ivory points; that he can properly charge ivory points or capillary tubes with lymph; that he is aware of the relative advantages of recent and preserved lymph, and of all precautions which are requisite in using the latter; that, from among vaccinated subjects presented for eighth-day inspection, he can select, and give reasons for preferring, those who are fittest to furnish lymph; that, besides being thoroughly familiar with all local changes which, from first to last, normally ensue on vaccination, he has learnt what causes may accelerate or retard the local changes, or give them undue severity, or otherwise render them irregular; that he is well informed as to the constitutional effects of vaccination (including the eruptions which sometimes follow it), and as to the treatment which cases of vaccination, under various circumstances, may require; that he knows how far the protective influence of vaccination is affected by lapse of time, and how far by the mode in which vaccination is performed, especially by the number or size of vesicles, and knows generally under what circumstances re-vaccination is to be recommended; finally, that he is acquainted with the laws and regulations relative to public vaccination, and understands the local arrangements which are necessary for maintaining a constant supply of lymph.

University of St. Andrew's. This university has lately conferred the honorary degree of Master of Arts on our talented associate, Dr. B. W. Richardson of London. Dr. Richardson is, we learn, the third member of the medical profession on whom the honour has been conferred—his predecessors having been the late Dr. Hannay of Glasgow, and Dr. Golding Bird.

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Addresses and Papers

READ AT THE

TWENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LIVERPOOL, JULY 27th, 28th, and 29th*, 1859.]

ON OXYGEN AS A THERAPEUTIC AGENT.

By S. B. BIRCH, M.D.

THE gradually increasing interest, which I now find existent in the profession, with regard to oxygen as a therapeutic agent, induces me to believe that a communication on this subject may not prove unacceptable at this our annual meeting, particularly if the paper offered be rendered as practically useful as possible.

Somewhat discouraged by much opposition, passive and active, I have thus far permitted myself to remain comparatively isolated. No doubt this has been a grave fault; yet even now I come forward with considerable diffidence, and can only hope that due allowance will be made for imperfections, and any savour of egotism, to a certain extent unavoidable in a position almost unsupported. Long silence, since I first introduced the subject in the pages of the *Lancet*, may have conveyed the impression that untenable ground was about to be quietly evacuated. It is desirable, therefore, to enter a *caveat* against any such possible assumption, and to give an assurance that (far from entertaining such an intention) the further my clinical experience of oxygen advances, the greater does its value as a remedy in intractable disease appear, and the more does the conviction obtain, that ultimately it must be acknowledged as one of our most approved resources, failing ordinary treatment. Had I, however, been premature, where would have been my collection of facts? where my practical knowledge of the subject? where the basis upon which I could venture to form an opinion adverse to general authority?

A few of my professional brethren in different localities have latterly been induced to promise a fair trial in suitable and carefully selected cases in private practice; but to arrive thus at fair results, will be a work of time in the hands of gentlemen in extensive general practice, who can hardly, amidst their laborious daily duties, afford the necessary amount of time which a proper trial, entailing close watching and daily observation, necessitates. Indeed, I almost feel certain that extended, patient, and impartial trials in several large hospitals, will be needed, in order to satisfy the professional mind of the true place which this gas ought to occupy in our materia medica, and of the necessity of precise rules in exhibiting it.

It may seem presumptuous to imagine that I may succeed where Drs. Beddoes, Hill, and Thornton (although eminently successful in their own practice), left no permanent impression; where hospital experimenters are reported to have always failed; where authorities in general are decidedly adverse. But duty and *esprit de corps* must urge each of us to promote truth to the utmost of our ability, and to endeavour to extend beyond our own limited sphere of practice any assumed improvement in therapeutics. Previously to adducing facts within my own cognizance, it will be right to shew that, even ignoring clinical evidence altogether, chemical and physiological experiments are sufficiently conflicting to warrant the medical practitioner in regarding the question of the therapeutic value of oxygen (beyond atmospheric proportions) as *adhuc sub judice*. A very brief outline of the main results hitherto obtained from experimental research may not be *mal à propos*.

In 1807-8, Messrs. Allen and Pepys apparently established the following: 1. That, however much oxygen was inspired in a given time, the carbonic acid evolved, and the oxygen actually entering into chemical combination with the constituents of the blood, underwent so very small an increase, as practically to nullify the idea that even the pure gas could prove useful as a medicinal agent. 2. That the disappearance of an extra amount of oxygen was simply consequent upon its temporarily taking the place of nitrogen as the residuum in the lungs.

Fortified by general opinion, and by such amusing jokes as that of Sir Humphry Davy and his thermometer-cure, men of science almost rested on their oars (it would seem) until MM. Regnault and Reiset issued their beautiful series of experiments, with the view to prove that quantity and quality of food, exercise, etc., in a great measure regulate the amount and relative proportions of oxygen absorbed, and carbon given out by the system.

In the *British and Foreign Medico-Chirurgical Review* for 1856, Dr. Harley, reviewing the writings of Magnus, Liebig, and Lehmann on respiration, and adducing his own experiments, concludes, that time and temperature are agents which modify the absorption of oxygen, and the chemical changes resulting therefrom.

Dr. Edward Smith has lately carried this matter somewhat further, and in his laborious and admirably conducted investigations, has shewn that no experiments can be relied on which do not extend over considerable periods, and which do not include all the variations of diet, exercise, rest, temperature, sunlight and darkness, to which the animal economy may be subjected during the twenty-four hours.

The late Dr. Snow found that the presence of carbonic acid in atmospheric air acted more deleteriously in proportion as the normal quantity of oxygen had been reduced, and that oxygen being added to atmospheric air surcharged with carbonic acid, renders it respirable for a while, and capable of supporting life. A little practice will enable most of us with little inconvenience to hold the breath for several minutes after taking an inspiration of pure oxygen,—a tolerable proof that oxygen may be absorbed, while the exhalation of carbonic acid (except by the skin) is suspended.

Dr. Gairdner's experiments on rabbits go to prove that the inhalation of pure oxygen increases the fibrine, and diminishes the corpuscles and albumen of the blood.

Dr. B. W. Richardson, following out this idea, in his admirable work on the *Cause of the Coagulation of the Blood*, details some experiments proving that a condition of hyperinosis, with tough fibrinous concretions in the blood, is induced by prolonged inhalation of pure oxygen.

Mr. Savory, *On Animal Heat*, states that he has found the temperature to be lowered, not increased, by an extra amount of oxygen. My own experience, however, tends to the conclusion that in healthy well-fed animals the animal heat is usually first increased, then lowered; while clinical observation has afforded satisfactory evidence that oxygen, when employed in disease, will raise or lower the temperature *under different circumstances*.

Lastly, I would draw special attention to the highly interesting experiments of Mr. Erichsen, detailed in his monograph on *Asphyxia*. He says: "In a considerable number of experiments that I have performed on this subject, I have never succeeded in reexciting the contractions of the ventricles by means of the inflation of the lungs with common air, provided they had fairly ceased to act before artificial respiration was set up." He was then led to try oxygen, and in several experiments was successful in restoring the action of the ventricles after the entire cessation of the heart's action.

It would be tedious, and needlessly taking up valuable time, to give more than an epitome of such facts. To comment upon them, *in extenso*, would at present be equally injudicious. I simply wish to intimate that physiology certainly does not negative oxygen in a therapeutic point of view. With a few remarks, as brief as possible, I will pass on to the purely practical portion of this paper.

When we reflect on the acknowledged difficulties and trouble, and probably many fallacies, attendant upon tedious and

lengthened experiments; when these are associated with at least uncertainty regarding facts based on chemical researches; when our still imperfect knowledge of animal chemistry in connection with the vital dynamics and the generation of nervous force is taken into due account; when the fact stands forth that we can, if we please, by means of pure oxygen, induce a state of hyperarterialisation and hyperinosis; when, further, Mr. Erichsen's experiments are brought into the field of mental vision; it must be acknowledged, that the *dicta* of even the most accomplished chemico-physiologists as to the uselessness of oxygen in medical practice, ought to be received with extreme caution. Then, add to this the recent views put forth by Professor Schönbein, which a few weeks ago were made the subject of an interesting lecture by Dr. Faraday, at the Royal Institution, and the therapeutic question becomes of still deeper import. It may now be fairly inferred that oxygen can exist in not fewer than three allotropic conditions—ozonic, antozonic, and neutral; the two former even possessing the power of assuming opposite polarities with regard to each other. This interesting discovery is highly suggestive, and opens out a new field for observation and investigation, which, it is earnestly to be hoped, may assist to elucidate this at present obscure inquiry as to the cause of the frequently unquestionable potency of oxygen, when employed in suitable cases *in very small quantity beyond atmospheric proportion*.

Without risking shipwreck upon an obvious yet somewhat vague hypothesis, nearly allied to that so energetically proffered by that acute old physician, Dr. Stevens, but partially illuminated by the discovery of Schönbein, I will here simply trust that sufficient obscurity and doubt exist in the scientific world, on this interesting subject, to afford ample apology for my differing from authority, while on the present occasion I deviate but very slightly from the practical experience of the clinical observer.

Whatever be the true *modus operandi* of small doses of oxygen (irrespective of the purest atmospheric air), when judiciously exhibited, in many intractable forms of disease, abundant evidence can be brought forward to prove beyond moral doubt that, in certain lowered conditions of the vital forces, this gas can not unfrequently exercise an alterative and tonic influence upon the entire animal economy, which no other medicinal agent at present known can exert. And further, waiving the therapeutic question, instances will from time to time present themselves, during extended employment of oxygen in practice, where certain unexpected, curious, and sometimes unpleasant and serious effects, will so immediately and decidedly manifest themselves as to render it impossible for even the most incredulous observer to impute, *post hoc ergo propter hoc*, expectancy, etc., without ignoring truth altogether.

One mode of casual and limited investigation, for the purpose of testing its action on the system, has often struck me as a fruitful source of error; viz., impulsive trials made by my professional brethren upon themselves and upon their friends, *in a state of health*, or at least where there is absence of any actual disease requiring its use, or of that susceptible condition occasionally met with, through disease or natural temperament, in which a *nidus*, as it were, is presented for the exhibition of abnormal sensitiveness to the action of the gas. Now, oxygen seldom evidences its special influence to any marked extent in persons enjoying perfect health, although rare exceptions are met with; and perhaps it may not be amiss here to add *en passant*, that this fact ought not to be lost sight of, when considering the therapeutic relations of oxygen in derangements of the animal frame. Be it understood, also, that my advocacy of oxygen is exclusively confined to disease otherwise incurable, imminently dangerous, or very intractable.

In employing oxygen in different diseased conditions, it appears necessary to regard its action from two aspects:—1. The alterative and tonic influence which it can exert on the nervous system (apparently irrespective of immediate chemical action *per se*, in the ordinary acceptation of the term), when exhibited in very small doses, and for a very limited period daily. 2. The augmented activity of the normal chemical changes in the animal organism directly induced by bringing a largely increased proportion of the gas in contact with the pulmonary cells; the duration and frequency of the inhalation being, in this case, an important consideration.

So far as relates to the first suggestion, I have, as before stated, had ample opportunities of observing that oxygen can in many susceptible temperaments, and in certain diseased conditions, exercise a peculiarly powerful influence, rarely met with in persons enjoying perfect health; and, by taking advantage of this peculiarity, many cases will quickly undergo a change for the better, where the most enlightened and judicious treatment had previously failed to produce any beneficial effect. In such instances, the gas ought to be used with great caution; for I have known serious and unpleasant (not to say alarming) symptoms arise from what would usually be regarded as a ridiculously small percentage added to atmospheric air. Most of these examples have occurred in sensitive nervous systems—in individuals possessing a very susceptible nervous organisation; or otherwise in those affected with lesions of the brain or spine, from disease or injuries. Fanciful imagination, hysteria, *et hoc genus omne*, may very naturally create misgivings in the minds of those who have not personally witnessed such phenomena. Willingly do we grant a liberal discount to the incredulous, while we add that several of the best exemplifications have presented themselves in men of powerful frames, ignorant of the increase or diminution of the doses that they were being subjected to, and not only devoid of all apprehension of the treatment, but in the highest degree surprised that "a little more pure air" could exert such a perceptible action on the system. The principal symptoms of a disagreeable character, here referred to as occasionally resulting from extremely small doses, are, a sense of constriction of forehead and temples; a feeling of weight over the centre of the parietal bones, and in the occiput; a rush of blood to the head; fulness, pain, or oppressive sensation, in the nape of the neck and base of the brain; sudden faintness; palpitation of the heart; spasmodic contraction of affected parts, *e.g.*, violent reflex movements in extremities affected with paralysis of voluntary motion. Moreover, I have seen, on two or three occasions, a state of unnatural excitement of the entire nervous and vascular systems, which has continued for several successive days after one moderate dose. The chief symptoms of a disturbing character observed from pushing very large doses of the gas, are, in thin anæmic persons, sudden or gradual disappearance of pulse, pallor of countenance, coldness, and partial collapse; in the plethoric and sanguineous, the reverse—viz., too excited circulation; full bounding pulse; intense heat of head, face, and skin; severe, oppressive headache. I have also known the frequent and long continued exhibition of it, when not duly superintended, cause much emaciation.

For individuals, however, to be obnoxious to the extremes of the foregoing symptoms, is only occasional.

On the other hand, certain beneficial effects of oxygen may be mentioned as not unfrequently immediate and well marked, where due judgment has been exercised in selecting cases, and in directing the doses and duration of the inhalation. Such are, complete relief from excessive oppression of the brain; sight improved in defective vision consequent on venous congestion; genial warmth, even to the ends of the toes and fingers, succeeding to extreme chilliness and collapsed condition; sudden departure of great nervous depression; permanent relief afforded to the uterus, ovaries, and spine, by sudden induction of long suppressed catamenia, particularly at the change of life; unexpected diarrhœa, of highly offensive character, with dark inspissated bile, in long continued torpor of the liver and portal system; cutaneous transpiration suddenly and freely produced. To guard against any possible misapprehension from dwelling upon these special and important points, it must be distinctly understood that, in very many cases, the beneficial alteration effected by oxygen takes place with no characteristic signs of action perceptible to the patient, or even to the practitioner, except general improvement in the constitution, such as may be observed in many debilitated frames undergoing a mild course of chalybeates. Speaking generally, there will be found, in suitable subjects for the treatment, improved appetite and powers of digestion and assimilation, a feeling of being much more "up to the mark", less lassitude, more ability to bear physical exertion, and (that to which ladies are preeminently partial, and some of the ruder sex not less so) a clearer, fairer, and softer skin.

The semeiological and pathological indications for the employment of oxygen, with a view to cure or palliation, must next receive some general consideration; and afterwards will follow certain points contraindicating its use.

The deviations from health in which it will be found most beneficial are those where there has been no very considerable reduction of what may be called intrinsic vital power. Depression or oppression may be extreme; the nervous and vascular systems may be incapable of receiving more than temporary tone or stimulation by means of ordinary tonics, stimulants, and attention to the best sanitary and dietetic rules; but, as a rule, there must not be present that permanently lowered con-

dition induced by long continued, insidiously undermining nervous debility (so well known to us all), which, having become almost a second nature, has incapacitated the system for "making life" beyond such amount as is absolutely essential for the maintenance of Psyche in her terrestrial abode.

In some constitutions, with blue noses, congested conjunctivæ and sclerotice, semi-stertorous breathing on the slightest exertion, hæmorrhoids, etc.—all vividly depicting to the mind the internal state of matters—each dose will often cause a slow, laboured, full, but very compressible pulse, to become quicker, firmer, smaller. In others, with a small, weak, quick, and even irregular pulse (in the absence of much excitement with hyperæsthesia), the quick conversion into a slower, fuller, and firmer pulsation, is sometimes equally well marked. Examples of each (modified, of course, as to rapidity of production and duration of effect) have frequently occurred in my practice.

The diseases *par excellence* in which the gas has afforded me the most gratification are those attended with either local or general venous congestion—a preponderance of the venous over the arterial, and torpidity of the capillary circulation. The good effects have been, as a rule, most decided in persons of a gouty or strumous habit, or otherwise in a state of general *malaise*, with sluggish circulation, either constitutional or superinduced by an atonic and oppressed condition through over-feeding and other luxurious or indolent habits, so prevalent in these artificial days.

The organs which, specially affected, experience the most immediate and sensible advantage from oxygen, are the brain, lungs, liver, and spleen, including the entire portal and mesenteric system, and uterus and ovaries.

In plethoric habits, with chronic local or general congestion interfering with the functions of one or more of these organs, the commencement of the curative process has sometimes been ushered in by sudden and unexpected efforts of nature to throw out peccant matters—efforts for so long a period previously unattainable through the most judicious treatment, and so immediately following two or three large doses of the gas, as to afford almost unquestionable evidence of true sequence. The assistance urgently demanded by the system has been given; Nature has thus had a starting-point, and a critical discharge has made its appearance. It has been my fortune to see this exemplified in cases of long suppressed catamenia, in torpidity of hepatic functions with pent-up biliary secretion (as evidenced by sudden diarrhœa of most offensive character), and in gouty affections with much cerebral, nephritic, and other distress. In the last, I have known the urine, which had been for many weeks uniformly clear and limpid, become, to the horror of the patient, turbid, dense, and loaded with urates and phosphates.

I would venture particularly to draw attention to the ascendency of oxygen over the cutaneous capillaries, not unfrequently evidenced from the commencement of its use in torpid and unhealthy conditions of the cutaneous function, and cachexia arising therefrom. The benefit afforded will occasionally demonstrate itself in profuse perspiration, when a dry harsh skin had been previously the order of the day; or a relaxed and moist state of the cutis, with constant chilliness and liability to colds, will give place to a warm, healthy, and comfortable state, to which the invalid had been long a stranger. With reference to extremes which occasionally present themselves, it may be added, although any prompt improvement or disappearance of certain eruptions, previously almost untouched by the treatment, will usually evidence the *suaviter in modo* as well as the *fortiter in re* operation of oxygen; yet I have met with a few instances where ladies have been disagreeably surprised to find some slight but chronic eruption become very unsightly after a few days exhibition of the gas. To calm the female mind is not very easy under such circumstances; but a bold assurance of the exacerbation being merely temporary—an effort of Nature to endeavour to rid the system altogether of the disease—has thus far not been falsified by the result.

Even inveterate skin-affections, the history of which points to a congenital origin, and incurable in the permanent sense of the word, may nevertheless receive much benefit from an occasional resort to this remedial agency.

Rapidly spreading ulceration, with sloughing nearly allied to gangrene, has under my observation been suspended solely through the influence of oxygen in a few liberal doses. A similar result has followed its employment in malignant anthrax, the most serious symptoms being brought under permanent subordination. And, indeed, I firmly believe, with oxygen as an adjunct, surgeons might regard with much less dread the frequently alarming and even fatal supervention of erysipelas or gangrene in traumatic cases. Conjoined with proper sanitary measures and the usual treatment, abundant stimuli, beef-tea, cinchona, ammonia, etc., the inhalation of the gas might, in some cases of the worst description, prove the salvation of the patient. Perhaps this suggestion might not inaptly be extended to the notoriously fatal effects of badly located hospitals.

The space to which I must necessarily limit myself in this paper, will admit of little more than a glance at those pulmonary and cardiac affections, in which oxygen merits cautious, careful, and judicious trial. I will simply remark, that the palliative effects of oxygen have kept hopelessly phthisical subjects in comparative comfort and freedom from dyspnœa and exhausting cough, up to their dying hour; while the necessity for opium and other sedatives has been very trifling, and comfortable sleep has been secured, *minus* any disagreeable feelings following the free use of medicines. I know a lady in London who, with fatty degeneration, and probably attenuation of the muscular walls, and enlargement of the cavity of the heart, has been kept alive for the last three years by a dose of oxygen almost daily. On many occasions, in this lady's case, the heart's action, capable of only partial and temporary restoration by brandy and other stimulants, has at once been restored by oxygen in large doses. She lives by exercising great care and avoiding physical exertion, to a certain extent enjoys life, yet cannot do for more than a few days successively without the renovation afforded by the gas. Again, in asthma, there is a tolerable percentage of cases in which oxygen can either cure or greatly relieve. As a rule, the subjects most benefited are those in which we can trace no congenital or hereditary predisposition, and where the disease owes much of its origin to chronic bronchitis or partial congestions and indurations of the pulmonary parenchyma.

[*To be continued.*]

CASE OF CEREBRAL OR SUBJECTIVE VISION.

By WILLIAM CAMPS, M.D.

A GENTLEMAN, turned sixty years of age, finding himself somewhat out of health, placed himself under my care. He had been, he told me, very much troubled by the frequent recurrence of ocular spectres, both during the day and the night. He complained that, very often, as well in the daytime as in the night-time, but chiefly when in bed or sitting in his chair, he was plagued by the appearance of a female figure, usually clad in a grey dress, which apparently entered the apartment in which he might be, sometimes holding a lighted candle in her hand, which the figure would appear to place sometimes upon his bed, and sometimes upon a chair in the room. Occasionally, this figure would appear to him as though seated in a chair by his bedside, or in a chair in his sitting-room. Occasionally, the figure would appear to remain standing at a few paces distant from him; and frequently the appearance would be so vividly real to him that, although the patient *knew* thoroughly that it was only an *appearance*, and not a *reality*, yet so strong and powerful was the impression made upon him of the *presence* of a *real* object, that he would not unfrequently appeal to his wife, when with him, to ask her whether she saw any object, such as presented itself to his perverted sense of sight.

Many of the gentlemen I have now the honour to address may probably recollect that a very similar case to the above is recorded in Nicholson's *Journal of Natural Philosophy, Chemistry, and the Arts*, the subject of which was an intelligent bookseller in Berlin; and the particulars of his case were made the subject of a communication to the Royal Society of that city. In his case, more active treatment, by way of bleeding and of purging, was resorted to, than I thought it necessary to adopt in mine. I can, however, affirm that my patient perfectly recovered, and continued free from all disturbance of the nature above referred to. By change of scene and occasional doses of aperient medicine, and attention to his general health, these ocular spectres or phantoms ceased to trouble him; they altogether left him; and he continued perfectly well for several years. Before his death, however, seven or eight years after the period herein referred to, this patient manifested indications of impaired intellectual vigour, which ulti-

mately proceeded so far as to incapacitate him from proper attention to his affairs.

The view that I entertain of such cases is, that they are instances of *perverted cerebral* action, and are purely *subjective*. There is no *external* object affecting the organ of vision, causing these appearances. The affection, in my judgment, is entirely *subjective*, and most probably having its anatomical seat not in the retina, regarded as the terminal nervous expansion of the optic nerve; but rather *cerebral* and subjective, and having its seat in the tubercula quadrigemina, the functions of which are now known to be appropriated to the sense of vision. This is not the place, nor the time, or it would not be difficult to show anatomically the mode of arrangement in which filaments of nervous matter proceed from the tubercula quadrigemina along the optic tract, and ultimately become expanded in the retina. In such cases, I apprehend, there is a disturbed relation between the blood and the nervous matter which compose the parts specially concerned in the function of vision. The minute blood-vessels themselves, or portions of the nervous mass itself, may be the subjects of disease or derangement, in some form or other; and if so, we may reasonably expect, as we find, in these and similar affections, instances of diminished, augmented, or, as in the case referred to, of perverted sensation.

In conclusion, I would submit, What are the practical conclusions to be drawn from such instances of perverted cerebral action? Are they to be regarded as indicative of commencing or progressive disease of the brain itself—it may be, in not a few instances, as, for example, in the present case, terminating in some one or other of the forms of insanity?

Finally, may not many of the related instances of phantoms, ghosts, and apparitions, have a similar origin, and be explained on the principles I have herein submitted to this meeting?

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. GEORGE'S HOSPITAL.

I. FRACTURE OF THE SKULL: COMPRESSION OF THE BRAIN.

Under the care of H. C. Johnson, Esq.

Joseph M., aged 31, was admitted November 9th, at 10 P.M., under the care of Mr. Johnson. He was a cab-driver, and was driving a Hansom cab round a sharp corner, when the wheel caught the kerbstone, and threw him off. He struck, as it was supposed, the back part of his head against the ground. On his admission, directly after the accident, there was no wound to be seen anywhere; he was quite insensible; the pupils were natural, and acted; the pulse was weak, and slow. Whilst he was being undressed, he roused himself up, and looked about him; but did not answer, or seem to know, what was being said to him. In about five minutes he vomited up a large quantity of undigested food, and again became totally insensible, but there was apparently no paralysis. When visited, two hours afterwards, he was still insensible, and was constantly passing his right hand over his forehead, as if in pain. He moved every part of his body, except his left arm, which he did not move, even on being pinched. His pupils now were very variable, at one moment contracted, and at another dilated. He remained in this state till seven next morning, when, without any further symptoms, he suddenly expired.

The head was examined next day. There was no external mark of injury, nor any irregularity to be felt about the skull. On turning back the scalp, there was seen to be a considerable ecchymosis of blood in the substance of the right temporal muscle; and on scraping this muscle off, a linear fracture was seen, passing obliquely forwards, and somewhat downwards, from the occipital bone, across the lower part of the parietal, and through the squamous portion of the temporal, into the base of the skull; where it crossed the great wing of the sphenoid, and terminated in the sphenoidal fissure. This part of the base of the skull was slightly comminuted. A branch of the fracture ran across the tympanum, which was full of blood, but the chain of bones was not disturbed, and the membrana tympani was uninjured. The course of the fracture crossed that of the middle meningeal artery, and this vessel was in all probability laid open, though the lesion was not demonstrated. The lateral sinus were shown to be perfectly intact. Between the bone and dura mater was an immense clot of blood, of the consistence of currant-jelly, which passed down into the base of the skull, and had compressed that hemisphere of the brain, so as to indent it in some parts to the depth of nearly an inch. There was also a good deal of blood in the cavity of the arachnoid, particularly on the side of the fracture. The surface of the brain presented several superficial bruises in various situations on both sides, but was otherwise healthy.

Remarks. We publish the above case as a continuation of a series of injuries of the head given at pp. 953, 974. It is remarkable, both from the rapidity with which the blood was poured out, and the extraordinary obscurity of the symptoms which attended that effusion. Had the paralysis been well marked, and confined to one side, there would have been little doubt about the propriety of cutting down on the middle meningeal artery on the side opposite to the paralysis, although there was no mark of injury in that region; but, in the absence of any history of injury in the parietal region, with such doubtful symptoms, and with no apparent risk of impending death, it would have been most improper to complicate the case by a severe operation, which would most likely lead to no result. The operation in any case would have in all probability failed in prolonging the man's life, since it is quite uncertain whether it would have reached the wound in the vessel.

II. OVARIAN DROPSY: DISTENSION OF THE UMBILICUS, GIVING RISE TO AN OPENING INTO THE PERITONEUM: DEATH FROM PERITONITIS.

Under the care of H. A. Pitman, M.D.

Martha B., aged 46, a servant, was admitted under the care of Dr. H. A. Pitman, November 9th, on account of ovarian disease. This had commenced five years ago, in the left iliac region, according to her account (which was probably erroneous), after exposure to cold and damp. The swelling gradually increased, but did not affect her general health till eight months before admission, when she lost her appetite, and began rapidly to lose flesh, and become very weak. Her feet had been anasarcous for about a fortnight, and she was complaining of pain, referred to the sacrum.

On admission, the abdomen was enormously enlarged, and she was greatly emaciated. The superficial veins were very full. Fluctuation could be felt in some places, and masses of different density in others. The umbilicus was protruding. Diuretics were given, with support, and she went on in much the same way till the beginning of December, when she began to be troubled with a slight cough.

On December 8th, a small amount of serous fluid was observed to drain away from the umbilicus, and this recurred in increased quantity on the 10th. She complained of being very low and weak, so that a liberal quantity of wine had to be given.

On the 14th, it is noted that an immense quantity of fluid had drained away during the night; the face was very much shrunken, cold and pale; the breathing difficult; the pulse scarcely perceptible. Stimulants were freely administered, but she died next day.

On *post mortem* examination, the abdomen was found greatly distended by a large fluctuating tumour, which projected about equally on both sides of the body. The umbilicus was very prominent, and was perforated by a small hole, or sinus, which led directly from the skin into the cavity of the peritoneum, and was large enough to admit a probe. The peritoneum contained turbid fluid, and its pelvic portion was filled with well formed pus. The liver was occupied by large masses of encephaloid deposit, presenting the puckered appearance, homogeneous white colour on section, and creamy juice on pressure, which are usual in this disease. In the intervals between the malignant deposits the hepatic structure was natural. The spleen was healthy. The capsule of the kidney was adherent, and its surface somewhat granular; the cortical structure was also somewhat diminished in quantity. The tumour consisted of a very large cyst, developed in the structure of the right ovary, with a few similar cysts in its walls. Its parietes showed unmistakable traces of the same deposit as existed in the liver. The size of the cyst was very large, so that it had encroached upon the thorax, and pushed the diaphragm up to the level of

the fourth rib. It was quite free from adhesions, both in front and behind. Its pedicle, formed by the parts in the broad ligament, was of very great breadth. It contained a dark grumous fluid. The subordinate cysts, most of them, communicated freely with the principal cyst. The uterus was pushed over considerably to the left side. The left ovary was healthy.

III. Hæmorrhage behind the peritoneum: suspected poisoning by opium.

A man, calling himself John Smith, aged 42, was admitted, at the point of death, at 1 A.M. on Dec. 3rd; and died in a few hours. The following particulars were obtained from the gentleman under whose care he had been. On the evening of November 30th, he began to suffer from pain in the belly. This continued; and, early in the morning of December 1st, he sent for medical assistance. He was then complaining of excruciating pain in the bowels, and great tenderness on pressure. There was nausea, but no vomiting. The pulse was feeble, about 90. The disease was supposed to be colic, with some amount of inflammation. Turpentine fomentation was applied. Two grains of opium were given at once, and one grain ordered to be taken every two hours subsequently, until either the pain should cease, or the patient be put to sleep. At 4 P.M., the patient fell asleep, after having taken seven grains of opium. He slept for seventeen hours, and then partially awoke. He was now (9 A.M., Dec. 2nd) visited again by the doctor, who found him drowsy and feeble. He was made to swallow large quantities of strong coffee and beef-tea. Copious vomiting ensued. By constant agitation and rousing, he gradually became more sensible: all drowsiness at length ceased; and at noon he was quite rational, sitting by the fire, and answering questions with readiness. He took frequently small quantities of beef-tea and brandy, until 6 P.M., when he again became feeble and torpid. From this state he could with difficulty be roused. About midnight, he was brought to the Hospital. He was then pale, blue about the lips, with a weak pulse, and pupils contracted to less than the size of a pin's head, and was perfectly unconscious. The usual treatment for poisoning by opium was now applied. Cold water, dashed in his face, at first roused him; and for a time he seemed more lively. By 4 A.M., though still able to swallow small quantities of brandy and water, he was unable to make any effort to walk. After this he sank into a state of complete coma, and so died.

On post mortem examination, three days after death, it was found that the brain was healthy. The heart was large; the blood was found coagulated in the cavities on both sides, and the clots discolored. The mitral valve was atheromatous, and one of its flaps slightly thickened. A small quantity of bloody fluid was found in the peritoneal cavity; but, as the membrane was quite healthy, it was considered probable that this was the result of transudation from the large clot outside of it. The liver was healthy in appearance, but two small masses of ecchymosed blood were found in its substance. The stomach was healthy, and contained food mixed with bile. The kidneys were of rather large size. They contained numerous cysts, and their surface was of a pale mottled colour, and extremely granular. There was a small ecchymosis in the pelvis of the left kidney, beneath the lining membrane. An enormous mass of semi-clotted blood lay behind the peritoneum, extending from the stomach above into the pelvis. It was in largest quantity opposite the left kidney, which was completely bathed in it. There was a small quantity also in the roots of the small omentum and mesentery, but this seemed to be merely a part of the principal ecchymosis. No aneurism could be detected after the most careful search, nor any laceration or ulceration of any of the vessels. The aorta was considerably atheromatous; its branches less so; and the smaller arteries seemed quite healthy. The arteries examined were the aorta (from its commencement to its termination), the superior and inferior mesenteric, renal, common, external and internal iliacs. The veins seemed all natural. It was conjectured that one of the smaller arteries had been affected with an aneurism, which had burst; or that there was some small rent in one of the atheromatous vessels; but this could not be proved.

Remarks. The preceding case, although it bore little real similarity to that of Mr. Augustus Stafford, still recalled it to the memory of those who saw it, in consequence of the combination of hæmorrhage with the effects of opium. That unfortunate case was in point to prove the old doctrine that the absorption of medicines into the system is greatly facilitated by bloodletting; and the one before us goes to the same effect, so far, at any rate, that the unusually profound narcotism which followed on a moderate exhibition of opium was coincident with rapid and severe hæmorrhage. We say the moderate exhibition of opium; for it can hardly be pretended that a grain of opium every two hours is at all an unusual dose for a patient suffering under severe pain in the abdomen, and in whom colic is suspected. But that it did produce unusual symptoms, is evident from the fact that his medical attendant thought it necessary to use restoratives, and to keep the patient awake by forcible measures; and that the man, when admitted into the Hospital, was still so drowsy that he was thought to be suffering from the effects of the narcotic. The probability, however, is that the opium had no injurious effect in hastening death, while it made the man's last hours less conscious of suffering. The fatal disease was a singular one, since no lesion could be discovered to account for the immense hæmorrhage that had taken place. It is perhaps more probable that an artery had ulcerated, than that an aneurism had existed; since, in the latter case, the tumour must have been so small as to have escaped notice in the clot; while a moderate hole in the aorta itself might easily be overlooked, or might have been included in the incision made in laying open the vessel. The hæmorrhagic tendency was also shewn by the ecchymosis in the liver and kidney.

We subjoin notes of another case of fatal hæmorrhage, from the bursting of a thoracic aneurism. The case is interesting principally from the fact of the man having been under treatment for more than a year, without having presented the least trace of aneurism.

IV. Aneurism of the aorta, bursting into the pleura.

Under the care of H. A. Pitman, M.D.

W. P., aged 40, a shoemaker, was admitted on Dec. 7th, under the care of Dr. Pitman, for what was considered as dyspepsia, and had been treated on that hypothesis for the last eighteen months by an eminent physician in London. This treatment had much relieved him. A fortnight since, after eating a hearty dinner of salt beef, he was seized with pain in the great end of the stomach, extending backwards to the spine, accompanied with sour eructations, but no sickness. The pain was increased after taking solid food. He had had no cough or difficulty in breathing. He had been out of health for seven years, with eructations and epigastric pain. He had been liable to epigastric pulsation after exertion ever since he could remember.

On admission, there was found a good deal of pain on pressure over the great end of the stomach; and it was noticed that the last two or three ribs on the left side were elevated more than on the right. The tongue was thickly coated. The chest-sounds were natural. Pulse 74. He was sallow, and looked cachectic. He was ordered ten drops of solution of permanganate of potash (Condy's solution), in water, three times a day; and a small quantity of compound soap pill every night. There was pulsation perceptible to the hand in the epigastric region, and the least pressure with the stethoscope produced a systolic murmur.

Next day, he had had no sleep, and the pain in the stomach was worse. A blister to the epigastrium gave some relief. It recurred, however, accompanied on the 12th by sickness, and by much pain in the region of the stomach and back, which was so severe on the evening of the 13th as to prevent sleep. There were no symptoms, however, of an alarming nature; but the pain continued, in spite of small doses of morphia. In the morning of the 17th, he died suddenly. He was reading the newspaper, and had been unusually well and cheerful, when he was seized with sudden prostration, and with severe pain in the lower part of the chest and abdomen, so that he writhed about in agony, and, though unable to express himself intelligibly, was conscious enough to put his hand to the region of the stomach when asked where he felt pain. Stimulants rallied him for a time; but he relapsed, and died in about three-quarters of an hour. Dyspnœa was not complained of during the fatal seizure.

On *post mortem* examination, the body was found to be in good condition. There was a large mass of loosely clotted blood in the left pleural cavity, which had proceeded from the bursting of an aneurism of the thoracic aorta. This aneurism was seated on the aorta about midway between the end of the arch and the diaphragm. It involved all the circumference of the vessel, but for only a short distance, and the sac was formed behind by the bones of the spine, which were extensively

eroded from the sixth to the tenth dorsal vertebra. The opening was of large size, so as easily to admit two fingers. The heart lay directly in front of the aneurism. It was small, but otherwise healthy. The aorta was very atheromatous above the aneurism. The left lung was much compressed, but still buoyant. The other viscera and vessels presented nothing remarkable.

Original Communications.

ALKALIES OR ACIDS IN STOMACH-DISORDERS?

By Edward Wells, M.D., Reading.

[*Read before the Reading Pathological Society.*]

In the following remarks on the above question, I shall endeavour to put together a few observations derived from actual practice, and shall not trouble you with extracts from works which are within the reach of all. My apology for troubling you at all must be, that stomach-disorders are among the most difficult which we are called upon to treat; and that, in their treatment, the question proposed in this paper becomes frequently a nice point.

I shall jot down these remarks as they offer themselves to my own mind, without attempting any order, which will appear of little consequence to those who have daily to treat diseases observing neither rules nor order in practice, however they may be made to go through a systematic parade in works on medicine.

There would seem to be some patients who have a total inability to take any alkalies at all. There are others, and those more numerous, who have an idiosyncrasy which prevents their taking certain alkalies, though they may with impunity take others.

I had a patient once, a lady, aged 52, who was unable to take magnesia. Her symptoms were as follows: flatulency; want of power, apparently rather nervous than muscular; depression of spirits; liability to lodgments in the large intestine; to erysipelas of the face; and to flushing and heat of head; and she had occasional neuralgic pain over the left eye, and pain also in the left hypochondrium. The tongue was clean; the urine clear; pulse weak. She was ordered—

℞ Magnesiæ ustæ ʒj; mucilaginis ʒij; tincturæ corticis aurant. ʒj; aquæ carui ℥vj. M. A sixth part twice daily.

℞ Pilul. hydrar. chlorid. comp. extracti hyoscyami, extracti colocynth. comp. ää ℈j. M. Fiant pilulæ xij, quarum sumatur i pro re natâ.

The effect of the magnesia was to blow her up like a balloon—a result which, she assured me, invariably followed the exhibition of that drug.

Another lady, aged 50, consulted me, complaining of distension of stomach after eating, with feelings of nausea and general discomfort. The tongue was creamy, red, pimply; the appetite bad; the urine clear; the pulse weak. She had also severe occipital headache. The catamenia were irregular, recurring at periods of several months. She was ordered a mixture containing the magnesia usta. When I saw her, shortly afterwards, I found she had been unable to take the medicine, as magnesia invariably occasioned sickness.

I had another patient, a gentleman, who was suffering from pain and great tenderness in the epigastrium, with much nausea and acid eructations, and occasional pyrosis, to whom I prescribed bicarbonate of soda in a mixture. He was, however, unable to take it, as it distended his stomach; and he informed me that he had frequently tried it, and always found the same effects, which were probably due to the disengagement of the carbonic acid.

I have another patient, a lady, aged 50, who is unable to take potass in any form or combination. This inability extends even to the iodide of potassium. The symptoms caused by any of the salts of potass are the most violent cramps in the stomach and bowels, running on into diarrhœa of a painful and dysenteric character.

Again, there are persons who under no circumstances can take the mineral acids. As far as my experience goes, it will generally be found that such individuals have a gouty taint in their constitution. In all cases where gout can be suspected to be lurking in the system, the greatest caution should, I think, be exercised in administering mineral acids in stomach-disorders, even though they may appear, from the symptoms, to be suitable. A case in point occurred to me only lately.

A lady, aged 43, stated that latterly the catamenia had been very irregular. After suspension for two months, they came on a few days back, but very sparingly. She complained of flushing of the face, giddiness, and an occasional feeling of losing herself. She had fluttering of the heart, and felt very nervous and weak. The bowels were regular; the urine was free and clear; the pulse was weak. She was ordered to take two tablespoonfuls of the compound decoction of aloes thrice daily, and to use a warm hip-bath. She called on me four days afterwards. After taking two doses of the compound decoction of aloes, the catamenia made their appearance, and kept on freely for two days. This had relieved the flushing of the face and the head-symptoms. She now chiefly complained of debility and nervousness. She was ordered—

℞ Infusi quassiæ ʒj; acidi nitrici diluti ♏x; tincturæ aurant. co. ʒss. Fiat haustus ter die sumendus.

A day or two afterwards, she called to ask me to change the medicine, as the acid in it occasioned so much pain and distension of the stomach. She then informed me that, many years back, before her marriage, she had suffered much from gout, which had also affected her kidneys; and that she had never been able to take the mineral acids. In the present instance, however, neither the urine nor the other objective symptoms denoted that gout had any share in causing her ailment.

In prescribing acids or alkalies for the relief of painful digestion, there is, I think, one practical point to which we should pay great attention, and that is the question whether the pain is located principally at the cardiac or at the pyloric end of the stomach. Where the seat of the pain is chiefly in the right extremity of the stomach, as far as my experience is concerned, the mineral acids will give much more relief than the alkalies. This probably arises from the complication of the liver in the disorder, although there may be no actual hepatic symptoms, and althongh pain may be complained of on pressure over the right portion of the stomach itself. In these cases, too, on a rigid examination by pressure over the region of the liver, it will generally be discovered that pain is occasioned by such pressure, although the stomach-symptoms are the only ones to which the patient's attention has been drawn, or to which the patient spontaneously draws the doctor's attention. I will give a few instances to illustrate my assertion.

I was consulted by a young lady, aged 20. She had been ailing for some time with symptoms of stomach and liver derangement, indigestion, with pain occasionally referred to the pit of the stomach, and occasionally to the bowels; pain between the shoulder-blades; tenderness on pressure over the region of the liver. The urine was thick; the bowels were costive; the tongue patchy, furred; the pulse 100; the complexion dark, sallow. She had the catamenia every fortnight, but not in excess; slept heavily, and felt languor and lassitude, with occasional headache. This case failed to derive any benefit from the use of alkalies, but was relieved by the mineral acids, manifestly from the cause that the liver was the fons mali.

A gentleman, aged 57, a free liver, in the habit of taking large potations of port wine, called on me, complaining of pain (not severe) at the pit of the stomach, worst three or four hours after eating. There was some tenderness on pressure over the region of the liver, which was full. He was liable to large losses of blood from the hæmorrhoidal vessels, preceded by fulness of blood about the head, which was relieved by the discharge. The bowels were regular; the urine clear; the tongue was pale, whitish; the pulse 64, rather weak. He was ordered—

℞ Hydrargyri chloridi gr. j; ipecacuanh. gr. j; extracti coloc. comp. gr. iij. M. Fiat pilula omni nocte sumenda.

℞ Infusi gentianæ co. ℥vj; potassæ nitrat. ʒss; liquoris potass. ʒiss; liquoris taraxaci ʒvj. M. Fiat mistura cujus sumatur pars 6ta bis die.

Six days afterwards, I saw him again. He still had pain at the epigastrium, increased by pressure over the liver. Nitric acid was now substituted for the liquor potassæ in the mixture; and the result was a rapid disappearance both of the pain at the pit of the stomach, and of the hepatic tenderness; and, under the use of the mineral acid, he became much better

than he had been for a long time before. Ten years afterwards, he died of stricture of the pyloric orifice.

The value of the mineral acids in the cure of the cutaneous eruptions, is well known to practical physicians. My experience would also lead me to infer, that where indigestion is complicated with affections of the skin, the mineral acids will work more good than the alkalies.

A lady, aged 43, complained of an eruption of the skin, becoming very troublesome when she was warm, and covered with a slight scaliness, particularly around the waist. She suffered much from dyspepsia, as shewn by flatulency and discomfort after meals. The tongue was white, patchy; the mucous membrane was slightly ulcerated in the mouth: the urine was thick; the bowels were irregular; the pulse weak. She was ordered bismuth and magnesia usta twice daily; with Plummer's pill, henbane, and compound extract of colocynth, at bed-time. The stomach symptoms were not relieved. She was then ordered gentian, carbonate of soda, and taraxacum. The flatulence after meals was still very distressing. She was then ordered dilute nitric acid with taraxacum, which at once gave relief. And, although there was no evidence of liver derangement in this case, it is probable that that viscus was implicated in the production of the symptom.

On the other hand, where the pain is distinctly referred by the patient to the cardiac end of the stomach, and where that portion of the stomach is the most tender on pressure, I think we shall generally find alkalies more serviceable than acids. Some judgment should here be observed as to the particular alkali which we ought to select. If the pain be situated quite and exclusively at the cardiac orifice, and if there be a total absence of tenderness on pressure, no alkali will give such immediate ease as the carbonate of ammonia. Such cases generally depend upon distress of mind, induced by harassing anxieties and mortifications preying upon sensitive natures.

A young lady complained to me of severe pain, coming on at the cardiac end of the stomach, after long fasting, accompanied by great depression of spirits, and frequently followed by headache. Being a governess, she had been subject to annoyances, and the meal hours to which she had been obliged to conform, had been too far apart. There was no tenderness over the stomach on pressure. The tongue was clean; the pulse was very weak; the skin cold; the urine thick. The catamenia were too copious. These distressing symptoms yielded, as there was no doubt they would, to the carbonate of ammonia with gentian.

When the pain is situated rather more towards the pit of the stomach, and when there is tenderness on pressure, the two alkalies most likely to afford relief will be the calcined magnesia and the carbonate of potass; the former being exhibited when the bowels are constipated, and the latter when they are rather inclined to be relaxed.

The following case may be quoted, as one pretty sure to be relieved by the calcined magnesia, from among many others.

A lady, aged 42, stated that she complained of extreme pain at the pit of the stomach, and down the centre of the back, increased by eating. She had no appetite. There was tenderness on pressure over the epigastrium. She felt sick. The urine was very high coloured, clear; the bowels were confined; the tongue creamy; the pulse 80, rather sharp; the catamenia scanty. She slept badly.

If the bowels, however, are inclined to be relaxed, it will frequently happen that the magnesia will produce diarrhœa, before curing the gastrodynia, for which it is administered. In this case, the bicarbonate of potass will be preferable.

Mr. B. applied to me, suffering from dyspepsia. There was pain after eating, which frequently was followed by vomiting of the food taken. He had much tenderness on pressure over the epigastrium, a white pasty tongue, and thick and scanty urine. A mixture, containing the calcined magnesia, was prescribed. Though it gave some relief to the pain, it occasioned so much relaxation of the bowels, that it was found necessary to change it for carbonate of potass, which soon effected a cure.

In treating cases of dyspepsia, the question, as to whether acids or alkalies should be given, will partly depend upon the condition of the bowels. I have already stated that, if we decide for alkalies, we must be guided by the state of the bowels as to which alkali we would select. But further, the state of the bowels will frequently direct us as to whether we shall use alkalies at all, or prefer acids. When gastric dyspepsia is complicated with irritable bowels, it will generally be found that alkalies are more beneficial than acids. Where the action of the bowels is sluggish, where they are unusually dull to the operation of aperients, there is certainly not the same objection to acids; there would seem almost an indication that they are called for. Here again the probability is, that in these cases the benefit derived from the acids depends upon their quickening action on the liver. When the symptoms of gastric dyspepsia are severe, and at the same time complicated with great irritation of the bowels, one of these two conditions may be suspected: either that the patient is a tubercular subject, or that the patient is habituated to liquor. I will select a case illustrating each condition, from among several which occur to me.

I was consulted in the case of a gentleman, aged 30, who had been taken ill a fortnight previously, with a cold. His medical attendant had purged him freely with calomel and black draughts several successive days. For the last week he had been suffering from constant vomiting, and rejected all his food. The bowels were also relaxed. After eating anything, he suffered severe pain in the stomach. The urine was thick. Pulse 120. The vomiting had reduced him to extreme debility. The tongue was coated with a brownish yellow fur in the centre; it was red at the tip and sides. He had some wandering at night, and slept badly. He had a desire for cold drinks. There was some wheezing scattered over the lungs, but no dulness on percussion. He was ordered lime water, with Battley, and hydrocyanic acid. Under this treatment the stomach and bowels resumed their natural functions; but soon afterwards phthisical symptoms supervened, and he died a few months subsequently.

I was consulted in the case of a lady, aged 64, who had been in the habit for some time of taking spirits. She had been ill for two months, suffering from a disordered state of stomach and bowels. She had no appetite, and felt an uncomfortable sensation all down the alimentary canal, with constant nausea, but no vomiting. She had frequent attacks of diarrhœa, and occasional discharges of bile. The motions were slimy, but not bloody. She suffered from depression of spirits, palpitations of the heart, faintness. She was also subject to sciatica. The urine was copious, clear; the tongue moist, with a creamy fur; pulse tolerable, 84; skin cool. There was no tenderness over the abdomen. She also was ordered the liquor calcis with hydrocyanic acid, five minims of Battley's solution being added, when the condition of the bowels required it. Under this treatment she got better for a time. And here I may remark, that where gastralgia and irritation of the bowels coexist, the lime water will generally prove the best alkali we can use.

As an instance of a case in which the bowels were confined, which was benefited by acids, after taking the alkali to little purpose, the following may be quoted. It is another proof that when the liver is the cause of dyspepsia, acids are more efficacious than alkalies in relieving troublesome affections of the stomach.

A young lady consulted me, stating that she suffered from discomfort after eating, with distension of the stomach. She had also some amount of pyrosis. She was liable to heat of the face, producing a papular eruption. She had some tenderness over the liver, but none over the epigastrium. Is subject to the bleeding piles. She complained also of debility, and of being unequal to her duties of a governess. The bowels were confined; the urine was thick and scanty; the tongue moist, slightly furred; the skin cool, moist; the pulse weak. The catamenia were quite regular. She was ordered—

℞ Sulphuris ʒss; potassæ bitart. ʒij. M. Fiat pulvis omni mane sumendus.

℞ Pilulæ hydrargyri, extracti hyoscyami, āā gr. ijss. M. Fiat pilula omni nocte sumenda.

℞ Infusi gentianæ co. ʒviij; liquor potassæ ʒiss; spiritus ætheris nitrici ʒii; liquor taraxaci ʒvj. M. Sumat sextam partem bis die.

A week afterwards, there was very slight improvement. Her appetite was still bad, and she felt weak and below par. She was not worse, but one could hardly say she was better. The urine was less thick; the skin very moist, and cold. She had had some slight bleeding from the piles to-day. She had some enlargement of the cervical glands. She was ordered to continue the sulphur and cream of tartar powders, and to omit the alterative pills.

℞ Inf. corticis aurant. ʒviij; liq. sarsæ fluid ʒvj; spirit. æth. nitrici ʒiij; acidi nitrici dil. ʒj. M. Fiat mistura cujus sumat sextam partem bis die.

Under the use of the acid with the bitter, instead of the alkali, she rapidly recovered.

The indications afforded by the conditions of the urine should certainly be considered as important in directing the

practitioner to the choice of alkalies or acids in the treatment of stomach disorders. And yet I must confess that they have very much disappointed me as safe guides to either an acid or an alkaline treatment. Still there are, I think, certain points, by attention to which we may generally arrive at some approximation to a right judgment on this matter.

If, as far as stomach disorders are concerned, we divide the conditions of the urine into those which have reference to the pathology of uric acid, of oxalate of lime, and of the earthy salts, we may find a few words to say of each.

The oxalate of lime seems to afford the clearest indication. In oxaluria, as it has been termed, the nitric acid, or the nitro-muriatic acid, is nearly always highly beneficial. Cases of gastralgia, in which the octohedral crystals of oxalate of lime are discoverable in the urine, are certainly proved by experience to yield more readily to these acids than to any of the alkalies.

In the uric acid pathology of the urine, the presence of the simple lithates of ammonia do not in my opinion afford any sure criterion as to the exhibition of either acids or alkalies; in the cases I have quoted, as relieved either by acids or alkalies, the lithates were generally present or absent indifferently. When disorder of the digestive functions is accompanied with a deposit of free uric acid in the urine, or in other words, with gravel, the alkalies, and especially the bicarbonate of potass, is no doubt indicated. Such cases would, however, come under the category of those to which I have already applied the caution, that in affections of the stomach, where a taint of gout may be suspected to lurk in the system, the acids should not be administered. For we know by the experiments of Dr. Garrod, that free uric acid exists in the blood of individuals suffering from an attack of gout.

In cases of dyspepsia, in which the earthy salts, and especially the triple phosphates, are present in the urine, there is generally such a complication of disorder of the nervous system, that the mineral tonics usually afford more relief than either alkalies or acids. Of the two, however, my experience rather inclines to the exhibition of acids under such circumstances. Still we meet with many cases in which, owing to the depression of the system, we are obliged to administer the volatile alkalies; and, therefore, I cannot say that any fixed rules can enable us to decide between acids or alkalies in stomach disorders, when the phosphates present themselves in the secretion from the kidneys.

I have now gone through the principal points which have occurred to me on this subject. I must beg you to remember that I have limited myself to the question whether acids or alkalies should be administered in stomach-disorders; and that the general treatment of dyspepsia has formed no part of my undertaking. I will briefly recapitulate the various indications to which I have alluded, and will then relieve your attention.

1. There are certain patients who are unable to take particular alkalies.

2. There are certain patients who can never take acids, such patients being those of a gouty diathesis.

3. Pain situated at the cardiac end of the stomach is best relieved by alkalies; while pain at the pyloric end, depending on derangement of the liver, is most amenable to acids.

4. In dyspepsia accompanied with cutaneous eruptions, the mineral acids are more serviceable than the alkalies.

5. Of alkalies, magnesia is best when the bowels are confined, and carbonate of potash when otherwise.

6. The state of the bowels will in some degree guide us as to the use of acids or alkalies, the latter being preferable where irritation of the bowels coexists with dyspepsia.

7. When sickness and diarrhœa coexist, one of two conditions may be suspected—either the patient drinks, or the patient is tubercular.

8. The indications afforded by the urine are limited. The lithates afford no guide. The uric acid requires alkalies. The oxalate of lime requires acids. The phosphates rather lean to acids.

Influence of the Weather on the Aged. The effect of cold weather in carrying off aged persons has been shewn since the commencement of the present month. In the obituary of the *Times* of December 8th, nine deaths are recorded, at the respective ages of 94, 79, 81, 96, 84, 87, 91, and 76; and in the same paper of the 19th instant, eight deaths are recorded, at the ages of 78, 83, 80, 87, 70, 74, 85, and 68.

Transactions of Branches.

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

THREE CASES OF ENCEPHALOID DISEASE.

By William Hoar, Esq., Surgeon to the West Kent Infirmary, Maidstone.

[*Read at Rochester, September 30th*, 1859.]

Case 1. A gentleman, of independent fortune, aged 32, a hale hearty man, of florid complexion, with red hair, very temperate, fond of rural sports, previously healthy, and coming of a healthy family, who had been married about three years, was seized in March, after sitting on the damp ground, with an attack of nephritis, which readily yielded to treatment. In the course, however, of the recovery, he had an attack of what, to all appearance, was phlegmasia dolens in the right leg; this also soon disappeared under treatment.

In the beginning of June, about two months before his death, he suddenly awoke one night in the most excruciating agony in the left inguinal region, which he had never felt before, and a small tumour was then for the first time perceived by his medical attendant at the seat of the pain. The pain abated, and, to all appearance, he recovered; eating and drinking heartily, and pursuing his usual occupations, farming, etc.; but, as he afterwards declared, never perfectly comfortable, nor free from pain for long together. About one month before his death, he was suddenly attacked with alarming hæmorrhage from the bladder, of a venous character, which lasted nearly a week, but then almost entirely ceased; the urine, however, containing ever after much pus, mingled with some blood. The tumour, which had hitherto remained stationary, then began to increase rapidly in size; the pain in it became most agonising; and the patient rapidly emaciated; and, being seized with urgent vomiting, he speedily sank.

Post Mortem Examination twenty-four hours after death. The body was much emaciated; the abdomen immensely distended. The penis was well developed; but there were no testes in the scrotum. Decomposition was taking place very rapidly. On opening the abdomen, a large *tumour* presented itself in the left inguinal region, protruding from behind the intestines, which it had pushed over to the right side. The tumour was nearly as large as a man's head, weighing nearly four pounds, irregular in shape, lobulated, and of a dark colour: in some parts tense, with an obscure sensation of fluctuation; in others, more solid. Three or four convolutions of small intestine were adherent to it on the right side, in fact, were almost buried in it, but without any alteration in the structure or calibre of the intestine. The tumour was firmly adherent to the left iliac fossa (its whole surface); to the brim of the pelvis from the left ileo-pectineal eminence to the right sacro-iliac symphysis (the sigmoid flexure of the rectum being pushed to the right side); to the posterior and left lateral surfaces of the bladder by very strong fibrous attachment; and to the anterior surface of the rectum for the lowest three inches: also, to almost the whole of the inner surface of the lower part of the pelvis. In fact, with the exception of the anterior surface of the bladder, which was more than usually firmly adherent to the pubis, the tumour almost entirely enveloped the neck of the bladder and the rectum; so closely and intimately, that it was impossible to separate them by dissection; and yet there was no solution of continuity in the outer coat of either. The tumour was probably exterior to the cavity of the peritoneum. On *section*, it presented the appearance of a brain-like mottled mass, easily broken down, with numerous cysts, of various sizes, containing a serum-like fluid. No vessels were discovered in it, neither was there any communication between the various cysts. The *testes* were both found, although it was somewhat difficult to recognise the separate portions of either. The right was in the inguinal canal, wasted, small, and much elongated. Its vas deferens was traceable along its whole course. Of the left, a portion only was found in the inguinal canal, the remainder being, to all appearance, lost in the tumour; into which it could be traced for some distance, expanding, as it were, into one particular portion, near the centre, which was more defined and somewhat firmer than the rest. The right *kidney* was twice its natural size, with several small cysts about its

pelvis. Internally, it was dark coloured, and partially altered in structure. The left was healthy. The *ureters* were healthy; they were situated behind and external to the tumour. The *bladder* contained a large mass, of the size of the double fists, apparently a coagulum, and three or four ounces of a purulent stinking fluid. On the inner surface of the posterior wall was a large ragged deep ulcer, as large as the palm of the hand; which, however, had not perforated the outer coat of the wall, nor could any communication whatever be traced with the tumour. The *prostate* was not affected.

Case II. In a fine healthy looking boy, aged 4 years (the son of a gentleman), who had never had any serious illness, but was of a decidedly scrofulous constitution, three small tumours were suddenly discovered in the abdomen. They were situated in the angles of a triangle, the uppermost being in the right hypochondrium, the hindmost between the ribs and the anterior superior spinous process of the ilium, and the third near the umbilicus. They were all painful, but not very tender, and about the size of a hen's egg. The child had previously been somewhat ailing, but not so as to require medical aid, and had not complained of any pain in the abdomen.

The enlargement of all the tumours was very rapid, and they became merged into one mass; the veins on the abdomen became enormous; and an equally rapid emaciation took place. The pain was by no means excessive, until just towards the end, which occurred within less than three months. The secretions of the bowels and kidneys were constantly healthy; the appetite generally good; and there was no cough.

Post Mortem Examination twenty-four hours after death. All the viscera were perfectly healthy; but an enormous tumour occupied nearly the whole cavity of the abdomen, weighing six pounds and a half. It was adherent in the whole of its superior posterior and lateral surfaces, but not anteriorly to the wall of the abdomen. The right kidney was quite imbedded in the mass, but it was perfectly healthy. The intestines also were adherent to a large extent, but were in a healthy condition.

The composition of the tumour was, to all appearance, exactly the same as in the last recorded case, a soft mottled brain-like substance, with numerous cysts interspersed through it of various sizes. No cancer-cells were to be found.

Case III. A boy, aged 18, the son of an agricultural labourer in the weald of Kent, came under my care at the West Kent Infirmary, in the autumn of last year. He had previously enjoyed good health, but was of a decidedly scrofulous aspect. He had a small tumour at the inner side of the head of the right tibia, which was supposed to be a thickening of the periosteum, as he had recently had a blow there from a fall. It was not very tender nor troublesome, except after unusual exertion. Cold was applied, then hot fomentations, leeches, counterirritants, iodine, etc.; with a series of alteratives, tonics, etc., internally; but all to no effect. The tumour rather increased, and became more painful and tender. He was then taken into the house, where it was hoped the same remedies, with the help of rigid rest and constant care, would be of service in restoring the part. An exploring-needle was introduced, but nothing escaped, except a drop or two of bloody serum. His health began to fail; the tumour rapidly increased, ultimately becoming as large as a man's head, and causing dislocation of the joint; and death ensued within six months of his first application at the Infirmary. The tumour was softish, harder at places, with an obscure sense of fluctuation. The pain was never very intense, until towards the last.

The composition of the tumour was of a similar character with the others, with the addition, that at its base or pedicle, radiating spiculæ of bone appeared, extending a short distance into the tumour. Under the microscope, no cancer-cells could be discovered.

Remarks. In the first case, several interesting points exist. 1. The phlegmasia dolens in a man is of rare occurrence; and, moreover, it was on the right side, the tumour being subsequently on the left. 2. The sudden appearance of the tumour; its presence was not even suspected, until the attack of pain drew attention to the part. 3. The attack of hæmorrhage from the bladder, without pain or previous warning. 4. The absence of the testes from their usual position in the scrotum, and their discovery in the inguinal canals, where they had probably existed from birth, but had not previously caused any trouble. 5. The excessive sexual desire, which was distressing to the patient, who was a moral right thinking man. A question arises, whether the increased indulgence, naturally following upon marriage, by keeping up constant irritation, coupled with that caused by their being enclosed in the canals in the walls of the abdomen, where they were also exposed to constant friction at every movement of the body, produced, or at least hastened, the development of the disease. 6. There were no children, nor had the wife ever been pregnant.

I would further remark generally, that in all three cases, I look upon the disease as of a scrofulous character; that in the earlier stages, the general health was but slightly impaired, and there was freedom from acute pain; that this stage was of considerable duration, during which there was nothing particular to lead to the apprehension of such fatal results, except, perhaps, the slight influence of all kinds of treatment and remedies: of these, the best appeared to be those of a soothing character, with at the same time a plentiful supply of generous diet; and, in the more advanced stage, opiates, to lull pain; and finally, I believe that when the disease is once thoroughly established, there is little hope of recovery.

In the last case, amputation was not performed, in consequence of the presence of signs indicating a faulty condition of the lungs.

ANOMALOUS CASES IN MIDWIFERY.

By John Armstrong, M.D. Gravesend.

[*Read at Rochester, September 30th, 1859.*]

In the commencement of these social and scientific meetings, I ventured to say that it was the duty of every member of our noble profession to add his part to the already accumulated stores; and when the philosopher looks over the pages of our Journal, he will find there recorded important and truthful facts, from which he can deduce a fundamental law or explode an erroneous theory. One distinctive feature has chiefly characterised our papers and discussions hitherto, and that has been their pre-eminently practical character. I believe, with the exception of a paper by our accomplished associate, Dr. F. Brown, on Fever, all our papers have been specially so. Now, I by no means desire to be understood as objecting to practical papers; on the contrary, I feel personally thankful to those gentlemen who have favoured us with such valuable records of practice, accompanied by such clear delineations of disease; at the same time I feel that papers of a theoretic character, or records of cases of abnormal type, would give a pleasing variety to our meetings, and revive and extend our physiology. It is with these views I have ventured to bring before this meeting the following remarkable cases. I transcribe them from my note-book.

Case I. August 26th, 1844. I was requested to be in the way for a Mrs. P., who expected to require my services in a few hours. I heard nothing of her that night, and next morning I was requested to see her. Her state was as follows. She had occasional pains through the night, but not sufficient to do any good, as she expressed herself. She had a quick pulse, full and bounding; thirst; considerable heat of skin, and occasional pains. The os uteri was not at all dilated, and the cervix was not fully obliterated. She stated that four or five days previously she lifted a heavy weight. and from that time had not felt the child. I bled her, gave her an opiate, and desired her to take some opening medicine, and enjoined quietude. On the 29th, I was summoned again; regular pains had come on. There was a little coloured discharge. The os uteri was open to the size of a crown-piece, and was soft and yielding. The membranes protruded, and I had some difficulty in reaching the presentation, which had the feeling of a bag of bones. The pains continued feeble and infrequent; and finding after two hours that very little progress was made, I ruptured the membranes, which were very tough. A large quantity of liquor amnii escaped. I then administered a dose of ergot, and the labour proceeded freely, and a large sized fœtus was expelled. It was decomposed a good deal, and must have been dead some time. On proceeding to tie the funis, I found some hard substance twisted round it; and on examining this, it appeared like another smaller umbilical cord, which was so tight in several places, that it must have entirely stopped the circulation in the funis. While examining it, another pain occurred, and another smaller fœtus was expelled, which seemed of the size of a five months fœtus, but which must have been dead some considerable time, as it had that ashy shrivelled appearance, which denotes that death had taken place some time before. It was the funis of this fœtus which was twisted round and round the funis of the larger child, and stopped the circulation. Another remarkable circumstance was, that the funis of the last fœtus

did not seem at the placental end nearly so much decomposed as might be expected, and had a lighter colour and firmer feel than the funis of the larger child, round which it was twisted. The placenta was single, with the two funes inserted in it. The woman made a good recovery. In a large midwifery practice, extending over a period of thirty years, I have never met a similar case; and, with our present physiological knowledge, I scarcely know how to account for it.

Case II. October 2nd, 1844, 2 A.M., I was summoned to attend Mrs. C., in her third accouchement. She supposed she was only in the eighth month of her pregnancy. There were slight pains the day previously, and about twelve at night, the "waters" escaped, and she had good active frequent pains until two o'clock, when I was summoned. I found the os uteri fully dilated; the head presenting naturally, and low down in the pelvis. The perineum was not yet distended when she had a pain; but there was barely room for the finger between the fœtal head and the perineum of the patient. Of course, with a well formed pelvis, and a healthy young woman who had had a vigorous labour before, I expected a speedy termination, as there was plenty of room round the head, and I could readily feel the ear under the right ramus of the os pubis. In this, I was, however, disappointed; in about half an hour, the pains became less efficient and frequent. Ergot was administered, which partially revived them, but only temporarily. I waited; the pains were of the same feeble character; and after twelve hours, no advance was made. At 4 P.M., castor oil was ordered, and operated well. At 10 o'clock, there was no return of pains. She had been sick, and had become feverish. She had a quick, moderately full pulse; great heat of skin; thirst; and a coated tongue. The parts were not tender, and did not communicate a sense of heat to the finger. The presentation in all respects appeared the same as when I first saw her. The question now arose, What ought to be done? Nature had had fair play for about twenty hours; all the ordinary excitants of uterine action had been tried without effect; and constitutional disturbance was setting in, which might soon place my patient and her infant in considerable danger. I could deliver this woman readily with the forceps or vectis; but then there was no uterine action. Or I might administer ergot again, but there was now a great deal of fever. I thought it best to remove as far as I could the febrile condition; believing that, if I could do so, Nature would resume her office again, and the labour be completed. Accordingly, I bled her to about sixteen ounces, and gave her fifty drops of tincture of opium. Four hours after this, the pulse had lost much of its frequency; a gentle moisture had broken out over the surface of the body; the pains returned, and the labour was completed in about half an hour. The child was all but gone; its face was livid. A teaspoonful of blood was allowed to flow from the divided funis, it was put into a warm bath, and stimuli were applied externally; these, without artificial respiration, restored it. The mother made an excellent recovery.

Every man has met with temporary arrest of labour during its various stages. I do not remember an arrest of this character under such circumstances for so long a period of time, without any attempt on the part of Nature to resume her office. I should like to obtain from the members their opinions as to the cause of the arrest, their views as to the treatment of such cases, with the opinions of the mode by which the alteration of the case was produced.

CASE OF FEMORAL HERNIA.

By John M. Burton, Esq., Blackheath.

[*Read at Maidstone, October 28th, 1859.*]

I was summoned on the evening of Saturday, May 10th, 1843, to see a patient, who was said to have been suffering from bilious vomiting since noon of the previous Thursday. His medical attendant had given him aperients and saline effervescents since the commencement of the attack, without affording him any relief.

I found him to be a thin attenuated man, of sickly appearance, about sixty-four years of age. He stated that vomiting had come on quite suddenly, after his having been engaged in moving some heavy garden pots; and that it had continued without cessation up to the present time. There was general uneasiness over the abdomen. He had a sense of tightness at the epigastrium; constipation from the period of the attack; furred white tongue; the skin was natural; the pulse 80, soft. Upon examination, I found that there was a femoral hernia on the left side. He had been aware of the existence of the swelling since Thursday; he thought that it had existed previously; but his account of the matter was not very precise.

On using the taxis, I returned a portion of intestine with a distinct gurgling sound, and with evident diminution of the size of the tumour; there remained, however, a hard swelling, of about the size of a cob-nut, which I could not reduce, and which I thought might be omental. I was, however, so satisfied, that I had returned the intestine that had been in the sac, that I did not think it advisable to operate. I directed fomentations to be applied to the belly; a dose of calomel and opium, and an aperient in the morning.

May 11th. The bowels had been moved once. There was no sickness; the tongue was furred; the pulse 80, soft. He had some fullness of the abdomen. In the afternoon he had an injection, which produced a good healthy stool.

May 12th. Sickness returned in the night, and was now severe. The abdomen was more tumid and tender. The skin was cool; the tongue furred; pulse 80. Under these circumstances, on a consultation with Mr. Busk and Mr. Sams, it was agreed than an operation was desirable. Having exposed the sac, I made a careful incision into it; there was a very small quantity of fluid, and at the bottom of it lay a small portion of omentum, slightly congested. Mr. Busk, as well as myself, made a careful examination of the ring, and satisfied ourselves that there was no portion of intestine strangulated. I returned the omentum into the abdomen.

Evening. He had no sickness since the operation. There was very little tenderness; pulse 80.

May 13th, 6 A.M. The abdomen was distended. There was some tenderness in the left iliac region. He had had no stool; pulse 92; tongue furred, rather brown. He had general feeling of uneasiness, though he had had a tolerable night. A common enema was administered; the fomentation was continued; and calomel and opium were ordered to be given every four hours.

Evening. He had four or five copious fæcal evacuations. There was less tenderness. The wound was healthy, granulating; pulse 92, soft.

May 14th. He had some rest in the night. The tenderness was less. The bowels had not been moved since yesterday. The tongue was clammy. Pulse 80, soft. He was ordered to have beef-tea. The medicines were continued.

10 P.M. He had vomited just previously to my seeing him; pulse 92, intermittent. He was evidently much changed.

May 15th. He had a restless night. His countenance anxious. Pulse 92, intermittent. The belly was tympanitic. There was an offensive discharge from the wound, the edges of which are assuming an unhealthy appearance. Pulse 100. A poultice was ordered to be applied to the wound.

May 16th. He had a bad night, and was very low, evidently sinking. The edges of the wound were gangrenous.

May 17th. He died at 1 P.M.

Post Mortem Examination, two hours after death. The body was much emaciated. The edges of the wound were widely open and gangrenous. The whole tract of the intestines was inflated and congested, and agglutinated at all points by recently effused lymph, with some pus in the intestines. The portion of ileum which had been strangulated was adherent by a small point to the neck of the sac just within the crural ring. It comprised the whole calibre of the gut, and was most distinctly defined by the impress of the sharp edge of the stricture, and completely gangrenous; so that it was lacerated on attempting to remove it. There had been no perforation during life. The omentum, which had been returned at the operation, formed a sort of valve at the ring, preventing any protrusion from the abdomen, though the finger could be readily passed into the abdomen from the wound.

Remarks. This appears to me to be an interesting case, inasmuch as it raises a practical question. It is evident that I returned the intestine from the sac when I first saw my patient; and that the injury done to the gut by its delay within the sac for sixty hours—before any attempt at reduction was made—so far destroyed its integrity, as to produce gangrene of the portion which had been strangulated; the gangrene not being the result of general inflammation, as it was confined entirely and distinctly to the part of the bowel which had been contained in the hernial sac.

It becomes then a question, whether, when a hernia has been strangulated for so many hours, it would not be better to open the sac at once, and examine the condition of the gut, than to endeavour to return it into the abdomen, in a possibly irreparably injured state? I must confess, that should I unfortunately be ever called to a similar case, where strangulation

had existed so long, I should feel much disposed to operate at once, especially if, as in this case, the hernia were femoral, when the tightness and unyielding nature of the stricture add so much to the danger of delay.

ON FORCED FLEXION OF THE FOREARM IN WOUNDS OF ITS VESSELS OR OF THE DEEP PALMAR ARCH: WITH TWO CASES.

By Frederick Fry, Esq., F.R.C.S., Senior Surgeon to the West Kent Infirmary.

[*Read at Maidstone, October 28th*, 1859.]

At the meeting at Dover, in June last, Mr. Peter Martin, the Secretary to our Branch, read four or five most admirable papers on cases which had been treated by his partner, Mr. Holman. One was a case of wound of the palmar arch, for which Mr. Holman had tied the radial and ulnar arteries. On that occasion, I took the liberty to make some remarks on the non-necessity of tying any vessel for such an injury, and to say that I believed forced flexion of the fore upon the upper arm was, in the majority of cases, amply sufficient to stop the bleeding.

This proceeding has been long practised in France and Germany; but the practice does not generally obtain in England. As a proof of this, I beg to refer to a case reported in the *Lancet* about six months ago, treated in St. Bartholomew's Hospital by Mr. Skey, the talented surgeon, a gentleman who has written one of the best works on operative surgery. Mr. Skey had a case of wound of the palmar arch. He first tied the radial, then the ulnar, and afterwards the brachial; and, this not sufficing, the arm had to be amputated at the shoulder-joint; and from the combined effects the man died shortly afterwards. Now, if such a series of serious operations, with such a lamentable result, can be avoided by the simple proceeding of forced flexion of the forearm, I think you will agree with me that such an event is all desirable.

The operation is very simple; merely controlling the arterial circulation by pressure; which any gentleman can verify on his own person by placing his finger on the radial artery, and forcibly flexing his arm, when he will find the pulsation completely obliterated.

I beg to read two cases which happened under my care at the end of the summer of 1858.

Case I. A boy, aged 14, was brought into the West Kent Infirmary, bleeding very freely from a penetrating wound below the elbow. He had been employed at Mr. Whatman's, of Vinter's Park, attending to and feeding a turnip-cutting machine. Whilst so doing, his arm came into contact with the cutter. He was brought directly to the Infirmary, a distance of a mile, bleeding all the way; and the persons who brought him said he had lost two pints of blood. Before I saw him, attempts had been made to take up the bleeding vessel, but unsuccessfully; and the tourniquet was applied. Upon my arrival, the following appearances presented. There was a wound two inches long upon the upper part of the forearm, and underneath another wound, about an inch and a half long. On passing the finger into the wound, there was found a free passage between the radius and ulna; and it was quite evident that the knife had passed through the upper part of both bones, and that either the radial or ulnar artery, or perhaps both, were wounded. By this time the parts were very much swollen. The tourniquet was taken off, and the bleeding immediately recommenced. The forearm was then forcibly flexed, and retained in that position. All bleeding ceased, and never returned. The boy was put to bed; an irrigating lotion was applied; and free suppuration afterwards took place from both wounds. As soon as he could bear it, passive motion was commenced, and stringently followed out; but with great difficulty, in consequence of the irritability of the patient. In about three months he went out well, with the motion of the joint pretty good. I saw him about a month ago, twelve months after the accident. On examination, I found the joint but little impaired, the only motion at all interfered with being supination.

Case II. The next case was an accident which happened to a man named Goodsell. He was cutting trees in the Barming woods, and the knife took him between the forefinger and thumb, and completely divided the parts the whole extent between the two metacarpal bones, of course wounding the terminus of the radial artery which runs between those bones. Goodsell tied a handkerchief round his hand, and immediately walked to Maidstone, a distance of three miles, bleeding profusely all the way. The man was a large, powerful, bony fellow; and he declared he must have lost two or three pints of blood. On his arrival at the Infirmary, an attempt was made to take up the artery, but failed. A tourniquet was applied, and I was sent for. When I arrived, the tourniquet was removed, and the bleeding recurred freely. The forearm was forcibly flexed; the bleeding ceased, and never returned. He was put to bed, and an irrigating lotion was applied. In about twelve hours, he complained of great pain in the elbow from the flexion, which was slightly relaxed. In two days, it was still more relaxed; but the bleeding did not recur. He went out quite well in about three weeks.

Remarks. With regard to the operation, the time required to keep up the forcible flexion depends much upon circumstances, three days being generally amply sufficient, as by that time the external wound will have healed to a certain extent.

It is a question whether forced flexion of the leg upon the thigh would be equally efficient in wounds of the leg and foot; but I should certainly recommend and adopt such a simple proceeding before any operation.

NOTES ON DIPHTHERIA.

By W. Sankey, Esq., Dover.

[*Read at Maidstone, October 28*, 1859.]

The following are notes of cases of diphtheria which occurred in my practice in 1858 and 1859.

1858. The son of a carpenter, aged 7 years, of strumous constitution, came under my care on September the 7th. The solid nitrate of silver was applied to the throat; chlorate of potass and tincture of sesquichloride of iron were given every two hours, with port wine and beef-tea. This treatment succeeded admirably in curing the boy in a week.

On September 17th, a young gentleman, aged 5 years, who had suffered severely with the rest of the family from scarlatina four years previously, was the next case; and although he did not at first exhibit a peculiar membrane, yet it soon showed itself unmistakingly, and spite of every remedial measure, he died on the 30th. The autopsy showed the membrane lining, not only the throat, but extending through the larynx into the trachea. It was firmly adherent, and very tough in its texture. The sister of the above little boy, who had been in constant and anxious attendance upon him during the whole of his illness, complained of sore throat on the day after his death, October 1st. It speedily yielded to gargles and slight aperients; but in a few days she became worse, the throat became covered with leathery membranes, and she died October 10th.

The next two fatal cases occurred in infants under two years. One was dying when first visited, and the other died on the second day from laryngitis.

From October 1st to December. The number of cases was fifteen, which, with the first two in September, makes a total of seventeen, of which four died.

1859. From January to March, nine cases occurred. Several of them were very severe, and all well marked; none proved fatal. From April to June there was only one case, which also did well.

July 7th. A young lady, about fifteen, and her brother, a few years younger, both delicate, were on a visit near Headcorn. The servant dying from diphtheria, they were sent home, and almost immediately both fell ill with unequivocal symptoms, and were a long time under treatment, but did well.

The last case was a retired cavalry officer, aged 65. He was taken ill on September 26th, and left convalescent, October 4th. Altogether, this makes thirty cases, well marked, and several severe, of which only four proved fatal.

No result was obtained from inquiries into sex and age, occupation, or hygienic condition. Contagion was observed in three cases. As to scarlatina, so far from there being any connection, one case occurred in a young lady, who nearly lost her life only two months before from scarlatina-anginosa; and hers was one of the severest cases of diphtheria that recovered. The symptoms at the commencement were those of cynanche, but with great weakness. Exudation was present in all cases; it was not examined by the microscope. Albumen was present in the urine in all cases where it was examined. The treatment consisted of tincture of sesquichloride of iron, and chlorate of potash, with port wine, beef-tea, etc. Local applications of solid nitrate of silver. I had no experience of tracheotomy. The ratio of mortality was four in thirty.

Reviews and Notices.

Descriptive Catalogue of the Preparations in the Museum of St. Thomas's Hospital. Printed by order of the Governors. Vols. II and III. Pathological Anatomy. Compiled and edited by Sydney Jones, F.R.C.S., M.B. London: Henry Renshaw. 1859.

It would be a great convenience to the medical scientific inquirer if all the great museums of pathological specimens were as well catalogued as the one before us of St. Thomas's Hospital. The two handsome volumes are a credit to the hospital, and to the curator, Mr. Sydney Jones, who has so well concluded what Messrs. South, Le Gros Clark, Dixon, Grainger, Rainey, and Adams, have accomplished before him, and to whose labours these volumes form the conclusion. The richness of the Museum at St. Thomas's is well indicated in these pages. There is scarcely a portion of the human body which is not well illustrated by the morbid specimens so clearly and elaborately described. The volumes before us contain sections on Injuries of Bone and Joints, Diseases of Bone and Joints, Diseases of the Spinal Column, Injuries and Diseases of the Muscular System, Injuries and Diseases of the Eye and Ear, Injuries of the Skull and Spine, Injuries and Diseases of the Stomach, etc.

Publications of the New Sydenham Society: viz.—

1. Treatise on Syphilis in New-born Children and Infants at the Breast. By P. Diday. Translated by G. Whitley, M.D. London: 1859.
2. Gooch on some of the most Important Diseases of Women: with other Papers. Prefatory Essay by Robert Ferguson, M.D. London: 1859.
3. Memoirs on Diphtheria: from the Writings of Bretonneau, Guersant, Trousseau, Bouchut, Empis, and Daviot. Selected and translated by R. H. Semple, M.D. With a Bibliographical Appendix by John Chatto, Esq. London: 1859.
4. The Spinal Cord and Medulla Oblongata; and the Proximate Cause and Rational Treatment of Epilepsy. By J. L. Schroeder Van der Kolk. Translated by Wm. D. Moore, A.B., M.D. London: 1859.

There can be no question that the New Sydenham Society has begun its labours with great energy and ability. Already its members have been presented with four volumes on subjects that are specially engaging the attention of the profession at the present time.

Of these, we must give a most prominent place to the collections of *Memoirs on Diphtheria*, which have been so well translated by Dr. Semple. Bretonneau's memoir must be considered the fullest and most searching that has yet appeared in any country on this extraordinary disease; and every practitioner should make himself acquainted with the view this distinguished Frenchman takes of an affection which is the latest puzzle Nature has presented to us. The memoirs of Guersant and Bouchut on *Tracheal Diphtherite*, and of Trousseau, Empis, and Daviot, on *Diphtherite*, which follow that of Bretonneau, present us with the opinions of the most eminent foreign *savans* on the obscure and malignant throat-diseases.

Dr. Ferguson's edition of Gooch's *Diseases Peculiar to Women* forms the second volume of the new series. We question the advisability of permitting editors to take up so much room in the publications of the Society as Dr. Ferguson has done in this volume in his Prefatory Essay. The object of these publications is to reprint the valuable words of the great men of the past, whose works are not likely to be republished by trade publishers; and not to spend their money upon printing and publishing the thoughts of editors, who can put forth what they have to say under their own names and at their own expense. We say this without wishing for a moment to depreciate the labours of Dr. Ferguson, but simply as a protest against what we cannot but consider a misdirection of the purpose of these volumes, and which, we trust, will not be looked upon as a precedent by subsequent editors.

The *Treatise on Syphilis of New-born Children*, translated by Dr. Whitley from the work of P. Diday, is another work which will receive great attention at the present time, when the subject is so much under debate.

We apprehend, however, that Van der Kolk's great work on the *Minute Structure and Functions of the Spinal Cord and Medulla Oblongata* will be received with the most favour by the members. This volume alone, illustrated as it is by such admirable engravings of the anatomy of the nervous system, is worth the whole annual subscription. We are given to understand that the success of the Society's publications has been so great that they are now at a premium. We do not wonder at this, as the selection of subjects has been admirable, and the getting up of all the volumes could not be improved.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, DECEMBER 24th, 1859.

THE REVEREND MR. BONWELL'S CASE.

The Commissioners appointed by the Bishop of London to inquire into the charges made against the Reverend James Bonwell, the Incumbent of St. Philip's, Stepney, have in the course of their investigations brought to light two or three circumstances which form, we think, fit subject for comment in a medical journal.

The charge made and proved against the defendant was that, although a married man, he gave himself out to be a widower, and under that pretension engaged the affections of a young lady named Yorath, the daughter of a deceased clergyman. He carried on a courtship for some time, with the consent of the lady's family, and ended by inveigling her from home and seducing her. Such little episodes are not, it is true, of rare occurrence in life; but when we find that, during all the time that this reverend gentleman was thus committing adultery, he was preaching the Divine Word, and exhorting his flock to holy living—his paramour listening as one of the congregation—we must confess that an amount of depravity had been reached, which it would be difficult to match. But this was not all. The reverend gentleman had private apartments at the school-house of St. Philip's; and hither he had the audacity to bring the young lady for her confinement.

In referring to these particulars, it is very far from our wish to cast any blame upon the clergy of the Church of England, because there are among them a few black sheep amid a host of good and worthy men. Our object is to draw attention to the manner in which the culprit has been judged by his superior the bishop, for the offence of systematically enacting a lie that could have had no other purpose than the ultimate

seduction of the young lady. The lighter moral indiscretions of the clergy, it may be stated, are submitted to the judgment of the bishop of the diocese in which they may have been committed: and this charge against Mr. Bonwell, of having passed himself off for a widower, and of having engaged himself to Miss Yorath, having come to the ears of the bishop, his lordship cited him to appear before him to answer it. Answer of course there was none. He stood before his judge convicted of a crime which, in a clergyman, must be considered as of the deepest dye. Nevertheless, his spiritual superior dismissed him with a *severe reprimand only*.

We pause for a moment at this stage of the transaction, to remark that the office of the Bishop is somewhat analogous to that of a medico-ethical society with respect to recalcitrant members of our own profession. The moralities of his clergy are to a certain extent under his keeping. Looking at the matter in this light, let us ask what would be thought of a medico-ethical society that, upon as flagrant a case in kind being proved against any of its members, should dismiss him with *a severe reprimand only*, delivered in private? We forbear to make reply. It is often objected to the medical profession, that their morals are sometimes not of a very high order. We question, however, if any one of us would be judged as leniently by our fellows, for an offence commensurate with that committed by the Rev. Mr. Bonwell, as he has been by the Bishop.

Immediately on the reprimand having been given, the graver charge of having caused his victim to be confined at the school-house of his parish, and of having made away with the child in a very suspicious manner, came under the notice of the Bishop, who then determined to hand over the whole matter for investigation to the Commissioners under the Church Discipline Act. The public have been made acquainted by the daily papers with the result of that investigation. These proceedings, which were properly made public, clearly proved the adultery and the concealment of the birth of the child; and a little episode then transpired, which proves that undertakers, when we have "shuffled off this mortal coil", play a shifting part that possibly never entered into our calculations. The worthy undertaker in the present instance, having been directed by Mr. Bonwell to bury the child at his convenience, went through the farce of exhibiting it in its shell, and then, the moment he had an opportunity, transferred the body to a coffin already occupied by another corpse. We know not if such tricks are often resorted to by the trade: if so, it is quite clear that unexpected exhumations may now and then lead to very extraordinary suspicions against the fair fame of the dead. The discovery of the remains of a new-born infant in the coffin of a young woman may possibly give rise to investigations of a most painful character, in which the happiness of surviving relations may be involved. We are not aware that any proceedings have been instituted against the undertaker; if not, we think it very disgraceful, and fear that the impunity with which he has been allowed to escape will, in all probability, lead to the repetition of the misdemeanour.

Dr. Godfrey, who confined the young lady, in the course of his evidence laid claim to a privilege which we should be sorry to see carried to so great a length by medical men. When asked if Mr. Bonwell admitted to him that he was the father of the child, he replied, "Whatever passed between us, was confided to me in my professional capacity, and I am not bound to divulge." That a medical man is bound not to reveal, in an ordinary way, what is confided to him by his patients, we fully admit; but we altogether question his right to keep secret any matter the knowledge of which is requisite for obtaining the ends of justice. The Catholic priest cannot maintain the secrecy of the confessional in such a case; and surely the medical man must not lay claim to a larger privilege.

It is seldom that, for the mere purpose of creating a laugh in court, a medical man is guilty of such buffoonery as this witness. On being asked, for instance, if he had been long acquainted with Mr. Bonwell, he replied—"Well, in the present state of the Church of England, I don't care to acknowledge an acquaintance with a clergyman." We should resent such an impudent remark as this, if addressed by any person to our own profession; and we feel certain that every medical man of respectability will feel the utmost disgust for this sally of Dr. Godfrey.

THE WEEK.

In a letter published at page 1049, Dr. Markham disputes, to a certain extent, the correctness of some remarks in a paper recently published in this Journal, by Dr. Handfield Jones, on the efficacy of local blood-letting in relieving inflammations of internal organs. The question whether local depletion is really *per se* efficacious in relieving congested states of viscera separated from the outer wall by a serous space (as the pleura or peritoneum), is one which may well lead to much consideration; but it is one which we, and probably many of our readers, remember to have seen examined several years ago by Dr. John Struthers of Edinburgh. A paper on the subject was published by that gentleman in the *Monthly Journal of Medical Science* for April 1853; and an abstract, illustrated by woodcuts, kindly lent by the author, appeared in the Association Medical Journal for the 20th of the same month. The propositions laid down by Dr. Struthers were briefly these. The relief in local blood-letting is through the blood-vessels or vascular system; and there can be no special relief from local blood-letting, unless the blood-vessels of the affected part communicate with those of the part from which the blood is drawn. But, according to his statement, such communication in the case of the thoracic and abdominal viscera is wanting, except in the case of the anastomosis between the vessels of the rectum and the perinæum, which gives a rational explanation of the French practice referred to by Dr. Markham. Dr. Struthers believes that local blood-lettings in inflammations of the internal viscera do good only in the same way as general blood-lettings—by relieving the general circulation. His object, however, is not to depreciate local bleedings, which he rather supports, on the ground that the blood may as well be taken from one place as from another, and that perhaps, the inflammation being of a serous lining of the parietes, the benefit may be direct. We would again commend Dr. Struthers's essay to the attention of our worthy contributors Drs. Jones and Markham.

It appears that, although there is a public prosecutor in Scotland, the wording of the Medical Act renders his office of no effect in regard to the prosecution of illegal practitioners. The Act provides that penalties may be recovered by "the Procurator Fiscal, or by any other person". Now, when these words, "*any other person*", occur in an Act of Parliament, the Procurator Fiscal is instructed not to prosecute. The Scottish Branch of the Medical Council have, we learn from the *Daily Scotsman*, endeavoured, but without success, to obtain a modification of this rule. Under these circumstances, if the penal clauses of the Act are to be enforced at all in Scotland, the medical practitioners in that country must follow the example of their brethren in England, and form Registration Associations in Scotland. We understand that a movement in this direction has already commenced, both in Edinburgh and Glasgow; and that almost all the leading practitioners in both cities have expressed their willingness to assist in furnishing the funds required for the prosecution of flagrant offences under the Act.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, December 7th, 1859.

Edward Rigby, M.D., President, in the Chair.

The gentlemen proposed as Honorary Fellows at the last meeting were duly elected. Twelve gentlemen were elected, and twelve proposed for election, as Ordinary Fellows.

COMMUNICATIONS.

Statistics of Midwifery Practice, from July 2nd, 1808, *to December 31st*, 1858. By H. W. Bailey, F.R.C.S. (Thetford). In order to afford an opportunity of comparing provincial statistics with those of town and hospital practice, the author submitted the results of fifty years extensive practice in midwifery. The births amount to 6476: 3290 males, and 3186 females. There were 53 cases of twins: 63 males, and 38 females. 21 were still-born. There was one case of triplets, which lived till the next day. There were 6120 cases of head presentation, and 356 preternatural cases. Presentations of the face to the right side were very tedious; in such cases, turning or the use of the forceps was advisable. In 44 cases, the arm or hand presented. In 21, the funis presented; one or two of these were still-births. Of breech cases, 45; when the face presented to the front, these cases required the aid of the forceps to save the child. In 40 cases, the face, and in 9, the abdomen or back, presented. In 180 cases (primary), the feet presented. In 17 cases, placenta prævia existed. In one, the placenta was expelled first. As a rule, the author dilates gradually and turns in these cases. All cases were successful, both to mother and child, if at the full time. Hæmorrhage was fatal in two cases, attended by midwives. There were two cases of sudden death after labour; no apparent cause. Embryotomy was performed only twice. A tabular statement was appended, showing the number of deliveries in the respective months of the year.

Delivery of a very large Living Child by means of the Long Forceps. By Charles Waller, M.D. This case was brought forward on account of the extreme size of the child, which, on delivery, was found to weigh 15 lbs. 15 ozs. After about thirty-six hours ineffectual labour, Dr. Waller applied the long forceps, a good part of the head being still above the brim, and delivered the child, which was a female, alive.

A new Nursing-Cradle was exhibited by the inventor, Mr. C. Wright.

On the Risk to Life of First and Subsequent Pregnancies. By Robert Barnes, M.D. The author wished to draw the attention of the Society to the determination of the question as to whether first pregnancies were to be considered as more hazardous to life than subsequent ones. The question was one of great interest as bearing upon life assurance. It was not sufficient to know the amount of risk for all pregnancies, which we were at present, indeed, in possession of. Excluding deaths from puerperal fever, the Dublin Hospital statistics shewed that 1 in 100 of primaparæ died, and 1 in 200 of the multiparæ. But as the statistics of private practice only were capable of affording satisfactory information, he would suggest that the Fellows of the Society be invited to contribute to the settlement of the question. A tabular form for the purpose he submitted to the Society.

Dr. Tyler Smith agreed with Dr. Barnes as to the risk incurred by women in first labours; but it was the custom of the insurance office with which he was connected—the New Equitable—to assure the lives of healthy women pregnant for the first or any other time at the ordinary rates. The rates of life assurances were framed upon the average duration of life in average lives. At all ages, the expectancy of the continuation of life was somewhat greater in the female than the male; so that they were the best lives for assurance. As regarded the question of married or single women, there could be no doubt that there were certain risks incidental to childbirth; but single and childless women were subject in an increased degree to certain disorders of the nervous system, and to uterine and ovarian tumours, which rendered them, if anything, less eligible than child-bearing women for life assurance.

Dr. Murphy believed the principle of the New Equitable Society to be the correct one. The statistics of the Dublin Hospital were not applicable to the settlement of this interesting question, for special stated reasons; and, in fact, arguments based on statistics generally required to be received with very great caution.

Treatment of Moles and Premature Expulsion of the Fœtus. By Ancell Ball, M.R.C.P.Ed. (Spalding). In cases of severe hæmorrhage after the expulsion of the fœtus, the secundines being retained, the author uses one of three instruments exhibited, for the purpose of removing the retained substance. The instruments consist of a two- and a three-bladed forceps, which admit of being used through the speculum.

Retroflexion of the Gravid Uterus during Labour at Term. By Henry Oldham, M.D. The patient was pregnant for the first time, and had been in labour for several hours when Dr. Oldham saw her. On examination, the fundus uteri, with the head of the child, were found filling the pelvis; the os uteri drawn up above the pelvic brim, and reached with the utmost difficulty. The condition had apparently existed from the beginning of pregnancy. By combined external and internal manipulation, the breech was brought down, and the fundus pushed up. Delivery was then effected; the child was dead. The mother did well. The author remarked on the facts:—1st, that the full time had been reached; 2ndly, that the symptoms were not such as to excite attention previously; and 3rdly, the possibility of replacement at this late period. In answer to a question put by Dr. Graily Hewitt, the author stated that the patient, when formerly under his care, and single, had, he believed, been the subject of retroflexion.

Sloughing of the Fœtal Scalp as a Result of Tedious Labour. By W. O. Priestley, M.D. The author related a case, under the care of a midwife, in which the head had been impacted for about forty-eight hours in the pelvis, in a first labour. Eight days after delivery, the child died. On the third day, the back of the head was much inflamed; later, the scalp assumed a darker colour, and the child gradually sank. A slough, of the size of a shilling, had separated, leaving a wound, which extended nearly to the bone, over the occipital protuberance; and there was extensive ecchymosis around almost to the ear on each side; and the pericranium was in part separated from the bones. The sloughing in question resulted, in the author's belief, from the long impaction of the head in the pelvis.

Fibrous Tumour of the Uterus, illustrating a Surgical Operation for its Cure. By I. Baker Brown, F.R.C.S.E. In a woman, aged 49, ill for six years, there was found an abdominal tumour, extending half-way to the umbilicus, composed of the uterus, enlarged by the presence of a fibrous tumour. The os uteri was incised, and the tumour brought into sight. The author then proceeded to operate upon it by piercing it in the centre, cutting out a portion, much in the manner of coring an apple. Through the cavity thus formed, as much as possible of the surrounding tissue was broken down. A copious discharge occurred for the next few days; and at the end of four months, a slightly enlarged uterus was all that could be detected. The principle on which the operation in

question (which, the author observed, had been performed by Atlee and Recamier) was adopted, was the knowledge of the fact, that when polypi are ligatured, the whole of the growth perishes—not only that on the distal side, but also that on the other side of the ligature. By removing a portion of the fibrous tumour, the same effect—the destruction of the whole—was in this case obtained.

Dr. Barnes believed Atlee's operations had been attended with great mortality. He would suggest that Dr. Simpson, just elected an honorary fellow, should furnish the Society with the results of his enucleation practice.

Dr. Priestley believed that Dr. Simpson had abandoned interfering with large fibroid tumours of the uterus by operative measures.

The President remarked on the varying degrees of the menorrhagia attending cases of fibroid tumour.

Extreme Emaciation, the result of Obstinate Vomiting in Pregnancy. By W. Tyler Smith, M.D. A girl, aged 19, unmarried, was admitted into St. Mary's Hospital in July last. Obstinate vomiting, at first supposed to depend on cerebral disorder, continued from the time of her admission. She became so extremely reduced in flesh, that at the end of six weeks her weight was only forty-seven pounds and a half. At this time, she was unable to move in bed; delirium was frequent, bed-sores appeared over the sacrum and nates, and she appeared to be dying. Pregnancy was now suspected. The catamenia were found to be absent; the breasts were full, notwithstanding the emaciation of the rest of the body, and the uterus had increased in size. Remedies had been of no avail. She was too weak to allow of artificial abortion. A nurse was put by her bedside to give her a single teaspoonful of nourishment every half hour. The body was rubbed with oil, and beef-tea injections were administered. Under this plan the sickness ceased; the quantity of nourishment was slowly increased, and she improved in strength, and became comparatively stout. Pregnancy went on to December 3rd, when she miscarried at the fifth month, and is now recovering. In answer to a question, Dr. Tyler Smith stated that the enemata given were retained.

Hysteria simulating in the most perfect degree Natural Labour. By Richard Hodges, M.D. (Rochford). The author was engaged to attend a woman said to be in the fifth month of pregnancy. Four months afterwards, he was sent for, the patient being stated to be in labour. The pains were found to be severe, and like those of the last stage of parturition. On examination, however, a tumour was found to present, which turned out to be the bladder, distended and prolapsed. There was no pregnancy.

The President then announced that the first session of the Society, which had been a most successful one, was now brought to a close. The first meeting of the next session would be held on Wednesday, January 4th, 1860.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, December 13th, 1859.

F. C. Skey, Esq., F.R.S., President, in the Chair.

THE ETIOLOGY AND TREATMENT OF PERITONITIS.

BY S. O. HABERSHON, M.D.LOND., F.R.C.P.

Dr. Habershon first alluded to the value of a knowledge of the causes of disease as a guide to right treatment, and to the importance of considering local disease as connected with a constitutional or general origin. In reference to peritonitis, he remarked that, although written and spoken of as an idiopathic disease, we did not find any proof that the malady really existed in that character. An analysis of the records of 3752 inspections after death at Guy's Hospital, and extending over a period of twenty-five years, was brought forward as confirming this statement, and as an indication of the general plans of treatment. 501 were instances of peritonitis, and they were divided—first, into those in which the disease is set up by mischief extending to the peritoneum from without, as from adjoining viscera, injury, or perforation; secondly, those which might be called blood diseases, connected with albuminuria, with pyæmia, or puerperal fever or erysipelas; and thirdly, those in which general nutritive change in the system is followed by acute or chronic peritonitis, as in struma or cancer, or after continued hyperæmia of the capillaries of the serous membrane, as in disease of the liver or heart, where very slight exciting cause suffices to produce acute mischief.

Of the *first* division, there were 266 instances and 102 of these arose from internal or external hernia, or mechanical obstructions, 19 being of the internal kind. Reference was made to the mode in which the extreme tension of the intestine leads to intense congestion of the mucous membrane, diphtheritic inflammation, and ulceration in the direction of greatest tension, leading to perforation in many cases. In 35 cases, peritonitis arose from injuries or operations directly affecting the serous membrane, and in 14 had followed tapping; this number was lower than might be expected. In 56 cases, there was perforation of the intestine: in 10 from hernia, in 9 of the appendix cæci, in 2 of the cæcum, 4 from cancerous disease of the colon, 9 from disease of the stomach, 15 from typhoid disease of the ileum, 4 from struma, 2 from ovarian adhesions, and one from cancerous disease of the vagina. In 5 other cases of fever, peritonitis had resulted, in 2 of which the perforation was not complete; 1 was of doubtful character. In 19 cases, fæcal abscess had taken place. In 42 cases the peritonitis was caused by extension of disease from the bladder, uterus, or pelvic viscera: 10 from lithotomy, 6 from ovarian disease, and 14 from calculus in the bladder, cystitis, or stricture. In 11 cases, disease of the liver or gall-bladder had led to direct extension of disease to the serous membrane, and in 3 other cases it followed acute inflammatory disease of the colon, and from disease of the cæcum, not previously mentioned, in 3 instances. Thus 261 cases of the 501 were produced by disease not commencing in the serous membrane, but propagated to it from adjoining parts; and the author stated that in each of these instances, as far as medicinal treatment could be of service, he believed that the plan suggested by Drs. Stokes and Graves in instances of perforation of the stomach was of the greatest value, in promoting rest to the intestines, the localisation of the mischief, and the acceleration of reparative changes; in many instances, that local depletion and the external application of anodyne remedies might be combined with advantage; but that mercury, in the form of grey powder or calomel with opium, was injurious rather than otherwise, as tending to prevent adhesions, exciting action from the bowels, or rendering their contents more fluid, and increasing the depressing effects of the disease on the nervous system.

The *second* class of cases consisted of those in which peritonitis was set up by a changed condition of the blood, as in albuminuria, pyæmia, etc. In 63 instances, the peritonitis was connected with Bright's disease, in nearly all of an acute kind. The peritoneum was rarely the only serous membrane affected. The treatment of the general disease was regarded as best calculated to remove the local affection, assisted sometimes by counterirritants: but that the ready salivation produced by mercurials did not afford corresponding benefits. 10 were puerperal in their origin; in 13, pyæmia followed operations, local suppuration; and 5 others were with erysipelas. Instances were alluded to in which serous membranes became simultaneously affected, perhaps from pyæmia or rheumatism, or renal disease; and 3 of those were mentioned, one where peritonitis was connected with pericarditis and pleurisy, a second with pneumonia and dysentery, and a third with pericarditis, pleuropneumonia, and obscure renal mischief. In the treatment of these cases, the local affection must be almost lost sight of in the general treatment, and local depletion and mercurial preparations would not promote the cure.

The *third* class of peritonitis consisted of cases connected with general nutritive changes, as cancer, struma, etc., or where, with continued hyperæmia of the peritoneal capillaries in cirrhosis, or heart-disease, a very slight exciting cause suffices to produce acute disease. 70 cases rose with struma; 22 acute and 48 chronic and acute. The varieties of the strumous form of disease were mentioned, leading sometimes to serous effusions, to general adhesions, to perforation, or fæcal abscess. The ages were stated not to be limited to early life, many occurring between 30 and 40 years of age. It was urged that in all these cases the same general rules of treatment should be observed as in ordinary strumous disease, sometimes assisted by counterirritants, very cautious local depletion, anodyne applications and opium; but the avoidance of purgatives and of mercurial preparations was recommended. 40 instances of peritonitis with cancer, besides those already mentioned, were next referred to; 9 in males, and 31 in females. In men, glandular organs were generally affected; and, in women, the ovaries or uterus; but, in 20 instances, the disease consisted of tubercles upon the peritoneum, generally with dropsical effusion: 19 of these were women, and 1 a man; the average age of the former 52, and evidently coming on after the cessation of ovarian functional activity. The inutility of diuretics, and the inadvisability of depressing measures, as mercurials

were spoken of; and it was stated, that paracentesis was often followed by increased effusion of lymph, and the best treatment consisted in sustaining the ebbing powers of life by every means in our power.

The *last* cases were those of peritonitis associated with hepatic or heart-disease. In 32 of the hepatic complication, 14 were chronic, 12 acute, and 6 acute and chronic: 5 had been previously referred to as rendered acute by tapping. In some instances pneumonia was present, and slight exposures to cold and wet evidently sufficed to induce acute changes. The degenerative arterial changes often found with cirrhosis were mentioned, this chronic state should be borne in mind in the treatment of the acute disease. In early cirrhosis, the usual treatment of peritonitis by calomel and opium was more serviceable than in any other form of peritoneal disease, on account of the stimulating effect of mercurials on the glandular organs of the abdomen; but that even here it was not necessary to produce salivation to ensure the beneficial effects. 9 cases were connected with heart-disease.

The general causes of peritonitis were:—

Hernia (19 being internal)	102
Injuries; operations, as tapping, etc.	35
Perforations of the stomach, ileum, cæcum, appendix, colon, etc. (other 13 included under hernia, etc.)	43
And leading to fæcal abscess (2 otherwise mentioned)	17
Ulceration, with fever, without perforation	5
Disease of the bladder or pelvic viscera; operations, as lithotomy, etc.	42
Abscess of the liver, gall-stone, etc.	11
Acute disease of the colon	3
Other disease of the cæcum	3
	261
Bright's disease	63
Pyæmia, puerperal fever, etc.	31
Strumous disease	70
Cancer (12 before mentioned)	40
Hepatic disease (and 5 acute, from tapping)	27
Heart-disease	9
	240

The author concluded with the following propositions:—

1. Peritonitis is never idiopathic in its origin, and we do not find any such instance as acute disease of the peritoneum coming on from mere exposure to cold; in such case, the cold tends to render acute an already existing morbid state.

2. The consideration of the origin of the disease, either in a local or general source, is the best guide to treatment: whether—first, from extension of disease from adjoining viscera, as the ovaries, bladder, intestines, perforations, or injuries; secondly, from blood-changes, such as occur in albuminuria, pyæmia, or erysipelas; and thirdly, from almost imperceptible changes, or deficiencies, in general health, as in struma, or cancer, or climacteric changes, or as a consequence of the hyperæmia of cirrhosis, or heart-disease.

3. In the first form, perfect rest, the avoidance of food as far as possible, and the mode of treatment recommended by Dr. Stokes, in producing rest to the intestinal canal and peristaltic action, and diminishing the collapse and prostration consequent on the disease—constitute the best mode of treatment; using, as far as need be, other means, as anodyne applications, local depletion; and, in many instances, also seeking to remove the exciting cause, as in cystic disease, etc.

4. Where peritonitis is a symptom of blood-change, as Bright's disease, pyæmia, etc., it may be best relieved by the treatment of the primary disease; but here opium is sometimes of great value, and more effective without mercurial combination.

5. In the treatment of the third class, the consideration of the cause is also our best guide; strumous and cancerous disease should be regarded in their general relations; and in those connected with hepatic disease, the remembrance of the condition prior to the supervention of the peritonitis should prevent us from using means calculated to increase the primary mischief; and any benefit due to mercurial action may be attained without mercurial salivation.

6. In general, the benefit ascribed to mercury in the treatment of peritonitis is not established, and may, perhaps, be correctly attributed to the opium with which it is combined.

MEDICAL SOCIETY OF LONDON.

Monday, December 19th, 1859.

John Hilton, Esq., F.R.S., President, in the Chair.

ON SOME POINTS IN THE CLINICAL HISTORY OF ASTHMA, FOUNDED ON AN ANALYSIS OF FIFTY CASES.

BY HYDE SALTER, M.D., F.R.S.

After some preliminary observations, Dr. Salter recalled the attention of the Society to the fact that he had already written much on asthma, and it might be imagined that he had little of fresh interest to communicate; but, he said, the more his observations on the disease extended, the more he found to observe. The subject of the present paper was an analysis of fifty cases of asthma; the notes of which he had arranged in tables, so as to be able to compare and contrast the circumstances attending them. (The tables were handed round for examination.) About one half of the fifty cases had come under his personal observation; the rest had been collected from friends in the country, whom he had furnished with tabular forms to be filled up. This method he recommended to be followed in similar investigations on other subjects; by means of it, he had been enabled to extend the basis on which he founded his observations. The circumstances noted in the tables were:—1. Name, age, and sex; 2. Appearance—the asthmatic *physique;* 3. Occupation; 4. Residence, past and present; 5. Age at first appearance of the disease; 6. Cause, predisposing and provocative; 7. Frequency of the attacks; 8. Time of the day, or night, at which the paroxysms appeared; 9. Premonitory symptoms; 10. Whether the asthma was simple, or complicated with other diseases, as bronchitis or heart-affection; 11. Standing of the disease; 12. Hereditary predisposition; 13. Associated diseases; 14. Effect of remedies. Of these, the first six were noticed in the paper.

1. Regarding *age*, the tables gave information as to (*a*) the age of the individuals when the notes were taken; (*b*) the time of life at which the disease first appeared; and (*c*) the duration of the disease.

(*a*) The age at the time of recording the history was noted in 48 cases; and in nearly one-third (15) it was from 20 to 30. The number decreased in each succeeding decade of life. The youngest patient was aged 12, and the oldest 78. This shews plainly, that asthma may occur in early years; and that it does not tend to shorten life.

(*b*) The age at which the disorder first appeared was noticed in 47 cases, with the following result:—

	Cases.		Cases.
During 1st year	9	Between 30 and 40	6
Between 1 and 10	10	„ 40 and 50	3
„ 10 and 20	7	„ 50 and 60	4
„ 20 and 30	8		

Asthma, then, may occur at any time of life; and the table shews that a large proportion of the cases (19 out of 47) became asthmatic within the first ten years. In the nine in which the disease commenced in the first year, it attacked one almost from the moment of birth; 2 within three months; and 4 within the year. It would appear, also, that the liability to the occurrence of asthma diminishes as life advances up to old age, when it increases somewhat. This is what would be expected, from the constitutional nature of the disease. And, according to the age, the form of the asthma varies. In children, it is mostly of bronchitic origin; in adults, it is a purely nervous affection; and in old persons, its source is to be traced to bronchitic and cardiac disease.

(*c*) The average *duration* of the disease was, in 32 cases, 22 years. This, it must be observed, merely represents the time from the first appearance to the time of taking the notes. Perfectly correct results could be arrived at only by ascertaining the period from the commencement of disease to the end of life. In 4, in whom it had appeared during the first year, were aged 25, 37, 27, and 47. A person aged 71 had had asthma 34 years; and another, aged 78, had had it 45. The longest period of duration met with by Dr. Salter had been 47 years. The non-tendency of asthma to shorten life, as shewn by such facts as this, is true only of the pure nervous asthma—not of bronchitic or cardiac asthma. It would be well if assurance offices would bear this in mind; at present, however, the distinction is overlooked, and the practice in such offices regarding asthmatic patients is very dissimilar.

Sex. Of the patients, 33, or nearly two-thirds, were males, and 17 females. The greater frequency of asthma in males seems attributable to the circumstances under which they are

placed, by occupation, exposure to weather, wear and tear of life, etc. If these be rejected, we must suppose a greater proclivity in the male sex to the disease—which, however, is quite improbable.

2. *Appearance.* There is generally some deviation from the healthy appearance; and, in various cases, the patients were noted as being "high-shouldered", "thin", "emaciated", "round-shouldered", "anxious looking", "stooping". The asthmatic is generally a miserable wretch, emaciated and cyanosed. If the disease have appeared in early life, he is generally below the average height. Sometimes, but rarely, there is no deviation from the ordinary healthy appearance.

3. *Occupation.* In 47 persons—32 males and 15 females—22 of the males were gentlemen (professional men, merchants, etc.); and 10 were tradesmen, artisans, and labourers: while of the 15 females, 9 were ladies. The greater proportion of asthmatics in the upper classes is more striking when we remember their actual smaller number; but even here we are likely to arrive at a false conclusion, unless other circumstances are taken into account. In the upper classes, the asthmatic patient is very likely to come under the physician's notice; while the poor often allow the disease to go on without taking medical advice. But still the rich may have a greater proclivity to the disease; and this may depend in part on a morbidly sensitive and excitable nervous organisation engendered by our hypercivilisation, and in part on the fact that the children of the upper classes frequently pull through the diseases which often give rise to asthma (such as measles, bronchitis, etc.), while those of the poor are cut off by them. Particular occupation does not appear to predispose to nervous asthma; while the reverse is the case with regard to the bronchitic and cardiac forms of the disease, to which, therefore, the poorer classes are most liable—especially, it would appear, costermongers, cabmen, and Covent Garden porters.

4. *Residence.* Asthma may occur in every conceivable locality and climate. It may continue during prolonged residence in one place, and during repeated change of locality. In certain cases, change of residence effects a cure; which, however, lasts only as long as the place where the attacks come on is avoided. In general, the lowest and dirtiest parts of cities are found to be most beneficial to the asthmatic; in some cases, country air is of service. It is impossible, *à priori*, to predict what air will best suit the patient. Dr. Salter stated that, in a Hindoo lady under his care, who had had asthma for twenty years in her native country, the paroxysms had been excited in England by the smell of hay. This phenomenon had been observed by him also in other cases; whence it would seem that the grass-emanation producing asthma was peculiar to Europe.

5. The *causes* were considered as essential or predisposing, and provocative or exciting. Of 46 cases, the disease in 22 was attributed to a bronchial affection,—hooping-cough in 3, catarrhal bronchitis in 19. In 16, the disease seemed to depend on a constitutional or congenital proclivity; in many, where the disease appeared early, it was hereditary. In 2 cases, it was attributed to the sudden suppression of eruptions, and in 2 to grief and trouble. Both these causes Dr. Salter was inclined to recognise. The cause, however, was regarded as apocryphal in four others, in which the asthma was attributed respectively to typhus fever, bowel-complaint, hard work, and temperance after excess in drinking, and a visit to Ashby. Of provocative causes, there was a numerous and very varied list, which will be arranged in three classes;—respired irritants, alimentary irritants, and sources of irritation affecting the nervous system directly: to these were to be added hot weather and laughter. Dr. Salter referred to the particulars of 4 cases which he had observed, and which presented some peculiarities as to the cause. In two of the patients, a brother and sister with whose cases he had been acquainted many years, the paroxysms were induced by the proximity of a cat, especially if the animal were stroked by the patient. This phenomenon had induced him to term the form of disease "cat asthma"; but other two cases, in which the paroxysms were brought on by the effluvia of tame rabbits, induced him rather to designate this form of the affection as "asthma from animal emanations."

Dr. E. Smith criticised Dr. Salter's statistics as being founded on a small number of cases. Dr. Salter had referred to relative numbers of asthmatics at different ages: but this did not determine the proportion to the given population at any age. The duration of the disease should be estimated from the first attack up to death. Then, as to station and trade, a small number of facts cannot determine the question, as asthma occurs in all classes and at all ages. With regard to residence, he believed that many cases are relieved in the crowded parts of cities. There must be a physical cause for this, which ought to be investigated. The state of the bronchial membrane in cold he did not think to be inflammatory. There is no heat of skin, nor thirst, nor pain; and the ordinary treatment does not point to inflammation. As to provocatives of asthma, he found that excess of carbonaceous food had much to do with producing the attacks; and this was explained by the confinement of patients in cases of bronchitis. This pointed to diminishing the food and relieving the bowels and liver.

Dr. Routh thought that the conclusions, drawn with evident care by Dr. Salter, even from a few cases, were more likely to be correct than those drawn from a number of cases, of which it might be doubted whether all were cases of asthma. He had never heard that genuine bronchitis or catarrh is not inflammatory. There may be inflammation without fever; he had seen pneumonia and other local inflammations without fever.

Dr. Smith had referred to the ordinary accessions in chronic bronchitis.

Dr. Gibb had many years ago examined the body of an old gentleman who had had asthma. There was enlargement of the longitudinal fibres of the bronchi; and he had observed this in two other cases.

Mr. Miller had frequently found the longitudinal fibres enlarged in asthma.

Mr. P. Marshall suggested that account should be taken of the number of members of a family in which asthma occurs.

Dr. Habershon thought the facts deduced were in the right direction. Had Dr. Salter found that menstruation had much to do with the character of asthma?

Dr. Mackenzie suggested that the partial asphyxia may be obviated by inhaling oxygen.

Dr. Salter having replied, the Society adjourned until Monday, January 9th, 1860.

Editor's Letter Box.

LOCAL BLOOD-LETTING IN INFLAMMATION.

Letter from W. O. Markham, M.D.

Sir,—Will you allow me a few lines of remarks on a point referred to by Dr. Handfield Jones in his very valuable papers on Inflammation, etc.?

Dr. H. Jones maintains that abstraction of blood from the skin which lies over certain inflamed internal organs, where there is no direct vascular connexion between the skin and the internal organs, is a practice whose utility remains unquestioned. He instances the cases of leeching at the epigastrium in gastritis, of cupping the back of the chest to relieve pulmonary hyperæmia, and of the loins to relieve congestion of the kidneys. Now, without denying the fact, I would gladly hear from my friend the evidence upon which he founds his assertion of it. Is it clear and indubitable that such abstraction of blood really does relieve these congestions? To *prove* the fact, it must be shown that all those *other* remedies which are invariably used in the treatment of these diseases were dispensed with in such cases. In congestions of the kidney, in which cupping over the loins is practised, are not other still more powerful remedies always resorted to at the same time—viz., warmth, rest in bed, purgation, and opiates? And so, in pulmonary congestions, we invariably use other remedies besides the cupping; and how are we to distinguish between the effects of these on the congestion, and the effects of the cupping?

Besides this, do not these local abstractions of blood, in the cases referred to, very often fail to give the relief expected from them? This much, at all events, seems to me as undeniable; viz., that, in all such cases, the relief which follows upon the bleeding is never so certain, so constant, so manifest and undoubted, as the relief which follows in those cases in which there is a direct vascular communication between the skin and the inflamed part beneath—as, for instance, between the skin and an inflamed parietal pleura. I do not pretend to give any explanation of the fact, but I take it as one which every one will admit; viz., that the withdrawal of a small quantity of blood from an inflamed part—say, by leeches from a sprained ankle—will diminish the chief phenomena of the inflammation—the pain, the heat, the redness, and the swelling. We all see this effect too constantly follow to doubt the relation of cause and effect. Now, taking this fact, I apply it to

the case of internal organs; and I cannot but think that, in all those cases in which there is a distinct vascular connexion between the skin and the inflamed internal organ, we have much more certain proof of the efficacy and benefit of the remedy than we have in those cases in which there is no such vascular connexion—in the cases, for instance, referred to by Dr. H. Jones. And I would observe that, in some of those cases in which there is no vascular connexion, relief to pain may undoubtedly be given by local bleeding, and in a way which has not been referred to. For example, in some cases of pericarditis, when there is much local pain, local abstraction of blood gives relief, as I believe, by its action on the pleurisy which almost always accompanies severe pericarditis. So, again, in liver diseases, when leeching over the hepatic region gives relief (which we know it very often fails to do), may we not very fairly ascribe the beneficial action to the influence which it has had over the inflammation which has been excited in the parietal peritoneum over the liver? The proofs of the existence of such inflammation are frequently shown to us in the deadhouse, in the adhesions between the surface of the diseased liver and the parietal peritoneum over it.

In inflammation of the lungs, local bleeding is of service, because it acts upon the pleurisy which usually accompanies pneumonia. Is, I might add, the French system of leeching the parts around the anus, to relieve abdominal congestions, a mere farce? I should be too much trespassing upon your space, if I were to prolong this note; but I would just venture to say also, that I believe the vascularity of the new formed adhesions, which unite internal organs to the parts around them, may in some cases create a new and direct vascular connexion between the skin and these organs.

Altogether, I think my friend will himself admit this much—that the benefit of local bleeding in internal inflammations is much more sure and manifest in those cases in which there exists a direct vascular connexion, than when no such vascular connexion exists.

I am, etc.,

W. O. Markham.

33, Clarges Street, W., December 19th, 1859.

PHYSIOLOGICAL ACTION OF DIGITALIS.

Sir,—In your number for December 10th (at p. 1001). Dr. Handfield Jones describes digitalis "as a stimulant which tones, steadies, and strengthens a weak flabby heart." This description may be proved to be quite correct; but it is so opposite to the notion commonly received, namely, that digitalis is a sedative and contrastimulant, that I doubt not that Dr. Jones will confer a favour upon many of our older readers by briefly stating any facts which have led him to speak of digitalis as a stimulant or tonic.

The perusal of Dr. Jones's paper has recalled to my mind a case which came under my notice many years ago, and which would tend to show, as far as a single case can, that the old idea of the medicinal properties of digitalis is not altogether erroneous. A young lady, sixteen years of age, was the subject of frequent fits of syncope, which led her parents to consult a physician of great local reputation, whose first prescription produced no amendment, the fits recurring at least as frequently as before, which led to another interview and prescription. The writer was sitting in conversation with some other members of the family, when the mother of the patient rushed into the apartment, with terror in her looks, exclaiming that her daughter was dead. Happily this did not prove to be the fact, as the young lady slowly rallied, and eventually recovered. Upon inquiry, it appeared that the young lady had that day commenced taking the medicines last prescribed; the second dose of which had been speedily followed by a fainting fit of unusual duration. My request to be allowed to look at the prescription was willingiy acceded to; and I saw at a glance that tincture of digitalis constituted the active part of the medicine just prescribed, and that a still larger dose figured in the second. Now, whether it was prescribed by Dr. —— as a cardiac, or as an uterine tonic, I cannot tell; it is sufficient here to know, that wtih the discontinuance of foxglove, and the substitution of steel and aromatics, the fits became less frequent and alarming, and in a short time entirely ceased.

I had written the above some days ago, but deferred posting it, in the hope that the passage in Dr. Jones's paper would have attracted the notice of some one dissenting from his opinions, and led to some communication in your last number; but as that contains nothing relating to the subject above, in the absence of something more to the purpose, I shall feel obliged by your insertion of the foregoing.

I am, etc., T. H.

—, Cambridgeshire, December 1859.

WANT OF DEVELOPMENT IN LIMBS AFTER EXCISION.

Letter from Richard Barwell, Esq.

Sir,—I have studied with much attention the excellent paper in the number for November 26th, of the British Medical Journal, by Mr. Pemberton, which relates to the want of development occasionally occurring in a limb after excision of the knee-joint; and as I am by several reasons impelled to differ from his conclusions, must beg of you a little space to explain the grounds of my doing so.

In the case which Mr. Pemberton quotes, as the first in which he had excised the knee-joint, an unusual quantity was removed from both bones. There is no doubt that the epiphyses were taken away. I have had no opportunity of examining the case itself; but Mr. Pemberton gives a woodcut, which we must presume to be accurate. Now, on comparing carefully the length of the two thighs, and of both lower legs, I find that the difference between the two former is as nearly as possible double the difference between the two latter. It is to be observed, that both femur and tibia have an epiphysis at each end; those of the latter bone are perpendicular and parallel. Growth in length of that bone takes place at both ends; hence, when its upper epiphysis is excised, it has still one end from which it may grow; but the upper epiphysis of the femur is very oblique, almost horizontal, and growth from that end only takes place by the little that may be added to the length of the neck, and even that little in an oblique direction. Growth in length of the bone, therefore, takes place almost entirely from the lower epiphysis, and this is doubtless the reason why that epiphysis should remain longer ununited than any other in the body. When, then, this part is excised, growth in length of the femur must be very small. Hence, in Mr. Pemberton's case, the femur has lost double as much of its length as the tibia; if my measurements from the woodcut be correct, the femur will have lost six inches, the tibia three. That the foot of the limb operated on should also have been stunted in growth, can only be accounted for by an attempt of nature to adapt the growth of one part to that of another part of the same limb.

These observations are greatly confirmed by the letter of Dr. Keith. In the case mentioned therein, equal portions were removed from the femur and tibia; in little more than three years after, the measurements are these; healthy femur and tibia, each 17 inches; operated femur, 12½ inches; operated tibia, 14½ inches. One loses 4½, the other 2½ inches; which follows sufficiently closely within one-sixth of an inch, the law of double loss of growth from the femur.

It would be most interesting to pursue this inquiry further, and I cannot but think that it would end in establishiug the necessity of sparing the epiphysac junction. Mr. Page's case of a person, aged 17, would be useful in the question; for the lower femoral epiphysis is, as a rule, ununited at that age, in males to a later, even to 20; and I once examined a subject (not ricketty) in whom the junction remained unossified in the twenty-fourth year.

I believe I am not alone in feeling grateful to Mr. Pemberton for having called attention to this point in so masterly a manner. In differing from him, I do so with all the deference due to so excellent a surgeon, and with the more modesty that I have seen none of the cases to which he alludes.

I am, etc., R. Barwell, F.R.C.S.Eng.

22, Old Burlington Street, December 8th, 1859.

TUBAL PREGNANCY.

Letter from G. C. P. Murray, Esq.

Sir,—On reading in the Journal of last week Dr. Henry Hancox's account of a case of tubal pregnancy occurring in his practice, it struck me that the mention of an essential point had been omitted, if not altogether overlooked in treating the case. Dr. Hancox says, that "on examination, *per vaginam*, the parts were very dry; the os uteri was very high up; tilted forwards; under the pubis, no sign of labour could be detected."

As this seems *all* the investigation mentioned in the report, I venture to ask why, during the two or three days of her

getting worse, the ear or stethoscope was not made use of, with the view of ascertaining whether a living fœtus existed in the abdominal cavity?

If such had proved to be the case from the presence of the placental and fœtal sounds, and then taking into account the one sided situation of the tumour, with the pain on the *same* side, I think the idea of tubal pregnancy might reasonably have been entertained.

If then the case appeared upon strong conviction to be one of tubal gestation, the Cæsarian operation would have been justifiable, as giving the only chance to both mother and child. The operation, I consider, is less perilous when the tube, instead of the uterus, has to be opened. If, however, the case were doubtful, and the symptoms insufficient to guarantee the section, then the alternative remained of performing the operation at the moment of death, and in all probability the fœtus would have been rescued.

I am, etc., G. C. P. Murray.

Green Street, Grosvenor Square. December 20th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of a son, the wife of—

*O'Bryen, John B., M.D., Liverpool, on December 17.

Of daughters, the wives of—

Massey, Albert, M.D., Peckham, on December 18.

Todd, G. M., M.D., Old Kent Road, on December 18.

*Williams, J., Esq., Brecon, on December 4.

MARRIAGES.

Betham, John, Esq., Surgeon Royal Lancashire Artillery, to Mary Alice, daughter of John Barnes, Esq., Holloway, on December 17th.

*Bickersteth, Edward R., Esq., Liverpool, to Anne Sophia, youngest daughter of the late Hon. Alexander Murchison, of Springfield, Jamaica, and Elgin, N.B., at St. Marylebone Church, on December 15.

Clark, William F., Esq., Bengal Medical Service, to Flora Jane, third daughter of Charles Mackinnon, Esq., of Edinburgh, on December 15th.

*Edwards, James, M.D., Benarth, Carnarvonshire, to Harriet, youngest daughter of the late George Main, Esq., of Kelso, N.B., at St. John's Episcopal Chapel, Edinburgh, on Dec. 15.

Kilkelly, Charles, M.D., Bengal Army, to Louise Isabel, eldest daughter of the late Commissary-General Sir R. I. Routh, K.C.B., at St. Thomas's Church, Calcutta, on November 8th.

DEATHS.

*Croker, John G., M.D., F.G.S., at Bovey Tracey, Devon, aged 71, on December 16.

Fullford, William, Esq., Resident Medical Officer of the Dispensary, Carey Street, aged 43, at Brighton, on Dec. 18.

Perfect. On December 10th, at Bath, Anna Maria, only daughter of the late Wm. Perfect, M.D.

Pierpoint. On December 16th, Julia, wife of N. B. Pierpoint, Esq., Surgeon, of 23, Little Pulteney Street, S.W.

*Pyne, Wm. C., Esq., Wellington, Somerset, aged 40, lately.

Ross. On December 19th, at Guildford, aged 9 days, Alexander F. D., infant son of *F. D. Ross, Esq.

Rumley, Henry Wm., Esq., Surgeon Bengal Horse Artillery, at Paris, aged 42, on December 10.

Spry, Joseph Hume, M.D., of Bath, aged 84, on Dec. 5.

Taylor. On December 12th, at Guildford, aged 56, Mary Ann, wife of J. H. Taylor, M.D.

Wharton. At Bedford, on December 15th, aged 20, Mary Sophia, second daughter of George Wharton, M.D.

APPOINTMENTS.

Smith, Wm. A., M.D., elected Physician to the City Dispensary, in the room of T. W. Jones, M.D., resigned.

*Williams, James, Esq., Mayor of Brecon, appointed Honorary Surgeon to the Brecknockshire Volunteer Rifles, and Justice of the Peace for the County of Brecon.

Wing, Edwin, M.D., elected Superintendent of the Northampton County Asylum.

PASS LISTS.

Royal College of Surgeons. Members admitted at a meeting of the Court of Examiners, on December 16th :—

Eastlake, H. E., Plymouth
Kibbler, Richard C., Hackney
Twemlow, Alfred, Sandbach, Cheshire

Apothecaries' Hall. Licentiates admitted on *Thursday, December 15th*, 1859 :—

Andrew, A. L., Manchester
Bate, H. F., Somersetshire
Dunn, F., Wolverhampton
Hawkins, T. H., Reading
Hughes, Robert, Trefriw
Michell, Thomas, Redruth
Murray, Wm., Chele-le-Street, Durham
Tacy, Wm. G., Louth
Thompson, John, Snaith

As an assistant—

Hodgson, Henry Frederick, Cradley Heath, Stafford

The following gentlemen also, on the same day, passed their first examination :—

Griffith, Alfred L., Old Kent Road
Macnamara, J., Great Ealing
Tofts, Henry, Cambridge

HEALTH OF LONDON—DECEMBER 17th, 1859.

[From the Registrar-General's Report.]

	Births.	Deaths.
During week ..... Boys .. 952 / Girls .. 879	1831 ..	1289
Average of corresponding weeks 1849-58..	1598 ..	1339

Among the causes of death were—small-pox, 45; scarlatina, 83; diphtheria, 6; bronchitis, 164; phthisis, 134; pneumonia, 76. Five deaths are recorded at the ages of 92, 93, 95, 97, and 99 years. Of bricklayers, 1 died in the week, of bricklayers' children, 12; of carpenters, 3 died, of carpenters' wives, 1, of carpenters' children, 19; of masons, 2 died, of masons' children, 2; of painters, 5 died, of painters' children, 2; of plasterers, 3 died, of plasterers' wives, 1, of plasterers' children, 4.

Barometer :

Highest (Sun.) 30·440; lowest (Fri.) 29·556; mean 29·940 in.

Thermometer :

In sun—highest (Mon.) 40·4°; lowest (Sat.) 30·4°.
In shade—highest (Mon.) 40·4°; lowest (Sat.) 15·5°.
Mean—28·6°; difference from mean of 43 yrs.—11.3°.
Range—during week, 24·9°; mean daily, 8·7°.

Mean humidity of air (*saturation*=100), 82.

Mean direction of wind, N.—Rain in inches, 0·01.

Proposed Monument to the late Richard Sandford, Esq., Honorary Surgeon to the Staffordshire Hospital. Great sympathy is felt for the friends of this lamented gentleman, whose death occurring as it did at a time when he was to some degree in hostility with a considerable number of gentlemen in the town, was an affliction of an unusually trying character. The Wolverhampton and South Staffordshire Medico-Ethical Society have passed a resolution expressing their respect for the deceased gentleman's memory, "the very high opinion which the society entertains of the honourable and humane principles by which he was always actuated in the discharge of his hospital and other professional duties; and they beg to offer their sympathy and condolence to his friends on their recent great bereavement." With a view still more effectually to give expression to the respect felt for the late Mr. Sandford, subscriptions are being entered into for the purpose of erecting a monument to his memory in the Wolverhampton cemetery. Already a considerable sum has been subscribed towards this object. It is very generally felt that whatever view may be taken of the proposal he brought forward before the governors of the South Staffordshire Hospital, a sincere desire to promote the efficiency of the hospital was the motive which actuated him in the steps he took. The rev. W. Stephens, vicar of Wednesfield, especially alluded, at the service in the parish church, to the remarkable attention which the late Mr. Sandford had paid to patients in the South Staffordshire Hospital. The Rev. gentleman stated that he scarcely ever knew of a surgeon who had taken such intense interest in hospital patients, nor one who was more desirous to do good to the poor and labouring clssses. (*Staffordshire Advertiser.*)

POISONOUS BUNS. Six of the pupils in a large boarding school at Clifton, were last week nearly poisoned by Bath buns coloured with chromate of lead. Three of the youths had been walking at Redland, near Bristol, and purchased some Bath buns at the shop of a confectioner named Farr. In the course of the afternoon three other lads from the school went to the same place and bought some more buns. In the evening all six were seized with violent sickness, and presented symptoms of poisoning. Mr. Cross, surgeon, of Clifton, was called in, and prescribed the necessary remedies, but the patients continued so ill during the night that two of them were not expected to survive. After great suffering, they all recovered. Some of the buns were analysed, when it was found that each of them contained seven grains of chromate of lead, which was used as a cheap substitute for eggs, for the purpose of colouring the buns. Farr, on being sent for, admitted having used this preparation for some time, without being aware of its injurious effects, and it is supposed that a larger dose than usual was, through carelessness, placed in the buns in this case.

SURGICAL SOCIETY OF IRELAND. The meetings of the Society for the session 1859-60, will take place at the Royal College of Surgeons of Ireland, on the undermentioned evenings, at half-past eight o'clock precisely, viz., Saturdays, Jan. 14th and 28th, Feb. 11th and 25th, March 10th and 24th, and April 14th and 28th. Members who intend to read papers before the Society, are requested to inform the secretaries of their intention a few days previously. Discussion on any paper is not permitted unless the writer calls for it or desires it. When the contributor of a paper wishes that the secretary should read it to the Society, he will please forward it to them some days before the meeting. Naval and military surgeons are admitted as honorary members of the Society on sending their names to the secretaries.

TO CORRESPONDENTS.

THE NEW VOLUME. The first number of the New Volume of the BRITISH MEDICAL JOURNAL will be published on Saturday, January 7th. The names of gentlemen wishing to join the Association should, as far as possible, be transmitted to the General Secretary on or before the 1st of January, in order that an estimate may be formed of the number of copies to be printed weekly. Members will oblige also by forwarding to the Publisher any alterations they may wish to have made in their addresses.

AN ASSOCIATE. The Order of the Privy Council regarding Public Vaccination does not interfere with the present public vaccinators who are likewise legally qualified medical officers of unions. These are exempted from the operation of the order by the portion of the first clause which states that "in respect of persons legally admitted to practise before this regulation comes into effect, the special certificate may be dispensed with, on condition that the contract, during one year from its making, continue subject to the approval of the Poor-Law Board." The regulation obliging contractors for vaccination to produce a special certificate of fitness for the duty is prospective rather retrospective. At all events, we see nothing in it likely to disturb the present holding of vaccination contracts by persons who have given practical proof of their competency.

A CORRESPONDENT, who is a Licentiate of the Royal College of Physicians of Edinburgh, calls our attention to the disputed point, whether the holders of such title have a right to be called "Dr."; and he encloses a note received from the Medical Register, stating that he has "no legal claim to the title of Dr." He has no *legal* claim, it is true; but we are of opinion that he may put "Dr." on his door-plate and cards, and appeal in support of the act to *custom*—"quem pene imperium est, et jus, et norma," as our correspondent, will probably remember. Extra-Licentiates of the Royal College of Physicians of England, not holding University degrees, have used the title of Dr. and the right has always been conceded to them. Although the Medical Act does not positively give a Licentiate of a College of Physicians the right to call himself "Dr.", it is not likely to interfere with him for doing so, except by a most forced and vexatious interpretation.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

Communications have been received from:—DR. JAS. EDWARDS; MR. J. GODFREY; MR. SAML. STRETTON; MR. JNO. ORMOND; DR. W. O. MARKHAM; MR. R. S. FOWLER; DR. O'BRYEN; MR. DUNCALFE; DR. WM. CAMPS; DR. W. A. SMITH; MR. WM. HOAR; DR. JOHN W. OGLE; DR. PAXTON; MR. A. A. JOHNSON; MR. H. MUNROE; T. H.; DR. SLOANE; DR. W. V. BIRD; MR. R. GRIFFIN; MR. T. HOLMES; DR. PARKES; MR. JAS. WILLIAMS; MR. G. KIDGELL; DR. E. WELLS; and DR. BIRCH.

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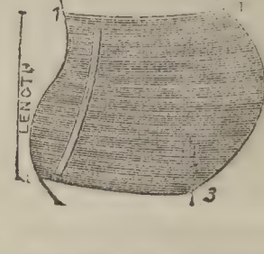
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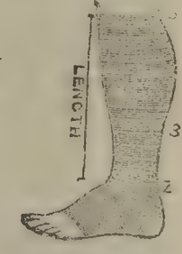
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Mr. BOURJEAURD, in submitting the accompanying Diagrams, presents his best thanks to the Members of the Medical Profession for their unceasing support of his invention of the Spiral Elastic Compressional Principle in Surgical Appliances, and for the continuance of innumerable recommendations in all parts of the kingdom, at the same time he feels it incumbent upon him to remind his friends, that this Invention was registered by him in February 1848, and, immediately after, advertised in the Medical Journals, thus affording an undeniable contradiction to the assertions of the unblushing appropriators of his principle, who have never appeared till within the last three and a half years, and yet style themselves Patentees, Registrars, etc., of the Spiral Principle. The advantage of qualifying antecedents, and being a Member of the Surgical Profession, have enabled Mr. B., by confining his attention to the superintendence of the manufacture and adjustment of his appliances, to attain great proficiency; and he considers it essential, especially in difficult cases, that patients should be attended by himself or his assistants, and if not practicable, by a Member of the Profession, as it must be admitted to be exceedingly hazardous for the suffering to entrust their limbs or cases of hernia to persons totally ignorant of anatomical or physiological laws.
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

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Addresses and Papers

READ AT THE

TWENTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[*Held in LIVERPOOL, JULY 27th, 28th, and 29th*, 1859.]

ON OXYGEN AS A THERAPEUTIC AGENT.

By S. B. BIRCH, M.D.

[*Concluded from p.* 1035.]

As to conditions of the organism contraindicating the employment of oxygen, or in which it ought to be exhibited with extreme caution, no stringent rules can be offered. A few hints, sufficiently suggestive to the professional inquirer, will alone be needed. *Du reste*, each case must be considered on its own merits.

Both functional and organic affections of the heart, when accompanied with much nervous and vascular excitement, will, as a rule, decidedly negative its use. With a constitutional predisposition to nervous hyperæsthesia, where the slightest causes derange the heart's action, in impulsive and sensitive temperaments, there seldom will be found much satisfaction from oxygen. This obtains especially in subjects who have been the victims of chronic functional derangements calculated to upset cerebro-spinal equilibrium, and to induce morbid sensitiveness. A grave distinction, however, should be drawn between rapid pulse thus almost constantly present, and that arising purely from the presence of disease. It seems almost superfluous to guard the educated practitioner against the use of the gas in acute inflammatory attacks and aneurismal tumours. I have already intimated that cases of long continued spanæmia, in which the *vis vitæ* or *vis medicatrix naturæ* has been slowly and insidiously undermined, would rarely confer any credit upon the practitioner who might be led to make the most earnest trial of oxygen. Indeed, in all chronic cases of extreme debility, with spanæmic condition and imperfect digestion and assimilation, oxygen, if tried as a last resource, must be employed in very small doses. Large ones, even two or three, in such cases, will invariably tend to lower the vital powers, to increase the preexisting coldness of skin and extremities, pallor, sallowness of countenance, and general lassitude; nor may a patient for many days recover from the effects of one large inhalation.

The following carefully noted clinical facts, which have from time to time come under my personal observation, will, I trust, assist to illustrate my position. They are by no means adduced as testimony of therapeutic success, but simply selected as indicative of the peculiar power to which oxygen may justifiably lay claim.

CASE I. Nearly three years ago, Captain M., long a sufferer from diabetes mellitus, consulted me as to the probability of oxygen proving serviceable in his case. He told me that he had consulted and been for a lengthened period under the care of the most eminent physicians in London and Paris; that he was becoming gradually weaker and thinner; and that forced residence abroad had been the only available means to prevent a rapid progress of the disease, which always became seriously aggravated whenever he remained in England. I advised a trial. In a few days, the harsh, dry, feverish condition of skin, so common in this affection, was removed; and the thirst, as well as dryness of mouth and fauces, were much less distressing. The treatment was continued scarcely three weeks, during which the most marked advantage was derived from it—great improvement in the general health, increase in weight and strength, and great diminution in quantity of urine. Unfortunately, I could not get any samples of the fluid. This gentleman expressed himself as highly gratified, and then started for France. I have latterly observed his name several times in the public journals, but have had no opportunity of knowing his subsequent history.

CASE II. Miss D., in the last stage of phthisis pulmonalis with respirations from 30 to 40 per minute, pulse 120 to 135, with profuse purulent expectoration, and every two or three days considerable hæmorrhage, with alarmingly increased prostration, found instant relief to the urgent dyspnœa after the first dose of oxygen, which likewise produced a pleasant warmth, and removed the "feeling of sinking" within the chest. During the following night, hæmorrhage again took place; but the blood was more coagulated, and the chest was much relieved by it. No further hæmorrhagic attack occurred for three weeks. For five months I treated her, myself administering every dose for the first six weeks. Vomicæ from time to time opened suddenly, discharged their contents, and then apparently contracted and cicatrised. Improvement was extremely slow, but progressive, as long as she remained in my hands. Her friends then removed her, other practitioners assuring them that she never could recover. She then retrograded, and died six months afterwards.

I ought not to omit naming that the oxygen in one week restored her appetite, and removed her craving for liquids; that her weight (only 5 st. 5 lbs., while her height was 5 feet 5¼ inches) underwent no increase for four months and a half, but then in a single fortnight improved to the extent of two pounds and a half; and that she could at length walk several miles daily, with pleasure and advantage.

CASE III. A gentleman's coachman came to me, labouring under extreme debility, with constant liability to profuse —alternately hot and cold—perspirations after the slightest exertion; yet compelled, from cutaneous relaxation, distressing chilliness, and icy-cold extremities, to wrap up in a thick great coat in warm weather. He said that he had for twelve months tried several of the principal London hospitals, but without the slightest benefit. He appeared to have no *special* malady, except dyspeptic symptoms and imperfect assimilation. The first dose of oxygen acted almost like a charm, and made him thoroughly and comfortably warm from head to foot, without perspiration. The next day, I found that it had been no transient effect. He took a dose daily for one week, and then, feeling himself quite well and up to his work, and not needing his extra clothing, ceased attendance. Unfortunately, I forgot to take his name and residence before his somewhat sudden disappearance. Out of gratitude (being a gratuitous patient), he ought to have called again.

CASE IV. Mr. S., a well known Yorkshire gentleman of family and fortune, placed himself under my care three years and a half ago. He was sixty-two years of age; had suffered for several years from paraplegia of the lower extremities, from the loins downwards. In spite of treatment of every possible kind, the gradual diminution of motion and sensation continued. Under my advice, he determined to try a lengthened course of oxygen, in small doses. From the first, there was evidenced some gradual improvement, more decided for the first two months, scarcely perceptible afterwards; yet so firm of purpose and so patient was this gentleman, and so strongly did experience impress him with a feeling of hopelessness regarding his case, if this failed, that he steadily persisted with extremely small doses (depending solely upon it) for two years. He is now perfectly well.

CASE V. Three years ago, Miss T., a patient of the late Dr. Thornton, who stated that her life was formerly saved by oxygen, inhaled the gas three times under my immediate direction. The result was peculiar and interesting. The first inhalation (six pints of oxygen in eighty of atmospheric air) raised the pulse in frequency, then caused it to become gradually slower and fuller. Towards the end of the administration the pulse again became quicker, and assumed a hard wiry character, the forehead at the same time feeling very slightly

constricted. This last sensation passed away in two minutes. Next day, this lady came for her second sitting, being much gratified with the agreeable feelings experienced ever since her inhalation of the day previously. She said she felt "two or three inches taller, and as though the nerves were elongated". This day the effects were nearly allied to those manifested before, but with the addition of a "curious fluttering" about the heart. For two days she did not appear. On the third day, she again visited me, and stated she had felt so unnaturally excited during the whole day after the last dose, that she thought it advisable to discontinue for a day or two. The unnatural (though not disagreeable) excitement had left, but she still felt "taller, and nerves elongated". Wishing further to satisfy myself, I now administered three pints in about fifty of atmospheric air. No immediate result of special moment followed, and I arranged for another visit in a few days. A week elapsed before my patient again called; and she then informed me that she dare not at present take any more oxygen. Violent palpitation of the heart, with great excitement of the circulation, had supervened a few hours after taking the last dose, and had continued more or less for several days. She had only just recovered from this condition, after resorting to certain sedative measures which I had taken the precaution to recommend in case of absolute necessity.

Now this lady, it should be borne in mind, was entirely prepossessed in favour of the gas, and had no anticipation whatever of such unpleasant consequences. The first two doses had influenced her most beneficially; and the same gas had produced no such effects upon her sister, who had for ten days previously been inhaling daily with great advantage. Moreover, she had no tendency to cardiac affection, no functional derangement of uterus, and had comfortably transited the change of life.

Case vi. Mr. S., of Watford, who was for many months under my care, could take twelve pints without any special effect, except gradually increasing warmth and strength of pulse; but invariably the four pints succeeding the twelve would convert this warmth into profuse perspiration. To demonstrate that there could be no fallacy, I repeatedly tried minute doses, and even atmospheric air alone, without his knowledge, ensuring the precise conditions of physical exertion, etc.; but no such result followed as with the larger quantity.

Case vii occurred in the person of a brother physician in London. He has kindly permitted me to use his name. Dr. C. H. Thompson, of Sussex Gardens, was seriously affected with partial amaurosis, which had resisted the best directed treatment, and had at length rendered him unable to employ the sense of vision for the most ordinary purposes; in fact, professionally, he was becoming almost *hors de combat*. He could only see the largest type in print, and could not read a very few successive lines of that without the greatest difficulty. Fearing total loss of vision from the progressive nature of this serious affection, which had even appeared to advance more rapidly in proportion to his improvement in general health under ordinary treatment, he was induced to request my advice as to the possibility of oxygen being serviceable. The exciting cause was clearly traced to extreme congestion and torpid action in the medulla oblongata, base of brain, and parts adjoining, implicating especially the origin of the optic nerves. To predisposing causes it is needless to refer. I acquiesced in, and indeed urged, the propriety of immediately resorting to oxygen; but, for special reasons, advised an extremely cautious use of it; the maximum dose to be six pints in eighty pints of atmospheric air. This maximum dose was tolerated very well for the first few days; and a decided improvement in vision, in head-symptoms, and in feeling of strength, at once manifested itself. About ten days or a fortnight, however, after the first dose, this gentleman called upon me, and stated that he had been obliged to reduce the amount of his daily inhalation to the *minimum* which I had suggested, viz., two pints of the gas; yet he had still, a few hours after inhaling, experienced so much uneasiness of head, tremor, lassitude, and exhaustion, as to compel him to omit his inhalation the day before. He added, that to-day he decidedly felt better for the omission, and almost feared any further trial of the treatment, notwithstanding the steady improvement in vision. I explained that I had met with various eccentricities in the action of oxygen on susceptible individuals, earnestly encouraged him to proceed, but recommended a diminution in quantity, and an inhalation only on alternate days. When next I saw him, he informed me that this plan had proved successful, adding, as an example of the benefit he felt, that he had just read without difficulty a long letter—a feat which he had been unable to accomplish for months.

The other day I saw my former patient, after an interval of some months. He stated that, although vision was anything but perfect, he had found no retrogression from the *statu quo* following *first* improvement, which had been of a permanent character. Occasionally he takes, for two or three successive days, a minute quantity of the gas. This is borne very well; but he cannot persevere longer without producing unpleasant symptoms, which will then arise from even one pint to seventy of atmospheric air.

I may remark, that several cases have occurred in my practice equally demonstrative of idiosyncrasy, yet indicative of a peculiarly alterative, cumulative, perhaps catalytic or electrolytic action on the part of oxygen in extremely small doses. May we not, without rendering ourselves obnoxious to an imputation of undue enthusiasm after a hobby, admit the probability of such an influence being employed with permanent advantage in obstinate disease? Is it not our duty to afford an unprejudiced, impartial, and extended trial?

The doses advisable in different cases, as well as the mode of administration, demand a few words of consideration before concluding. General rules only can be laid down; but, since the axiom, "Nullum remedium quod non tempestivo usu tale fiat," attaches itself especially to oxygen, I will endeavour to be as lucid as possible.

In speaking of small doses, a range is implied of from 2 to 12 per cent. of the gas in a given amount of atmospheric air. Large doses are signified by a *minimum* of 12 per cent., ascending to the *maximum* of pure gas. It is rarely, however, that I use it undiluted. Nine to twelve pints of the pure gas, diluted with about seventy-five pints of atmospheric air, may be stated as a fair medium dose. The inhalation of this quantity should, *mutatis mutandis*, extend over a period of fully half an hour; and, in the majority of cases to which it is applicable, no inconvenience will be occasioned. The time to be occupied in inhaling a given quantity demands quite as much vigilance and judgment, on the part of the medical attendant, as the prescription of a dose. As a rule, debilitated and anæmic subjects will not tolerate a lengthened sitting, and then will only bear very small doses; while the plethoric and congested will receive but an infinitesimal amount of benefit, unless they are compelled to expend a full hour on each occasion. Of the latter class, some will need thirty or forty pints of oxygen (diluted according to circumstances) during the hour; others will experience unpleasant effects from even sixteen pints. Everything, in fact, depends upon the greatest attention to minute details in management, presuming, of course, that proper judgment has been exercised in selecting the case. If the practitioner desire success from the use of the gas in very bad cases, he must not lose sight of either point. Above all, he must carefully superintend, and in many instances himself administer and anxiously watch throughout the inhalation.

And now, gentlemen, it is incumbent upon me to draw your attention to a fact which doubtless is known to some, but perhaps to few; viz., that the mechanical difficulties which formerly militated against any extensive trial of this remedial agency no longer exist. The mechanical means to which I would refer, and by the assistance of which oxygen may be used with perfect facility, are an apparatus and condensed gas supplied by Mr. Barth, 217, Piccadilly, London. Any gentleman in the profession, by simply writing to him, could by the next train receive supplies, with every requisite information as to their manipulation. In private practice, this plan is undoubtedly the least troublesome, and almost as economical as for the practitioner to employ a druggist, or prepare the gas himself (of course, uncondensed). It likewise ensures purity, which is an important consideration; for the patentee has informed me that there are only two or three manufacturers of pure chlorate of potash in the kingdom; and that he has frequently had to return large quantities, too impure for the purpose, though sent by eminent firms. The authorities of large hospitals, who would naturally prepare their own gas, should note this point.

In conclusion, permit me to observe, that it has been my wish carefully to avoid hypothesis, and any undue parade of success, while I have endeavoured to preserve the simple position of the impartial and careful clinical observer, appealing to an experience of some years duration, almost exclusively gained by experiments and trials in diseases either intractable or incurable. The animal organism, though no doubt subject to certain laws of chemistry, is amenable to higher laws than those practically known in the laboratory. A

physician, if he see the sudden change of a pathological condition—a long continued unpleasant entity—must accept the fact, notwithstanding that the *rationale* be unascertained by the chemist. Certain observed effects become the basis of a law. Opium causes sleep; aloes purges; antimony is diaphoretic. May not oxygen claim admission into the list of our therapeutic agents? Splendid as are the achievements of chemistry, there is a boundary beyond which it cannot pass; yet every medical practitioner knows that he must cross this Rubicon every day in practice.

Not deeming myself competent to undertake an extensive series of chemical analyses, it would be presumptuous to present any such crude experiments of my own, in opposition to accomplished chemical analysts. I venture to hope that, by bringing the subject (however imperfectly) forward, I may enlist the cooperation of gentlemen well versed in chemico-physiological investigation, and derive mental profit from their further researches. A second and not less weighty consideration urges me to trust that so much interest may be created in the minds of practitioners generally as to induce extended and fair trials.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

SUMMARY FOR THE YEAR 1859.

The following list includes the cases which have been published in this department of the Journal during the present year, arranged in a classified form, for convenience of reference:—

I.—Diseases of the Brain and Spinal Cord.

Under this head the following cases are found:—

Latent meningitis in a case of pneumonia; p. 145.
Amaurosis in a child, from cerebral disease: probable cure; p. 419.
Neuralgia contrasted with wasting palsy; p. 787.
A series of cases of epilepsy: with remarks; pp. 973, 995, 1013.

II.—Injuries of the Head and Spine.

A fatal case of injury of the head, which had been followed by diplopia and other cerebral symptoms; p. 145.
A case of depressed fracture of the skull, with concussion, and another of concussion accompanied by hæmorrhage from the ear: recovery; p. 734.
Concussion of the brain: recovery; p. 825.
A case of probable fracture of the base of the skull: recovery; p. 825.
A fatal case of fracture of the base of the skull, illustrating the difficulty of diagnosis between injury and disease; p. 825.
A series of cases of scalp-wound and of fracture of the skull, illustrating various points in the surgery of these injuries; pp. 953, 974, 1036.
A series of cases of injury of the spine; p. 240.

III.—Diseases and Injuries of the Eye.

In this class we have reported the following cases:—

A case of granular ophthalmia treated by the application of gonorrhœal matter to the eye; p. 19.
Two cases of diplopia cured by quinine; p. 265.
Operation in a complicated case of squint; p. 538.
Operation for entropium with contracted lateral commissures; p. 558.
A case of traumatic ophthalmia treated with mercury; p. 847.
Rheumatic ophthalmia; p. 538.
The after treatment of cases of extraction; p. 558.
The condition of the eye after injuries, as seen by the ophthalmoscope; p. 645.
Illustrations of the use of the ophthalmoscope in diagnosis; p. 994.

IV.—Injuries and Disease of the Chest and Organs of Respiration.

Here we find the following:—

A case of fractured ribs, showing the beneficial action of venesection; p. 865.
A case of fractured ribs, with clinical remarks on the importance of emphysema; p. 866.
A case of laceration of the lungs without fracture of the ribs; p. 186.
Tracheotomy in croup; p. 59.
Tracheotomy in laryngitis; p. 347.
Asthenic pneumonia; p. 363.
Acute phthisis; p. 733.

V.—Affections of the Mouth, Alimentary Canal, and Liver.

Under this head will come—

A tabular report of 74 cases of diphtheria occurring in various parts of the country, and an epitome of 188 other cases; pp. 305, 327, 348, 380, 420, 497.
A fatal case of sarcina ventriculi; p. 100.
Hydatid tumour of the omentum and liver; p. 121.
Hydatid tumour of the liver; p. 283.
Recovery from supposed hydatids of the liver; p. 934.

VI.—Injuries and Diseases of the Intestines, including Hernia.

A case of wound of the abdomen, with protrusion of the large intestine: recovery; p. 283.
Laceration of the great omentum by a blow; p. 537.
Operation for the radical cure of hernia; p. 120.
Abscess near the rectum, caused by a fish-bone; p. 121.
A case of strangulated oblique inguinal hernia in a female, complicated with a false sac: failure of operation to relieve the strangulation; p. 40.
Two cases of obstruction of the bowels within the abdomen complicated by hernia, not strangulated; p. 221.
A case of hernia with undescended testis; p. 558.
Pyæmia after strangulated hernia: recovery; p. 789.
Cases and statistics of strangulated hernia; p. 845.

VII.—Injuries and Diseases of the Kidneys and Urinary Organs.

Cases of incontinence of urine; p. 119.
Albuminuria and sore throat; p. 99.
Abscess of the kidney, with discharge of renal calculi in the loins; p. 934.
A case of foreign body in the bladder; p. 100.
Two cases of lithotomy; p. 995.
Puncture of the bladder from the rectum in a case of enlarged prostate; p. 186.
Treatment of stricture by forcible rupture; p. 934.
Two cases of retention of urine; p. 439.
Several cases of extravasation of urine; pp. 751, 905.

VIII.—Affections of the Organs of Generation.

Under this head we find:—

Treatment of hydrocele by silk seton; p. 691.
Also by metallic seton; p. 284.
A case of hæmatocele; p. 790.
Varicocele treated by subcutaneous section of the veins; p. 99.
Varicocele treated by Vidal's method; p. 905.
Cancer of the testicle in a baby; p. 1.
Cases of ovariotomy; pp. 39, 146.
Ovarian dropsy fatal from giving way of the umbilicus and exposure of the peritoneal cavity; p. 1036.
Cases of prolapsus uteri successfully treated; p. 885.
Hypertrophy of the clitoris with condylomata; p. 399.
Procidentia uteri from lacerated perinæum cured by operation; p. 363.
A case of vesico-vaginal fistula, showing the state of the parts after operation; p. 222.

IX.—Injuries and Diseases of the Heart and Blood-Vessels.

A case of cancer in the chest producing a murmur by pressing on the pulmonary artery; p. 826.
Aneurism of the aorta, bursting into the pleura; p. 1037.
A case of aneurism of the aorta, accompanied by peculiar symptoms from an anomalous arrangement of the vessels; p, 460.
Aneurismal dilatation of the aorta, accompanied by severe dyspnœa; p. 750.
Ulceration of the aorta in a case of caries of the spine; p. 537.
Aneurism of the femoral artery, in a man aged 75, cured by pressure; p. 2.
Popliteal aneurism cured by ligature after it had burst into the knee-joint; p. 489.
Wound of the femoral artery and vein, successfully treated by ligature; pp. 364, 954.
Wound of the femoral artery; p. 20.

Rupture of the popliteal vessels: gangrene: amputation; p. 79.
Wound of the palmar arch, for which several vessels were tied unsuccessfully: amputation: death; pp. 379, 419.
Cases of hæmorrhage from the palmar arch successfully treated by forcible flexion of the arm; pp. 665, 771.
Wound of the internal jugular vein: pyæmia: death; p. 933.

X.—Injuries and Diseases of the Bones and Joints.

Fracture of the forearm from muscular force; p. 557.
Fracture of the pelvis on horseback; p. 557.
Recovery from numerous fractures; p. 749.
Cases of fractured ribs; pp. 865-6.
Ununited fracture of the humerus, cured by the use of ivory pegs; p. 885.
A case of dislocation of the hip in a child 4 years of age; p. 187.
A case of dislocation of the hip into the sciatic notch, which slipped into the obturator foramen during attempts at reduction, reduced by manipulation; p. 749.
Dislocation of the shoulder, with compound dislocation of the wrist; p. 691.
Cases of diseased joints: excision; pp. 165, 185, 323.
A case of strumous disease of the foot; p. 517.
A case of hydrarthrosis of the knee, where a bony plate was found in the synovial membrane; p. 691.
Necrosis of the upper part of the femur and pelvis; p. 59.
Necrosis of the lower end of the femur: proximity of the popliteal vessels to the wound of the operation; p. 80.
Abscess in the head of the tibia; 807.
Medullary cancer of the ischium; p. 826.

XI.—Constitutional Diseases.

Cancer of the peritoneum; p. 239.
A case of malignant disease in the neck, pressing on the trachea; p. 284.
A case of acute purpura; p. 788.
A case of acute tuberculosis; p. 459.
Two cases of chorea; p. 577.
A fatal case of chorea; p. 718.
Acute rheumatism treated with large doses of opium; p. 645.
Other cases of acute rheumatism; pp. 303, 906, 1014
Lime-juice in rheumatic fever; p. 865.
A case of fever unaccompanied by the usual *post mortem* appearances; p. 749.
Recovery from acute hæmorrhage in fever; p. 805.
A case of typhoid fever; p. 825.
Tetanus after laceration of the hand; p. 597.
Tetanus: recovery after stimulant treatment; p. 665.

XII.—Operative Surgery.

Cases of ovariotomy; pp. 39, 146.
Cases of excision of the knee; pp. 165, 185, 806.
Cases of excision of the elbow; p. 323.
A case of successful excision of the patella; p. 733.
Excision of the astragalus; p. 517.
Excision of the upper jaw; p. 716.
Partial amputation of the hand; p. 557.
Primary amputation for extensive injuries: rapid recovery; p. 885.
Numerous cases of Teale's amputation; pp. 265, 266, 517, 994
Amputation at the shoulder-joint; p. 325.
Excision of a large tumour of the thigh; p. 399.
Fissure of the hard and soft palate cured by operation; p. 666
Lithotomy on account of a foreign body; p. 100.
Syme's operation for stricture; p. 847.
The old operation for impassable stricture; p. 1014.

XIII.—New Inventions and Miscellanea.

Cases of narcotic injections into the cellular tissue; p. 19.
Treatment of abscess by Chassaignac's drainage tubes; p. 690
A case of recurrent fibroplastic tumour; pp. 80, 993
Poisoning by aconite; p. 122.
Poisoning by opium; p. 692.
Hæmorrhage behind the peritoneum: suspected poisoning by opium; p. 1037.
Hæmatoma, or secondary blood-tumour; p. 865.
Cyst connected with the thyroid body; p. 717.
Synovial tumours; p. 770.
Hydrocele of the neck; p. 379.
Pustular eruption from the internal use of the iodides; p. 60.
The pendulum of a clock impacted in the ear; p. 400.
Burn by the sun's rays; p. 579.
Disease of the suprarenal bodies; p. 716.
Cases of foreign body in the nostril; pp. 771, 789.
A case of wasting palsy; p. 788.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

British Medical Journal.

SATURDAY, DECEMBER 31st, 1859.

CLERICAL QUACKERY.

"All good things are three," says the German adage. Must we add—All bad things too? The medical world at home had only just forgotten the Dr. Fell scandal at the Middlesex Hospital, when the great Velpeau, committing an error which he must have since bitterly repented, introduced the Negro Vriès to the Parisian world as an infallible cancer-curer. Dr. Fell is still, we believe, drawing largely in a quiet way upon public credulity and upon the public purse, as the possessor of a sure remedy for one of the most dreadful maladies afflicting the human race. Vriès has been prosecuted for his impudent quackery. The road is, therefore, clear for a third passenger; and he steps forth, in the guise, not of the doctor, but of the clergyman—the Reverend Hugh Reed, curate of St. Sepulchre's (ominous name!), in this great metropolis. A letter in the *Times* of Thursday, from the Rev. H. E. Head, of Feniton, in Devonshire, states that the Rev. Mr. Reed has discovered a cure for cancer; and that he (Mr. Head) has put it in practice upon himself.

"Such were the ravages," says this reverend gentleman, "to say nothing of the anguish, made by the cancer in the roof of my mouth, that, according to medical testimony, I had but a month to live. In this state, by Dr. Cronin's advice, I put myself under Mr. Reed's treatment. His powerful remedies soon reached and arrested the disease. The cavity is now being filled up; the parts are granulating; and I have all the symptoms of returning health."

Alas! the credulity of the clergy in matters of this kind is only too well known to the profession. We are, therefore, not surprised at the faith which this simple priest places in the power of a brother of the cloth to cure that which benighted doctors declare to be incurable. We are astonished, however, at finding the nostrums of a clergyman puffed by a physician. Appended to the Rev. H. E. Head's letter is the following:—

"Claremont-house, Brixton-road, S.

"I beg to address you in the event of your knowing any cases of cancer. A process of treatment (remarkably successful) has been discovered by a clergyman of the Church of England, at present residing and officiating in London. The remedy for this dreadful disease, which I thus seek to make known, may be tested by several cases now under treatment in London. It is essentially different from any mode hitherto known in three grand points:—It promises permanent results (and thus differs from the two existing methods—extirpation by the knife or by escharotics); it is applicable to cancer of every character and stage; and it is not only painless, but positively palliative throughout its application, not alone to special local distress, but yielding conscious relief to the whole system. You will observe that I do not claim infallibility for it, any more than for anything human; but I do deliberately claim for it a character surpassing anything of the kind which has hitherto been made known to man.

"Yours truly, "Edward Cronin, M.D."

On referring to the *Medical Register*, we find that Dr. Edward Cronin is one of that class of physicians who have been called into existence, not by virtue of any examining Board, College, or University, but by the grace of his Grace of Canterbury. For any proof we have to the contrary, Dr. Cronin's professional abilities are on a par with those of the reverend gentleman, whose skill as a cancer-curer he endorses. Owing, as he does, so much to the clergy, we are not at all surprised to find that he endeavours to repay the obligation by dressing the unhappy curate of St. Sepulchre in the cast off garments of Fell and Vriès.

A gentleman possessing merely the Lambeth degree, cannot be supposed to have many feelings in common with medical men who have acquired the right to practise from a less spiritual source than he has; and therefore he feels no shame in setting forth this puff of a clerical pretender. We use the word pretender advisedly; for by what other name can we call a man who, without any preliminary professional education, takes upon himself to cure the most incurable of all diseases? The love of the clergy for dabbling with the simples of every grandmother's receipt-book is too well known by country practitioners. But now they are taking a higher flight.

By the Medical Act, no one is permitted to call himself a surgeon when he is not one; but he may take upon himself the duty of a surgeon, and may with impunity employ powerful remedies, of the mode of operation of which upon the human frame he must necessarily be entirely ignorant! Possibly the Rev. Hugh Reed, by the aid of his spiritual influence, which we know has such an effect upon women, will induce large numbers of poor suffering creatures to submit themselves to his treatment; but supposing any difficulties should arise, that fatal hæmorrhage, for instance, should be the result of any of his "powerful remedies", what position would he then stand in with respect to his victim? That he would be guilty of manslaughter, we have not the slightest doubt; and that he should, in such a case, suffer the penalty of such a crime, cannot reasonably be denied.

We may just draw attention, by way of *finale*, to Dr. Cronin's statement that this new cancer-cure "is essentially different from any mode hitherto known in three grand points"; the first of which is, that it "promises permanent results". Indeed! We thought this was the cry of all cancer-curers from the commencement of time. We need not inquire about the other two points, if they possess no more originality than the first one; and we need not further trouble our readers with Dr. Cronin's views of this new and most impudent piece of quackery.

THE WEEK.

At p. 1052 of last week's Journal, a case of poisoning following the use of Bath buns was noticed; and the noxious agent was said to be chromate of lead, with which the buns were coloured. It appears, however, that the ingredient was not chromate of lead at all, but *yellow sulphide of arsenic*. This was supplied to the confectioner by a druggist living two doors off, who seems to have sold the pigment without asking any questions as to its use; and it is not clear whether or not the word poison was written on the packet. In further proof of the ignorance or carelessness of the druggist, we are told by Dr. Griffin, the analytical chemist, that, on being applied to for a sample of the powder he had sold, he (the druggist) produced a loosely tied brown paper parcel, which he marked "chrome yellow", but which was found to contain, as in the other case, sulphide of arsenic. This is a case which may be placed in the same category with the wholesale poisoning by arsenicated lozenges at Bradford last year. Until the legislature interferes to prevent, as far as possible, the catastrophes arising from the sale of poisons by persons ignorant of their properties or careless of their effects, the public would do well to use great care in their dealings with the confectioner and pastrycook.

Editor's Letter Box.

LOCAL BLOOD-LETTING IN INFLAMMATION.

Letter from Thomas Inman, M.D.

Sir,—Allow me a few remarks upon this subject, and upon Dr. Markham's letter. With the general tenor of the latter I fully agree; but there is a point in it which is left for farther elucidation: viz., why leeching should ever do good in affections of the liver, stomach, pericardium, kidneys, etc. I have given special attention to this for the last four years, and think I see my way clearly to the following conclusions:—

1. Internal inflammations are often entirely confined to the organ primarily attacked, as the pleura, pericardium, peritonæum, kidney, bladder, lung, etc. Under such circumstances, local bleeding rarely, if ever, does good.

2. Inflammations of internal organs are often connected with an inflammatory state of the muscles in their immediate vicinity, and this gives rise to certain symptoms, generally supposed to be due to the original disease; when this secondary inflammation is present, local bleeding very frequently gives relief, and this when other remedies fail.

In a previous communication, I called attention to the fact that inflammations of serous membrane were not necessarily painful, unless the muscles in their vicinity were affected; and I think your readers would agree with me, that such affections as pneumonia, suppurative hepatitis, inflammation of the kidney, are not attended, necessarily, with pain or other purely local signs, unless the inflammatory condition has extended to muscular parts in the vicinity.

At the risk of being supposed to be riding a hobby, I offer the above as being the most rational philosophic reason, why local bleeding sometimes seems to do good in internal inflammations, and sometimes is of no avail: and I feel inclined to add, that the presence of inflammation of some internal organ is often supposed to exist, and leeches used accordingly, when the sole part affected is the muscular structure over the organ believed to be in fault, and that this faulty diagnosis gives rise to fallacious experience.

I am, etc., Thomas Inman.

29, Rodney Street, Liverpool.

PHYSIOLOGICAL ACTION OF DIGITALIS.

Letter from C. H. Jones, M.B.

Sir,—Your correspondent T. H. has misunderstood my remarks, if he thinks that I regard digitalis solely as a cardiac toner, to the exclusion of the older view which he writes to maintain. I think, if he refers to p. 1019, he will find that we are nowise at variance as to the sedative and contrastimulant action of digitalis. I have so long been acquainted with the view (or fact, as it is to me) that small doses of digitalis exert a toning action upon a weak, enlarged, dilated heart, that I have never thought it necessary to seek for exact proof of it. I supposed it was generally known and admitted. T. H. is doubtless acquainted with the opinions of Drs. Withering and Holland, quoted by Dr. Pereira, as to the better success of digitalis as a diuretic in cases of feeble and intermitting pulse, than in those where the pulse is firmer. I may refer him also to Dr. B. Jones's Lectures on Digitalis (*Med. Times and Gazette*, April 21st, 1855), where he states, after detailing Franke's experiments, "In small doses, the digitalis acts as a stimu-

lant; in large doses, it acts as a sedative, causing paralysis and death." My colleague Dr. T. K. Chambers tells me that he has no fear of giving digitalis in cases of weak heart with flickering pulse; and finds that it steadies the heart, makes its action stronger, and the pulse firmer. It is true that digitalis is commonly given with other remedies, especially steel; but the following case, which has lately been under my care, goes far to prove that the chief virtue is not due to the steel.

J. F., aged 24, a robust male, had, on October 17th, great shortness of breath, palpitation, "awful" pains in the chest, much dry cough at night. The heart's impulse was widely diffused, perceptible to sight and touch almost as far as the right nipple. There was a marked regurgitant aortic *bruit*, audible above the left back. The rhythm of the heart was regular; pulse 114, regular. The breathing was good in both backs. Tongue clean; urine free and clear. He had taken, three times a day, the following:—

℞ Strychniæ gr. 1-24; tinct. ferri sesquichlor. ♏x; spirit. æther. chlor. ♏x; acidi nitro-hydrochlor. ♏i; aquæ ℥j.

This was replaced by the following:—

℞ Tinct. digitalis ♏x; tinct. ferri sesquichlor. ♏xv; spirit. æther. chlor. ♏x; aquæ ℥i.

A belladonna plaister was applied. He improved on this at once, and decidedly; and continued to do so till November 10th, when he ceased attendance; his pulse then was 84 (standing), regular, and of good force. In this case, I think, there can be little room for doubt that the heart, especially the right side, was enlarged and dilated, and was incapable, from debility, of propelling the blood in a normal manner; and that, under the influence of digitalis, it became stronger, and fulfilled its function better. The strychnia, which was omitted, is surely more than an equivalent for the additional five minims of tincture of sesquichloride of iron; and the belladonna plaister can scarcely be supposed to have had any tonic effect. If T. H. will refer to Mr. Dickinson's paper in vol. xxxix of the *Med.-Chir. Transactions*, I think he cannot but observe how well the patients, exhausted by hæmorrhage, bore the large doses of digitalis.

I may observe further, that it is quite conceivable that fatal syncope may occur with two different states of heart; viz., either with relaxed and open cavities, or with contracted and closed. Now, it is evidently of prime importance to know in what state the heart is found after death from digitalis; and this point I am now investigating experimentally. In two animals, I have found the left cavities very firmly contracted, the right less so; while, after death from aconite, the condition was very different. It is therefore possible that digitalis may kill, not by paralysing, but by causing excessive and enduring contraction of the heart.

Trusting that I have now in some measure complied with your correspondent's request, I am, etc.,

C. Handfield Jones.

33, Albion Street, Hyde Park, W.

PHYSIOLOGICAL ACTION OF DIGITALIS.

Letter from H. Duncalfe, Esq.

Sir,—The physiological action of digitalis has for some time past occupied my attention; and in a paper on Chronic Bronchitis (the corrected proof of which lies at your office), I have alluded to the beneficial effects which foxglove produces independently of its sedative action on the heart itself. The question arises, Whether digitalis possesses properties other than sedative? I believe it does, and that its power is exerted over the capillary circulation. If such is the case, we can then clearly understand how the action of a weak heart becomes steadier, and the pulse firmer, when the circulation of the blood is accelerated in the smaller vessels.

Bearing this supposed action of foxglove in mind, it occurred to me some months back to try digitalis in the treatment of hæmorrhoids, and the results were as I had anticipated they would be. I was so satisfied of the value of foxglove as a remedy in that troublesome disease, that I brought the treatment before the notice of the Birmingham Medico-Chirurgical Society, and I have already collected a number of cases, which I intend in a short time to make the subject of a paper for the Journal.

The present time, however, seems fitted for me to make known the fact, that I have for some time past recognised properties in digitalis, which, *if previously known*, have been much neglected. I am, etc., Henry Duncalfe.

West Bromwich, December 26th, 1859.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Blomfield, Josiah, M.D., Peckham, on December 15.
Brand, S. E., Esq., Surgeon, Stoke Newington, on Dec. 27.
Saunders, George, Esq., Surgeon Bengal Army, at 4, Dorset Square, on December 24th. (Twins.)

Of daughters, the wives of—

Brown, Andrew, M.D., Weymouth, on December 18.
Brush, John R., M.D., Clifton, on December 23.
Lowdell, Charles, Esq., Assistant-Surgeon Bengal Army, at Brighton, on December 21.
Weber, Frederick, M.D., 44, Green Street, W., on Dec. 22.

MARRIAGES.

Alder, William, Esq., of Wells, Somerset, to Emily Jane, only daughter of *Henry L. Sopwith, Esq., Tunbridge Wells, on December 27th.

APPOINTMENTS.

*Hutchinson, Jonathan, Esq., elected Assistant-Surgeon to the London Hospital.
*Jones, T. Eyton, Esq., elected Surgeon to the Wrexham Infirmary.

HEALTH OF LONDON—DECEMBER 24TH, 1859.

[From the Registrar-General's Report.]

	Births.	Deaths.
During week ..... {Boys .. 961 / Girls .. 807}	1768 ..	1548
Average of corresponding weeks 1849-58..	1478 ..	1270

Among the causes of death were—bronchitis, 260; pneumonia, 135; asthma, 24; phthisis, 186; small-pox, 37; scarlatina, 85; diphtheria, 14. The deaths from pulmonary diseases (exclusive of phthisis) were 430, being 152 above the corrected average. Of 66 persons who died at the age of 80 and upwards, 6 were nonagenarians. Of bricklayers, 2 died in the week, of bricklayers' wives, 3, of bricklayers' children, 11; of carpenters, 12 died, of carpenters' wives, 7, of carpenters' children, 21; of masons, 2 died, of masons' wives, 2; of painters, 4 died, of painters' wives, 2, of painters' children, 9; of plasterers, 1 died, of plasterers' children, 10.

Barometer:

Highest (Mon.) 29·653; lowest (Sat.) 28·990; mean 29·402 in.

Thermometer:

In sun—highest (Sat.) 49·6°; lowest (Mon.) 30·4°.
In shade—highest (Sat.) 47·0°; lowest (Mon.) 14·0°.
Mean—33·0°; difference from mean of 43 yrs.—5.4°.
Range—during week, 33·0°; mean daily, 10·5°.

Mean humidity of air (*saturation*=100), 81.
Mean direction of wind, S.W.—Rain in inches, 0·37.

TO CORRESPONDENTS.

The New Volume. The first number of the New Volume of the British Medical Journal will be published on Saturday, January 7th. The names of gentlemen wishing to join the Association should, as far as possible, be transmitted to the General Secretary as early as possible, in order that an estimate may be formed of the number of copies to be printed weekly. Members will oblige also by forwarding to the Publisher any alterations they may wish to have made in their addresses.

Dr. W. King. We are not aware that there is any agent in London to the Parisian Vaccination Institution. You had better apply, in French, to M. le Dr. B. Mangeant, Médecin Vaccinateur de la Société Nationale de Vaccine de France, 8 Faubourg St. Denis, Paris.

Communications have been received from:—Mr. Wm. Copney; Mr. A. B. Steele; Dr. Keiller; Dr. H. Hancox; Dr. Birch; Mr. T. Holmes; Mr. T. E. Jones; Dr. Inman; Mr. H. Duncalfe; Dr. W. Bird; Dr. C. H. Jones; Mr. R. T. Hunt; Dr. Andrew Wood; Mr. R. S. Fowler; Mr. R. S. Stedman; Mr. W. Bradley; Mr. J. G. Dowse; Mr. W. W. Morris; Dr. Gillibrand; Mr. F. Jordan; Dr. D. Archibald; Mr. Howard; Mr. H. Ashton; Mr. C. T. S. Kevern; Dr. W. King; and Mr. H. M. Williamson and Dr. Thorburn.

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